



**THE ANALYSIS OF INDUSTRIAL ATTACHMENT ASSESSMENT PROCEDURES
FOR INDUSTRIAL CLOTHING DESIGN AND CONSTRUCTION: IMPLICATIONS
FOR A VERTICALLY AND HORIZONTALLY INTEGRATED CURRICULUM IN
THE POLYTECHNIC COLLEGES IN ZIMBABWE**

**A THESIS SUBMITTED IN FULFILMENT FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY (PhD) IN EDUCATION, FACULTY OF EDUCATION**

**UNIVERSITY OF FORT HARE
BY**

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JUNE 2019

DECLARATION

I hereby declare that the thesis **“The analysis of Industrial Attachment Assessment Procedures for Industrial Clothing Design and Construction: Implications for a vertically and horizontally integrated curriculum in the Polytechnic Colleges in Zimbabwe”** is my original work. This thesis has never been forwarded to any other institution of higher learning for the purposes of awarding any other degree or qualification. I have also acknowledged the authors in both the text and reference list for this thesis.

MASINA RUMBIDZAYI

Signed Date: 19 June 2019

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I, **MASINA RUMBIDZAYI** student number **201510145**, hereby declare that I am fully aware of the University of Fort Hare policy regarding Plagiarism and that I have considered all the necessary precautions to abide by the regulations with reference to this policy.

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I, **MASINA RUMBIDZAYI** student number **201510145** hereby declares that I am fully aware of the University of Fort Hare policy on Research Ethics and that I have considered every possible precaution to abide by the regulations pertaining to it. I applied and was given an ethical clearance certificate by the University of Fort Hare Ethics Committee, **DUK231SMAS01** as its reference number.

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ABSTRACT

Industrial Attachment (IA) curriculum component of Technical and Vocational Education and Training (TVET) provides students with work-based learning and experiences in the real world of work. IA practices are best achieved through assessment which aims at reviewing at every stage how the student is performing against intended learning outcomes. This study was therefore undertaken to analyse the IA assessment procedures for Industrial Clothing Design and Construction (ICDC) used in Polytechnic Colleges in Zimbabwe.

The study was guided by the Constructive Alignment Theory (CAT), and premised in the interpretivist research paradigm. Purposively sampled sites and participants were used. Two Polytechnic Colleges and three Host Industries were selected as research sites. Individual interviews with lecturers and Focus Group Discussions made up of ICDC students were the major data collection instruments, supported by document reviews. The unit of analysis also consisted of policy makers, external assessors and supervisors. Data were analysed using thematic data analysis technique.

The study revealed that there are no clearly defined policies on IA and IA assessment as a result the administration of IA and IA assessment is considered as inadequate, haphazard and unsystematic. Due to what is perceived essentially as lack of effective collaboration between the colleges and the Host Industries, students' assessment is negatively impacted. Consequently, IA assessment is perceived as useless by students because it does not equip them with more effective practical competencies such as content, knowledge and skills needed for effective assessment. This study therefore suggests a more vertically and horizontally integrated approach for the Colleges and their Host Industries.

KEY TERMS

Industrial Attachment, Assessment, Technical and Vocational Education and Training, Effective Assessment, Vertical and Horizontal Integration

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LIST OF ACRONYMS

ACRONYS	EXPANDED NAME
CA	Constructive Alignment
CAT	Constructive Alignment Theory
CRA	Criterion-Referenced Assessment
CRD	Curriculum Research and Development
HEXCO	Higher Education Examinations Council
HOD	Head of Department
IA	Industrial Attachment
ICDC	Industrial Clothing Design and Construction
ITTTD	Industrial Training and Trade Testing Department
LIC	Lecturer In Charge
NAMACO	National Manpower Advisory Council
NC	National Certificate
ND	National Diploma
OJET	On the Job Education and Training
QAS	Quality Assurance and Standards
TEP	Tertiary Education Programs
TVET	Technical and Vocational Education and Training
VTC	Vocational Training Centre
WIL	Work Integrated Learning
ZETDC	Zimbabwe Electricity Transmission and Distribution Centre
ZIMDEF	Zimbabwe Manpower Development Fund

CHAPTER ONE

CONCEPTUALISATION OF THE PROBLEM

1.1 INTRODUCTION

Technical and Vocational Education and Training (TVET) is the form of training which comprehends knowledge, skills, competencies and all other experiences acquired to enhance opportunities for securing jobs (Magaji, 2015; Abassah, 2011; UNESCO, 2001; Kehinde & Adewuyi, 2015; Agrawal, 2013). One of the most important features of TVET is its orientation towards the world of work and the emphasis of the curriculum on the acquisition of employable skills (UNESCO, 2001; Aring, 2011). This implies that the skills, abilities and competencies needed by any nation are entrenched in TVET. In general TVET is one of the major constructions that determine a nation's productivity for sustainable economic development.

TVET curriculum has two fundamental components: the theoretical knowledge acquired at the colleges and the practical knowledge gained in the industry (Aring, 2011). Magaji (2015) and Aring (2011) assert that TVET is the kind of training that concerns both theoretical and practical instructions that are given to those who are going to be employed in industry. The TVET trainer therefore has a dual mission of preparing students for the ever increasing workplace requirements and for further study (Kehinde & Adewuyi, 2015). This gives students an opportunity to put theoretical knowledge into practice.

Donkor, Nsoh and Mithual (2009) concede that TVET programs need to create an environment where students could relate theory to practice through simulated work environment in colleges and Industrial Attachment (IA) in real workplaces. IA involves three main stakeholders who are the student, the work place supervisor and the lecturer (Karunaratne & Perera, 2015). The focus of this study is on students' IA and the researcher is placing more value to assessment than any other components of the IA program.

1.1.1 Conceptualising Industrial Attachment

Industrial Attachment is a program that provides students in the field of training with supervised practical experience (Svotwa, Rudhumbu & Chikari, 2014; Cohen, 2014). It is a structured, credit-bearing work experience in a professional work setting during which the student applies and acquires knowledge and skills (Sumathi, Zainal, Karim & Li, 2012; Karunaratne & Perera, 2015). This is important because students may not know how to use the knowledge gained from a specific subject, and knowledge not used is easily forgotten (Kasli & Ilban, 2013). Cohen (2014) posits that IA is the best out-of-classroom learning activity. It is therefore a very important component in the TVET system at tertiary institutions that include Polytechnic Colleges, Vocational Training Centres (VTCs) and Universities (TVET Policy Review Framework, 2005; Cohen, 2014). Technical education has different strings but in this particular study it was located within Industrial Clothing Design and Construction (ICDC).

Students from Polytechnic Colleges engage in workplace activities primarily for the purpose of providing them with hands-on experience that enhances their understanding of issues relevant to their area of study (Trolwer, 2010; Cohen, 2014; Bukaliya, 2012). Through IA, learning becomes real as concepts are made simpler through practice. Sometimes there is a gap in what students are taught in their learning institutions with what really transpires at work places (Ibid). IA therefore assists the student to bridge the gap between the academic learning process and the practical reality (Trotsky & Sabag, 2010; Cohen, 2014). Other benefits of IA include improvements in career-related direction (Bukaliya, 2012; Kasli & Ilban, 2013) and improved marketability of graduates (Adjei, Nyarko, & Nunfam, 2014; Johnson, 2010; Bukaliya, 2012). The work place also exposes students to its specific organizational hierarchies and culture, professional conducts, artefacts and materials, as well as to notions of professional responsibilities and consequences (Trotsky & Sabag, 2010; Trowler, 2010; Cohen, 2014). It is therefore paramount that ICDC students engage in IA in order to simplify and to put into reality the abstract concepts learnt in the college.

Skills taught at school do not go beyond theories unless they are practised (Kasli & Ilban, 2013). IA promotes a scientific inquiry through the use of experiments, experiences, observations, discovery and problem solving (Bailey, Barrow, Carr &

McCarthy, 2013; Antunes & Camisao, 2018). These allow students to produce things from matter and lead to production of multi-skilled graduates who are able to, for example in ICDC, operate state-of-the-art industrial sewing machines (Owusu-Acheampong, Williams & Azu, 2014), design and construct garments, market garments and purchase raw materials. Through practice and in doing work there is an application of the senses through seeing, smelling and touching (Bailey et al., 2013). Implicitly, ICDC students will be able to add value to matter such as converting raw fabrics to wearable clothing items and this is best done through IA where such skills are enhanced. On the whole, IA programs aim to merge students' learning gained in a classroom-based environment with real life working environment. Like any other programs, results on how well ICDC students perform during IA are expected and these can be obtained through assessment.

1.1.2 Exploring Assessment

Given the diverse functions of assessment, understanding what assessment entails is of great importance especially in the industrial training of ICDC students. Miller, Linn and Gronlund (2013) refer to assessment as procedures used to gain information for value judgement. Similarly, Donkor et al. (2009) and Clarke (2011) understand assessment as a process of collecting and interpreting evidence to determine the learner's performance. This means that in order to make a judgment about students' learning, it is imperative that some form of assessment is conducted.

Biggs (2009) describes assessment as the crucial link between learning outcomes, content and teaching and learning activities. Whatever processes are undertaken during the course of students' training, assessment checks on how each stage has been performed. This concurs with the assertion that the rationale for assessment is to evaluate, ascertain or judge the nature, quality, ability and the extent to which the program adequately yields the desired competencies (Clarke, 2011; Chinyemba, Bvekerwa, Chirimuta, Sithole & Gwangwaya, 2012). This involves the criteria for measuring and scoring in order to establish how well students perform prescribed tasks (Clarke, 2011).

Assessment can be done for a number of purposes, which include individual certification, improvement of teaching and feedback on quality of learning (Brady &

Kennedy, 2009; Clarke, 2011). Assessment is also a way of getting feedback to help improve students' learning therefore feedback needs to be focused, honest, based on formal assessment and be given by the one assessing the student (Brady & Kennedy, 2009; Peterson & Berg, 2016). It is imperative therefore that ICDC students undergo assessment process to ascertain their abilities to perform tasks and also as a way of giving feedback about the whole IA program in order to guide future programs.

1.1.3 Unpacking Industrial Attachment Assessment

Assessment in IA is a competence-based type of assessment (Chinyemba et al., 2012). This basically refers to the process of recording tasks performed and making judgements about whether skills and competencies have been achieved (Clarke, 2011; Chinyemba et al., 2012). This information may be obtained through observation or direct demonstration, product evaluation, work place documents analysis, questions (written or oral), assignments, third-party reports, self-assessment, simulations, portfolio and Log Book completion (Chinyemba et al., 2012; Peterson & Berg, 2016). These together with other assessment criteria, if well thought about and if properly selected result in effective and reliable assessment of ICDC students during IA for performance to be reflective of the skills and competencies gained (Peterson & Berg, 2016; Chinyemba et al., 2012; Mgaya & Mbekomize, 2014).

IA assessment should be conducted through collaborative efforts by different assessors (Shui, 2008 cited in Jumo, Chakamba, Chiweshe & Museva, 2013; Mhizha & Mandebvu, 2012). This entails that the Clothing Company, the training institution and the student should be involved in assessment (Shui, 2008 cited in Jumo et al, 2013; Matamande, Nyikahadzoi, Taderera & Mandimika, 2013). This follows that the final grade in the assessment should be the result of a negotiation of the individual assessment done by the student, the supervisor and the lecturer (Shui, 2008 cited in Jumo et al., 2013; Chinyemba et al., 2012).

IA assessment can be both a formative and summative process (Clarke, 2011, O'Farrell, 2009). Formative assessment is used to provide feedback to students, supervisors and lecturers to promote further learning (Clarke, 2011). Summative assessment contributes to the judgement of students learning for reporting and

certification purposes (Clarke, 2011; Merwe, 2013). According to Clarke (2011) and Merwe (2013) formative assessment is assessment **for** learning. It is used during the process of instruction to check for student understanding. Formative assessment enables students to learn through the process of feedback, provides opportunities to practise and for improvement (Clarke, 2011; Merwe, 2013). As ICDC students reflect on and monitor their progress through feedback from different assessors, this process effectively becomes assessment for learning. It is a developmental process, an instant and constant improvement of processes and procedures for attaining the desired goals. Summative assessment is assessment **of** learning (O'Farrell, 2009; Clarke, 2011). It is used towards and at the end of the instruction period. Supervisors and lectures can document the culmination of ICDC students' learning achievements through tasks that invite students to demonstrate their mastery and knowledge of the course content (Clarke, 2011). Summative assessment data provides lecturers, supervisors and policy makers with information about how effective training strategies have been, time needed for instruction and how to improve teaching programs for future students (Peterson & Berg, 2016; Clarke, 2011).

IA assessment can be formal or informal. Formal assessments are pre-planned, systematic attempts to ascertain what students have learnt, and may include presentations and experiments (Curado, 2017; Peterson & Berg, 2016). In contrast, informal assessments are those that result from the lecturers' or supervisors' spontaneous observations of how students behave or perform at a work place (Curado, 2017). Assessment tasks should always reflect the ways in which knowledge and skills are used in real world contexts (Peterson & Berg, 2016).

Some students are very difficult to formally or informally assess because of anxiety. ICDC students can feel anxiety related to IA tasks as they may not have an idea of how the Host Industries will assess them. If supervisors can recognise the signs, they can help students cope with workplace related anxiety hence improve IA assessment process (Huberty, 2009; Dobson, 2012). Thus, TVET holds the key to building a competent and versatile graduate, hence global perspectives were explored to gain insights on the IA assessment procedures for ICDC students in the Polytechnic Colleges in Zimbabwe.

1.2 GLOBAL PERSPECTIVES ON INDUSTRIAL ATTACHMENT

This section examined how IA is practiced globally with the aim of identifying challenges experienced by other countries and to establish how they circumvent them. Germany, Ghana, South Africa and Zimbabwe were explored for their IA and IA assessment programs in order to build a strong case about the problem under study.

IA in Germany is discussed below.

1.2.1 Industrial Attachment in Germany

Germany has been explored because of its large industrial base and elaborate national policies on IA (Mgaya & Mbekomize, 2014; Andoh, Boadi, Mensa & Spio-Kwofle, 2016). It has also been considered due to its successful dual learning programs that are recognised internationally. Germany has succeeded in turning around their economy through a well-designed Technical and Vocational Education (TVE) program (Andoh et al., 2016). There is also a good collaboration between learning institutions and host organizations in the administration of internship programs in Germany (Cord, Bowrey & Clements, 2010; Andoh et al., 2016).

Germany practices a dual system type of IA in which educational programs combine classroom learning with learning at the workplace concurrently (Arslan, Özdemir, O'Mahony, Parsons, Di Bono, Battipaglia, Jociunas, Lovsin, & Muresa, 2013; Jiang & Pang, 2011; Muchemi, Muthoni, Mutahi, Gunga & Origa 2013; Nilsson, 2010). Chu (2015) explains that in the dual system, trainees work for the enterprises for three to four days each week, and study in public vocational schools for one to two days per week. Euler (2013) concede that dual system has several component parts that can be viewed individually such as how it is financed, how theory and practical training can be combined and how examinations are conducted. This system is deemed to be highly effective in expediting the transition of youths from school to work (Euler, 2013; Chu, 2015) and it is open to all youths regardless of qualifications (Chu, 2015). Vocational colleges are coordinated with work-based training delivered via the trainer in the company (Arslan et al., 2013). This system is unique to the universities in Germany as learning combines theory and practice in equal parts (Scalmato & Angotti, 2009; Euler, 2013; Deissinger, 2015).

The dual system is more dynamic in the way it responds to the training needs of the workplace because it is open to continuous improvement through periodic negotiations between trade unions and employers (Arslan et al., 2013; Howard, Simpson & Kemevor, 2014). This keeps training programs in tandem with market needs hence the success of the dual system (Howard et al., 2014). Arslan et al. (2013) and Jiang and Pang (2011) affirm that the German system of vocational education and training is well supported and resourced. With regards funding, costs of school-based training are assumed by the state and costs of industry-based training are assumed by firms that provide the apprenticeship although in very rare cases students are required to pay (Howard et al., 2014; Scalmato & Angotii, 2009; Arslan et al., 2013).

The dual system is conducted in three years for most programs and Host Industries are responsible for the training (Andoh et al., 2016; Howard et al., 2014). Skills and knowledge taught are standard across all programs and are however, said not to provide trainees with sufficient experiences as demands for different programs may differ (Arslan et al., 2013; Deissinger, 2015). According to Arslan et al. (2013), the examination board together with the chambers of commerce and industry conduct the national exams all over Germany. These examinations are said to be standard across all fields as well (Deissinger, 2015; Jiang & Pang, 2011). Assessment of trainees is based on three types of assessments. There is an assessment that comes at the end of the training program upon completion of a national final examination, which all trainees must take regardless of industry sector. There is also assessment issued by the firm; and an assessment by the vocational training school (Arslan et al., 2013; Deissinger, 2015). Although the three certificates have numerous advantages, they have problems which are not so easily solved as the balance between the certificates and their method of assessment is often debated (Euler, 2015; Nicolaidis, 2015).

According to Arslan et al. (2013) and Nicolaidis (2015) the problem with Germany lies in the workplace assessment of learners as this is said to be entirely inadequate. The IA national policy is very clear on issues of financing the program, how theory and practical training can be combined, how examinations are conducted and how issues of certification are handled (Euler, 2013; Arslan et al., 2013; Deissinger, 2015) but, assessment that is general across all areas of study throughout the country may

not measure what the student achieved in a specific trade. Moreover, assessment is based on minimum required standards which the trainers lament as they prefer more specialised training (Nicolaidis, 2015). Again, assessment comes at the end of the program which means it is summative. This may not be adequate to communicate the achievements throughout the training program especially in a skills area. Nicolaidis (2015) maintains that the skills in Germany are of high standards but she lacks adequate assessment skills for learners. Assessment is therefore an issue as there are no clear assessment guide lines to be followed by all stakeholders during internships (Nicolaidis, 2015; Hesser & Landfeldt, 2018). As much as Germany is good in IA training, assessment gaps are glaring (Nicolaidis, 2015).

The next section situated this study in an African context.

1.2.2 Industrial Attachment in Ghana

Ghana has introduced new educational reforms that emphasise on Mathematics, Science and Technology as well as TVET to position the country for accelerated development (Andoh et al., 2016; Howard et al., 2014). As part of the educational reforms, the Polytechnic Colleges may meet the needs of industry and commerce and be more productive (Ansah, 2012; Adu-Gyamfi, Donkor & Addo, 2016). There are several studies conducted on IA in the Polytechnic Colleges in Ghana. These focus on challenges faced by students during IA, opinions of stakeholders about industrial practical skills program, reforms of educational systems in Ghana and assessment of supervised IA of Technical and Vocational teacher education programs, impact of industrial practical skills on Fashion students among other issues (Iddrisu, Alhassan & Kinder, 2014; Howard et al., 2016; Ansah, 2012; Donkor et al., 2009; Howard et al., 2014).

It has been revealed that students on IA in Ghana are faced with a lot of challenges. These include lack of free access to machines and equipment and inadequate training facilities (Dasmadi, 2011; Owusu-Acheampong et al., 2014). Lack of financial support and inadequate funding caused transport and accommodation challenges leaving students with no choice but to settle for Host Industries which are not adequately resourced (Howard et al., 2014; Iddrisu et al., 2014; Ndure, Anderson, Peprah & Twenefour, 2014). Students encountered placement problems as a result they were being exploited, used as cheap labour and most of them were

tasked with work that was not relevant to their area of study (Howard, Simpson & Peligah, 2016; Dasmadi, 2011; Iddrisu et al., 2014). In some Host Industries students were supervised by the staff of the host organisation who in most cases displayed uncooperative attitude (Iddrisu et al., 2014; Owusu-Acheampong et al., 2014). Some supervisors made it difficult for students to participate fully in the IA process and some students encountered challenges of inadequate supervision by their lecturers (Howard et al., 2016; Andoh et al., 2016; Dasmadi, 2011).

Iddrisu et al. (2014) and Owusu-Acheampong et al. (2014) cited inadequate staffing, high staff turnover, high enrolment, lack of industries and lack of industrial linkages, outdated curriculum delivery and unstable academic environment as some of the challenges affecting industrial training. In Ghana's polytechnic system, the design of IA is reportedly highly unstructured and poorly supervised (Ansah, 2012; Iddrisu et al., 2014). These and other challenges may be similar to the Zimbabwean situation and may impact negatively on the assessment procedures used in assessing ICDC students during IA.

Donkor et al. (2009) sought to establish the organisational issues and challenges of supervised IA of Technical and Vocational teacher education in Ghana. Assessment was based on students' reports submitted at the college. The other assessment component was on students' performance during IA and was assessed by workplace supervisors. The host organisation was required to appoint a supervisor, preferably a professional in the student's occupational area to mentor, supervise and assess them. From the university side, an IA coordinator was responsible for pre-attachment orientation of students, record keeping, general communication and contact with students and not organisations. It is however not clear how the supervisors assess the students during IA.

Iddrisu et al. (2014) studied management delivery and challenges in Polytechnic education in Ghana. The study revealed that IA is not examinable and not part of accredited courses as a result issues of assessment were not included in their study.

Howard et al. (2014) studied the impact of industrial practical skills on Fashion students in Ghanaian Polytechnics. In terms of assessment, students submit reports on Industrial Practical Experience for assessment and they are also required to work on projects on Pattern Technology, Garment Technology, CAD and Illustration and

Textile Design among others. Projects are submitted after four months of the program and each attracts three credit hours. Even though, according to Howard et al. (2014), Universities and Polytechnic Colleges in Ghana are criticised for churning designers out of the program who cannot sew. Too many students come out of the Fashion Design course in Universities and Art Colleges lacking designing and manufacturing skills. A critical observation of Polytechnic education revealed that students in various Fashion Departments are not able to relate practical meaning to theoretical lessons imparted in the lecture halls as there is no balance between academic education, practical skills and vocational applications (Howard et al., 2014; Andoh et al., 2016).

The research by Howard et al. (2016) on contemporary issues about IA in Ghana, reveals that besides some students working with modern equipment, writing daily and weekly reports, visits by lecturers and attachés getting some incentives, supervisors/managers working hard, there was need for attachés to be aware of how they were assessed. This shows that there is a gap in assessment as students are not aware of the assessment procedures.

These studies conducted in Ghana show that a lot has been gathered about IA in relation to the challenges faced by students. Literature on the Polytechnic Colleges in Ghana shows that the aspect of IA assessment has not been researched on. Very few isolated cases point at different tools used for assessment, duration and frequency of assessment and not on the whole IA assessment process. Students are not aware of how they are assessed, supervisors do not know how to assess and there is also lack of collaboration between Host Industries and institutions. All these issues paved way for the current study.

The next section examines how assessment is conducted in the SADC Region.

1.2.3 Industrial Attachment in South Africa

In this section, perspectives of South Africa on IA and IA assessment were explored. The South African context was identified because it is widely seen as Africa's economic success story in TVET (African Development Bank, 1998) and it is said to have a better economy and a good industrial base than most if not all other countries in Southern Africa (Mgaya & Mbekomize, 2014).

Work Integrated Learning (WIL) in South Africa is guided by policies and training standards which are expressed in terms of a nationally agreed framework and internationally accepted learning outcomes and competencies (Guthrie, 2009). South Africa has universal IA policies which are also recognised at international levels. There has been growing attention on the importance of making curricula more responsive to the needs of industry and more focus is on promoting the employability of graduates across the country (Blom, 2013). This has seen the development of several innovative curricular, pedagogical and assessment forms in response to concerns about graduates, employability and civic responsibility (Bonnet, 2009). Examples of such developments include apprenticeships, cooperative education, practicum placements, problem-based learning, project-based learning, WIL, and Work Based Learning (Mthembu, 2013; Taylor & Govender, 2013). The duration of these programs in South Africa differs from program to program, for example the duration of WIL for Engineers (B-Tech Engineering) at Durban University of Technology is one year which is sandwiched between two academic years (Bonnet, 2009).

Durban University of Technology is one good example of South Africa's success stories in IA. The Technical Vocational and Education department maintains strong links with industry throughout KwaZulu Natal to ensure that the content of all programs is relevant to the real working world (Durban University of Technology, 2013). As such, it has seen more trainees being offered work placement opportunities in the mining and power generation sectors (Bonnet, 2009). The Central University of Technology describes the foundational, practical, and reflexive competencies that students should have achieved at the end of their training (South African Qualifications Authority, 2012). The associated assessment criteria for these outcomes guide the learning activities and assessment in the lecture room (Ibid). The exit-level outcomes are validated in the workplace because the practical competencies are influenced not only by sound theoretical knowledge but also by quality mentoring in the workplace (Merwe, 2013).

The workplace learning of the students is monitored and assessed by different tools that include formative assessment and summative assessments (Peterson & Berg, 2016). The student completes the continuous assessment forms on a daily basis and submits a portfolio of evidence that guides the work arrangement (Merwe, 2013).

Case studies, integrated assignments, and problem-based activities are also used as opportunities for learning during IA at the Central University of Technology (Merwe, 2013; Chinyemba et al., 2012). The execution of practical demonstrations by students while being assessed by peers exposes the students to different protocols and encourages lively feedback and debate (Merwe, 2013). Workshops are conducted to address knowledge gaps, for example, the training in the skills of Theatre Radiography (Merwe, 2013). The positive result of the training sessions on assessment is that the workplace assessment mark is calculated by input from a team: supervisor, student and lecturer (Sui, 2008 cited in Jumo et al., 2013; Merwe, 2013). This collaborative assessment can be very effective in assessing students' performance as it can eliminate all isolated incidences of bias.

Nicolaides (2015) studied work integrated learning for the culturally diverse Hospitality Industry in SA. It was established that industry considers students as cheap labour and it uses them to fill gaps in staffing shortages. In another study, Keating (2012) investigated the mentorship of Hospitality Management students during WIL and established that an industry mentor was necessary. However, some students indicated that their mentors did not assist them and some felt their mentors did not understand the role they had to play in the development of the mentee. It was also revealed that there was lack of trained mentors available and there was absence of training programs. While the employer gave an overall view of the students' performance, industry confirmed that some Host Industries did not provide mentors and some that did, had mentors who were not trained. Some of these mentors said they did not understand the mentorship expectations.

The study by Bonnet (2009) discussed the development of a competency-based WIL program to facilitate Science, Engineering and Technology retention in SA as a developing country. WIL is managed and assessed incorporating a log-book and is thus at the heart of the problem in terms of ill-defined academic outcomes, and hence this non-professionally recognised year of WIL. The strategy adopted by the Department of Electric Power Engineering at the Durban University of Technology in addressing the academic accreditation of the one year of WIL from the ill-defined log-book system to a portfolio was through a process of discussion and review. Bonnet (2009) acknowledged that issues surrounding the assessment of developed

trainee's competencies require further in-depth research as these are currently only aligned against the South African Qualifications framework outcomes.

However, regardless of industrial learning programs being applauded for doing very well with some institutions and with some courses, South Africa is still faced with challenges experienced in Africa as a continent (Merwe, 2013). For an effective IA assessment, mentors require an educational foundation, on-going support, and time to develop as mentors and this is considered a career-long challenge (Bara, Lischynski, Scotland, Tan & Tarmohamed, 2013). Although workshops, in-service training, and change in assessment are a step in the right direction in most South Africa's workplaces, the workplace and lecture-hall synergy has not been achieved yet (Merwe, 2013; Bara et al., 2013). This means that assessment by company supervisors still remains a challenge. They only come in as implementers yet they play a key role in assessing the students (Jumo et al., 2013). Assessment is then likely to be compromised if there is a missing link between the training institutions and workplaces especially during planning stages of the training program. Ultimately, this adversely impacts on the effectiveness of IA assessment.

1.2.4 Industrial Attachment in Zimbabwe

In an endeavour to fulfil the mandate of TVET in Zimbabwe, Polytechnic Colleges have incorporated into their curriculum a component of IA which is generally referred to as On-the-Job Education and Training (OJET). OJET is the training given at workplaces in the formal and informal sectors which uses real jobs as a basis for instruction and practical purposes (TVET Policy Review Framework, 2005). It is a full course that receives grade points just like any other course.

TVET programs were designed in 1990 by the Higher Education Examinations Council (HEXCO) (TVET Policy Review Framework, 2005). HEXCO is an examination board which determines curriculum content so that courses offered address national needs. HEXCO's mandate is to facilitate and regulate TVET through provision of relevant and responsive curriculum (Jumo et al., 2013). IA is therefore offered as a compulsory component of the TVET curriculum in the Polytechnic Colleges in Zimbabwe. As such ICDC students are expected to undertake one year mandatory industrial training in their third year of study.

ICDC involves the study of textile fibres, yarns, and fabrics (Gupta, 2011). It enables appreciation of the characteristics and fabric performance in product end use. The study of ICDC allows students to demonstrate textile, apparel and fashion design skills and fashion merchandise. It also enables the application of systematic knowledge and skills in clothes designing, pattern making and garment construction (Little, 2016). ICDC is a four year course. Students attain a National Certificate (NC) at the end of the first year. This NC course is aimed to produce industrial artisans with knowledge, skills and attitudes required in the Clothing Industry (Industrial Clothing Design and Construction 374/13/CT/0, 2013).

The National Diploma (ND) is done in three years. This course is designed to develop an Industrial Designer with the knowledge skills and attitudes required in the Clothing Industry (Industrial Clothing Design and Construction 555/15/CT/0, 2015). Some of the ND subjects are done before IA while others are done after IA. In their second year of National Diploma (which is the 3rd year of their training) students conduct work-based learning in local Host Industries. IA is done for the whole year (twelve months) and students are assessed for an OJET (TVET Policy Review Framework, 2005; Jumo et al., 2013; Industrial Clothing Design and Construction 555/15/CT/0, 2015). ICDC students are awarded the full National Diploma certificate at the end of their three years of training. When assessing students, visits by college assessors are done at least three times per year as per ND syllabus (Industrial Clothing Design and Construction 555/15/CT/0, 2015) and the 4th visit is conducted by external assessors.

As part of assessment, students submit Log Books assessed by the supervisor which are then weighted by lectures at the end of IA program (Jumo et al., 2013; Chinyemba et al., 2012). Polytechnic Colleges, Universities and other VTCs in Zimbabwe acknowledge a Log Book as a useful tool during IA assessment (Jumo et al., 2013, Chiweshe, Motsi & Edziwa, 2011; Chinyemba et al., 2012; Matamande, et al., 2013). Chiweshe et al. (2011) emphasise that assessment of IA should include a Log Book which concentrates on evaluating the practical skills of the student. According to Chinyemba et al. (2012) a Log Book is a dossier developed to improve continuity of information; it contains information on different aspects of the training program as well as facilitating communication between both the training institution

and the industry on the student's progress. However, the HEXCO external assessors' reports on IA for the period 2011 to 2017 issued to Polytechnic Colleges through the regional coordinators raised concerns mainly over the completion of the Log Book. Some of these issues include extremely high marks, the nature of the skills assessed, comments written by supervisors and incomplete sections of the Log Book yet the students were awarded very high marks, (Chinyemba et al., 2012; Jumo et al., 2013; Bukaliya, 2012).

Zimbabwe is however said to be faced with serious economic crisis leading to the shrinkage of industries, particularly Textile and Clothing Industry (Matamande et al., 2013). By 2010 more than one hundred and fifty Clothing and Textiles Host Industries had permanently shut down business (Nkala, 2012; Herald, November, 2013). The Zimbabwe Economic Policy Analysis (2014) also indicates that thirty thousand retrenchments occurred between 2002 and 2013. Mgaya and Mbekomize (2014) concur that currently Technical Colleges are striving to enhance their internship programs in an environment of world-wide economic stagnation which has seen many Host Industries taking a variety of measures such as scaling back their expansion plans, reducing their operations, or even closing their businesses. The effects of this include the proliferation of the informal Host Industries most of which are poorly equipped with inadequate and outdated facilities (Confederation of Zimbabwe Industries (CZI), 2000) These constitute the largest number of Host Industries that engage ICDC students for IA as most reputable ones closed or scaled down business (Mgaya & Mbekomize, 2014; Nkala, 2012). Most of these small mushrooming backyard Host Industries that are engaging ICDC students for IA may not be conversant with the aims and purposes of IA therefore they may not effectively assess students. Students may not get the best experience from these not so well-established Host Industries with incompetent and inexperienced supervisors making assessment a big challenge.

Chinyemba et al. (2012) assert that authentic assessment of students on IA only takes place where the student is attached at a credible organization and is exposed practically to the broad categories of specific field of study. The state of affairs therefore, translates to lack of experience and expertise in the supervisors who assess students on IA in the Host Industries in Zimbabwe. Most of the experienced

supervisors might have been caught up in this economic dilemma as thousands of workers lost their jobs (Mgaya & Mbekomize, 2014; Chinyemba et al., 2012; Nkala, 2012; The Zimbabwe Economic Policy Analysis, 2014). Since it is the mandate of the HEXCO program that the ICDC students get industrial training for one year, Polytechnic Colleges have no option but involve such Host Industries in the implementation of the TVET programs.

Studies were conducted on IA in Zimbabwe mainly on University students. Bukaliya (2012) studied potential benefits and challenges of internship programs for the faculty of Science Technology and the Applied Social Sciences at the Zimbabwe Open University. Issues identified were that employees were reluctant to disclose important information to students, a number of supervisors were too busy to provide effective supervision, duration was too short and some employees regarded interns as a threat to their positions and in some cases, supervisors possessed inferior qualifications than the student interns. Those with the right qualification were in short supply, there was lack of partnership between college and industry and there was inadequate assessment by lecturers. Documents used to assess internship programs were inappropriate and inauthentic.

The study by Matamande et al. (2013) sought to evaluate the effectiveness of the IA program undertaken by the University of Zimbabwe in the Faculty of Commerce which encompasses the Department of Accountancy, Business Studies and Tourism and Hospitality. The faculty developed a set of assessment tools which involved the lecturers and the host company and this collaboration is important in ensuring that IA assessment objectives are met. The overall summary view of the student's performance is given by the host company, followed by the lecturer's assessment. Factors affecting the success of IA programs from the University students' point of view included the assessment methods employed, the relationship between students and senior workers and the perceptions of the host company towards IA.

Chiweshe et al. (2011) studied the organisation, quality and challenges in the BED Technical Education degree IA course at the University of Zimbabwe. The study sought to find out how students on the Bachelor of Education (Technical) degree program were rated, the organisation and quality of IA component of the program and to examine challenges faced during IA. Home Economics, Building and Wood

Technology and Design programs were studied. It was established that lecturers' input in the IA process left some gaps which students felt negatively affected their workplace experiences. Furthermore, there was supervision at industry level, lecturers did not follow-up due to logistic issues relating to unavailability of funding and transport. Some students portrayed that there was no link between what was taught at college with what was prevailing in the industry. Some students complained of inadequate orientation and scanty assessment forms. Others expressed that IA did not add any value to their experiences. There was no adequate training equipment in some Host Industries and assessment was not comprehensive as it lacked feedback in some cases.

Mhizha and Mandebvu (2012) studied stakeholders' perceptions of IA for students studying Tourism and Hospitality management at the University of Zimbabwe. It was discovered that all stakeholders found IA program very important. Nevertheless, Issues raised were that some organisations seemed to take advantage of students' presence. Students felt exploited without any significant recognition and appreciation. Some Host Industries did not allow students to fully access some components of some departments. Lecturers only communicated with the industry when seeking IA places and sometimes never visit students at all. Host Industries did not handle students well and some complaints ended up unresolved till the end of IA.

Chinyemba et al. (2012) investigated the concerns about assessment on IA with regards to undergraduate degree programs at Chinhoyi University of Technology in Zimbabwe. Industrial liaison officers and lecturers were not sure as to whether the mode of assessment provided a dossier of students' practical achievements collected over the attachment period. It was concluded that supervision and assessment of IA are not competency-based. Some concerns raised by students were that they were not part of the assessment discussion between the lecturer and the supervisor, lecturers did not show them their marks after assessment, there were no clear guidelines to assist workplace supervisors, assessments by different lecturers sometimes caused confusion and misunderstanding of expectations, assessment was done late and in many of the cases students had to wait for assessment when the attachment period had elapsed, they were not given the

opportunity to air their views and concerns with lecturers when they visited and that supervisors tended to give personal feelings and opinions when evaluating students.

Garwe (2014) studied the holistic initiatives for enhancing graduate employability in Zimbabwe. The focus was on the interventions by Higher Education Institutions, Government and Industry and Commerce as well as professional bodies. Exposing students to work related learning was found to be useful in nurturing future entrepreneurs as well as building successful careers in academia and industry. The focus was on Bachelors' degree in wild life. Mention was made that due to increasing number of students requiring placements, some students delayed completion of their studies because the program regulations did not allow students to proceed with studies before successfully completing at least eight months of work attachment and passing the assessment. The study shows that work-based learning is viewed as an effective approach to promoting employability of graduates but does not explain how the assessment is done.

Jumo et al. (2013) studied the Log Book focus being on gaps perceived in assessing students on 'On the Job Education and Training'. The research revealed that all the stakeholders did not fully understand the assessment instrument (the Log Book). Colleges did not induct company mentors timeously resulting in Host Industries coming up with a different assessment tool. The study targeted the problems surrounding the use of the Log Book as an assessment instrument for OJET and to establish the competences of different stakeholders on the use of the assessment tool but not on the whole IA assessment process which this study intended to analyse.

Munyoro, Nyandoro & Musekiwa (2016)'s study was on the evaluation of the students IA program for Chinhoyi University of Technology. Their findings were that supervisors lacked experience which compromised the attachment program. It was also found out that there was a huge gap between the type of equipment available in industry and that at the university. Placement and financial challenges were confirmed which could impact on assessment of students. The majority of students felt neglected as there was not a platform to address their grievances. Issues raised by supervisors and lecturers were related to inconsistent policies. IA component was a one size fits all approach. In turn some lecturers demonstrated inferiority complex

when conducting attachment follow-ups. Some lacked practical understanding of the nature and type of work students are supposed to be undertaking during IA period. With regards to the actual assessment, the continuous assessment and the IA report were considered. Documentary evidence showed discrepancies through very high marks awarded by supervisors for continuous assessment and some low marks for reports by lecturers.

Makuvaro, Ngara and Magwa (2015) conducted a study on the barriers to effective work-related learning by the university students. Concerning students' assessment, students were assessed based on a combination of their lecturers and mentors reports as well as their own reports which they submit to their department. In addition, some students carry out research projects which constitute a WRL assessment. However, it was established that projects conducted by students during IA were only considered for their final assessment. Some students were not sure of the basis of assessment while some were not aware of what they were assessed on.

In Zimbabwe ICDC at ND level is offered at the ten Polytechnic Colleges yet not much is known on assessment procedures. On the whole IA assessment procedures remain unexplored especially in the field of ICDC. Generally, studies were conducted on other fields such as Hospitality and Tourism, Agriculture, Commerce, Business Studies, Home Economics, Fashion Designing, Engineering, Building and Wood Technology. All the studies conducted in Zimbabwe which the researcher reviewed, except for Jumo et al. (2013), were conducted on university students yet the focus of this study is on the Polytechnic College students. Those studying Bachelors and Honours degrees in Zimbabwe and few other universities mainly in SA were studied in the previous undertakings while focus of this current study is on the National Diploma students. Jumo et al. (2013) only focussed on the use of a Log Book as an assessment instrument used in the Polytechnic Colleges in Zimbabwe, nonetheless, this study sought to analyse the whole IA assessment process which include assessment strategies, assessment tools and views of different participants on how IA is conducted. Very few studies touched on assessment of which the assessment procedures were not explored, which is the focus of this current study.

In other countries such as Germany and SA, there are elaborate IA policies but their problems lie with workplace assessment of students. With Germany IA assessment

is said to be general across all fields and inadequate and with SA and Ghana, it lacks collaboration between institutions and industry. With Ghana, Polytechnic Colleges are churning out of the program such as Fashion and Design students who lack designing and manufacturing skills due to lack of clear IA assessment criteria (Howard et al., 2014). There have been several educational reforms in Ghana but assessment still receives little attention. All these issues surrounding IA assessment prompted the researcher to conduct this study.

1.3 PROBLEM STATEMENT

The Polytechnic Colleges and other training institutions around the globe regard IA as an integral component of TVET program which aims at equipping students with all the skills and competencies required in the world of work (Trowler, 2012; Cohen, 2014). Corresponding to this, IA assessment has been found to be instrumental in assisting and guiding students in their work-related learning for the realisation of the expected goals. However, literature has shown that several challenges inhibit the realisation of these benefits of assessment during IA programs in Polytechnic Colleges worldwide. Also, not much is known about IA assessment procedures being used in the Polytechnic Colleges in Zimbabwe.

Zimbabwe has been faced with serious economic crisis leading to the shrinkage of the Textile and Clothing Industry, in particular (Matamande et al., 2013). Most Host Industries permanently shut down business with some scaling down their operations (Nkala, 2012; CZI, 2000; Mgaya & Mbekomize, 2014). Thousands of qualified and skilled workers lost their jobs. As a result, small, mushrooming, backyard Host Industries proliferated. Most of these may be poorly equipped with inadequate and outdated facilities, yet these become Host Industries for College students undergoing IA.

Assessment is central to IA in judging the nature, quality, ability and the extent to which the program adequately yields the desired competencies (Chinyemba et al., 2012; Clarke, 2011; Biggs, 2009). Hence, the study sought to analyse the IA assessment procedures used in the Polytechnic Colleges in Zimbabwe during IA.

1.4 RESEARCH QUESTIONS

The study sought to answer the following main and sub-research questions:

1.4.1 Main Research Question

How is assessment undertaken in the Polytechnic Colleges in Zimbabwe during Industrial Attachment?

1.4.2 Sub- questions

- What assessment strategies are used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment?
- How user friendly is the Industrial Attachment assessment tool(s) used in the Polytechnic Colleges in Zimbabwe?
- How do respondents view the assessment process used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment?
- On the basis of the findings, how best can Industrial Attachment assessment procedures used in the Polytechnic Colleges in Zimbabwe be improved?

1.5 PURPOSE OF THE STUDY

In the view of the foregoing, the ultimate aim of the study is to suggest a framework for an improved IA assessment in the Polytechnic Colleges in Zimbabwe.

1.6 RESEARCH OBJECTIVES

The study sought to:

- Unpack assessment strategies used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment.
- Assess how user friendly the Industrial Attachment assessment tool (s) used in the Polytechnic Colleges in Zimbabwe is.
- Explore the respondents' views on the assessment process used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment.
- Suggest strategies that can improve assessment in Industrial Clothing Design and Construction in the Polytechnic College in Zimbabwe during Industrial Attachment.

1.7 SIGNIFICANCE OF THE STUDY

Assessment has been identified as an important aspect of IA in collecting and interpreting evidence in order to determine how well the learner performs prescribed tasks. It measures the extent to which learning outcomes, content and teaching and learning activities have been achieved (Biggs, 2009). It is also important for individual certification; improvement of teaching; providing feedback on quality of learning and in guiding future programs (Clarke, 2011; Chinyemba et al., 2012). This study may extend the knowledge on workplace assessment to the policy makers so that they may consider coming up with a national policy on IA assessment in the Polytechnic Colleges in Zimbabwe. The study may be of value to Polytechnic Colleges that use the Log Book as the main assessment tool and lecturers from other fields who assess Industrial Clothing Design and Construction students by considering adopting the suggested IA assessment framework. By examining what really is happening in terms of assessment at work places, this study may enhance work place learning and practices. IA coordinators at the Polytechnic Colleges will gain knowledge about the Host Industries that engage Industrial Clothing Design and Construction students and the calibre of supervisors who assess them.

The focus of this study is on IA for students and these students can also benefit from this study as feedback from assessment can help them improve in academic performance in terms of knowledge, skills and values acquired during IA. Results of assessment can help in increased employability of the graduates and that they will be well sought after in the workplaces after graduation. The study will also benefit the Host Industries as they may be enlightened on how best they can improve their assessment processes during IA. The study can also contribute to further research by other researchers on Industrial Clothing Design and Construction programs in the Polytechnic Colleges in Zimbabwe. There are very few studies that exist that have looked at assessment in Industrial Clothing Design and Construction in the Polytechnic Colleges in Zimbabwe as part of the IA training program. This study will therefore add to the published literature as well as to discussions concerning the opportunities to obtain valuable data and insights from internship programs.

1.8 DELIMITATION OF THE STUDY

This study focused on two Polytechnic Colleges that offer ICDC at National Diploma (ND) level in Zimbabwe. Three Host Industries that provide industrial training to

students from these two Polytechnic Colleges were also studied. Only eight lecturers participated in this study with four lectures selected from each of the two Polytechnic Colleges. Five post IA students from each of these colleges were selected. One supervisor from each of the three Host Industries was involved. Two policy makers from the two arms of Quality Assurance and Standards (QAS) that take part in the design and review of the TVET curriculum were involved in this study. Also two external assessors who examine students on OJET in two different regions were included. The study only focused on the IA component of the TVET program and the thrust was on the participants' analysis of the IA assessment procedures in the Polytechnic Colleges in Zimbabwe.

1.9 DEFINITION OF KEY TERMS

The following key terms used in this study were defined as follows:

Technical and Vocational Education

An educational program that is aimed at acquisition of Polytechnic skills, knowledge and attitudes that relate to work places. It entails equipping students with hands-on skills that enable them fit in the real world of work (Magaji, 2015; Kehinde & Adewuyi, 2015).

Industrial Attachment

This is a training program that forms one of the fundamental components of TVET that is aimed at marrying theory and practice (Sumathi et al., 2012) and it is carried out at work places.

Assessment

Assessment entails evaluating, ascertaining or judging the nature, quality, ability and the extent to which a program adequately yields the desired competencies. It involves the criteria for determining and scoring in order to establish how well students perform prescribed tasks (Donkor et al., 2009; Clarke, 2011).

Effective Assessment

Effective assessment is the psychometric quality of the instruments, processes and procedures used for the assessment activity (Clarke, 2011). It is the worthiness of the whole assessment process.

Industrial Clothing Design and Construction

Industrial Clothing Design and Construction is the application of systematic knowledge and skills in clothes designing, pattern making and garment construction. It involves the study of textile fibres, yarns, and fabrics (Industrial Clothing Design and Construction 555/15/CT/0, 2015).

Vertical and Horizontal Integration

Vertical and horizontal integration is the concept that refers to the coordinated, purposeful, planned system of linkages and activities in the delivery of education and training throughout the continuum of the learner's stages of ICDC education (Dick, King, Mitchell, Kelly, Buckley & Garside, 2009; Rafique, 2014).

1.10 CHAPTER OUTLINE

Chapter One constituted the background of the study in which issues surrounding the problem were raised; statement of the problem; the purpose and the significance of the study were discussed. Research questions and research objectives were also formulated in this chapter. Furthermore, delimitation of the study and definition of concepts were presented.

Chapter Two presented the theoretical framework that informed the study whereby the Constructive Alignment Theory was applicable.

Chapter Three reviewed literature relevant to the study where other scholars who have written concerning the subject under study were considered.

Chapter Four outlined research methodology and methods used in this study. The research paradigm, research approach and research design were identified and explained. Research instruments, sample and sampling techniques, data collection and analysis procedures, aspects of trustworthiness as well as ethical considerations were also discussed in this chapter.

Chapter Five presented and analysed data collected through interviews, FGDs and documents. Data presentation was done using tables and figures and analysis was done in a form of a discussion substantiated by results from other studies. Research findings were discussed based on the comparison with data found in literature review. This comparison gave insights that fully explained how IA assessment is done in ICDC in the Polytechnic Colleges in Zimbabwe.

Chapter Six provided the summary of findings drawn in relation to the problem as unearthed by the methods used to extract findings from data in relation to themes abstracted from research questions. The conclusions and the contextual relevance of IA in ICDC, recommendations arrived at, contribution to new knowledge and areas for further study were included in this chapter.

1.11 CHAPTER SUMMARY

This chapter gave an overview of this study. It highlighted the background and contextualised the problem that forms the basis for this study. It presented the background where the study was located. In addition the chapter outlined the statement of the problem, the purpose of the study, research questions and research objectives, significance and delimitation of the study and definition of key terms as used in the study. The next chapter presented the theoretical framework guiding this study.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 INTRODUCTION

This chapter discussed the theoretical framework where the Constructive Alignment theory (CAT) has been explained in relation to its relevance to assessment during IA. There are several theories that could be used to elucidate the problem of assessment during IA but for the purposes of this study (CAT) has been used for its widespread success in emphasising the need to consider assessment right from objectives formulation stage in curriculum design and implementation up to assessment and grading.

2.2 CONSTRUCTIVE ALIGNMENT THEORY (CAT)

The theory guiding this research was propounded by Biggs (2003). It is a design for teaching in which what students are intended to learn and how they should express their learning are clearly stated before teaching takes place. Teaching then, must be designed to engage students in learning activities that optimise their chances of realising those outcomes. As such, assessment tasks should be designed to enable clear judgments on how well those outcomes will be attained (Biggs, 2003, 2006, 2009; Biggs & Tang 2011; Surgenor, 2010; McNamara, 2011). Key to this theory is that all components in the teaching and learning system should align to each other to facilitate the achievement of the intended learning outcomes (Biggs, 2003, 2009; Surgenor, 2010). This fits very well with the industrial training program whereby the objectives are for students to gain a greater understanding of the industrial requirements, test career choices and develop important hands-on workplace skills (Hosea, 2013; Gumbe, Sivotwa & Mupambireyi, 2012; McNamara, 2011). The following diagram represents the relationship of intended learning outcomes to conceptions of learning, assessment methods, learning and teaching activities and approaches to learning.

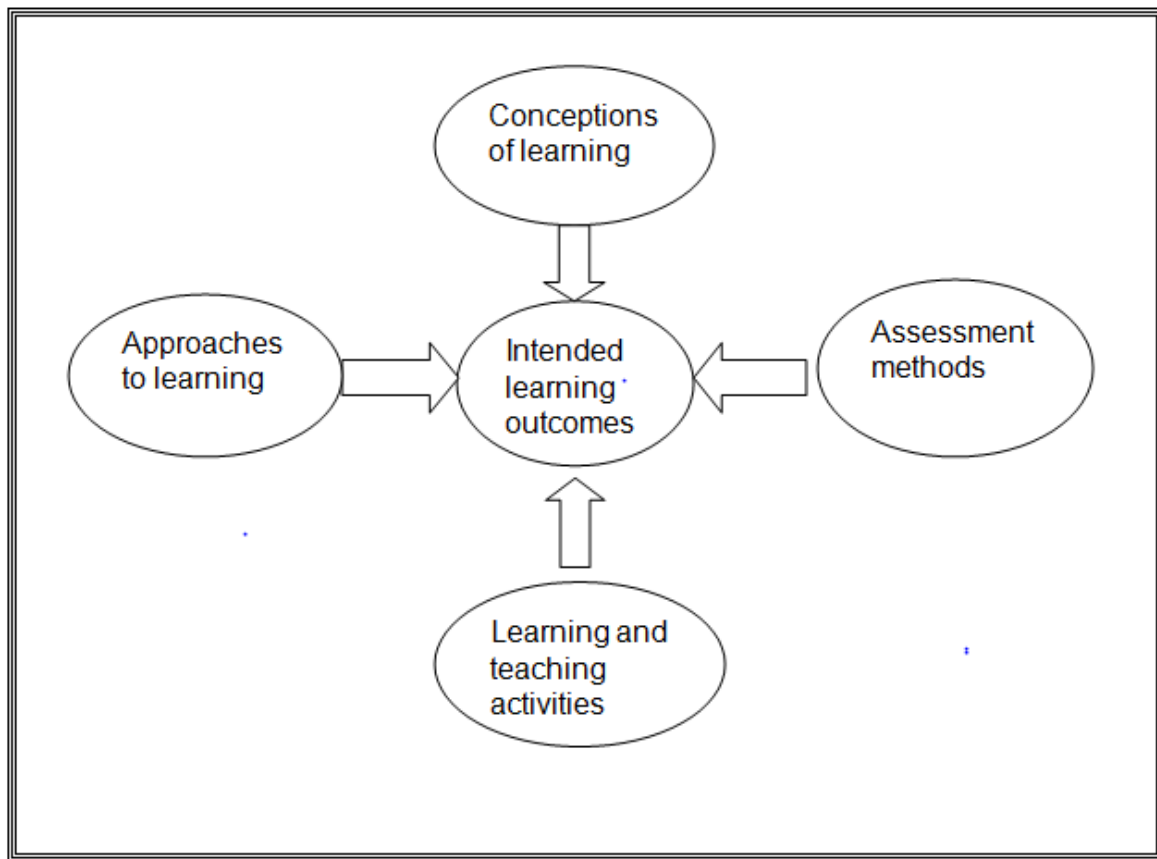


Figure 2.1: Outcome- based learning (Adapted from Biggs, 2001)

2.3 WHAT IS CONSTRUCTIVE ALIGNMENT (CA)?

Biggs (1996, 1999, 2003) explicates that CA has two fundamental aspects which are the constructive aspect and alignment aspect. The **constructive** aspect refers to the idea that students construct meaning through relevant and authentic learning activities (Biggs 2003; Reaburn, Muldoon & Bookallil, 2009). This means that meaning is not just conveyed, imparted or transmitted from the teacher to the learner, but it is something that learners create themselves. According to Jiang (2013), Biggs used the term constructive deliberately to emphasise the conception that learning is a gradual process of shaping understanding and constructing knowledge of the world through experiencing things and reflecting on those experiences. In any educational program, the central goal of teaching is to design various learning activities that engage the students to make sense of information themselves by relating it to previous knowledge and experiences (Jiang, 2013). Students in Polytechnic Colleges can relate the theoretical knowledge they learn in their institutions to industrial experiences through engagement and they can

construct meaning out of those experiences. ICDC students therefore should be allowed to use different kinds of machinery, visit different departments in the factory and to apply different methods in performing assigned tasks in order that the previously learnt theoretic knowledge becomes meaningful to them. According to Esubalew (2017), the vertical knowledge that students acquire in their institutions should be linked with the horizontal industrial knowledge for a vertically and horizontally integrated curriculum where there is cross pollination of ideas. This is in support with Jiang (2013)'s assertion that learning only occurs when students are allowed to put theoretical knowledge into practice.

It is important to remember that what the student does is actually more important in determining what is learned than what the teacher does (Biggs, 2003; Reaburn et al., 2009). In other words, it is the responsibility of the supervisor to act as the catalyst that facilitates the learning of the student through creating learning activities and assessments that are aligned with the learning outcomes in such a way that students can construct meaning in a given learning event (Reaburn et al., 2009). If students are to learn desired outcomes in a reasonably effective manner, then the supervisor's fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes (Biggs, 2003). In support of this notion, Reaburn et al. (2009) affirm that the educator must create a learning environment that includes learning activities and assessment that facilitate the student achieving the desired learning outcomes. If the learning environment is restrictive and if activities and assessment are not aligned with the outcomes, ICDC students will not be able to construct meaning out of the whole IA process and will not enhance their skills.

The **alignment** aspect refers to what the teacher does, which is to set up a learning environment that supports the learning activities appropriate to achieving the desired learning outcomes (Biggs, 2003). In setting up an aligned system, the instructor specifies the desired outcomes of teaching in terms of the topic content and the level of understanding the student must achieve and then chooses assessment tasks that will tell us how well individual students will attain these outcomes in terms of graded levels of acceptability (Biggs, 2003; Biggs & Tang, 2011). Jiang (2013) explicates that alignment focuses on the mechanisms which create the coherence between the

essential components of the educational system. These are the intended learning outcomes (curriculum objectives), assessment (formative and summative), and learning activities (strategies/methods and teaching content) (Jiang, 2013; Biggs, 2003; Biggs and Tang, 2011). All these components in the teaching system should be aligned in order to fulfil the objectives of TVET programs through training offered by the Polytechnic Colleges in Zimbabwe. According to Dochy, Sergers, Gifbels and Struyven (2007) cited in McNamara (2011), the alignment theory promotes integration of learning, instruction and assessment that result in assessment as a tool *for* learning rather than a tool *of* learning. Alignment is therefore central to effective assessment. It is therefore important to use the right procedures in assessing ICDC students during IA (Biggs, 2003; Surgenor, 2010; Pretorius, Bailey & Miles, 2013).

The CA framework suggests that learning objectives, teaching methods, activities and assessment should be aligned (Biggs 2003) for students to be able to apply theory into practice and to deduce meaning from any concepts learnt on their own. It provides explicit scaffolding and precise building blocks for students to develop their skills and competencies (Willison & O'Regan, 2006 cited in McNamara, 2011). It is also useful in assisting the staff to develop assessment rubrics that explicitly outline the skills required to succeed in an assessment task (Surgenor, 2010). Constructive Alignment is learner centred so that the student does the real work; the lecturer and the supervisor simply act as a broker between the student and the learning environment that support the appropriate learning activities (Biggs, 2003). In this case the ICDC students should be able to construct knowledge with the assistance from the lecturer and the supervisor during IA. Therefore, collaboration between Polytechnic colleges and Host Industries is of paramount importance.

The lecturer should ensure that, for example, the students are placed at workplaces where the environment is supportive of their learning through adequate and specialised machinery in order that they achieve the intended learning outcomes. On the other hand, the supervisor should be prepared to assist students and guide them towards construction of various artefacts as they put the theory learnt in their learning institutions to practice through properly laid down work schedules for the student. Perez-lara, Saucedo-Martinez and Marmolejo-Saucedo (2018) and

Esubalew (2017) emphasise on the vertical and horizontal integration of the curriculum where college activities are complemented by the development and execution of company activities.

Biggs and Tang (2011) assert that in CA teaching and learning activities are systematically aligned, as well as the assessment tasks to the intended learning outcomes. This is done by requiring the students to engage the *learning activities* outlined in the outcomes (Biggs & Tang, 2011). These include aspects such as creativity, problem solving, professional skills, communication skills, teamwork, and lifelong learning, which should be contextualized in the programs and courses students undertake. According to Biggs and Tang (2011) these attributes define the outcomes of the total learning experience thus guide the design of programs and courses. IA programs should therefore be designed to cater for these attributes in order that intended learning outcomes are achieved. In fact, the intended learning outcomes should be very clear for learners to be able to engage in meaningful activities (Biggs & Tang, 2011; Biggs, 2003). CA should then be used to enhance coordination and focusing each ICDC student's progress towards educational mastery (Alsaggat, Ali, Ayuob, Eldeck & El-haggagy, 2010; Perez-lara et al., 2018).

Since IA requires collaboration between the training institution and industry (Sui, 2008 cited in Jumo et al., 2013), it is important that the expectations of the industry that employs the student after completion of the course be taken on board. Lecturers that are directly involved with the acquisition of theoretical knowledge should be consulted when designing these learning outcomes together with input from other officials from National Manpower Advisory Council (NAMACO) and Quality Assurance and Standards. Biggs (2007, 2009) concurs that outcome statements are designed by the teachers themselves, either alone or as a member of a unit or course committee, so the level of outcome is up to them to decide as such. Instructors play a very pivotal role in designing the outcome statements for easier implementation and assessment of learner performance. The outcomes of IA in ICDC should be clearly defined so that the supervisors who train students will not encounter problems in implementation and assessment processes. Lack of such clearly laid down learning outcomes will see assessors use different approaches some which restrict students from constructing meaning out of the learning process.

IA is an outcome-based learning exercise (Chinyemba et al., 2012; Matamande et al., 2013). In outcome-based teaching and learning, the concern is not so much a matter of what topics to teach, but what outcomes students are supposed to have achieved after having been taught (Biggs & Tang, 2011). Defining these intended learning outcomes becomes the important issue, and assessment is criterion-referenced to see how well the outcomes have been attained (Garrison & Michael, 2009; Biggs & Tang, 2011). Teaching and learning activities as well as assessment tasks are so aligned to the outcomes in CA in a manner that helps students achieve those outcomes more effectively. If the Polytechnic Colleges in Zimbabwe have a well-defined IA policy or an IA course outline that stipulates the intended learning outcomes, teaching/learning activities and assessment tasks, all stakeholders will have a standard approach to issues of assessment hence outcome will be more effective. The syllabus that is meant to guide the ND students throughout their three year course does not show what students should achieve during IA but it is very clear about what students should achieve during their first and third years of their ND course. In fact, there is not even a course outline for IA therefore issues of assessment and methods/activities are not addressed. As a result lecturers and supervisors are bound to use their own discretion on issues pertaining to learning outcomes, learning activities and assessment even when using the same assessment tool, the Log Book.

2.4 Four steps in CAT

This theory addresses a number of key concerns of IA in Polytechnic Colleges today. There are thus four major steps in CAT outlined by (Biggs, 2003) which must be followed in order for students to be able to construct meaning out of every learning process. These are:

- I. Defining the intended learning outcomes;
- II. Choosing teaching/learning activities that are likely to lead to the Intended learning outcomes (strategies/methods and teaching content);
- III. Assessing students' actual learning outcomes to see how well they match what was intended;
- IV. Arriving at a final grade.

Each of these major steps has been clearly elaborated by (Biggs, 1996, 1999, 2001, 2003, Biggs & Tang, 2011) as follows:

2.4.1 Defining the intended learning outcomes

Intended learning outcomes are statements of what students are expected to be able to do after studying a course or program (Biggs 1999, 2009). Biggs (2003) suggests that when we teach we should have a clear idea of what we want our students to learn and this should be expressed from the students' perspectives. It is therefore of paramount importance that the ICDC students are made aware of what they need to accomplish for the whole year that they spend on IA. If the program requires them to learn to operate specialised machinery; construct some clothing items; to learn about the operations of various departments in the clothing company in real work settings, the students should know this is what their IA program entails before they are placed.

Biggs (2003) asserts that we have to state our objectives in terms that require students to demonstrate their understanding, not just simply telling us about it as if in invigilated examinations (Biggs, 2003; Reaburn et al., 2009). IA is meant to bridge the gap between theory and practise and it is a hands-on exercise therefore objectives should reflect the nature of skills, knowledge and competences that students should acquire at the end of the course. Determination of curriculum competency is essentially for defining course curriculum goals and objectives (Esubalew, 2017; Alsaggaf et al., 2010). These objectives can be used as a template prepared for IA assessment and coordination through a matrix within the curriculum to confirm, verify and correct course content and focus (Perez-lara et al., 2018; Alsaggaf et al., 2010). The Curriculum should be organised in a systematic format that allows both lateral and vertical progression in the student development to a mastery of skills competences required in the world of work (Magaji, 2015; Esubalew, 2017).

In setting objectives, it is helpful to think in terms of appropriate verbs (Biggs, 2001, 2009) expressed in the form of actions leading to observable and assessable behaviour. Advanced high level verbs include to reflect, to hypothesise, to design, to solve unseen complex problems, and to generate new alternatives. Middle level verbs include to explain, to analyse, and to apply to familiar domains. Low level verbs include to describe, to identify, to memorise, to list, to state and so on (Biggs, 2003; Reaburn et al., 2009). Each task will of course have its own appropriate verbs

that reflect different levels of understanding. Incorporating verbs in our intended learning outcomes gives both lecturers and supervisors markers for assessment throughout the IA program. Everyone will be aware of what the students need to achieve thereby making assessment easier and objective. In support of this Biggs (2009) emphasises that the intended learning outcomes should be related to the criteria for assessing students' performance. Biggs (2003) further points out that the same verbs need to be embedded in the teaching/learning activities and in the assessment tasks as they keep both the student and assessors on track. The verb in the intended learning outcome becomes the common link that establishes alignment between the intended learning outcome, the teaching/learning activities, and the assessment tasks (Biggs, 2001, 2003).

Higher order intended learning outcomes require open ended tasks, allowing for unintended outcomes. The teaching/learning activities and assessment tasks for that intended learning outcome would then address that same verb (Biggs, 2003). For example, an intended learning objective in Work Based Learning might read: "Design an African Attire for the Guest of Honour for the All Africa games to be held in Victoria Falls in Zimbabwe in October". The teaching/learning activities might be the collection of designs, preliminary sketches, work drawings and presentation requiring the students to apply the theory on history of fashion and principles and elements of design in order to come up with the best outfit. Assessment would be in terms of how well the problem has been solved, which is best achieved using rubrics by which the quality of the solution as a whole may be judged such as design suitability in terms of occasion, season, functionality, balance, proportion, colour and use of the designing pen. These will enable the student to construct a design using higher order verbs and learning becomes learner centred and all components in the learning system will be aligned. The kind of knowledge to be acquired would have been reflected in the learning outcomes and students will be able to construct meaning out of all these activities.

Distinguishing the kinds of knowledge

Biggs (2003) emphasises the need to be able to stipulate how well each topic needs to be understood and suggests we need to distinguish between *declarative* knowledge and *functioning* knowledge. Declarative knowledge is knowledge that can

be declared, that is, the knowledge that we tell people about orally or in writing (Biggs, 2003, 2006; Reaburn et al., 2009). We do not acquire knowledge only so that we can tell our students about it; or that our students can tell us in their own words (Biggs, 2003; Reaburn et al., 2009; Biggs & Tang, 2011). Students need to put that knowledge to work to make it function. Understanding makes one see the world differently, and behave differently towards the various parts of the world (Reaburn et al., 2009; Biggs & Tang, 2011). After graduation, all students, whatever their training programs, should see a section of their world differently, and to behave differently towards it, expertly and wisely and this is functioning knowledge.

At the end of IA, ICDC students should be able to run their own businesses as entrepreneurs or to be employed in the Clothing Industry and boost production for social and economic development of the nation. Thus, simply telling our students about designing, for example, using the Computer Aided Design/Computer Aided Manufacture, computerised embroidery sewing machines and advanced packaging systems, is not likely to achieve the intended learning outcomes with the majority of students. Students really need to practice using these machinery and produce items for the knowledge gained to be considered useful. Good students will turn declarative into functioning knowledge in time and it is functional knowledge that is important in solving everyday problems. These forms of knowledge are expressed through verbs outlined in the Structure of Observed Learning Outcome (SOLO) taxonomy.

The Solo Taxonomy

Biggs (2003) provides a systematic way of describing how a learner's performance grows in complexity when mastering many tasks, particularly the sort of tasks undertaken in schools and Polytechnic Colleges. A general sequence in the growth of the structural complexity of many concepts and skills is postulated, and that sequence may be used to guide the formulation of specific targets or the assessment of specific outcomes (Biggs, 2003). SOLO taxonomy best describes how a learner's performance develops from simple to complex levels in their learning as illustrated in fig 2.2.

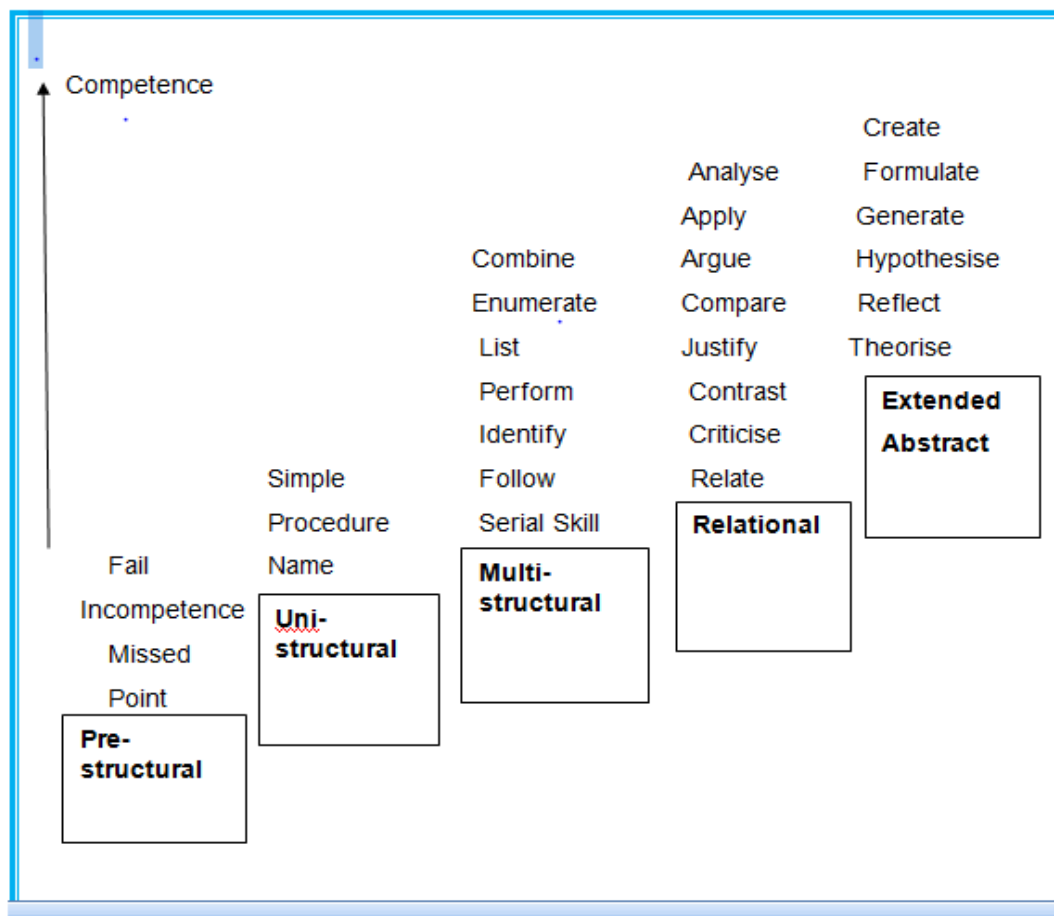


Figure 2.2: The SOLO Taxonomy. Adapted from Biggs: 2003 p48

The SOLO model makes it clear to students, lecturers, supervisors and external assessors what the learning outcomes of an activity, unit or program of IA are. In the SOLO model, a student's learning outcome may be to understand at any one of five levels of complexity: no idea, one idea, loose ideas, connected ideas, extended ideas (Biggs, 2001; 2003; Reaburn et al., 2009; Biggs & Tang, 2011). This model works well with both descriptive (declarative knowledge) and performance (functioning knowledge) learning outcomes (Biggs, 2003). Lecturers can use SOLO taxonomy to design differentiated learning tasks and to create differentiated assessment criteria. They can use it with any topic to plan the level of learning required for that topic, to assess the extent to which each student has reached that level and to make decisions on next steps for learning. SOLO taxonomy shows students' learning outcomes at five levels. These verbs indicate levels of understanding/performance and according to Biggs (2003), the taxonomy can be

used to sort learning outcomes into three levels of knowledge which are the surface knowledge, deep knowledge and conceptual (constructed) knowledge.

At the pre-structural level, the student has not yet grasped the ideas and/or needs help to start. At the unistructural level, the student has one relevant idea and multistructural level they have several relevant ideas. The kind of knowledge obtained at these two levels is called surface knowledge. At relational level, where deep knowledge (connected ideas) is obtained, the student has related, linked or integrated ideas. At the extended abstract level, conceptual, reconstructed and extended ideas develop whereby the student has taken the related ideas and extend those (Biggs, 2003).

Procedures in defining intended learning outcomes

Biggs (2009) recapitulates the following procedure as a guide in developing intended learning outcomes.

- I. Decide what kind of knowledge is to be taught- declarative or functioning
- II. Select the topics to be taught.
- III. Decide the levels of understanding/ performance the students are expected to achieve for the different topics.
- IV. Consider if all the intended learning outcomes are of equal importance.
- V. Ensure a clear understanding and agreement of the intended learning outcomes within the teaching team and other relevant parties, e.g. External assessors.
- VI. Communicate the intended learning outcomes to students.

Intended Learning Outcomes in IA

McNamara (2011) suggests that the learning outcomes for IA should include learning theory, critical reflection, professional competence and career management. IA involves transferable skills and know-how. It provides students with opportunities to practice what they have learnt in the classroom, test career choices and providing them with hands-on experience that enhance their understanding of issues relevant to their area of study (Trolwer, 2010; Cohen, 2014; Bukaliya, 2012; McNamara, 2011). Abeysekera (2006) cited in McNamara (2011) identifies two objectives of IA: to offer students an understanding of organizational structures within a professional

working environment and to provide students with an opportunity for professional development. Professional competence includes the ability to perform in the workplace and it encompasses relevant knowledge, skills and aptitude, (Jones, 2010). It is also the ability to act at a level of knowledge that enables efficient and effective practice and ability to review existing knowledge in order to acquire new knowledge and skills to solve new problems. These objectives should enable the student to acquire new knowledge, skills and competences required in further studies and in the world of work (McNamara, 2011). When objectives have been clearly laid down the next step would be to choose teaching/learning activities.

2.4.2 Choosing teaching/learning activities

Having designed the intended learning outcomes for the IA program, there is now need to design suitable teaching/learning activities that will facilitate students achieving these intended learning outcomes. The best way to do this is to activate the verbs or learning activities entrenched in the intended learning outcomes (Biggs, 2009) such as indicated below.

Table 2.1: Choosing teaching/learning activities. (Extracted from Biggs, 2009)

Intended Learning Outcomes	Possible Teaching/Learning Activities
Describe	reading/lecture followed by presentation
Explain	tutorial, write-up
Integrate	project, assignment
Apply	project, case study
Solve problem	problem-based learning, case study
Design, create	project, creative writing
Hypothesise	experiment, project
Reflect	reflective diary

The point here is not how to teach but how and what students should learn. Many of these teaching/learning activities can be assessment tasks as well, then, you have excellent alignment (Biggs, 2003; Reaburn et al., 2009).

Insufficient resources in most institutions and the changing nature of education in tertiary institution are forcing learning to take place outside the class, with interactive group work, peer-teaching, independent learning and work-based learning, all of which are a rich source of relevant learning activities (Biggs, 2003). During IA students can ensure that learning objectives are achieved especially the higher order as it is mainly the lower order ones that are achieved in learning institutions due to lack of resources in many instances (Biggs, 2003). Biggs (2006) emphasises the need to carefully select teaching/learning activities that will encourage students to start using the right verbs if they are to handle properly the tasks set. It is important that the supervisors assist students during IA to conduct tasks which keep them on track rather than giving them some menial jobs (Matamande et al., 2013; Chinyemba et al., 2012) which are not linked to what they need to achieve by the end of IA program. Some students on IA are used to provide cheap labour in the Host Industries to which they are attached (Owusu-Acheampong et al., 2014; Muchemi et al., 2013). This defies the whole purpose of industrial training as students will not learn much if they are denied the opportunity to learn from other departments or to perform meaningful tasks in the company. What all this means is that the learning outcomes are not being used to guide the teaching and learning activities in the company. Supervisors' roles of assisting the student achieve the intended outcomes will have failed.

The WIL activities relevant to the development of professional competence include the work placement and feedback from the workplace supervisor (McNamara, 2011). If students are placed in Host Industries with inadequate and outdated equipment, where supervisors' lack some training and assessment competences, students will not gain anything. Stuckey (2007) cited in McNamara (2011) suggests that providing prompt feedback to students is a key principle that should be met by internship programs. Feedback is a part of promoting a deep connection with the learning process for students and is critical to facilitating effective learning in workplace contexts (McNamara, 2011). In addition to feedback from the workplace supervisor,

students should also be provided with support from the lecturer to assist in the development of professional competences. This might include preparation for placement, identification of skills or competencies to be developed during the placement and the ability to self-evaluate and learn from experience. Furthermore, students need clear guidance as to what the learning expectations from the placement are and how to achieve them, and the distinction between work and what is learned at work (Walsh, 2007 cited in McNamara, 2011).

Students should also be supported in preparing for the commencement of their internship which may be their first experience of a professional workplace. Young and Blanco (2008) cited in McNamara (2011) mention that students are often unprepared for the workplace as some do not know how to dress and communicate appropriately; and that they do not know how to take instructions on assigned tasks. This lack of preparedness which might be caused by lack of proper orientation either by the college lecturer or by the company supervisor can inhibit students from attaining the best from their placement experience and may even embarrass the institution that has placed the student. It is important therefore according to the CAT that the learning outcomes and activities be aligned so that proper assessment procedures are employed during IA that are reflective of what the student learnt and is now able to do. It will be easier to measure how well students can perform certain tasks as guided by the learning outcomes and appropriate teaching/learning activities. Biggs (2003) outlines procedures of assessing students' learning outcome as narrated below.

2.4.3 Assessing students' learning outcomes

As Ramsden (1992) cited in Biggs (2003) puts it, the assessment is the curriculum, as far as the students are concerned. Students will learn what they think they will be assessed on, not what is in the curriculum, or even on what has been covered in their learning institutions. The trick is, then, to make sure the assessment tasks mirror the intended learning outcomes (Biggs & Tang, 2011). To the lecturer or supervisor, assessment is at the end of the teaching/learning sequence of events, but to the student it is at the beginning (Biggs, 2001, 2003). This entails that the student needs to be told of the assessment tasks at the beginning of IA so that intended learning outcomes will be achieved. If the curriculum is reflected in the

assessment, the activities of the supervisor and the learning activities of the student are both directed towards the same goal (Biggs, 2003). In preparing for the assessments, students will be learning the curriculum. Matching individual performances against the criteria is a matter of making holistic judgments. Intended outcomes refer to sought-for qualities of performance, and it is these that need to be stated clearly, so that the students' actual learning outcomes can be judged against those qualities (Biggs, 2003; Biggs & Tang, 2011). If this is not done, we are not aligning our objectives and our assessments. Assessment is almost certainly the most important single component in the system: get assessment wrong and you get everything wrong (Biggs, 2003). We therefore need to be clear about why we assess, what we assess, how we assess, and who is involved in the assessing during IA.

Assessment Tasks

These provide the students the opportunity to demonstrate whether or not they have achieved the intended learning outcomes and what level their performance is in those intended learning outcomes (Biggs, 2003). Assessment tasks should be appropriately designed or selected to address the intended learning outcomes that we want to assess. Different assessment methods (tasks) address different intended learning outcomes and there should therefore be several kinds of tasks. There is also a need to provide the evidence allowing lecturers or supervisors to make a judgment about the level of a student's performance against the intended learning outcomes and to award a final grade (Biggs, 2009).

Designing Assessment Tasks

The following are steps identified by Biggs (2003) to be followed in designing assessment tasks.

- I. Select a practicable task that embodies the target intended learning outcomes verb.
- II. Develop grading criteria so that you can make a judgment on how well the intended learning outcomes have been met by a student's performance on each assessment task.
- III. Decide how the graded performances can be combined to give a final grade.

The following are some examples of intended learning outcomes and the possible assessment tasks that ensure alignment of intended learning outcomes with assessment tasks.

Table 2.2: Intended learning outcomes and assessment tasks (Biggs, 2009)

Intended learning outcomes	Assessment Tasks
Describe	essay question, exam, oral presentation
Explain	assignment, essay question exam, oral, letter
Integrate	project, assignment
Analyse	case study, assignment
Apply	project, case study, experiment
Solve problem	case study, project, experiment
Design, create	project, experiment
Reflect	reflective diary, portfolio, self-assessment
Communicate	a range of oral, writing or listening tasks, e.g. presentation, debate, role play, reporting, assignment, précis, answering questions etc.

The CA theory suggests that assessment tasks should be selected that tell us whether and how well each student can meet the criteria expressed in the objectives (Biggs, 2003). The assessment of professional competence is also important in order to provide feedback to students on their performance in the workplace. Stuckey (2007) cited in McNamara (2011) argues that recording student performance, providing prompt feedback and training students to receive feedback are key principles that should be incorporated in IA programs. Further, assessment has a key role to play in what and how students learn (Boud & Falchikov, 2007 cited in McNamara, 2011). It directs attention to what is important; it acts as an incentive for study and it has a powerful effect on what students do and how they do it (McNamara, 2011).

Assessment also communicates to students what they can and cannot succeed in doing. In ICDC, students conduct self-evaluations on what they can and what they

cannot do on the tasks performed during IA. The supervisor then comments on the tasks done by the student and signs the appropriate forms in the student's Log Book. Institutions visit ICDC students during IA as a way to ensure that they are kept on track by signing in the students' Log Books. This is some form of formal assessment meant to align intended learning objectives with assessment tasks. It has been suggested that professional competence should be included in the summative assessment of IA in order to ensure alignment of learning objectives and assessment, to provide feedback to students on their performance and also to meet student expectations (McNamara, 2011). IA generally uses a range of tools, such as reflective journals and student presentations, to assess students' learning quantitatively or qualitatively.

Quantitative and Qualitative Assessment

Quantitative assessment is done using marks. It seems to be a logical way to assess in certain courses. However, Biggs (2009) defines quality in terms of accumulating small quantities; measurement error also accumulates, thus invalidating fine discriminations. For example, there is no valid difference between 74 and 75, yet to the student it can make a big difference as a 75 can be grade 'A' and 74 grade 'B'. This can send undesirable messages to students (backwash). Qualitative assessing done by grading with rubrics allows students' performance to be appropriately assessed against what they are intended to learn (*criterion-referenced*) (Garrison & Michael, 2009). The final grade tells students what they have achieved and what they need for a better grade. On the other hand, it requires a different mindset for some assessors (O'Farrell, 2009; Berry, 2012; Biggs, 2003). Again, more work is required initially in designing intended learning outcomes, suitable assessment tasks and rubrics, but once established is no more extra work than marking (Biggs, 2009). Qualitative assessment involves making judgments against criteria (rubrics), not by counting 'marks' (Berry, 2012). If intended learning outcomes are to reflect workplace or 'real world' standards it is not appropriate to state and assess them in terms of marks obtained. Assessment tasks should likewise reflect the 'real world' intended learning outcomes. Therefore, comments written by supervisors about students' performance should be meaningful and reflective. Students should be appropriately assessed against what they intended to learn.

Criterion Referenced Assessment

The concept of alignment is familiar to curriculum theory, as in Criterion-Referenced Assessment (CRA), which is said to be so effective in enhancing learning (Biggs, 2003). In CA we go one step further than CRA by aligning teaching methods, as well as assessment, to the intended learning outcomes (Biggs, 2003). Thus far, CA has been described as being used by individual lecturers at the classroom level. From the classroom we move to CA as part of an institutional system of teaching which can be used even in industry and other out of the classroom learning activities. When this has been done, Biggs (2003) concludes that it will be very easy to come up with the final grade.

2.4.4 Arriving at a final grade

The ratings that the supervisors arrive at when assessing students on IA are very important as they inform the final grade the student will get (Biggs, 2003). This therefore calls for a properly aligned curriculum which is strictly adhered to. Supervisors are mandated to consider the intended learning outcomes so that they rate the students according to what they achieved and should desist from giving students ratings that are not reflective of what the students have achieved just because a mark has to be generated.

According to Biggs (2003) we normally grade the tasks such as assignments and projects but logically we should grade the intended learning outcomes directly. We should award grades on how well the student has done in the intended learning outcomes such as in explaining, reflecting, creating, operating and designing and not on how well did the student do in the assignment or the exam. The student's transcript might then present a profile in terms of learning outcomes, which would probably be of more use to an employer than a profile of marks (Biggs, 2003).

2.5 Aligning intended learning outcomes, teaching/learning activities and assessment

Biggs (2003) details out the ways in which intended learning outcomes, teaching/learning experiences and assessment tasks should be constructively aligned. The diagram below offers a brief version of this figure.

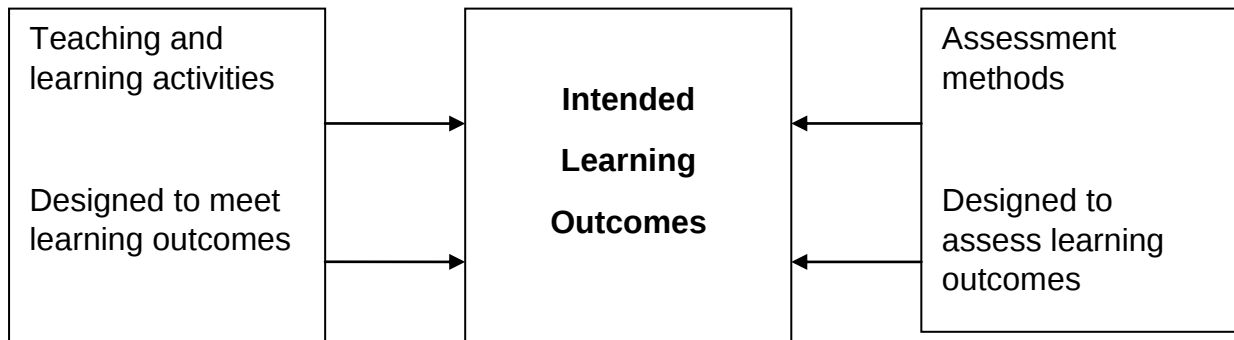


Figure 2.3: Aligning objectives, teaching/learning activities and assessment.
(Biggs, 2003)

CA comprises theories that have in common the centrality of the learner's activities in creating meaning such as constructivism, progressivism, pragmatism and realism (Bailey et al., 2013). According to Briggs (1996), these have important implications for teaching and assessment. Instructional designers emphasise alignment between the course objectives and the targets for assessing student's performance (Biggs, 1996, 2003). CA therefore is used as a framework to guide decision making at all stages in instructional design. It is used in deriving curriculum objectives in terms of performance that represent a suitably high cognitive level, in deciding teaching/learning activities judged to elicit those performances, and to assess in order to formatively and summatively report student performance (Biggs, 1996, 1999, 2000, 2003). The performances of understanding nominated in the objectives are thus used to systematically align the teaching methods and assessment (Biggs, 2006).

2.6 The influence of Constructive Alignment on IA

Based on the Constructive Alignment framework's emphasis on active student involvement in facilitated learning activities, Walsh (2007) cited in McNamara (2011) suggests that IA is more likely to achieve better learning outcomes for a number of reasons. Firstly, IA is an example of experiential learning and therefore requires active engagement in the learning process (Reaburn et al., 2009). Students will place higher value on successful learning when in the real world work context. Secondly, students focus on competency in real work-related tasks rather than the decontextualised approach of a college context alone (Reaburn et al., 2009), thereby achieving a vertically and horizontally integrated curriculum. They can demonstrate their understanding of concepts through various activities as guided by the intended

learning outcomes. Thirdly, taken together, the two factors above are more likely to generate a higher level of motivation in students when placed in a workplace setting. Finally, IA by nature demands higher order thinking such as predicting, diagnosing, designing, constructing, explaining and problem solving (Reaburn et al., 2009). Such cognitive behaviours lead to deeper learning than regurgitating subject content. Indeed, Billet (2000) cited in Biggs (2003) asserts that there is “long-standing evidence of the efficacy of learning in the workplace” because knowing and doing simultaneously occur through on-going and reciprocal processes.

The CA approach also emphasises the importance of appropriate assessment that assesses the desired learning outcomes (Biggs, 2003). For work-based learning where functioning knowledge rather than declarative knowledge is the emphasis, de-contextualised assessments such as examinations or tests are inappropriate and educationally invalid (Reaburn et al. 2009). Biggs (2003) highlights that the CA model requires performance assessment such as *viva-voce*, individual and group projects, individual learning contracts, critical incident analysis, case study presentations, reflective journals or portfolios. These can be used in the assessment of students during IA so that they complement each other in communicating the achievements of the student.

Moreover, applying the CA approach to IA emphasises the need for reflection to be integrated when designing learning activities (McNamara, 2011). It is not only a matter of acquiring a set of technical skills or knowledge but it also demands learning from experience upon which reflection is a critical element of the learning process. In IA, the role of the supervisor is to become more of a ‘critical friend’ to the ‘student practitioner, where equal status and expertise is exchanged to create new knowledge (McNamara, 2011). Again, this demands the lecturer to take on a role of supporting and extending the student’s learning through focus on the educational process and learning activities than on subject content (Walsh, 2007 cited in McNamara, 2011). Hence a vertically and horizontally integrated curriculum which is likely to yield quality IA assessment results in particular and ICDC ND results in general.

From an instructional design point of view, the principles espoused in the CA theoretical framework resonate well with the curriculum design intentions for IA that, when combined, educators will have significantly increased capacity to facilitate active learning and engagement.

2.7 CHAPTER SUMMARY

This chapter discussed the theoretical framework guiding the whole study. Constructive Alignment Theory (CAT) was identified and described for its usefulness in IA assessment and its intention for a collaborated learning program and through vertically and horizontally integrated curriculum. Challenges associated with IA assessment would be resolved if CAT is considered as a guiding framework in the delivery of IA programs in the Polytechnic Colleges in Zimbabwe. The next section reviewed literature related to this study.

CHAPTER THREE

LITERATURE REVIEW

3.1 INTRODUCTION

This chapter discussed other authorities' views concerning assessment during IA. Relevant literature on conceptualisation of IA and assessment, preparation for assessment, assessment during IA, assessment tools used in IA and how best IA can be improved was reviewed.

Literature review helps one to thoroughly familiarise with the available literature and this helps one narrow the topic and places the research in the proper context (Aveyard, 2010; Jesson, Matheson & Lacey, 2011). Understanding of the existing researches and debates relevant to a particular topic or area of study helps to build an expanse of knowledge in one's field (Machi & McEvoy, 2009; University of Melbourne, 2013). According to Library Study Smart (2017), the researcher gains insights into how other researchers apply the concepts one is studying to world problems through literature review. In addition, gaps can be identified easily which then can confirm the need to undertake the study. It also helps uncover what knowledge exists related to the area of study which also leads to the generation of new ideas (Library Study Smart, 2017; Aveyard, 2010; Jesson et al., 2011). Literature review also helps avoid duplication of researches and justifies the relevance of one's research (Library Study Smart, 2017). Furthermore, it provides evidence that the research will be an original and relevant contribution to existing knowledge (Ibid).

3.2 CONCEPTUALISING INDUSTRIAL ATTACHMENT

IA refers to an on- the-job training where a student learns while working within a normal working environment, using the actual tools and actually doing the job (Leong, 2004 cited in Munyoro et al., 2016; Gumbe et al., 2012). Sivotwa et al. (2014) regard internship as an expert supervised process of transferring skills, knowledge, attitudes and information to students as a way of enhancing their efficiency and effectiveness in their area of specialisation. The Industrial Training and Trade Testing Department (ITTTD) cited in Gumbe et al. (2012) defines IA as a process that moulds a student's knowledge; which is the students' ability, skill and

understanding of information that every student requires to perform efficiently and effectively. Relatedly, Chinhoyi University of Technology refers to IA as a prescribed period of practical experience in a relevant industrial/commercial/professional or community setting (CUT General Academic Regulations, 2012). University of Science (BUSE Academic Quality Assurance Policy, 2014) defines IA as structured, work experience in a professional setting during which a student applies and acquires knowledge and skills. It involves the application of learned skills in an organization related to the students' specialization. Other authors have defined the programme as one designed to close the gap between theory and practice (Cohen, 2014; Adjei et al., 2014; Matamande et al., 2013; Svotwa et al., 2014; Gumbe et al., 2012).

IA is also a learning process that requires the student to be supervised by a qualified person. One can construe that IA is an expert supervised process of transferring skills, knowledge, attitudes and information to students as a way of enhancing their efficiency and effectiveness in their areas of specialization (Gumbe et al., 2012). IA is therefore a process of learning which, when conducted in the right atmosphere, improves skills, knowledge, understanding and attitude, as well as enhanced use of tools and machines in order to achieve the desired goals (Donkor et al., 2009; Adjei et al., 2014; Howard et al., 2014).

Barber and Bailey (2014) aver that in the designing stage instructors need to specify the learning objectives for the internship. Mgaya and Mbekomize (2014) posit that the broad objective of IA program is to introduce students to the practical aspects of what they learn theoretically. Other objectives of IA include refining project management skills; enhancing team work; exhibiting self-efficacy and self-regulatory; developing ties with the business community, helping students to sharpen their soft skills and to allow the faculty to gauge the quality of its academic programs (Barber & Bailey, 2014; Mgaya & Mbekomize, 2014; Donkor et al., 2009; Adjei et al., 2014; Timm, Davis, McKinney & Knerr, 2013). In ICDC, IA objectives would include developing designing, pattern making and garment construction, marketing and purchasing skills among others. Curriculum objectives must be aligned with learning outcomes and students should construct meaning through relevant and authentic

learning activities (Abdullah, 2013; Biggs & Tang, 2011). Objectives of IA are better achieved through proper assessment of the whole IA process.

3.3 PREPARING FOR INDUSTRIAL ATTACHMENT

3.3.1 Identify Host Industries

In sectors such as construction and creative industries, work placements tend to be more challenging to source as employers may be sole traders and may not have the capacity to offer work placement (Learning and Work Institute and Fair Train, 2017). Not all employers are capable of hosting students for IA (Mgaya & Mbekomize, 2014; Learning and Work Institute and Fair Train, 2017; Chinyemba et al., 2012). Learning and Work Institute and Fair Train (2017) reiterates that some providers have no experience of delivering work placements. It is therefore pertinent to students to identify suitable companies for placement.

In identifying Host Industries, students need to establish companies that can provide them with most of the benefits of IA. They can look for lists compiled by their academic advisors at their colleges (Groenwald, 2009; Andoh et al., 2016). They can approach job boards for potential employers through their web pages or they can call any contacts they have already made within the field and ask those persons for ideas (Buckeye, 2017). Another possibility is that the student can review the companies they visited for field trips that sparked some excitements to them and contact them (Buckeye, 2017; Juznic, 2011). In some cases they may base their ideas of an ideal company through discussions held with the guest speakers when they described their line of work (Groenwald, 2009; Buckeye, 2017). The student should make a list of contact persons at the companies or agencies and it has been suggested by Buckeye (2017) that it is best to call rather than drop in on the person with whom you need to speak to so that you do not interrupt them at busy times. It is important to line up several interviews so that they have an opportunity to compare offers (Ibid). It may turn out that the first priority may not make the best offer so the students should keep their options open.

3.3.2 Host Mentors and Assessors

The workplace supervisor is an alternative source of evidence of the student's professional competence (McNamara, 2011), however relying on assessment by workplace supervisors raises issues such as quality assurance and the reliability of the assessment (Broderie & Irving 2007 cited in McNamara, 2011). The supervisor's assessment may not be reliable because it is heavily dependent on the professional ability of the supervisor (McNamara, 2011). Workplace supervisors may not have the specialised skill that is required for assessment and it is questionable whether it is possible to ensure each supervisor has a consistent perception about what they are assessing and what standards are expected (Costley & Armsby, 2007 cited in McNamara, 2011; Chinyemba et al., 2012). There may also be resistance from workplace supervisors to being directly involved in the assessment of students. Bukaliya (2012) maintains that there was little or no learning taking place at workplaces as students were more knowledgeable than regular employees they were to learn from. McNamara (2011) points out that, when supervisors are asked to grade an intern, they almost universally recommend an 'A'. Among the possible reasons for this recommendation is that agency members may view the grade as a reward for student interns who are frequently unpaid; or the 'A' may simply be a tactic to encourage more students to intern in their agency (Ibid). According to Bukaliya (2012), the majority of institutions used in their study lacked qualified mentors.

On the flip side a few researches show that students were satisfied with the adequacy of the supervision by the host organisation but were not happy about the participation by lecturers in the assessment process (Chiweshe, et al., 2011). In support of this view, Bukaliya (2012) asserts that a sizeable number of interns lamented the lack of supervision from the parent institution (Bukaliya, 2012). Gorenwald (2009) posits that there has been a fair amount of confusion about the difference between mentors and guest lecturers' assessments. Building on this discussion, ICDC students may also be faced with challenges of not getting qualified supervisor to effectively assess them during their practical learning process. If lecturers do not significantly play their role, this may create a gap in the assessment process.

3.3.3 Coordination between colleges and Host Industries

Literature has shown that the more IA is clearly coordinated, the more students will benefit from the overall experience (Adjei et al., 2014; Chinyemba et al., 2012; Chiweshe et al., 2011; Muchemi et al., 2013). A mismatch between what is taught in colleges and IA experience may affect IA results. When lecture hall taught lessons are different from what the industries teach the students on the program, then assessment will be very difficult to carry out (Merwe, 2013). The results of the study by Howard et al. (2014) show a strong agreement in confirming the mismatch between college-based learning and industrial practical skills.

Hora, Wolfgram and Thompson (2017), in a study of workplace learning in the Health, Engineering Business and Social Work Industries, concur that lack of coordination between academic staff and employers in terms of mentorship standards and procedures for providing feedback and evaluation led students and employers to feel that the program was a frustrating waste of time and resources. Chinyemba et al. (2012) describe the limited coordination at Host Industries and at the university level as a serious setback as it was not clear whether the lecturers and supervisors shared common understanding regarding the IA assessment process. Adjei et al. (2014) concur that production of adequately trained human capital for industries cannot be fully achieved without collaboration with supporting Host Industries and stakeholders of Polytechnic education through Polytechnic-Industry linkages. Adjei et al. (2014) reiterate that the relative weak linkage between Polytechnics and Industry in Ghana were in the joint research, provision of teaching and learning materials, funds for research as well as in the use of members of industry executives in the Polytechnics as guest lecturers. Lack of coordination was also highlighted by students which includes failure by the department to effectively visit students while on IA, monitor students' progress and also to communicate frequently with mentors (Chiweshe et al., 2011; Muchemi et al., 2013). This system differs with the situation in Germany where the involvement of industry in skills training is well coordinated (Jumo et al., 2013; Arslan et al., 2013).

3.3.4 Duration of Industrial Attachment

Time spent on IA may provide greater opportunity for practice and in turn determines the effectiveness of assessment modes employed. Several research results show the duration of IA although varied. Odugbesan (2010) reveals that in Nigeria duration is from three to four months. This concurs with results from studies by Bukaliya (2012), Mgaya and Mbekomize (2014) and Barber and Bailey (2014) who point out that the duration of IA is twelve weeks/three months. Some studies show that the duration is normally from one to six months (Howard et al., 2014). Karunaratne and Perera (2015) indicate that the duration is six to twelve months. Several institutions run their IA programs for twelve months (Chinyemba et al., 2012; Andoh et al., 2016; Keating, 2012). In the same vein, several other organisations were of the opinion that the IA period of a lesser duration was not enough for a student who has never worked before to gain any meaningful experience (Mgaya & Mbekomize, 2014; Chiweshe et al., 2011). Contrary, Hora et al. (2017) articulate that while students felt four hundred hours were excessive, supervisors felt that such an amount of time was adequate for an internship. Basing on these arguments one can construe that the duration of IA varies with nature of the subject and the objectives of IA for that particular field.

3.3.5 Pre-placement activities

This refers to the procedures established by the universities and colleges and the guidance given before finding a training placement (Karunaratne & Perera, 2015). It is generally accepted that students should be well guided for the internship programme so that they can understand the college expectation and the expectations of the industrial training provider as well as the trainee's expectations (Karunaratne & Perera, 2015; Gumbe et al.; 2012; Barber & Bailey; 2014). Internship orientation programmes minimize the expectation gap among the above-mentioned parties and strengthen the industrial relationship and students' confidence (Karunaratne & Perera, 2015; Barber & Bailey, 2014). According to Karunaratne & Perera, (2015) successful, meaningful and fulfilling IA experiences for students require the centralized work placement unit to have clear guidelines and experienced staff. Sharma, Shah, Gupta, Saxena and Singh (2017) posit that before the start of internship in Community Medicine, interns were briefed regarding their skills' assessment at the end of the internship in the subject. The interns were told about

the skills which were already identified in the Log Book and were asked to practice them during their field training at respective places. Specifics were given so that students would know when and how they were going to be assessed and on what. Results of the research conducted by Karunaratne and Perera, (2015) show that the briefing given by the university internship unit was sufficient and informative before starting the internship.

However, from the research conducted by Jumo et al. (2013) supervisors revealed that induction by college lecturers was done late. Very few authorities revealed that learners were inducted before the commencement of IA. According to Jumo et al. (2013) the absence of proper induction of students before deployment results in a number of problems seemingly affecting the fluidity of the assessment exercise. The findings from a study by Chiweshe et al. (2011) reveal that there was inadequate pre-orientation of students on workplace expectations. More so, Groenewald (2009)'s reports on students' uncertainty regarding how many projects or reports they were to send to college for evaluation is a clear indication that orientation was inadequate. Having orientation sessions both by the college and by the company could aid ICDC students in appreciating what IA and IA assessment entail.

3.3.6 Placement of students

Several studies revealed that majority of the students find placements through their own efforts. Kiplagat, Wanjiku and Karei (2013) and Chiweshe et al. (2011) reveal that the teaching departments were not involved in the placement of the students. Mgaya and Mbekomize (2014) concur that while placement is the responsibility of the teaching staff coordinator, most students get an internship position by directly applying to the host organisations themselves. This could be the reason why students take long in finding placement. This agrees with what surfaced in the study by Bukaliya (2012) where a student indicated that he spent most of the semester time looking for an attachment post. With regards to assessment, this may pose challenges of satisfying the expected credit hours and completion of assessment tasks.

Students face stiff competition for attachment places from students from other colleges and universities seeking placements (Donkor et al., 2009; Mgaya & Mbekomize, 2014; Munyoro et al., 2016; Gumbe et al., 2012; Kiplagat et al., 2013).

This could be attributed to economic issues that have seen many Host Industries either scaling down operations or even closing their businesses (Mgaya & Mbekomize, 2014; Chiweshe et al., 2011). As a result, some Host Industries fail to create placement for students at all (Chiweshe et al., 2011) hence stiff competition for the few remaining ones. In addition, the majority of students may find placement in very small Host Industries which may not expose them to meaningful job experiences (Bukaliya, 2012; Rupande & Bukaliya, 2013). Trede, McEwen and Sheehan (2013) concur that scarcity of work placements could force universities to accept students in workplace learning environments that are of low quality or even unsafe. According to Chinyemba et al. (2012) students may not find credible Host Industries to which they can learn effectively thereby affecting the assessment process. Donkor et al. (2009) concur that even when students are accepted by employers for IA, they are often not so well supervised and assessed.

It was established that the situation is less serious in Zimbabwe than in Nigeria and Ghana as employers are reluctant to take students for IA (Donkor et al., 2009). While there are very few Host Industries that are willing to take interns in Botswana, it is not the case with industrialised countries such as United States of America (Mgaya & Mbekomize, 2014) where the economy is good. Better placement of trainees on the program is an indication of better training and ultimately effective assessment. Howard et al. (2014) assert that when students have smooth access to industries which are well equipped with modern and state-of-the art equipment, the better the organization and if they are left alone to fish out for their own places for attachment, they will face difficulties. This follows that if ICDC students are properly placed, assessment processes will be easier to administer.

3.3.7 Clarity of tasks and activities

Another feature of internship associated with assessment outcomes is task clarity where students are provided with a clear understanding of the work, expected deliverables and performance criteria (Hora et al., 2017). The absence of task clarity is associated with reduced student satisfaction/ineffective assessment. High quality assessment is therefore measured by appropriate and clearly stated tasks given to students (Hora et al., 2017). The study conducted by Mgaya and Mbekomize (2014) reveal that there were guidelines that outlined the timetable of the program, duties and responsibilities of students, host organisation, faculty supervisor and faculty

internship coordinator. They also contained administrative policies and procedures regarding working hours, dress code, and leave of absence of the interns during placement, and grievances procedures (Ibid).

On the other hand, some literature has shown that interns did not have a proper training program (Karunaratne & Perera, 2015). According to Chiweshe et al. (2011), students complained of being assigned repetitive tasks not matching their course of study such as design and creation. In support of this observation, Groenwald (2009) remarks that most of the students' daily work was not related to their studies as it was manual and not necessarily outcomes related. Chinyemba et al. (2012) even mention that the supervision and assessment were not standardised and there were no clear guidelines to assist supervisors. ICDC students on IA may be regarded as 'just another pair of hands' and may not be given adequate training experience where tasks are not explicitly outlined, most importantly where supervisory and assessment skills are inept (Chiweshe et al., 2011).

3.3.8 Organisational environment and support

A weak institutional and policy environment, poor outcomes and disparities in access of educational facilities are some key issues that affect IA assessment (Agrawal, 2013). Some literature has revealed that there is lack of a clear policy on supplementary financial support for students on attachment to cover transport and related costs (Munyoro et al., 2016; Gumbe et al., 2012; Olugbenga, 2009). However, Kereng (2014) argues that the host organisation has no obligation to remunerate students on IA except in very special circumstances. Students who are faced with financial constraints may not settle down as they have to worry about transport and food (Chiweshe et al., 2011; Howard et al., 2014) thereby affecting their learning outcomes.

Karunaratne and Perera (2015) through their study gather that students negatively ranked the internship programme in providing opportunities for creativity build up activities, working in teams, develop managerial skills, enhance research and project skills and desire to go on learning. Students' feedback was positive for providing a real job experience, transport, meal and good allowance (Ibid). However, they showed negative feedback on the overall structure of the internship programme since it failed to provide them with an overall training covering the whole

departments of the organization (Barber & Bailey, 2014; Hora et al., 2017; Karunaratne & Perera, 2015). Also, most of the students mentioned that they lacked overall practical knowledge. Mupfumira and Mutsambi (2011) assert that due to limited machinery, some students could not fully utilise some facilities during IA. It is perceived that students are dumped at Host Industries for IA because it is just a requirement in their curriculum (Nicolaidis, 2015; Owusu-Acheampong, et al., 2014) and this de-motivates them as they do not realise the full benefits of IA.

Some of the other organisational challenges that the students mentioned were lack of project and presentation skills, no proper evaluation done by Human Resources, no creativity build up activities, work overload and more responsibility for interns (Karunaratne & Perera, 2015). More so, students lack knowledge of the nature of the respective company, lack of employee organisational 'fit' resulting in them being thrown at the 'deep-end' with poor working conditions (Nicolaidis, 2015; Svotwa et al., 2014). This is supported by Gumbe et al. (2012) that students are faced with a rough and tough work environment with very high expectations by Host Industries accepting them for IA. Munyoro et al. (2016) in their study on the evaluation of the student attachment program in Zimbabwe, the majority of students reported that they felt neglected as there was no platform to address their grievance in particular with issues to do with payment of allowances and the number of working hours. Owusu-Mintah and Kissi (2012) affirm that there are times managers tend to exploit the students on internship by letting them work for longer hours or refusing to give them stipend for labour expended. Some related challenges cited by Donkor et al. (2009) include lack of free access to equipment and machines and the absence of qualified supervisors.

Oguntimehin (2001) cited in Munyoro et al. (2016) maintains that if the IA process is done in an appropriate atmosphere, knowledge and skills are improved leading to understanding and positive attitudes. As a result, students would be better equipped to use tools and machines efficiently and effectively in their areas of specialisation. Ryan and Imel (1996) cited in Gumbe et al. (2012) point out that students gain knowledge through direct participation in the work process. This therefore means that the process enables students to learn effectively and acquire experience that reinforces academic instruction. Assessment, performed on the appropriate learning

tools and processes ensure the success of the IA program. The key success of IA in Germany is the total commitment of employers to train and their willingness to pay for training (Nicolaidis, 2015). However, assessment is said to be a problem for it is not clear how it is done.

Barber and Bailey (2014) contend that although the instructor can exert a great deal of structure of the course design itself, student experiences at the internship site are different for each student and within each student. The primary learning environment is dynamic and uncertain. The next section reviewed literature on how best IA assessment procedure can be improved.

3.4 ASSESSMENT DURING INDUSTRIAL ATTACHMENT

3.4.1 Conceptualising Assessment

Assessment has been defined by O'Farrell (2009) as the systematic and on-going method of gathering, analyzing and using information from measured outcomes to improve student learning in terms of knowledge acquired and skills and competencies gained. Swanger and Gursory (2010) concur that assessment is a systematic collection, review, and use of information about educational programs undertaken for the purposes of improving student learning and development. According to Clarke (2011), assessment is the process of gathering and evaluating information on what students know, understand, and can do in order to make informed decisions about the next steps in the educational process. In other words there must be a laid down procedure that determines students' achievements, errors and gaps in order to keep the student guided along a proper industrial learning path.

Groenwald (2009) maintains that educational values are most effective when they reflect an understanding of multi-dimensional and integrated curriculum and if revealed in performance over time. In other words, students on IA should be assessed in a number of varied tasks which integrate various skills and competencies. For example assessment of a project which requires the student to design, to analyse, to create, to present and to justify. Groenwald (2009) and Timm et al. (2013) concur that good assessment requires being clear about the mission, goals, objectives and learning outcomes; the standards to which you aspire and the

criteria by which you would measure success. This means that assessment works best when the programs it seeks to improve have clear, explicitly stated purposes. This concurs with Biggs (2003)'s assertion that there should be clearly defined learning outcomes which tell us how well individual students will have attained these outcomes at the end of a task or program.

In addition, assessment requires attention to experiences that lead to those outcomes (Groenwald, 2009; Barber & Bailey, 2014). What activities should the ICDC students be undertaking during IA? Should they be doing menial jobs and expect them to perform highly when they return to their learning institutions or when they are engaged after graduating? This means that learning activities should be meaningful and that students should be exposed to different processes or departments so that learning is multidimensional for improvement of performance. The kinds of activities that the ICDC students are engaged in during IA are however not known.

According to Berry (2012), there are three widely recognized assessment approaches in current literature, namely: assessment **of** learning which presents the assessment conception of measurement. Judgments of performance are taken at the end of learning. Assessment **as** learning places special attention on the role of the learner and promotes active engagement of learners; and assessment **for** learning which places stronger emphasis on the role the instructor plays in promoting learning. The student is thus the link between teaching and learning (Ibid). Being an active, engaged and critical assessor, the student makes sense of information, relates it to prior knowledge, and deliberates the strategies and skills involved in taking their learning forward (Berry, 2012; Merwe, 2013; Clarke, 2011). Students self-analyse, self-reference, self-evaluate and self-correct in the learning process (Berry & Adamson, 2011). Assessment as learning may involve the lecturer aligning to a set of procedures that allow the student to move forward independently in the required learning direction (Berry, 2012).

3.4.2 Formative Assessment

Formative assessment is a learning cycle to provide feedback to instructors allowing them to adjust instruction and provide personalised learning opportunities based on students' unique needs (McSweeney, 2014; Surgenor, 2010). According to Trumbull and Lash (2013), formative assessment can be characterized as all the activities undertaken by instructors and/or learners that provide information to be used as feedback to modify the teaching and learning activities in which they are engaged. It is part of the instructional process which when incorporated appropriately into IA practise, it provides the information needed to make the next steps in instruction. In this sense, formative assessment informs lecturers, students and supervisors about student understanding at a point when timely adjustments can be made (Garrison & Michael, 2009; O'Farrell, 2009; Trumbull & Lash, 2013). These adjustments help to ensure students achieve targeted intended learning outcomes within a set time frame (Garrison & Michael, 2009). Formative assessment is for the purposes of improving the quality of students' learning, not to provide evidence for evaluating or grading students (Council on Higher Education (CHE), 2011; Berry, 2012; Chinyemba et al., 2012). Trumbull and Lash (2013) also indicate that rather than waiting to assess students at the end of a unit, formative assessment is used as an integral part of the instructional process to identify learning difficulties and prescribe remediation procedures.

In formative assessment, group assessment can be administered where individuals work collaboratively to produce a piece of work (O'Farrell, 2009). The burden of marking many individual pieces of work is significantly reduced. Feedback can also be provided by peers and can learn better from their colleagues (Murphy, 2009; Trumbull & Lash, 2013). Students can also self-assess and develop reflective thinking as well as critical awareness of their own learning (Groenwald, 2009). One of the key components of engaging students in the assessment of their own learning is providing them with descriptive feedback as they learn (Garrison & Michael, 2009; O'Farrell, 2009).

Descriptive feedback provides students with an understanding of what they are doing well, links to classroom learning, and gives specific input on how to reach the next step in the learning progression. This infers that descriptive feedback is not a grade, neither is it a sticker nor a good (Garrison & Michael, 2009; Berry, 2012).

Such limiting feedback, if used during IA, students may not improve for it does not specify the area in which the student would have done well or poorly. O'Farrell (2009) suggests that assessors should be specific and assessment should be constructive, encouraging, honest, and supportive; and where possible it should be frequent and substantial. O'Farrell (2009) also proposes that effective feedback should clearly indicate what aspects have been successful and those that were not, giving reasons why. It should also indicate how the student should improve in particular pieces of work in future (O'Farrell, 2009; CHE, 2011; Trumbull & Lash, 2013; Berry, 20012).

Given insights into students' thinking, an instructor is in a position to counter misconceptions and steer learning back on track through feedback or instructional modifications (Trumbull & Lash, 2013; Berry, 20012; Garrison & Michael, 2009; O'Farrell, 2009). Feedback is information provided regarding aspects of one's performance or understanding. It takes an informative role when it provides information about the gap between a student's current understanding and the desired level of understanding and it is most effective for the students when it is targeted at the right developmental level and helps the student identify ways to close the gap (Trumbull & Lash, 2013; Berry, 20012; McSweeney, 2014; O'Farrell, 2009; Chinyemba et al., 2012). It helps students clarify the goals of learning, their progress towards such goals and what they need to reach the goals. However, feedback should be timely (Berry, 2012) but should not be provided too soon, as it could prevent the students reflecting on their work neither should it be provided too late when it is no longer salient to the student. It is therefore important to be able to distinguish between formative and summative assessment so that the right type of feedback is given at the right time.

3.4.3 Summative Assessment

Summative assessments are used to measure what students have learnt at the end of a unit, to promote students, to ensure they have met required standards for certification, to enter certain occupations, or as a method for selecting students for entry into further education (O'Farrell, 2009; CHE, 2011). It is testing which often occurs at the end of a term or course, used primarily to provide information about how much the student has learned and how well the course was taught (Berry, 2012; Garrison & Michael, 2009; Chinyemba et al., 2012). Summative

assessments happen too far down the learning path to provide information at any level and to make instructional adjustments and interventions during the learning process. In support of this concept Murphy (2009) and The Sectoral Assessment Working Party (2011) affirm that summative assessment is more product-oriented and assesses the final product, once the project is completed, no further revision can be made. Summative assessments are tools to help evaluate the effectiveness of programs, school improvement goals, alignment of curriculum, or student placement in specific programs (Garrison & Michael, 2009). Ministries or departments of education may use summative assessments and evaluations as a way to hold publicly funded learning programs accountable for providing quality education (Berry, 2012). Garrison and Michael (2009) concur with this assertion in that summative assessment at the district and classroom level is an accountability measure that is generally used as part of the grading process. Internationally, summative assessments have been important for comparing national education systems to developments in other countries (Ibid).

3.4.4 Benefits of Assessment during Industrial Attachment

Assessment during IA allows for the collection of pertinent information on the methods and practises used during training. It also allows for the evaluation of the company's 'fit' to equip students with the pre-requisite practical skills (Frunza, 2014). According to Wallace (2013) the information gathered through IA can be used to modify the IA process. By assessing students during IA, it also helps in standardising output of graduates who undertake TVET programs (Sharma et al., 2017). Interns will focus on the desired skills which are enlisted in their Log Books (Ibid). Skills assessment during IA can offer effective methods to enhance competencies in the area of specialisation (Sharma et al., 2017; Frunza, 2014). There will be a scope of improvement if students become aware that they will be assessed in a practical sense and not in a theoretical manner that they are used to in colleges (Sharma et al., 2017). Assessment of practical skills is considered a drive to learning and therefore enhances the learning process (Sharma et al., 2017; Frunza, 2014; Wallace, 2013). In addition, it provides a platform where the interns are assessed in different skills and also gives an opportunity to assessors to know whether **interns** have correctly gained the skills or not (Sharma et al., 2017). According to Frunza (2014), assessment during IA also ensures correction of errors according to the

scheduled educational trajectory. In addition, feedback brought about through assessment increases credibility of IA and students find the importance of structured efforts by lecturers and host mentors to achieve continuous professional development (Sharma et al., 2017). All these benefits can be realised when assessors conduct their assessment duties proficiently.

3.4.5 Assessment criteria

When designing and carrying out assessment it is important that both students and staff are clear on what students are expected to do, the circumstances in which they are asked to do it and how the marks are going to be awarded (Biggs, 2003; Abdullah, 2013). Chinyemba et al. (2012) concur that assessment criteria need to be understandable, explicit and public. However, students do not always know the assessment criteria or how assessors interpret them; it is often considered the business of examiners (O'Farrell, 2009). In the same vein Groenewald (2009) explains that there is often lack of congruence between what is actually assessed and the criteria that is crucial.

A criterion for assessment explains the relationship between how well a student answers the questions or performs the task set, and the mark and grade which they are given (Keating, 2012). Whereas learning outcomes say what a student is expected to do, assessment criteria say how well they should be able to do it in order to obtain a particular grade. An assessment criteria describes as clearly as possible, the characteristics of what is acceptable, for example, 'good', 'excellent' (Keating, 2012; Berry, 2012). Providing clear assessment criteria is therefore essential for fair and transparent assessments (Keating, 2012; CHE, 2011; Nitko, 2009; Lane, 2009).

Rubrics can be used in assessment which are the grading tools used to assign points or values for meeting performance criteria (Lane, 2009; CHE, 2011; O'Farrell, 2009). Rubrics provide examples of the scoring scale that is used to evaluate students' work. They guide the student in how the work is to be judged on a particular task (CHE, 2011). Poikela (2004) cited in McNamara (2011) suggests three levels on a scale for assessing workplace learning and experience which are: 'satisfactory', 'very satisfactory' and 'excellent'. A grade alone is said to be an inadequate report of an inaccurate judgment by a biased and variable judge of the

extent to which a student has attained an undefined level of mastery of an unknown proportion of an indefinite material (O'Farrell 2009; Berry, 2012). According to Berry (2012), Host Industries often make decisions based on the grade and mark achievements of the candidates which may be misleading as McNamara (2011) notes that supervisors almost universally recommend an 'A' grade possible reasons being a reward for student interns who are frequently unpaid or being the tactic to encourage students to intern in their companies. Many current assessment methods are not tailored to students' needs and students are rarely, if ever, given an active role in their own assessment (Carless, 2006 cited in Berry, 2012). Lane (2009) asserts that when students are made aware of the rubrics prior to instruction and assessment, they know the level of performance expected and they are more motivated to learn. When students are involved in rubric construction, the assignment itself becomes more meaningful to the students (Lane, 2009; Biggs, 2003). It is important to share a rubric with students before assigning them tasks to do (Chinyemba et al., 2012).

Drawing on the government assessment policies, many countries, particularly in recent years, embarked on educational reforms (Ansah, 2012; Adu-Gyamfi et al., 2016; Andoh et al., 2016). These countries provide the overarching policies to link assessment with learning but generally miss concrete ideas on how to make assessment a useful tool to promote active learning in parts or all of their policies and guidelines (Berry, 2012). Assessment policies revolve around processes like examinations, grading, as well as quality assurance, with less emphasis on linking assessment with learning (Berry, 2011b; Abdullah, 2013). Assessment policy reviews can be conducted which include the weighting of the assessment components, assessment tools, rubrics, intended learning outcomes and other issues such as leave days, misconduct and truancy during placement (Kereng, 2014; Donkor et al., 2009).

3.5 ASSESSMENT TOOLS USED IN IA

This section addresses the types of tools and assessment methods that are believed to produce reliable data. One size does not fit all, (Munyoro et al., 2016). So, selecting the appropriate assessment tool requires a basic understanding of the types of tools available, the nature of data, the process used to select appropriate

assessment tools, and the tool's ability to investigate (measure, assess, describe) the observable learning outcome (Ibid). Assessment tools and techniques that can be used to assess students on OJET include reflective journals, portfolios, reports, projects, Log Books, competence statements, multimedia evidence, products and witness testimonies (Shiu, 2008 cited in Jumo et al., 2013; Clarke, 2011; Bell, Urhahne, Schanze & Ploetzner, 2010; Chinyemba et al., 2012). Several of these have been described below.

3.5.1 Log Book as an assessment tool

A Log Book is also referred to as a diary, a workbook, learning logs or a journal (Bell et al., 2010). It can be described as a detailed record of the hours invested in the organization activity by the students describing their input and also incorporating reflective elements (Ibid). It contains a record of proof of students' learning accomplishments, learning experiences and learning outcomes (Chan, 2015). This book is used to assist students to keep a record of the training and it is designed to cause them to reflect on what they have learned or what they are learning (Yaghobian, Fakhri, Salmeh, Yaghobi, Zakizad and Shamshohammadi (2011). It shows the departments and sections in which the student has worked and the periods of time spent in each (Abdirahman, 2015; Yaghobian et al., 2011). A Log Book provides evidence of theoretical and practical experiences gained and as such prompts the student (trainee) through report writing to identify and describe the elements and tasks contained in their competence development frameworks in a logical and concise manner (Chinyemba et al., 2012). It is said to be a proper tool for continuous assessment that provides a feedback loop for evaluation and learning activities (Yaghobian et al., 2011). According to Burke and Hammett (2009), Log Books are best used for formative assessment.

Burke and Hammett (2009) outline several other purposes of a Log Book as: being effective instructional tool that helps students sharpen their thinking and communication skills; they give students the opportunity to think about materials used or needed, clarify confusion; discuss key ideas with others; connect with previous learning experiences and reflect on the personal meaning of the subject matter; and provide a record over time of what has been presented and learned. This approach provides essential means for assessing and reviewing the progress of the

student for correction and/or further development (Chinyemba et al., 2012; Jumo et al., 2013; Burke & Hammett, 2009). Challenges encountered by the students in carrying out certain processes are also stipulated in the Log Books (Burke & Hammett, 2009).

A Log Book usually consists of short, objective entries under specific headings such as problem solving, observations, questions about content or any other categories designed to facilitate record keeping (Burke & Hammett, 2009; McNamara, 2011). Students' responses are typically brief, factual and impersonal. Students' responses should be analytical, that is, breaking the task down into its parts; synthetic in which components are put together into a whole; and evaluative for the judgment about the worthy of the task (Fogarty & Brian, 2007 cited in McNamara, 2011). Burke (2007) cited in McNamara (2011) outlines the following as the various ways in which logs can be used: summarise the main ideas of an activity; connect ideas presented to previous learning, or to other subjects or events; monitor change in an event or experiment over time; brainstorm ideas about potential projects, presentations, assignments and problems; help identify problems and record problem-solving techniques or track progress in solving problems encountered in projects and experiments.

3.5.2 Portfolio as an assessment tool

Portfolios are collections of students' work gathered over time, a flexible on-going record of the student's achievement (Bell et al, 2010). Chan (2015) define a portfolio as a compilation of documentation of a student's past achievements. Portfolios often include students' major pieces of work, feedback from their supervisors/industrial tutors, and their own reflective analysis (Chan, 2015). A complete and well organised portfolio can show a student's development and learning progress in internship (Chan, 2015; Chinyemba et al., 2012).

Portfolio assessment offers many advantages according to Bell et al. (2010) and (Chan, 2015). It has been noted that the primary value of portfolios is that they allow students the opportunity to evaluate their own work. Further, portfolio assessment offers students a way to take charge of their learning; they also encourage ownership, pride, and high self-esteem. Portfolios can be maintained over several

years and can be used as some form of identification as students move from one level of education to another. Other advantages of a portfolio are that it contains evidence reflecting a wide range of skills and attributes; it can reflect student development and illustrates student progression; can reflect attitudes and values and can aid job searching. Portfolios are easily adjusted to differing context or environment in which a student might be placed. However, portfolios can be difficult or time consuming to assess unless clear guidelines are given concerning what should be included or what is acceptable as evidence (Bell et al., 2010; Chan, 2015). In addition, portfolios are difficult to ensure reliability between assessors and can encourage cheating regarding ownership of work. Another disadvantage of portfolios according to Bell et al. (2010) is that they present a whole story creating a major problem if the original folder gets lost.

According to Pennsylvania State University (2011) contents of the portfolio may include: a title page with student's details; introduction; company details; description of internship, that is, tasks and responsibilities of the intern; student's reflection of an overall internship experience; samples of internship work; all journal entries during internship; glossary of terms; a bibliography of resources; contact information for organization and personnel involved; and a current updated resume.

This shows that portfolios are a way of collecting and packaging a comprehensive body of rich evaluation materials. The key is to think carefully through the many logistical, conceptual and procedural issues that must be addressed in order for this tool to be used effectively (Bell, 2010; Chan, 2015). The value of a portfolio as an assessment tool is maximised when they contain items that have been carefully and thoughtfully selected to address specified learning goals (Bell, 2010; Biggs & Tang, 2011). At their best, portfolios can represent an extremely rich portrait of student ability and interests.

3.5.3 Journal as an assessment tool

A journal is a written series of students' ideas, personal thoughts, experiences, reflections, and insights gained during and after their placement. It provides a record of students' IA activities (Chan, 2015). The learning journal functions as a review and analysis of the student's accomplishments during the internship. Entries must be

entered chronologically with date and number of hours worked recorded (Ibid). The learning journal also contains the industrial supervisor's feedback and suggestions regarding the internship/placement (The University of Toronto Mississauga, 2015). According to the subject description form, the journal should cover the following: location of the training; overview of the host organization; the student's roles and responsibilities; required skills and knowledge; development and growth of skills and knowledge; learning experiences and learning outcomes; and effects of training on future career goals (Chan, 2015).

3.5.4 Report as an assessment tool

Types of reports include practical, written and oral. Generally, a report is a systematic and well-organized document that defines and analyses a subject or a problem (Chan, 2015). For example, engineering students are often required to write a progress or technical report as part of their placement assessment (Ibid). Western University and National University of Singapore require students to submit an internship report as one of the assessment tasks for their internship programs (Western University, 2013; Chan, 2015). Generally, students are required to cover: the overview of the company; description of the student's position(s) and role(s) for technical and non-technical work, training received and skills learned as well as special assignment(s); major projects and distinctiveness of the IA; applicability of IA to the student's degree and program; effects of IA on the student's employment or career goals and students' overall thoughts of the IA and the company.

While on IA, students from the Faculty of Commerce in the Tourism, leisure and Hospitality at the University of Zimbabwe are expected to write reports which are submitted to the faculty for assessment purposes, after which a grade will be assigned (Gumbe et al., 2012). In these reports students include recommendations in terms of operational procedures within the company they were attached to. Supervisors at the company also compile reports on the performance of the student, detailing all the departments visited and the duties that the students performed (Ibid). The lecturers and the industrial liaison officer assess students' performance for at least twice during the IA period. Lecturers take note of students' concerns after which they compile reports which are submitted to the university administration before students start their fourth and final year (Gumbe et al., 2012).

It is also common that the student's presentation is followed by a discussion section, where the supervisor may ask questions and the student needs to respond and defend any presented materials (Bell et al. 2010; Chan, 2015). In their internship course, Université Catholique de Lille employs *viva voce* as an oral examination in addition to students' completion of internship/placement and a written report (Chan, 2015). Students are expected to present the content of their IA experiences, to defend their presentation and perspectives. At the end of the *viva voce*, the jury's president comments on the presented work according to the following: presentation of the company's strategies; definition of the company's missions and actions; students' reflections on the project; debate with the jury (Ibid).

3.5.5 Project as an assessment tool

Projects are distinct from written assessments and performance tasks because they are cumulative (Chan, 2015; Bell et al., 2010). They reflect work done over an extended period rather than in response to a particular prompt. Students draw upon the skills they have developed over time (Ibid). A project has three components: a research paper, a product or activity, and an oral presentation, all associated with a single career-related theme or topic (Bell et al., 2010). The format is designed to be motivating, to permit involvement of people from business or community, and to encourage integration of academic and vocational ideas (Bell et al., 2010; Chan, 2015). Their scoring guides reflect concerns about content, technical knowledge, organization and time management, the extension of knowledge outside traditional school domains, communication skills, and even appearance (Chan, 2015). All these involve subjective judgments, so great care must be taken to ensure that scores are accurate and meaningful. Bell et al. (2010) explain that the case study or project should be verified by a manager or supervisor. During IA, ICDC students can produce projects that integrate knowledge acquired from different departments.

Bell et al. (2010) explain that students may make products during workplace learning. A situation where students can design and create their own line of products as their own initiation is quite possible with the ICDC program. They can produce garments which can be assessed by mentors and lecturers and by students themselves individually or as peers. Bell et al. (2010) indicate that such products

could be used as evidence but an additional reflective diary could be prepared to support the product created from design brief to the final product.

3.6 HOW BEST CAN IA ASSESSMENT BE IMPROVED

IA is an essential component of Polytechnic College education therefore lecturers, Host Industries and policy-makers should attend to issues that ensure students' participation in experiences that are truly in their professional spheres and personal interests over the long-standing (Hora et al, 2017). Very little has been talked about improving IA assessment per se, rather there is an extant of literature that suggests how the process of IA can be improved. This has been considered very useful in shaping IA assessment in this study. Key issues to be considered when designing the IA program and modes of assessment were the main thrust of this section.

3.6.1 Pre-placement of students

Chiweshe et al. (2011) suggest that students should be adequately prepared for workplace expectations and anticipated social changes before they leave for IA. This will help them have an insight into the attitudes of workers and the nature of environment in which they will operate. Kereng (2014) asserts that students should be provided with educational, supportive and administrative instructions throughout their IA and ensure that the supervisor has sufficient time to give the students effective instruction and guidance. On the same note, Chinyemba et al. (2012) concord that quality of assessment depends on the effectiveness of induction and training of assessors or pre-orientation training sessions (of both lecturers and supervisors) and how the system is administered by the institution as well as effective participation of employers.

3.6.2 Placement of students

Employers should not sign up to host interns simply because they need low-cost labour (Chiweshe et al., 2011). Engaging students to provide cheap labour can arguably be considered unethical and unfair (Hora et al., 2017). Many educational professionals emphasize that internships are intended to be an educational experience for the interns and warn employers against considering prospective interns as inexpensive labour or as a way to offload menial or boring tasks from permanent employees (Jumo et al, 2013; Chinyemba et al., 2012; Owusu-Acheangpong et al., 2014; Hora et al., 2017). With regards to placement, protocol

demands that negotiations be conducted between institutions to avert the delays and frustrations that are experienced by students (Kiplagat et al., 2013; Chiweshe et al., 2011). Bukaliya (2012) recommends that legislation should be enacted to protect interns against exploitation by unscrupulous employers.

For IA programs to be effective such that Host Industries are always prepared to take on students for practical work, colleges must enter into partnerships with relevant Host Industries (Bukaliya, 2012; Goenewald, 2009). This means that the problem of placement can be circumvented by creating strong relationships with organisations that have adequate, appropriate and latest equipment (Chiweshe et al., 2011). Hora et al. (2017) concur that the IA officers in the training institutions should be up and doing in search for well-equipped Host Industries where the trainees can get maximum exposure to practical work. This way, students can go to such Host Industries to do their IA instead of roaming around from company to company in search of placement (Bukaliya, 2012; Howard et al., 2014).

Institutions should keep a database of such organisations that are recommended for placement (Groenwald, 2009; Andoh et al., 2016; Howard et al., 2014). There should also be an audit of these Host Industries to establish the level of personnel qualifications especially supervisors (Bukaliya, 2012). Those responsible for assigning students to practical settings must closely evaluate the environment because finding placement does not guarantee quality mentoring and assessment (Ibid). On the other hand, before enrolling in an internship program, employers should be willing and capable of involving students in authentic, professional-level tasks that are appropriate for an entry-level employee (Hora et al., 2017; Karunaratne & Perera, 2015).

3.6.3 Adequate resources and organizational capacity

Designing and hosting internship programs requires a significant amount of resources. Olugbenga (2009) argues that for effective training to take place and to create skills that are relevant to the future during IA, institutions of training must have up-to-date technology. Lucas (2005) cited in Gumbe et al. (2012) emphasizes that learners must have access to the full range of modern equipment utilized in industry for training to be effective. Basically, interns require a stable workplace and the

necessary tools to do their work as would any other employee (Hora et al., 2017). According to Hora et al. (2017), the government should help as many industries as possible with the requisite equipment fit for sharpening the skills of the attachés. As it is done in Nigeria, a special fund must be set aside to finance the IA program. This fund could be contributed to by the government, industries and Non-Governmental Organisations who may be direct beneficiaries of the program (Hora et al., 2017).

Colleges may fail to participate fully in the assessment process due to logistical issues relating to unavailability of funding and transport (Chiweshe et al., 2011). Drawing upon the CIPP evaluation model, adequate funding and transport are inputs into the IA process (Patil & Kalekar, 2015; Stufflebeam, 2015; Zhang, Zeller, Griffith, Metcalf, Williams, Shea & Misulis, 2011). This therefore underlines the importance of setting up a solid supportive infrastructure in terms of funding, transport, materials and equipment (Chiweshe et al., 2011; Abassah, 2011). Chiweshe et al. (2011), in support of this inspection, assert that financial and transport challenges can be averted through giving students some form of allowances such as what is usually offered by the government and industry through Zimbabwe Manpower Development Fund (ZIMDEF). In addition, a study by Bukaliya (2012) advocates for the government intervention to ensure that some pieces of legislation are put in place to make it mandatory for interns to be paid. Through such befitting support, students can benefit massively from the IA assessment process.

3.6.4 Training program

According to Hora et al. (2017), pragmatic measures must be taken to restructure the program so as to increase the duration of IA. Students suggested that the duration of IA should be twelve months instead of six or less (Karunaratne & Perera, 2015). The other suggestions for improvement given by students who completed the internship programme at the host company are: need for proper training schedule to cover all the departments in the company, overall training than specialized training, projects allocation, need to give more chances to apply theoretical based learning to industrial activities, factory visits and supplier/customer visits, freedom to work independently, proper evaluation and the need for more participation for team work activities (Karunaratne & Perera, 2015; Hora et al., 2017; Chinyemba et al., 2012). A well-structured internship program will ensure greater opportunities for the interns to

gain the much-needed working experience in the limited time given to them. Also, it suggests that both industry and academic work together to develop a comprehensive industrial internship program that will provide relevant practical experience and knowledge to the students (Karunaratne & Perera, 2015; Kiplagat et al., 2016).

3.6.5 Frequency of assessment

Some studies suggest that assessment visits by lecturers should be increased at least to three times during IA while some suggest that it should be done twice (Chinyemba et al., 2012; Owusu-Acheampong et al., 2014). Some however view assessment by lecturers as not being worthwhile describing it as 'just' but a process in which lecturers only fulfil their duties (Chinyemba et al., 2012). Frequency of visits by lecturers is very important but may differ depending on the duration of IA and the support that they get from their institutions (Groenwald, 2009; Owusu-Acheampong et al., 2014). Number of students to be assigned per lecturer should be limited to a maximum of ten but should take into account the lecturer's availability and as well as the geographic spread of students allocated (Groenewald, 2009).

3.6.6 Close coordination between Colleges and Host Industries

The degree of coordination between Colleges and Host Industries is a major factor that influences the effectiveness of the IA assessment programs (Hora et al., 2017; Karunaratne & Perera, 2015). Lecturers are critical in identifying learning goals, setting clear criteria for success, and designing assessment tasks that provide evidence of student learning. According to Hora et al. (2017) the faculty, Host Industry coordinators and students should work together to design specific educational learning objectives for the duration of the student's internship. In addition to well-planned learning goals, Hora et al. (2017) point at other ways to coordinate academic content and internship experiences which include internship assignments, meaningful feedback and evaluations coproduced by the academic supervisor, the worksite supervisor, and the student.

Karunaratne and Perera (2015) aver that establishing a close relationship and understanding between the two institutions will create a flexible work schedule and comfortable work environment for the trainee which will lead them to achieve a wider scope of training and experience opportunities. Internships programs help nurture the development of mutual relationships between the faculty and host organisations

which in turn can help in identifying research areas, access to guest lecturers, and opportunities for student trips (Mgaya & Mbekomize, 2015; Hora et al., 2017). Internship programs also enable organisations to establish links with universities through sponsoring some university activities or providing guest lecturers (Adjei et al., 2014; Mgaya & Mbekomize, 2014). Mgaya and Mbekomize (2014) reiterate that in developed countries there is good collaboration between universities and host organisations in the administration of internship programs.

According to Yusof and Fauzi (2013) academics play a vital role to ensure that the institution's expectation of having students on IA is met. Mgaya and Mbekomize (2014) indicate that several students would like the university to take the internship program more seriously rather than what they were doing such as simply giving them letters to go around looking for placement. Host Industries also would like lecturers to regularly visit the students on internship to monitor their progress and discuss pertinent issues with them (Chiweshe et al., 2011; Adjei et al., 2014). Alzahrani and Woollard (2013) assert that collaborative learning activities can engage students' participation and interaction, working together towards a common academic goal and increasing the level of satisfaction and feelings of connection and community. A formidable linkage between the colleges and Host Industries can be effectual in the assessment of students during IA.

3.6.7 Vertically and Horizontally Integrated Curriculum

Vertical integration refers to activities undertaken in the Polytechnic Colleges. In a complementary way, the horizontal flow includes external relationships established between the Polytechnic Colleges and the Host Industries (Perez-lara et al., 2018). According to Goddam, Gowda and Vaidyanathan (2016), educational reforms through vertical and horizontal curriculum integration emphasises content, team work, communication, hands-on, open-ended problem formulation and solving and examples of best practices from industry. This will enable students realise full gains of collaborated efforts between their institutions and their Host Industries. The goal of synthesis is to develop curriculum strategies and alternative modes of instruction and access that foster horizontal and vertical integration of ICDC knowledge within the context of broader societal factors (Gaddam et al., 2009; Rafique, 2014; Dick et al., 2009). There is therefore need to create boundaries and methods for integration

between institutions and industry within the academy (Alsaggaf et al., 2016; Perez-lara et al., 2018; Rafique, 2014; Esubalew, 2017).

The ICDC curriculum must first examine its goals and the objectives necessary to achieve these goals. The process should further examine the existing curriculum to determine the strengths established in the course already being taught. It may simply be a matter of fine tuning the existing practices to allow for vertical and horizontal integration of the curriculum (Esubalew, 2017; Rafique, 2014). There is a need to bridge the curriculum gap in the training of the ICDC students especially during IA so that they realise the value of their course. Opportunities and benefits derived from a fully integrated curriculum includes the fact that conceptual and philosophical reinforcement of technical knowledge is developed in addition to the student improving in leadership and team building skills (Perez-lara et al., 2018; Goddam et al., 2016). There will be more effective utilisation of the workshop machinery and higher concentration of student time on tasks that develop and enhance competencies and skills mastery (Rafique, 2014; Gaddam et al., 2016). In addition, there will be less chances of missing or unintentionally duplicating some concepts in the overall IA training (Rafique, 2014; Gaddam et al., 2016, Dick et al., 2009).

Furthermore, there will be continual evaluation of the curriculum relevance, particularly the pre-requisites and the core-requisites (Alsaggaf et al., Rafique, 2014; Gaddam et al., 2016). Another benefit will be anticipating and off-setting the potential negative effects of irrelevant tasks and workloads (Rafique, 2014; Esubalew, 2017; Gaddam et al., 2016; Dick et al., 2009). Integrated approach to teaching results in better comprehension of the subject which in turn leads to better performance of the students in the final examinations and ultimately in their job careers when they finally join the world of work (Rafique, 2014; Esubalew, 2017; Dick et al., 2009).

3.6.8 Quality, behaviour and roles of supervisors and assessors

Cutting edge trainers should always create new thinking and better ways of doing things therefore the need for supervisors to keep their skills up-to-date and up-to-scratch (Hora et al., 2017). This implies that the supervisor has a critical role of shaping trainees and the quality of an attachee is determined by the supervisor (Gumbe et al., 2012; Munyoro et al., 2016; Sivotwa et al., 2014; Hora et al., 2017; Owusu-Acheampong et al., 2014). The study by Trede et al. (2013) places the

responsibility for good IA learning with the supervisor to provide scaffolding orientations, and give constructive feedback that would allow the student to learn. In addition, supervisors need to be flexible, accommodative, and adaptable and to have an open mind so that they also learn things and be receptive to new ideas (Gumbe et al., 2012; Dickinson, 2010).

Organizations and supervisors who accept internship placements must be aware that interns require and expect a higher level of supervisory engagement (Hora et al., 2017; Chinyemba et al., 2012). In support of this subscription, for anybody to assume the duty of serving as a technical instructor, such a person is expected to possess the needed competences for imparting technical knowledge and skills (Abassah, 2011). Hora et al. (2017) assert that Host Industries should ensure that supervisors are well trained and provide meaningful experience and assessment. These supervisors should be trained through specific pre-attachment seminars through government initiatives (Owusu-Acheampong et al., 2014). Gumbe et al. (2012) emphasise that the success of the IA program hinges on placement of students under experienced and skilled supervisors. In the view that the supervisor plays a more critical role during IA, they should be given more authority and responsibilities for the students' education during IA. Despite so many issues in relation to assessment by workplace supervisors, it may still be useful to include them in IA assessment (Costley & Armsby, 2007 cited in McNamara, 2011; Hora et al., 2017; Donkor et al., 2009; Muchemi et al., 2013).

3.6.9 Attitude of students during IA

Little (2010) expresses the need for students to have a positive attitude towards work; be fully committed, engaged and being prepared to take learning back into the workplace. Kiplagat, Khamasi & Karei (2016) suggest a number of critical elements of attitude that should be found in students on IA. These include taking responsibility of their own learning, thus they need to be attentive, observant and seek clarity where understanding will be lacking. Students should be open so that they say what they think and feel during training and be able to share their opinions with others. Students should be punctual and be time conscious. They should be cooperative as concurred by Gumbe et al. (2012) that trainees must not be difficult to work with and should allow the trainer to show them the right (correct) procedures of doing tasks

from the start as unlearning may be difficult. Perhaps when these qualities are exhibited by students during IA, assessment will be easier to conduct. Barber and Bailey (2014) acknowledge that the success of the interns in their respective organisations is critical to building strong relationships between the institution and the organisation. This means they should build good rapport between industry and colleges as they are the middle source of the internship program (Karunaratne & Perera, 2015). This facilitates timely and effective feedback from both parties.

3.6.10 Assessment tools

The level and type of skills and competencies imparted through assessment will depend on the level and type of course. According to O'Farrell (2009), it is likely that assessment will generate the following achievable skills: analytic skills, communication skills, contextualization, critical awareness, independent judgement, intellectual prowess, interrelation of knowledge and understanding, intuitive powers, problem solving skills and vocational demonstration of skills. These skills are applicable to the assessment of students during IA therefore suitable and dependable assessment tools should be developed.

Reports and projects as discussed earlier can act as an alternative or complementary assessment tools to Log Books (Chan, 2015; Bell et al., 2010). In addition to the daily and weekly records, the student should submit a report of the work done during the attachment (Keating, 2014; Mgaya & Mbekomize, 2014). Training reports are academically assessed against known academic standards to yield equitable outcomes commensurate with IA objectives. Bonnets (2009) identifies portfolios as important IA assessment tools which include a final on-site assessment report and a presentation to a panel of mentors. Barber and Bailey (2014) also state that using diaries is a common pedagogical tool to accomplish a variety of learning goals.

A combination of tools can effectively be used especially in technical subjects for assessment to be all-encompassing. Part marks can be obtained from these various assessment tools in order to avoid over reliance on one assessment tool. Abdirahman (2015) asserts that the whole IA exercise is marked out of 100 marks where by the supervisor's assessment constitutes 30 marks, lecturer's constitutes 30

marks, IA report, 30 marks and Log Book, 10 marks. According to Kereng (2014), an internship report constitutes 60%, lecturers' assessment, 30% and the Log Book, 10%. Donkor et al. (2009) concur to the generation of marks from varied assessment tools and highlight that IA reports which are marked by lecturers are weighted 60% with IA experience which is assessed by the supervisors weighted 40%. Tools used and weighting can vary depending on the field of study and the duration of IA. Marks for ICDC students can be obtained from IA assessment reports, portfolios, *viva voce* and projects since it is a practical skills area.

Traditionally, students keep Log Books or build portfolios to show their experience and the skills development. Many of these paper-based forms of assessment are inadequate in terms of demonstrating students' mastery of complex practices (CHE, 2011; Olufemi, 2012). As already alluded to by Stuckey (2007) cited in McNamara, (2011) an alternative would be for students' performance in their placements to be digitally recorded. Digital records can then be included in the student's portfolio of work and can be reviewed by the academic. A digital Log Book has been advocated for by Olufemi (2012) which is said to enrich the documentation of learning experiences. It serves as a training manual for assessors to guide and follow students learning activities and correct entries made into their Log Books electronically (Korthagen, 2009; Olufemi, 2012). This concurs with Barber and Bailey (2014) who assert that using online journaling functions help instructors track when students complete journal entries while also allowing instructors to provide real-time feedback to improve reflection quality. These electronic Log Books and journals are said to afford students space to clearly explain the details of procedures mastered (Olufemi, 2012). Columns can be adjusted, providing adequate space for describing processes and even for drawings and diagrams such as in the working of garment processes. Digital Log Books provide additional features like the use of videos and photographs (Olufemi, 2012). Practical subjects may also require more space in their Log Books to diarise daily activities and make some illustrations of designs and processes constructed electronically.

3.6.11 Feedback

The hallmark of the internship experience is performing real world-tasks on the job and participation in such work must be accompanied by critical self-assessment

informed by detailed feedback from both educators and employers (Hora et al., 2017). In many studies interns emphasised the need for more and higher quality feedback especially with specific directives rather than ambiguous suggestions (Hora et al., 2017; Barber & Bailey, 2014). Programs can also be developed that spark student's self-reflection and growth, for example, requiring students to maintain a log and create a portfolio of their internship experience (Hora et al., 2017). Such tasks provide students with an opportunity to evaluate their progress towards their learning goals. Knowledge of both self and environment, realities on the ground and continual feedback are meaningful indicators that will help the students make informed decisions as to whether they have attained a 'fit' or consistency with their career choices (Adjei et al., 2014).

According to Merwe (2013), feedback from lecturers who visit Host Industries regularly to observe students and to conduct assessments helps them have a finger on the pulse of the practice component. The study conducted by Adjei et al. (2014) recommends that supervisors and lecturers discuss the results of the evaluation between themselves first and then bring in the student, where corrective measures are carried out in terms of performance for the purpose of success and effectiveness of the practical training. Barber and Bailey (2014) assert that the assessors may choose to hold regular group sessions in which students discuss some of their internship activities to solicit feedback or merely share their experiences. Given that the experiential learning approach is critical to an internship course, students may benefit most from receiving feedback on all of their assignments before turning them in for a grade (Barber & Bailey, 2014). For example, the supervisor can assess the construction of a garment in stages and provide feedback on each submission which will accumulatively result in their final grade which provides feedback summatively.

3.7 CHAPTER SUMMARY

This chapter reviewed literature related to a number of issues that were raised in the research questions with focus being on assessment strategies used during IA, assessment tool(s), views of participants on the whole IA assessment process and ways to improve assessment in ICDC during IA. It is against this background of imperatives that are relevant, the literature review of some assessment perspectives

and a brief discussion on reflection that research methodologies and methods used in this study were discussed in the subsequent chapter.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

The purpose of this chapter is to present the philosophical assumptions underpinning this research as well as to introduce the research strategies and techniques applied in analysing the Industrial Attachment (IA) assessment procedures for Industrial Clothing Design and Construction (ICDC) used in the Polytechnic Colleges in Zimbabwe. The interpretative stance in the field of ICDC was examined and the research approach followed in case study research was described. Data sources, data collection and analysis procedures as well as ethical considerations were also detailed in this chapter.

4.2 INTERPRETIVE RESEARCH PARADIGM

Paradigm is a term that comes from the word *paradeigma* which means an unchanging model (Thomas, 2013). This term is associated with Thomas Kuhn (1962, 1970) who defines it as the underlying assumptions and intellectual structure upon which research and development in the field of enquiry are based (Lincoln, Lynham & Guba, 2011; Mertens, 2010; Magwa & Magwa, 2015). According to Tichapondwa (2013) and Rubin and Babbie (2011), a paradigm is a world view of a subject that includes its underlying philosophies and assumptions inherent in that view. This refers to a fixed set of assumptions about the way in which investigation should be conducted. These assumptions are enlarged upon hereunder.

There are two major philosophical assumptions that differentiate the various paradigms which are ontology and epistemology (Mertens, 2015; Creswell, 2014; Briggs, Coleman & Morrison, 2012). Ontology consists of a range of perceptions about the nature of reality (Briggs et al., 2012). It was therefore important for the researcher to become aware that there were multiple realities that were likely to yield multiple interpretations throughout the study. Epistemology focuses on how we come to certain realities and as a result, knowledge is usually authenticated by employing direct observation or measuring the phenomena at hand (Mertens, 2015). Different paradigms have different assumptions about reality (Ponelis, 2015; Mertens, 2015;

Creswell, 2012; Barbour, 2014) thus understanding the research paradigm to be adopted in this study was important because it influenced how the researcher structured and conducted the study. The philosophical assumptions underlying this research came from the interpretive traditions. This implies a subjective epistemology and the ontological brief that reality is socially constructed as explained in the preceding paragraphs.

Interpretivists believe that researchers discover reality through the views, background and experiences of participants (Thanh & Thanh, 2015; Yanow & Schwatz-Shea, 2011). This study sought to explore the procedures used in assessing ICDC students through the views and experiences of lecturers, students, supervisors, external assessors and policy makers with the purpose of uncovering the reality of assessment when students are on IA. Interpretive researchers do not seek answers for their studies in a rigid way (Briggs et al., 2012; Thanh & Thanh, 2015, Morehouse, 2011) and their model of a person is an autonomous one, not the plastic version favoured by the positivists (Dina, 2012; Green & Browne, 2009; Cohen, Manion & Morrison, 2011). This means that positivists method allows experimentation on measurement on what could be observed with the goal of discovering in general laws to describe constant relationships between variables (Mertens, 2015; Matthews & Ross, 2010). This method falls short when applied to human behaviour as there are still some important aspects such as feelings and thinking that are not observable (Mertens, 2010; Cohen et al., 2011). In this study the researcher tried to understand the complex world of lived experiences through engagement. The researcher did not want to rely on basic information or to take information from a general point of view but to dig deep into the perceptions, emotions and feelings of participants.

Interpretivism is associated with subjectivity and multiple realities (Mertens, 2015; Cohen et al., 2011; Briggs et al., 2012). The researcher was thus enabled to seek answers through various categories of respondents as already mentioned. According to Morehouse (2011) the idea of multiple perspectives arises from the belief that external reality is variable, different people have different views of the world. In this case perspectives of different categories of respondents were considered so as to understand the great diversity of realities about assessment during IA. This therefore

led to a more comprehensive understanding of the assessment procedures employed and this significantly facilitated in-depth information and insights from participants (Thanh & Thanh, 2015). IA assessment may mean different things to different people involved in the assessment process. Hence the researcher allowed the concept of assessment to emerge as meaning was constructed by participants. The researcher also acknowledged that the experiences of participants do not result in a definite capture of reality that can be generalised but rather their account and experiences shed light on what constitute assessment during IA and what strategies could be adopted by other Polytechnic Colleges.

Briggs et al. (2012) maintain that interpretivism assumes that reality cannot exist separately from the knower. This means that the knower cannot be separated from the known. In interpretivism, knowledge is socially constructed by people actively involved in the research process and the researcher tries to understand the complex world of their lived experiences (Mertens, 2015; Cohen et al., 2011). In the current study, this was useful in that the researcher gained in-depth knowledge on IA assessment procedures through conducting the interviews in person (Thanh & Thanh, 2015). The nature of the data collected really needed the researcher to participate in the data collection process. The inquirer and the inquired-into were interlocked in an interactive process, each influencing the other without personal distance (Cohen et al., 2011). The researcher recognised the common humanity that connects researchers and the participants so the researcher's intention was to learn from them and with them, rather than conducting research on them hence the choice of the interpretive study (Mertens, 2015; Cohen et al., 2011).

Hutton (2009) explains that there are various routes a researcher can use to get credible findings in a single research study. In this study, the researcher took advantage of this opportunity that interpretivism embraces and used multiple data collection instruments (interviews, Focus Group Discussions (FGDs) and document reviews) in a single study. The use of interviews and FGDs was a much more flexible way of soliciting information from the participants (Merten, 2015). These multiple data collection instruments enabled the researcher to obtain qualitative data which is one of the strengths of interpretivism. Furthermore, this enabled the researcher to

gain deeper insights on how IA assessment in ICDC is being undertaken in the Polytechnic Colleges in Zimbabwe.

The researcher then considered the research approach associated with interpretivist studies as discussed in the subsequent section.

4.3 QUALITATIVE RESEARCH APPROACH

Research approaches are plans and procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis and interpretation (Creswell, 2014). The decision on which approach to use was informed by the philosophical assumptions the researcher brought to the study, procedures of inquiry (research design) and specific research methods of data collection (Creswell, 2014). The selection of the research approach was also based on the nature of the research problem or issue being addressed. Three main research approaches are qualitative, quantitative and mixed methods (Creswell, 2014; Mertens, 2015; Cohen et al., 2011; Magwa & Magwa, 2015). Due to the nature of the purpose of this study, as well as the research questions generated, the study had to follow a qualitative research approach.

Qualitative research is usually conducted in natural settings such as schools, classrooms, and sports fields (Creswell, 2012; Leedy & Ormrod, 2010; Otieno, 2009; Thanh & Thanh, 2015). Rahman (2017) and Flick (2014) also admit that data in qualitative research is typically collected in the participant's setting. This study was conducted in Polytechnic Colleges, Clothing Companies and Ministry of Higher Education offices. Rahman (2017) explains that qualitative data seeks to describe, decode, translate and otherwise come to terms with the meaning of certain more or less naturally occurring phenomena in the social world. Thus, an intense and prolonged study was conducted by the researcher who studied individuals in their own settings and made follow-ups to incomplete and unclear data for individuals in their respective settings for more than six months.

The researcher is the main research tool in qualitative research (Briggs et al., 2012; Creswell, 2014; Mertens, 2015). In this study the researcher collected interview and FGDs data in person and she also collected data from all the documents that were

necessary to draw up conclusions with regards to IA assessment in the bid to come up with improved IA assessment procedures. During data collection, the researcher took an interactive role bringing her in close contact with participants in order to collect rich data (Thanh & Thanh, 2015). Data was recorded verbatim and according to what was ascertained during document reviews by the researcher. According to Mertens (2015) and Magwa and Magwa (2015) there is bound to be research bias if the researcher is part of the data collection process. In order to respond to this, the researcher attended research workshops before going to the field. There were also several capacity building programs organised and conducted by the research promoters for all the forms of data collection methods.

Qualitative research depends upon words rather than numbers (Mertens, 2010; Briggs et al., 2012; Matthews & Ross, 2010; Thanh & Thanh, 2015). Hence it involves extensive use of descriptive data where the phenomenon is described in words rather than numbers (Creswell, 2012). Flick (2014) explains that it is the social production of issues, events or practices by collecting non-standardised data and analysing text and images rather than numbers and statistics. The key issue is that textual analysis predominates and words can be broken into semiotic segments, they can be organised to permit the researcher to contrast, compare and analyse and bestow patterns upon them (Briggs et al., 2012). The researcher used descriptions in data presentation and analysis through the use of words in order to draw meanings about the data provided by participants on how IA assessment for ICDC students is undertaken by the Polytechnic Colleges in Zimbabwe.

Qualitative approach produces thick, detailed descriptions of participants' feelings, opinions and experiences and interprets the meanings of their actions (Rahman, 2017; Matthews & Ross, 2010; Cohen et al., 2011; Thanh & Thanh, 2015). According to Briggs et al. (2012) the essence of qualitative research is **rich and deep descriptions**. In this study, responses from individual and group interviews offered important insights upon which the researcher construed the procedures being used in assessing ICDC students during IA. Detailed consideration was given to the holistic picture in which the research topic is embedded (Briggs et al., 2012). Therefore this qualitative research tends to be rich with quotations, descriptions and narrations as the researcher attempted to capture conversation, experiences,

perspectives, voices and meaning (De Vos, Strydom, Fouche & Delport, 2011; Rahman, 2017). This was very useful in the analysis of how assessment is being undertaken during IA, as data sources needed to be interrogated in order to yield rich, profound and detailed data.

Qualitative research is best suited to address a research problem in which one does not know the variables and where one needs to explore the problem (Briggs et al., 2012). Literature might yield little information about the subtleness of the study hence the researcher needs to learn more from participants through exploration with the participants (Briggs et al., 2012). Likewise, there could be very little that literature gives with regards to assessment of ICDC students during IA in the Polytechnic Colleges in Zimbabwe. Hence, there was need to learn more from the participants for example, what their expectations from IA experiences are. Thus the issue of assessment during IA required both an exploration (because the researcher needed to know how these students were being assessed) and an understanding (because of its complexity) of the process of assessment (Briggs et al., 2012).

Qualitative research design has a flexible structure as the design can be constructed and even reconstructed to a greater extent (Maxwell, 2012). Thus, the thorough and appropriate analyses of assessment issues can be produced utilising qualitative research methods, and therefore participants have sufficient freedom to determine what is consistent for them (Flick, 2014). As a result, the complex issues can easily be understood. For example, the researcher acknowledged that because of the nature of industrial and institutional dynamics, participants' behaviour could be affected by numerous factors outside of research focus (Flick, 2014; Mohan, 2012). In this respect, the qualitative research approach was necessary to capture these dynamics. As the nature of assessment is also complex, there is a suggestion by Mohan (2012) to employ the qualitative research methodology, thus, the qualitative research contributed to the understanding of complex features of assessment procedures during IA.

According to Rahman (2017), data analysis and interpretation can be more difficult and complex in qualitative studies. Berg and Lune (2012) contend that qualitative research is a long and hard road with elusive data on one side and stringent

requirements for analysis on the other. For this reason, Flick (2014) affirms that the analyses of the cases take a considerable amount of time. The researcher however saved a lot of time and rigour that characterises most qualitative researches by trying to make sense of data during data collection process whereby some themes emerged (Flick, 2014). The results were also generated into more broad categories that represented the research findings (Creswell, 2012; Cohen et al., 2011; Briggs et al., 2012). Report writing included flexible, emerging structures and evaluation criteria (Creswell, 2012) hence the qualitative report in this study needed to be realistic and persuasive to convince a reader that the study is an accurate and credible account of what transpires during IA assessment of ICDC students in the Polytechnic Colleges in Zimbabwe.

Having discussed qualitative approach and its relevance, the next section unpacks the research design that guided the study.

4.4 CASE STUDY RESEARCH DESIGN

Research design is the logic that links the research purpose and/or questions to the process of empirical data collection and analysis in order to find conclusions drawn from the data (Yin, 2009). Welman, Kruger and Mitchell (2009) describe a research design as an overall plan, according to which the respondents of a proposed study are selected as well as the means of data collection or generation. In this sense a research design is viewed as the functional plan in which certain research methods and procedures are linked together to acquire a trustworthy body of data for empirically grounded analysis, conclusions and theory formulation (Ponelis, 2015; Welman et al., 2009). It is simply a plan or a blueprint for conducting research. There are a number of research designs in interpretive, qualitative approaches identified by various authors that can be used in order to acquire data that is trustworthy from which conclusions are drawn. These include case study, phenomenology, historic, narrative, ethnography, grounded theory and action research (Mertens, 2015; Magwa & Magwa; 2015; Creswell, 2012, 2014; Barbour, 2014; Matthews & Ross, 2010; Flick, 2014). Case study research design was used and this design is explored in the next paragraphs.

Mertens (2010) defines a case study as an approach that involves an in-depth exploratory of a single case of the phenomenon under study. It is further described as an investigation to answer specific research questions which seek a range of different evidence from the settings (Flick, 2014; Creswell, 2012; Mertens, 2010). It is therefore a holistic approach to the study as the relationships, the component parts of the case, the case as a whole and the social context are all of interest to the researcher (Matthews & Ross, 2010). According to Auther, Warring and Hedges (2012) a case study is a strategy for doing research which involves an empirical investigation of particular contemporary phenomenon within its real-life context using multiple sources of evidence. A case may be an individual such as a lecturer, an institution such as a Polytechnic College, an event, project or program within an institution; it may be a policy or other types of systems (Matthews & Ross, 2010; Barbour, 2014; Flick, 2014; Ponelis, 2015; Mertens, 2010). In the context of this study, the case was the two Polytechnic Colleges in Zimbabwe.

Flick (2014) asserts that the purpose of a case study research might be to explore a phenomenon about which not much is known or to describe something in detail. The phenomenon of IA assessment for ICDC in Polytechnic Colleges in and outside Zimbabwe may not be fully explored. Therefore, the researcher decided upon a case study to explore this phenomenon and gain in-depth understanding of its complexities and in particular, the dynamics of assessment during IA. In this respect the researcher decided to carry out a multiple case study rather than a single case study. A multiple case study is a research undertaken about the same phenomenon at multiple sites. Two Polytechnic Colleges were used. This is because the researcher was interested in making some broad comments about what characterises the assessment process in the Polytechnic Colleges in Zimbabwe. Also, the use of three Clothing Companies situated the study in a multiple case study. In a single case study it would be difficult to study just one entity yet assessment procedures used during IA involve different scenarios by different categories of people. It involves collaboration of colleges and companies for effective IA results.

A case study enables the researcher to intensively investigate the case in-depth, to probe, drill down and get at its complexity often through long term immersion in

repeated visits to or encounters with the case (Auther et al., 2012). The researcher conducted the study for a considerable period of time and had a chance to study the cases in depth in order to establish the assessment procedure used during IA. In conducting interviews, the researcher could rephrase questions for clarity and probe for the breadth and depth of data necessary to arrive at conclusions about IA assessment procedures. This was all due to the yielding nature of case studies.

The flexibility and adaptability of a case study allows single or multiple methods of data collection to be used to investigate a research problem (Ponelis, 2015; Mertens, 2010). Flick (2014) concurs that constructing the case is most fruitful if several methodological approaches are triangulated. A case study allows for a certain degree of methodological eclecticism which typically includes asking people questions, observing what happens and analysing documents (Auther et al., 2012). In this study, multiple methods were used with interviews as the main data collection instrument (Flick, 2014; Barbour, 2014; Cohen, et al., 2011). These were augmented by FGDs and by reviewing a range of documents relating to IA assessment. Multiple methods and sources are often made use of to achieve in-depth understanding of cases in order to confirm emerging findings and to point to contradictions and tensions (Thomas, 2010; Mertens, 2010). This may bring about diverse views valuable in data analysis and interpretations.

In case studies the richness and complexity of the data collected means that the data is open to different interpretations and potential research bias (Creswell, 2009; Mertens, 2010). The researcher however, remained guided by research questions in data interpretation and in drawing up conclusions about the study. The researcher found this rich and complex data gathered from different respondents and various documents being very helpful in exploring the problem under study. So, the richness of the data actually aided the researcher to arrive at meaningful research conclusions and recommendations. Appropriate data analysis strategies were used to reduce the rigour associated with qualitative data. In fact, the researcher clearly generated themes, sub-themes and their categories that made it easier to arrive at research conclusions. The researcher also attended multiple sessions with research promoters on data analysis in qualitative studies which helped overcome issues of

researcher bias. This rich and valuable data was obtained through the use of credible research instruments which are explored in the next section.

4.5 RESEARCH INSTRUMENTS

Data collection for qualitative research can be done using a variety of techniques which include interviews, FGDs, document reviews, observations and documentary (Creswell, 2012; Magwa & Magwa, 2015; Matthews & Ross, 2010). Interviews, FGDs and document reviews were the research instruments used in this study. The common characteristic of these instruments is that they are using text and words.

Interviews

Interviews are face-to-face verbal exchanges in which one person, the interviewer attempts to acquire information from and gains understanding of another person, the interviewee (Rowley, 2012; Creswell, 2009). Mafuwane (2011) refers to it as a social encounter where speakers collaborate in producing retrospective and prospective accounts or versions of their past or future actions. This form of interaction has been observed as a conversation between two people that is initiated by the interviewer for the purpose of obtaining relevant information (Cohen et al., 2011; Creswell, 2009; Dina, 2012). In other words the interview is some form of conversation or dialogue between the interviewer and the interviewee. It is a powerful means of obtaining information and gaining insights into people's behaviour, beliefs and attitudes (Cohen et al., 2011).

There are three types of interviews namely open-ended, semi-structured and structured interviews (Magwa & Magwa, 2015; Mertens, 2010; Cohen et al., 2011; Thomas, 2010). Semi-structured interviews were used to collect rich descriptive data on IA assessment from ICDC lecturers, supervisors, external assessors and policy makers (Cohen et al., 2011; Mertens, 2010; Maxwell, 2010). Semi-structured interviews were most suited for this study as they allowed respondents freedom to express themselves fully. Their flexibility allowed the interviewer to prompt and probe for clarity, rephrase and summarise where necessary and for confirmation of particular complex and vague issues (Magwa & Magwa, 2015; Mertens, 2015; Creswell, 2014). This allowed the researcher to solicit for more and clear information on the procedures used for assessment during IA.

An interview schedule was used but there was no strict adherence to it since additional questions were used in some instances. Using semi-structured interviews in this study was for the advantage that it provided access to what participants know, their values and views, beliefs and attitudes (Cohen et al., 2011). The researcher however, needed to be very attentive to the responses given by the interviewee since she had to probe and seek for clarification of answers. This was done so as to identify emerging lines of inquiry that were directly related to the phenomenon under study. To remain focussed on issues of assessment during IA, the researcher made use of interview schedules which are explained in the next section.

Interview schedule

An interview schedule is the guide an interviewer uses when conducting a structured or semi-structured interview (Magwa & Magwa, 2015; Barbour, 2014; Mertens, 2015). The guide may have a set of questions that require the interviewer to ask verbatim, that is, questions should appear in the order in which they are to be asked. They can also be those that may be altered depending on the flow of the interviewing process (Creswell, 2012; 2014; Barbour, 2014; Cohen et al., 2011). Remier and Ryzin (2011) maintain that a semi-structured interview schedule helps ensure that each interview covers substantially the same topics although the schedule is meant to be a flexible tool not a standardised script. In this study flexibility in asking questions from a semi-structured interview schedule was exercised for the purposes of gaining more insights into the IA assessment procedures for ICDC used in the two Polytechnic Colleges under study.

The interview schedules were designed in three segments which are the introduction, demographic data and the main interview with questions based on sub-research questions. The first part, the introduction, consisted of the researcher acknowledgement of respondent's acceptance to be interviewed and the researcher introducing herself. The duration of the interview was indicated and also that the researcher would tape record and take down notes during the interview. The interviewee signed a consent form and the searcher also made an understanding that she would give the respondent a written transcript of the interview for corrections and approval before the information was used in the thesis.

The second part solicited the respondent's background data and the data varied depending on the category of the respondent as some were company supervisors, some lecturers, while some were policy makers with some being external assessors. The third section requested interviewee's opinion on assessment strategies used during IA, user friendliness of the assessment tool, their views on IA assessment and suggestions on how to improve the IA assessment procedures. A thank you note was given at the end of the interview session. The interview schedule for lecturers was presented as Appendix 1, for supervisors, Appendix 2, for external assessors, Appendix 3 and for policy makers, Appendix 4. The use of different interview schedules was due to the nature of the responsibilities of the respondents. Presented next is an outline of how interviews were conducted.

Conducting the interview

Interviews with lecturers, supervisors, external assessors and policy makers were conducted at the interviewee's workplaces. This was so for convenience on the part of participants and the researcher. The researcher interviewed four lecturers and one focus group from one college so it was easier and cheaper for the researcher to conduct all interviews on a limited number of visits. Also participants could continue with their work before and after interviews. For instance, lecturers and students continued with their teaching and learning exercises before and after interviews without major interruptions. Also, some people may feel uncomfortable speaking freely about some issues in foreign places or in places where other people may overhear the conversation (Matthews & Ross, 2010; Flick, 2014). Participants' workplaces ensured free participation by everyone involved in the research study. Also, the researcher can make observations that generate richer and more detailed information than can be gleaned from the interview content alone (Matthews & Ross, 2010; Mertens, 2015). These observations made especially in the host industries where supervisors were interviewed helped generate new information and gave the researcher a stronger understanding of issues explicitly discussed in the interview. In addition, the researcher interviewed the respondents at their work places so that she did not owe them anything.

The researcher allowed the respondents to use any language they were comfortable with and which the researcher was conversant with. Respondents mainly used English language since all questions were asked in English. However, some used their mother language (Chishona) to clarify issues and to express themselves clearly. This is in support of Mertens (2015)'s assertion that relying on the use of a single language in some research settings can result in the omission of significant data by respondents. In addition, various communication styles including body language and tone of voice allowed for flexibility to individualise procedures and to simplify answers given (Mertens, 2015).

The next research tool used is the FGD described below.

Focus Group Discussions

Wiersma and Jurs, (2009) view FGDs as group interviews, only that focus groups do not rely on question and answer format as is the case with general interviews, rather they rely on the interaction within the group. Cohen et al. (2011) and Mertens (2015) further state that focus groups discuss a topic supplied by the researcher, yielding a collective rather than an individual view. FGDs are an appropriate method of data collection to use when the researcher is interested in gathering qualitative data about people's experiences, ideas and understandings and has an interest in why they experience their social world in a particular way (Wiersma & Jurrs, 2009; Barbour, 2014; Cohen et al., 2011). In this study FGDs were conducted with post IA students so that their experiences would help yield dependable and credible research results.

With FGDs the researcher develops the instrument, convenes a small group of people typically four to six who can answer the questions, and records their comments on the instrument (Gay, Mills & Airasian, 2011; Mertens, 2015). Focus group members can be six to eight although it is possible to run FGDs with smaller groups especially in social science research (Barbour, 2014). In this study the two focus groups comprised of five participants each. The researcher used Heads of Departments (HODs) of the selected Polytechnic Colleges as gatekeepers in identifying post IA students who participated in FGDs (Cohen et al., 2011; Creswell, 2009). Barbour (2014) explains that focus groups should be homogenous in terms of background and not in terms of attitude. The HODs therefore helped identify

students who had done IA only and most importantly those who did IA at different companies for a wider scope of IA experiences.

The benefits of FGDs are that they provide for interaction among interviewees, allow for collection of extensive data, and participation by all individuals in a group (Cohen et al., 2011; Gay et al., 2011). In this study participants interacted with each other rather than the interviewer only and their views emerged through this process. FGDs yielded insights that might not otherwise have been availed in a straight forward interview with other participants (Cohen et al., 2011). They offer unique advantages and if used appropriately, can provide extremely rich data with regards to a wide range of research questions (Barbour, 2014). They are economical on time and they produce large amounts of data in a short period of time (Matthew & Ross, 2010). FGDs are flexible and they allow the use of different formats and techniques (Matthews & Ross, 2010).

FGDs allow researchers to invite participants to problematise taken-for-granted assumptions as with the potential research questions that featured in this study (Barbour, 2014). They also could encourage people to collectively address topics to which as individuals, may have previously devoted little attention. In addition, they allow the researcher to explore public opinion through socially constructed meaning (Barbour, 2014). Focus groups were helpful in critiquing the assessment criteria used during IA without putting individuals 'on the spot' as might one-to-one interviews on the same aspects. Furthermore, they provide a little more leeway for participants in that they do not expect that every one would answer every question as with one-to-one interviews (Barbour, 2014). Some group participants may value the safety provided by numbers and prefer to discuss sensitive issues while others may feel less comfortable with discussing their opinions in public (Barbour, 2014; Matthews & Ross, 2010). It was therefore necessary for participants to carefully read consent forms and append signatures which guaranteed them anonymity before the start of the FGDs.

It is particularly important to use good quality recording equipment for FGDs in order to capture what are literally as well as conceptually, multiple voices (Barbour, 2014). During processes such as these, researchers ask questions and record or take down notes on the group conversation (Barbour, 2014; Mertens, 2015). The researcher

took note of the sequence of talk since this was invaluable when later explaining differences between groups. Barbour (2014) recommends that this function be carried out by the assistant moderator who is experienced in research since such notes need to focus on sequence rather than content. The researcher, however, did her own transcription. Field notes were made directly after each group discussion as this provided an invaluable source of additional contextual information to aid with analysis (Barbour, 2014).

The added benefit is the greater degree of control over the composition of the group and the potential for the researcher to guide the discussion in terms of focus (Barbour, 2014). This required considerable planning and attention to particularities by the researcher. However, the down turn of FGDs is that they require the researcher to find consensus on questions so one response can be recorded for all individuals in the group (Barbour, 2014). In addition, some strong characters may dominate discussions while some may be reluctant to speak. This has been alluded to by Gay et al. (2011) and Barbour (2014) that some individuals may dominate the conversation, they may be strong characters who may overshadow others leading to responses that do not reflect the consensus of the group. Matthews and Ross (2010) contend that the actions of dominant or subservient personalities can affect validity. In this case the researcher needed to take the role of a facilitator as Matthews and Ross (2010) reiterate that the success of the group often depends on the skill of the facilitator. The researcher was there as a peacemaker as some characters wanted to talk whilst others were still talking, disrupting them. The manner in which questions were asked encouraged discussion between group members, involving them in sharing views rather than formulating a collective response (Barbour, 2014).

These FGDs were conducted at the Polytechnic Colleges since these students were back in college after their one year of IA. As already alluded to about interviews, the researcher did not owe the students anything by conducting FGDs at their learning institutions (Cohen et al., 2011). It was also a cost effective measure in terms of time and money. FGDs were used with the post IA students and in-depth data was collected on the IA assessment procedures for ICDC used in the Polytechnic Colleges in Zimbabwe (Appendix 5). English was mainly used although here and there some issues were presented in Chishona. Body language and the tone of

voices were very useful in deducing the meanings of some issues raised by students during discussions (Mertens, 2015).

The other tool used is document reviews.

Document reviews

A document is a record of an event or process and is a valuable source of information in qualitative research (Cohen et al., 2011; Creswell, 2012). Documents consist of public and private records that a researcher obtains about a site or participants in a study. They can include newspapers, minutes of meetings, diaries, personal journals and letters (Creswell, 2012; Cohen et al., 2011). In this study documents reviewed included Log Books, IA assessment results, IA external assessment reports and the ICDC syllabus. Documents provide valuable information in helping researchers understand central phenomena in qualitative studies (Cohen, et al., 2011; Creswell, 2014). For example, in this study the researcher got to understand how user friendly the assessment tool was and its effectiveness in measuring students' performance during IA through analysing its contents. Documents provide the advantage of being in the language and words of the participants who have usually given thoughtful attention to them (Creswell, 2012). They are also ready for analysis without the necessary transcription that is required with observational or interview data (Creswell, 2012).

On the flip side, documents are sometimes difficult to locate and obtain as some people may not have them readily available or may not be willing to have them used in a research study (Vuban & Eta; 2019). Creswell (2012) concurred that documents may not be available for the public. This therefore calls for a lot of patience and good execution of research ethics in order to get the documents availed for research purposes. The university ethics clearance letter that was used by the researcher (Appendix 9) enabled her access to such information that was not for public consumption such as the IA results from the period 2013 to 2017 and the Log Books which were regarded as examination material. This information on IA results was therefore accessed through the central database for HEXCO at the Head Office. Log Books were accessed in the respective Polytechnic Colleges. Barbour (2014) asserts that information may be located in distant archives requiring the researcher to travel which takes time and can be expensive. On this note, the researcher cut

down on costs by collecting data from documents at the same visits for interviews and FGDs in the colleges. Getting IA results from the central database at the Head Office also cut down on costs and minimised challenges associated with accessing such kind of data in learning institutions. IA external assessment reports were requested from the Head Office and were availed by the link persons for the Polytechnic Colleges under study.

Furthermore, literature shows that documents may be incomplete, inauthentic or inaccurate (Creswell, 2014; Mertens, 2010; Magwa & Magwa, 2015). The researcher checked for college stamps on the Log Books, and on the syllabus for authenticity. In documents such as Log Books and IA assessment reports, the handwriting may be hard to read, making it difficult to decipher the information (Creswell, 2012; Cohen et al., 2011) therefore the researcher took her time to read through some difficult to read materials especially comments by supervisors.

Document reviews were used to complement interviews and FGDs, to help make judgements about the significance of non-occurrences and to elucidate some aspects of data collection processes.

The following section discussed the sample used in this study and the sampling techniques that determined the respondents that participated in this study.

4.6 SAMPLE AND SAMPLING TECHNIQUES

This section discussed the sample that was used in this study in order to collect data on IA assessment procedures used for ICDC in the Polytechnic Colleges in Zimbabwe. The sampling technique that was used to select participants for this study was discussed as well.

Cohen et al. (2011) describe a sample as a smaller group or subset of the total population. Magwa and Magwa (2015) explain that a sample is a proportion of the population, a slice of it, or a part of it. It is a selected element (people, objects) chosen for participation in a study. In other words, it is a subset of the population being studied used as a technique to gather information about that population (Magwa & Magwa, 2015). The sample in this study comprised two Polytechnic

Colleges from which four lecturers were drawn from each college giving a total of eight lecturers. Five post IA students from each of the two colleges constituted the two focus groups giving a total of ten students. Three host industries were selected with only one supervisor from each company giving a total of three. Two policy makers and two external assessors also became part of the sample. A sample of twenty five participants was used in this study. A sample was used because it was impossible to study the whole population in the Polytechnic Colleges and Host Industries under study (Cohen et al., 2011).

Sampling is an act, process, or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population (Mertens, 2010; Wiersma & Jurs, 2009). Sampling an entire population as part of research experiment is impossible due to time, expenses and the number of subjects or objects to be studied hence sampling reduces investment in time and money (Magwa & Magwa, 2015). The organisation of data collection is more manageable with a sample and it ensures accuracy of results. Collecting data from fewer cases means information is more detailed and qualitative data manipulations are much easier with a smaller data set. Also, sampling can be more accurate than studying an entire population because it affords researchers more control over the subjects (Magwa & Magwa, 2015; Cohen et al., 2011; Mertens, 2010). For the purposes of this study, a non-probability sampling technique was used.

Non-probability sampling is a process that does not give all individuals in the population an equal chance of being selected (Magwa & Magwa, 2015). The samples are usually much smaller but they collect more detailed data than in the probability samples (Ibid). It targets specific individuals and in the case of this study specific individuals who were best suited to provide the much needed data on IA assessment procedures were selected. Since qualitative data was to be gathered, a smaller sample was therefore unavoidable. Non-probability sampling techniques include judgemental, convenient, purposive and snow ball sampling methods (Mertens, 2015; Magwa & Magwa, 2015; Gay et al., 2011; Creswell, 2014). This study only utilised purposive sampling technique.

Purposive sampling is a type of sampling in which particular settings, persons or events are deliberately selected for the important information they can provide that cannot be gotten from other choices (Mertens, 2015; Gay et al., 2011; Matthews & Ross, 2010). Oliver (2010) asserts that purposive sample is one in which the researcher identifies certain respondents as being potentially able to provide significant data in a study. The researcher handpicked the cases that were included in the study on the basis of her judgement of their typicality (Magwa & Magwa, 2015).

Thus, purposive sampling technique utilised in this study were sufficiently focussed to allow the researcher to actually gather the data necessary to answer the research questions (Creswell, 2012; Cohen et al., 2011; Gay et al., 2011). It also allowed the researcher to draw inferences from the qualitative data provided by respondents. The advantage of purposive sampling was that it made the research practical and enabled the researcher to organise research easily and at reduced costs (Babbie, 2010; Mertens, 2015; Creswell, 2012). Purposive sampling, according to Magwa and Magwa (2015), is more convenient and very economical than other methods and the collected data is rich and informative for the research. One other advantage of purposive sampling is that the units are specifically qualified to provide data that assists in answering research questions and to meet the objectives of the study (Creswell, 2014; Gay et al., 2011; Mertens, 2015). Castillo (2009) also points out that some subjects are fit for research compared to others and this is why they are purposively selected. However, the down turn could be that it can be highly prone to research bias (Magwa & Magwa, 2015) and this was counteracted through reference made to key informants that ensured data was collected from relevant people.

Some populations are quite hard to find because there are no lists of such people or cases, nor are there obvious places where the cases may be found (Matthews & Ross, 2010; Barbour, 2014). In this study the researcher identified information rich participants such as the subject specialist for ICDC at the Head Office (in the Ministry of Higher and Tertiary Education Science and Technology Development) who helped identify the HEXCO and the CRD personnel as policy makers. The regional coordinators for HEXCO in the two regions under study and the college link persons from the Head Office helped identify the external assessors who

participated in this study. The HODs in Applied Arts and ICDC helped identify the LICs for IA in their colleges and the students who had already done IA. Reference to other respondents was sought in order to explore the research questions in depth using the respondents who were qualified to provide the much needed data. This was an especially valuable strategy where the researcher found access to information rich individuals whom she was not aware of.

Sampling of research sites and research participants was described next.

Sampling the research sites

As indicated earlier, purposive sampling was used for sampling the research sites. For this study research sites include Polytechnic Colleges and Host Industries. These colleges and Host Industries assess ICDC students during IA every year.

Sampling the colleges

Two Polytechnic Colleges that offered ICDC at National Diploma level were purposively selected. These colleges follow a syllabus that requires ICDC students to go for IA for the whole year and students are required to go for IA during the second year of their ND level. These colleges had adequate number of lecturers and students for the researcher to choose the required sample from. Staff establishment and student enrolment is always high. This was necessary for the researcher to collect adequate data from a plausible sample size.

Sampling the clothing companies

The three Host Industries selected have a record of placing ICDC students from different institutions yearly. These companies were purposely sampled so that both state-owned and privately-owned companies were included in order to analyse their industrial training programs, specifically their assessment procedures. Again, the very old and newly established industries were selected so as to gather comprehensive data on how IA assessment is undertaken by companies with different operating scales and experiences. Supervisors and other designated company personnel assess students whom they train during IA. Furthermore, these companies train students from the two Polytechnic Colleges under study.

Sampling the research participants

Purposive sampling was employed to allow respondents who possessed the qualities required to be included in the study.

Sampling lecturers

Four lecturers from each of the two Polytechnic Colleges participated in this study. Lecturers who participated in this qualitative research were those who were involved in the IA assessment and had to be ICDC lecturers only and not lecturers from other fields (with the exception of the Cosmetology lecturer from St Erics Polytechnic College who participated by the virtue of being LIC for OJET who also assesses ICDC students during IA). This study did not include lecturers who had just joined the ICDC Department or those who were not involved with IA assessment. Even those who had assessed students on IA for two years or less were excluded from this study.

Sampling supervisors

Three company supervisors were involved in this study. These were purposively selected as they were the ones who mentored and assessed students during IA. They are engaged with students for the whole year every year hence their relevance in this inquiry.

Sampling external assessors

Two external assessors were purposively chosen. These were chosen because they externally examine the students during IA. They both come from the regions from which the colleges under study are situated. Their vast experiences with different companies and students from different departments helped in moulding the results of this study.

Sampling Policy makers

Two policy makers were chosen because they design policy documents that guide TVET programs in the Polytechnic Colleges in Zimbabwe. One of them was from the examinations department and the other one was from curriculum development. Their coming together provided detailed and informative data on policy issues that affect IA assessment.

Sampling students

Five students from each of the two Polytechnic Colleges were involved in this study. Only students who had just completed their IA were selected as they were in the position to describe their lived experiences with regards to IA assessment.

The following section outlined the procedures that was undertaken in order to gain access to the data that was useful to this study.

4.7 NEGOTIATING ACCESS TO RESEARCH SITES

According to Vuban and Eta (2019), application of access to research sites and participants is an important ethical code of conduct particularly in a qualitative study. Researchers need to obtain research permits to conduct research and proper identification of the researcher is very important (Ibid). In order to gain entry into the colleges, an introductory letter from the University of Fort Hare's Ethics Clearance Committee (Appendix 9) and another one from research promoters (Appendix 10) were used. These letters together with the researcher's (Appendix 11) were first taken to the Minister of Higher and Tertiary Education Science and Technology Development whereby the Human Resources personnel and the Tertiary Education Programs Director granted permission to access the colleges (Appendices 13) respectively. The researcher also drafted another letter (Appendix 14) seeking permission to analyse documents in the respective colleges which was addressed to the heads of institutions. All these letters communicated the purposes of this research study. The two letters from University of Fort Hare were also used to gain entry into the Clothing Companies (Creswell, 2012; Cohen et al., 2011; Mertens, 2015). Appendices 7, 8 and 9 were provided as permission for the researcher to collect data from these companies. Appointments for the data collection process were made with lecturers, supervisors, external assessors and the policy makers who were involved in interviews and with focus groups who were involved in FGDs.

The following section discussed data analysis procedures.

4.8 DATA ANALYSIS STRATEGY

Data analysis is a process of systematically searching and arranging the interview scripts, field notes and other materials that are accumulated by the researcher so as to deduce meaning from those findings (Matthews & Ross, 2010; Creswell, 2014).

Literature shows that in qualitative studies, data analysis is a continuous process which proceeds hand-in-hand with other parts of developing the qualitative study such as data collection and write-ups (Creswell, 2014; Gay et al., 2011; Mertens, 2015). Throughout the study data is indexed and coded using as many categories as possible in order to identify, describe, understand and explain patterns and themes from the perspectives of the participants (Creswell, 2014;). For instance, while interviews were going on, the researcher analysed interviews collected earlier for clarity and easier understanding of assessment issues during IA. This means that data collection and data analysis must be a simultaneous process in qualitative research (Mertens, 2015; Creswell, 2014). Different approaches can be used to analyse qualitative data viz content analysis, discourse analysis, statistical analysis, narrative analysis, grounded theory and thematic analysis (Matthews & Ross, 2010; Mertens, 2015; Gay et al., 2011). The nature of the data gathered in this study required that the researcher used a thematic data analysis approach.

Thematic data analysis is a process of segmentation, categorising and re-linking different aspects of data prior to the final interpretation (Matthews & Ross, 2010). It involves interpreting and making a good sense of the words, stories and explanations of research respondents (Mertens, 2015; Matthews & Ross, 2010). Data is worked with in chunks which are in terms of words, phrases or sentences and throughout the process the researcher checks for own interpretations and understandings against each consecutive set of data (Matthews & Ross, 2010). This analytic process allows the researcher to return to raw data throughout the process, to check out interpretations, to look at data in different ways and to make links between different pieces of data within each case (Ibid). Thematic data analysis is important in exploring the meanings of data, looking into relationships between different parts of the data and to explain the similarities, differences and relationships (Mertens, 2015; Matthews & Ross, 2010; Gay et al., 2011). It was helpful to divide data as needed and use index and coding systems to identify the meaningful chunks of data (Matthews & Ross, 2010).

The following section described stages in thematic data analysis of qualitative data gathered through interviews, FGDs and document reviews. These include data transcribing, editing, coding and theme generating.

Transcribing

Transcription is the process of converting audiotape recordings or field notes into text data (Creswell, 2012, 2014). Transcribing is seen as the first step in data analysis (Kvale & Brinkmann, 2009) as the researcher needs to think of what is to be included and what needs to be thrown away in transcription and becomes familiar with the content of the interviews. The researcher listened to the tapes in order to begin the process of analysis. The tape-recorded information was transcribed verbatim. Barbour (2014) and Creswell (2012) posit that recorded interviews need to be transcribed by out sourced professional transcribers but in this study the researcher did the transcription process to transform the recorded information into texts. The researcher used special machine that enabled her to start and stop the tape recordings and to play them at a speed so that she could easily follow them (Creswell, 2012). The researcher also checked the transcriptions against the voice recordings for accuracy of collected information.

Editing

Data editing is a process of scrutinizing the raw data for the purposes of noting and rectifying some mistakes and omissions (Dina, 2012; Boeji, 2010). This editing process enabled the researcher to examine the raw data for accuracy and to check whether the computerisation done was uniform for coding purposes. With regards to this study, editing process focused on singling out mistakes and omitted information; deleting incomplete and unnecessary data; and also inserting correct information for accuracy, consistency with other collected data, and uniformity of recorded data to facilitate the coding process (Dina, 2012; Wiersma & Jurrs, 2009). The incorrectly recorded information was corrected by cross-checking the flow of responses against answers to previous and subsequent questions (Wiersma & Jurrs, 2009; Cohen et al., 2011). The qualitative data from the interviews, FGDs and document reviews was grouped focusing on common characteristics and more recurring answers.

Coding

Coding is the process of segmenting and labelling text to form descriptions and broad themes in the data (Creswell, 2012; Johnson & Christensen, 2012). In the same vein, Dina (2012) defines coding as a process of marking segments of text information with symbols, descriptive words or category names. In simpler terms,

coding means labelling or indexing. Analysis of qualitative data is concerned with organising and working with the data, breaking them into manageable units, coding and synthesizing them into categories and searching for patterns (Matthews & Ross, 2010; Yin, 2012; Creswell, 2012). Coding is usually an iterative process since one may need to revisit his/her data repeatedly to increase one's understanding of the collected information to discover connections or links between the data (Uma and Rodger, 2012). In this study, data was read several times by the researcher to discover the link between the data. Coding enabled the researcher to identify similar information. More than this, it enabled the researcher to search and retrieve the data in terms of those that bear the same code, (Cohen et al., 2011). This enabled the researcher to come up with themes and sub-themes regarding the notes which she computerised.

Themes

It was helpful to divide data in order to identify meaning of each category of data from interviews, FGDs and document reviews. Working with qualitative data is all about interpreting and getting a good understanding of the words, stories, accounts and explanations of the research respondents (Creswell, 2012; Matthews & Ross, 2010). In order to achieve this, throughout the analytic process, the researcher checked out her own interpretations and understandings against each successive batch of data. The major task of the researcher was that of categorising data into various themes and sub-categories.

The researcher considered how the description and themes are presented in the qualitative narrative. Diagrams were used and selected verbatim excerpts were drawn from the data (Matthews & Ross, 2010). Categories were used and finally how these were worked with to produce overarching themes. Thus the researcher used broad themes, sub-themes and narrative passages to convey the findings of the analysis. The final step in data analysis involved making an interpretation of the findings or the results (Creswell, 2014). Thematic analysis approach was used as it provided the first part of the research findings. In order to generate new knowledge from the raw data, the researcher was actively involved in the analytic process throughout all phases of the research doing the reading, understanding and

interpreting the data. It was however, important that the researcher maintained trustworthiness in presenting the results of the study.

4.9 TRUSTWORTHINESS

Trustworthiness is based on determining whether the findings are accurate from the standpoint of the researcher, participants and readers of the account (Creswell, 2014). In qualitative enquiry, trustworthiness is a matter of persuasion whereby the researcher gives value to the reports produced, making them truthful and free from bias (Gay et al., 2011; Erlingson & Brysiewicz, 2013). The aim of trustworthiness is to support the argument that the enquiry's findings are worth paying attention to (Elo, Kaariainen, Kanste, Polkki, Utriainen & Kyngas, 2014). In this study data collection procedures and analysis strategies were reported in detail in order to provide a clear, relevant and accurate picture of the IA assessment procedures used in the Polytechnic Colleges in Zimbabwe (Elo et al., 2014; Gay et al., 2011).

The researcher established the trustworthiness of the research study by ensuring credibility, transferability, conformability and dependability of research findings and through triangulation (Mertens, 2015; Matthews & Ross, 2010; Briggs et al., 2012; Gay et al., 2011). These aspects of trustworthiness were unpacked hereunder.

Credibility has been defined by Anney (2014) as the confidence that can be placed in the truth of the research findings. The researcher ensured the findings represented plausible information drawn from participants' original data and made correct interpretation of their original views on IA assessment procedures in ICDC. According to Anney (2014) credibility is achieved when the researcher establishes the rigour of inquiry through triangulation, member checking and peer examination among other techniques. The researcher ensured triangulation through the use of multiple and different methods and sources of data to obtain corroborating evidence which helped reduce bias and cross examined the integrity of participants' responses (Anney, 2014; Cohen et al., 2011; Mertens, 2015).

The researcher used member checking through continuously testing data and interpretations as they were derived from respondents from which data was solicited (Mertens, 2015; Matthews & Ross, 2010). Member checking was done to eliminate researcher bias when analysing and interpreting results (Creswell, 2014; Anney, 2014; Mertens, 2015). Feedback from peers in the School of Further and Continuing

Education as well as other professionals like the researcher promoters helped the researcher to improve the quality of the findings.

Transferability refers to the degree to which the results of qualitative research can be transferred to other contexts with other respondents (Anney, 2014). The researcher facilitated the transferability judgement by potential users through thick descriptions where all research processes from data collection to the production of the final report were elucidated (Mertens 2015; Creswell, 2012). Thick descriptions allowed comparison of assessment in IA in the context of ICDC with other possible contexts in TVET programs to which transferability might be contemplated in order to make a judgement about it fitting in with other possible contexts. Also the use of purposively sampled respondents provided greater in-depth findings as the focus was on key informants who were particularly knowledgeable about the issue under study (Anney, 2014; Mertens, 2015; Creswell, 2009).

Conformability takes into consideration issues of compliance to regulations that govern research studies in any setting. According to Anney (2014) conformability refers to the degree to which the results of an inquiry could be confirmed or corroborated by other researchers. It is concerned with establishing that data and interpretations of the findings are not figments of the inquirer's imagination but are clearly derived from the data (Anney, 2014; Mertens, 2015). Conformability was established using a reflexive journal kept by the researcher that included events that happened in the field, personal reflections in relation to the study and the phenomenon that had arisen during the investigation (Anney, 2014; Mertens, 2015). In other words, it was an assessment of the influence of the researcher's own background, perceptions and interests on the research process that included personal history as the researcher is a lecturer in ICDC who is also involved in the final grading of students' IA program among other subjects.

Dependability refers to the stability of findings over time (Creswell, 2009). It involves participants evaluating the findings at the interpretation and the recommendation stages of the study to make sure that they are all supported by the data received from the informants of the study (Cohen et al., 2011). The researcher kept raw data from interviews, FGDs, documents and records collected from the field for audit trail (Creswell, 2009; Cohen et al, 2011; Mertens, 2015). Data was coded twice in a

gestation period of two weeks between each coding and the results from the two sets of codes were compared to see if they were the same or different (Anney, 2014; Wiersma & Jurs, 2009; Gay et al., 2011). The coding results were in agreement and this enhanced the dependability of the inquiry. This helped the researcher gain deeper understanding of deep patterns and improved the presentation of participants' narrations. The researcher also discussed research findings with neutral colleagues such as the doctoral students. This peer examination helped the researcher to be honest about the study and peers contributed to deep reflexive analysis. In addition, colleagues helped identify the categories not covered by the research questions as well as identifying negative cases (Mertens, 2015; Anney, 2014; Creswell, 2009).

The following section discusses triangulation.

Triangulation

Triangulation is a process of verification that increases validity by incorporating several viewpoints and methods (Yeasmin & Rahman, 2012; Humble, 2009). Triangulation can be achieved by using different research techniques and these can be helpful in cross-checking and providing confirmation and completeness, which brings balance between two or more different types of research (Yeasmin & Rahman, 2012; Johnson & Christensen, 2012). The purpose is to increase credibility and trustworthiness of the results. In some contexts, it is used to obtain confirmation of findings through convergence of different perspectives (Yeasmin & Rahman, 2012). Johnson and Christensen (2012) concur that triangulation in research is when a researcher seeks convergence and corroboration of results from different methods when studying the same phenomenon.

Denzene (1970) cited in Yeasmin and Rahman (2012) and Nokleby (2011), distinguish four forms of triangulation viz data triangulation in which data is retrieved from a number of different sources to form one body of data; the investigator triangulation in which multiple observers instead of a single observer are used in the form of partnering and interpreting data (Yeasmin & Rahman, 2012; Nokleby, 2011); theoretical triangulation which involves using more than one theoretical position in interpreting data; and methodological triangulation which uses more than one

research method or data collection technique (Yeasmin & Rahman, 2012; Nokleby, 2011). The type of triangulation chosen depends on the purpose of a study and more than one type of triangulation can be used in the same study. For the purposes of this study, triangulation which utilised three data collection techniques (interviews, FGDs and document reviews) was used.

Several data sources complemented and verified one another, which reduced the impact of bias. This provided richer and more comprehensive information. Using several methods also helped rule out trivial responses (Yeasmin & Rahman, 2012; Humble, 2009). Yeasmin and Rahman (2012) maintain that a single method suffers from limitations associated with it hence multiple methods offer the prospect of enhanced confidence. It has been supported that the deficiencies of one method can be overcome by combining methods and thus capitalising on their individual strengths (Yeasmin & Rahman, 2012; Mertens, 2015; Cohen et al., 2011). Different data sources namely lecturers, supervisors, external assessors, policy makers, post IA students and several documents were used (Mertens, 2015). Multiple sources of data helped clarify issues and gave breadth and depth to the data that was collected; the multiple viewpoints allowed for greater accuracy and this substantially increased the credibility and trustworthiness of research findings (Yeasmin & Rahman, 2012). Triangulation allowed the researcher to be more confident of the research results (Yeasmin & Rahman, 2012; Nokleby, 2011).

However, triangulation has some drawbacks. If the researcher is not clearly focused theoretically and conceptually, triangulation will not produce a satisfactory outcome (Yeasmin & Rahman, 2012). It should not be used to legitimatise a dominant, personally preferred method. Again, time and costs may prevent the effective use of triangulation. Above all, it demands some creativity from the researcher, the ingenuity in collecting data and insightful interpretation of data collected (Yeasmin & Rahman, 2012). Several meetings with research promoters and workshops on research methodology and methods helped circumvent probable limitations associated with triangulation of methods, processes and procedures used in this study.

The next section focuses on ethical considerations.

4.10 ETHICAL CONSIDERATIONS

It is important to engage in ethical practices in all steps of the research stretching from the origins of the research study to its final completion and distribution (Creswell, 2012). Ethics should be a primary consideration rather than an afterthought (Creswell, 2012). Of all the steps in the research process, ethics tend to relate closely to data collection and reporting and distribution of reports than any of the other phases of research (Creswell, 2012). An ethics clearance committee of the University of Fort Hare evaluated my project and guaranteed the protection of participants (Ibid). Their approval enabled the researcher to proceed with the study. The researcher therefore ensured that the procedures were reasonable, non-exploitative, carefully considered and fairly administered (Mertens, 2015; Creswell, 2009). The main ethical principles that were seriously considered in this study were informed consent, protection from harm, right to confidentiality, anonymity and right to privacy (Creswell, 2012; Mertens, 2015). These were discussed in the following sections.

Informed Consent

This principle requires that research participants be informed about their role in the research study and that they give their written consent for participation (Wiersma & Jurs, 2009; Cohen et al., 2011). The researcher therefore designed an informed consent form which participants signed before they participated in the study. This form stated that participants were guaranteed rights to discontinue with interviews when they felt they no longer wanted to continue; that the information they were going to provide would not be shared with any other people and that their names would not be disclosed (Creswell, 2012). The form contained the contact details of the people whom the participants would contact if any problems arose such as my research promoters and the ethics committee of the University of Fort Hare (Creswell, 2012; Wiersma & Jurs, 2009). The form also clearly stated that by signing the form, participants were agreeing to be involved in the study and acknowledged the protection of their rights. The researcher also sought permission to use a voice recorder during both individual interviews and FGDs. This procedure was applied to lecturers, company supervisors, policy makers and external assessors who answered the interview questions and to post IA students who participated in FGDs.

Protection from Harm

In any study, if the researcher is not careful, it is possible to harm informants not only by exposing information about individuals but also by discussing them as a group, in a publication in a way which they may find harmful or which actually disadvantages them (Mertens, 2015; Luttrell, 2010; Cohen et al., 2011). Harm can be embarrassment, anger, irritation, physical and emotional stress, loss of respect from others, negative labelling, invasion of privacy and damage to personal dignity (Cohen et al., 2011; Mertens, 2015). Since the Polytechnic Colleges and the Host Industries under study are public organisations competing for excellence, it was necessary to protect their credentials. Polytechnic Colleges involved in this study were referred to as St Erics and St Pauls while Host Industries were referred to as Fashion, Style and Glamour. As a result, the research paid close and continuous attention to processes and procedures in order to avoid harm or damage to the Polytechnic Colleges and Host Industries under study (Cohen et al., 2011; Mertens, 2010; Luttrell, 2010). While interacting with the participants, the researcher treated them politely and with respect of their human dignity. Whatever sensitive subject matter provided, the participants did it willingly as they were already aware of the scope of the study and the methods. The researcher also avoided harming the participants by reporting the findings in a truthful way.

Right to Anonymity

Anonymity means the names of the participants from whom data have been obtained are not known (Wiersma & Jurs, 2009). Cohen et al. (2011) refer to it as not disclosing information from a participant in any way that might identify an individual or that might enable the individual to be traced. It can also mean not discussing an individual with anybody else. The researcher avoided mentioning concrete information about the interview or other persons mentioned during the interviews, during data transcription and in the reports. All the information provided about individuals and institutions was kept unidentified (Matthews & Ross, 2010; Cohen et al., 2011). This means that although the researcher knew who provided the information or was able to identify participants from the information given, she in no way made the connection known publicly, the boundaries surrounding the shared

secrets were protected (Cohen et al., 2011). The essence of the matter is the extent to which investigators keep faith with those who have helped them.

It was important in this study that respondents were given an assurance of the researcher's adherence to issues of anonymity. The need to preserve anonymity was conferred through the use of aliases or use of codes for identifying people and research sites (Cohen et al., 2011). As already mentioned, Polytechnic Colleges under study were identified as St Erics and St Pauls and Host Industries were identified as Fashion, Style and Glamour. This guarded against unauthorised identification of students, lecturers and supervisors who participated in this study. The use of group data rather than individual data through FGDs also facilitated the retention of participant anonymity since no individual response would be traced back to the individual or the colleges under study. The researcher also used documents that only contain pseudo letters for the Polytechnic Colleges instead of the names of students and institutions. This guaranteed anonymity, no matter how personal or sensitive the information might have been. Thus, results from documents bearing absolutely no identity marks such as name, address, occupational details or coding symbols ensured complete and total anonymity (Cohen et al., 2011).

Face-to-face interviews on the other hand are in no way expected to have some degree of anonymity (Cohen et al., 2011). However, the researcher employed non-traceability measures to ensure anonymity of such respondents (Cohen et al., 2011). The researcher included aggregate data in some cases, so that an individual's response would be unknowable. The principal means of ensuring anonymity, then, was not using the names of the participants or any other personal means of identification. Further ways of achieving anonymity include keeping the information on individuals separate from access to them and use of pass word-protected files, having the identification information destroyed following its use for research (Wiersma & Jurs, 2009) and by keeping original content details separately under lock and key (Barbour, 2014). The researcher used pass words to protect data files and she kept audio tapes and notebooks in locked cupboards in an endeavour to keep respondents separate from their responses.

Right to Confidentiality

According to Wiersma and Jurs (2009) confidentiality refers to the researchers not disclosing the identity of the participants or indication from whom the data were obtained (Wiersma & Jurs, 2009). Mertens (2010) explains that in confidentiality, the privacy of individuals will be protected in that the data they provide will be handled and reported in such a way that they cannot be associated with them personally. Once data has been collected, the researcher should make sure that no one has access to the data except the researcher and a few co-investigators (Wiersma & Jurs, 2009). For the sake of confidentiality and anonymity, pseudo names were used to identify Polytechnic Colleges, Host Industries and participants. As a result of protecting the respondents' identities, they gave their honest opinions without the fear of victimisation.

The researcher was quite explicit in explaining to subjects what the meaning and limits of confidentiality are in relation to the data that she collected on the assessment procedures undertaken during IA. On the whole the more sensitive, intimate or discrediting the information, the greater is the obligation on the researcher's part to make sure that guarantees of confidentiality are carried out in spirit and letter (Cohen et al., 2011). Some students may refuse to cooperate when an assurance of confidentiality is weak, vague, not understood or thought likely to be breached. They may refuse to disclose the truth about how assessment is actually done by various assessors for fear of being prejudiced in their ratings and final grades. The researcher was obliged to ensure that no uniquely identifying information was attached to the data and thus, no one, not even the researcher would trace the data back to the individual who provided those (Mertens, 2010; Cohen et al., 2011). The researcher needed to be cognisant of the repercussions of revealing the identity of persons who provided data and guarded against them.

Right to Privacy

Right to privacy means that a person has the right not to take part in the research, and not to answer questions, not to be interviewed, not to have their homes or work places intruded into, not to answer telephones or respond to emails (Cohen et al., 2011). They also have the right to engage in private behaviour in their own private

places without fear of being observed (Cohen et al., 2011; Barbour, 2014; Creswell, 2009). In this study the right to privacy was ensured in a number of ways. The researcher considered time and place of where relevant information was to be obtained. Protecting the privacy of respondents meant having respondents for interviews being interviewed in their offices and FGDs conducted in the HODs' offices. No identifiable information about participants' behaviour was disclosed outside of the research so as to avoid placing them at risk. Privacy was not invaded, appointments were made in person and through telephone calls for suitable times and venues to conduct interviews. A letter was written seeking authority to access documents such as Log Books from the Polytechnic Colleges under study. The researcher was allowed to extract all the data she required but was not allowed to take them out of the HECXO offices and she complied.

4.11 CHAPTER SUMMARY

This chapter presented the methodological stance that the researcher undertook in order to collect data in a coherent and systematic manner. Data gathered through this study intended to answer the following main research question: How is assessment undertaken in the Polytechnic Colleges in Zimbabwe during IA? The sub-research questions are: What assessment strategies are used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment? How user friendly is the Industrial Attachment assessment tool(s) used in the Polytechnic Colleges in Zimbabwe? How do respondents view the assessment process used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment? On the basis of the findings, how best can Industrial Attachment assessment procedures used in the Polytechnic Colleges in Zimbabwe be improved? The responses gained from different research tools guided the researcher to propose a framework that could be used in assessing ICDC students in the Polytechnic Colleges in Zimbabwe during IA. The following chapter focused on data presentation and analysis.

CHAPTER FIVE

DATA PRESENTATION AND DISCUSSION OF FINDINGS

5.1 INTRODUCTION

The previous chapter examined the research methodology and methods guiding this study. This chapter is aimed at presenting and analysing data gathered through interviews, Focus Group Discussions (FGDs) and document analysis. The data was obtained from lecturers, supervisors, external assessors, policy makers, students who just completed IA and documents. Findings to the four research questions were discussed from the perspective of Constructive Alignment (CA) theory and with respect to the literature reviewed.

The main research question that guided this study is: How is assessment undertaken in the Polytechnic Colleges in Zimbabwe during IA? The sub-research questions are: What assessment strategies are used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment? How user friendly is the Industrial Attachment assessment tool(s) used in the Polytechnic Colleges in Zimbabwe? How do respondents view the assessment process used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment? On the basis of the findings, how best can Industrial Attachment assessment procedures used in the Polytechnic Colleges in Zimbabwe be improved? The presentation and analysis follow the pattern of research questions as some different questions appeared on the different interview guides.

The biographic data of the participants and research sites involved in this study is presented and analysed below.

5.2 BIOGRAPHIC DATA

Biographic data refers to a detailed description of a person's life. It involves more than just the basic facts about a person's life such as age and gender (Neil, 2010). Biographies of lectures, supervisors, external assessors, policy makers and students were presented in this section. Issues such as the college, region from which the colleges are located, company, gender, age, qualifications, work experience, positions held and experience in IA were presented and analysed. This data set the

background upon which analysis of IA procedures were based. Biographic data of lecturers is shown in Table 5.1.

Table 5.1 Biographic data of the lecturers

College	Region	Participant	Gender	Age	Professional qualifications	Position(s) held	Experience in IA
ST Erics	Elect	Mrs Jack	F	52	National Diploma in ICDC	Principal lecturer	5 years
		Mrs Josh	F	52	MA in Fashion and Textiles	Head of Department	3 years
		Mrs Jerry	F	36	Higher National Diploma in Cosmetology	Lecturer, LIC OJET	4 years
		Mrs James	F	47	Honours Degree in Sociology and Development Studies	Principal lecturer	15 years
ST Pauls	Supreme	Mrs Treck	F	43	Bachelor of Education in Fashion and Textiles	Principal Lecturer	3 years
		Mrs Tom	F	34	Bachelor of Education in Clothing and Fashion Design	Principal lecturer	10 years
		Mr Toby	M	44	National Diploma in ICDC	Head of Department	18 years
		Mrs Tuan	F	41	Bachelor of Education in Fashion and Textiles	Principal Lecturer, LIC OJET	8 years

Table 5.1 indicates that two Polytechnic Colleges participated in this study. For ethical reasons, these were referred to as St Erics and St Pauls. St Erics is found in Elect region and St Pauls is situated in Supreme region.

Table 5.1 also indicates that eight lecturers participated in this study. Gender breakdown indicated that there were more females than males who participated in

this study. At St Erics College, Table 5.1 shows that lecturers aged between thirty six and fifty two years while at St Pauls, lecturers aged between thirty four and forty four years. This implies the mature nature of all lecturers who participated in this study.

In terms of professional qualifications, Table 5.1 illustrates different levels and different forms of qualifications of lecturers who assess the same category of students during IA. At St Erics College, Mrs Jerry holds a Diploma in Cosmetology and Mrs James has an Honours Degree in Sociology and Development Studies but these two participate in the assessment on Industrial Clothing Design and Construction (ICDC) students during IA. While these lecturers belong to the same department of Applied Arts, this may compromise the quality of IA assessment as these are not specialists in the area under study.

Table 5.1 shows that only one lecturer, Mrs Josh from St Erics College holds a Masters Degree in Fashion and Textiles. In contrast, all lecturers at St Pauls College have a first degree in the relevant area except for one who holds a Diploma still in the same area. Based on this data it can be inferred that all lecturers at St Pauls College can be helpful and resourceful in assessing students because they are suitably qualified compared to those at St Erics.

Among participants from these two colleges are the Heads of Departments (HODs), (Mrs Josh and Mr Toby). Two are Lecturers In Charge (LICs) for IA (Mrs Jerry and Mrs Tuan) and the rest are Principal lecturers. Experiences of these lecturers in IA assessment range from three to eighteen years. It is interesting to note that one of the lecturers at St Pauls, Mr Toby who holds the least professional qualification is the most experienced with eighteen years and is also an HOD. This could mean that he has done many IA assessments with several groups of students and companies using different HEXCO regulations.

The biographic data of supervisors is presented next.

Table 5:2 Biographic data of the supervisors

Host Industries	Business category	Participant	Gender	Age	Professional qualifications	Current Position	Experience on the position	Experience in IA
Fashion 2009	Privately owned	Mr Eno	M	30	None	Designer	3 years	3 years
Style 1922	State owned	Mrs Ema	F	45	Prisoner Officer.	Supervisor, Prisoner Officer.	9 years	2 years
Glamour 2012	Privately owned	Mr Edy	M	47	Advanced Certificate in CAD/CAM, Diploma	Production Manager	25 years	22 years

Given that IA is conducted in Host Industrial sites and IA assessment is solely at the industrial sites, three Clothing Companies were involved in this study. Table 5.2 indicates that Fashions and Glamour Clothing Companies are privately-owned while Style is a state-owned company. It was important to study the companies that belong to different categories in gain insights into their different experiences in assessment. Table 5.2 also shows that the state-owned company, Style, has been running for decades while the privately-owned companies have been in existence for just a few years. This could signify the amount of experience these companies have in handling assessment issues during IA depending on when they started taking interns.

Table 5.2 illustrates that two males and one female supervisors participated in this study. Mr Eno has no professional qualification at all while others have some professional qualifications related to the Clothing Industry. It implies that lack of professional qualification may impinge on the IA assessment process. Mr Eno has been a company designer for three years of which he has been involved in the assessment of students on IA. Mrs Ema has been a supervisor for nine years but has only been engaged in IA assessment for two years. The longest serving employee is Mr Edy who is also the most experienced assessor for students on IA.

Although Table 5.2 shows that Mr Edy works at a fairly new company further probing highlighted that he was a supervisor at another company before joining Glamour Clothing Company. With all this data, it implies that those with few years of experience might not adequately assess students. However, it can be argued that a lot of experience does not automatically qualifies one to be a good assessor.

Presented and analysed next is biographic data of external assessors.

Table 5.3: Biographic data of the external assessors

Region	Participant	Gender	Age	Professional qualifications	Current Position	Experience in IA	Department
Elect	Mr Dave	M	39	HND in Electrical Engineering	Sub-Transmission Controller	2 years	ZETDC
Supreme	Mr Duly	M	36	NC, BTech, Masters in VLSI Design	University Lecturer	3 years	Electronics

Table 5.3 indicates that two external assessors participated in this study. Mr Dave is from Elect Region, where St Erics College is located. The other one, Mr Duly, is from Supreme Region in which St Pauls College is found. Both participants are males and middle aged. Mr Dave holds a Higher National Diploma (HND) in Electrical Engineering while Mr Duly holds a Masters degree in Very Large Scale Integration (VLSI) Design. Mr Dave is a Sub Transmission Controller at Zimbabwe Electricity Transmission and Distribution Centre and Mr Duly is a university lecturer in the Electronics Department. They have been involved in IA assessment for at least two years. It has been noted that both external assessors have very good qualifications in other fields of specialisation but not in ICDC. This means that their assessments may not be significant to ICDC students.

Following is the presentation and analysis of biographies of policy makers.

Table 5.4 Biographic data of the policy makers

Participant	Gender	Age	Professional qualifications	Current Position	Ministry	Department	Sector
Mr Bill	M	46	MSc Information Systems	Deputy Director National Exams	Higher and Tertiary Education Science and Technology Development	QAS	HEXCO
Mr Ben	M	34	Masters in Curriculum Studies	Head of Curriculum Research and Development	Higher and Tertiary Education Science and Technology Development	QAS	CRD

Data provided in Table 5.4 indicates that only male respondents participated in this study and are both middle-aged. Mr Bill and Mr Ben are both from the Quality Assurance Department under the Ministry of Higher and Tertiary Education Science and Technology Development and they are based at the Head office for the Ministry. Mr Bill, the Deputy Director National Examinations holds a Master of Science degree in Information Systems while Mr Ben, the head of Curriculum Research and Development Section is a Master in Curriculum Studies. This means that both policy makers are key stakeholders in curriculum issues hence their relevance in this study.

Following is the presentation and analysis of biographic data of Post IA students.

Table 5.5: Biographic data of National Diploma (Post IA) students

College	Participant	Gender	Age	Professional qualifications	Experience in IA
ST Erics	Joy	F	34	NC	1 year
	Jude	F	35	NC	1 year
	Jill	M	33	NC	1 year
	John	M	42	NC	1 year
	Julie	F	32	NC	1 year
ST Pauls	Tracy	F	28	NC	1 year
	Trish	F	31	NC	1 year
	Truth	F	30	NC	1 year
	Tandy	F	23	NC	1 year
	Tessa	F	28	NC	1 year

Table 5.5 indicates that more females than males participated in this study. Age ranged between twenty two and forty three years. This could mean that they are all mature people who can reason rationally. All the participants did GCE 'O' levels except for one, Truth, from St Pauls College who did GCE 'A' level as the highest academic qualification. All participants hold a National Certificate in ICDC and they all did IA for one year. This entails that they all have a better understanding of what IA assessment entails, challenges encountered in IA assessment and they can come up with reasonable contributions on how to improve the whole IA process.

Presented next is data on the first sub research question: What assessment strategies are used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment?

5.3 WHAT ASSESSMENT STRATEGIES ARE USED IN THE POLYTECHNIC COLLEGES IN ZIMBABWE DURING IA?

Under this research question, the main theme, sub-themes and their various categories have been represented as illustrated in Fig 5.1 below.

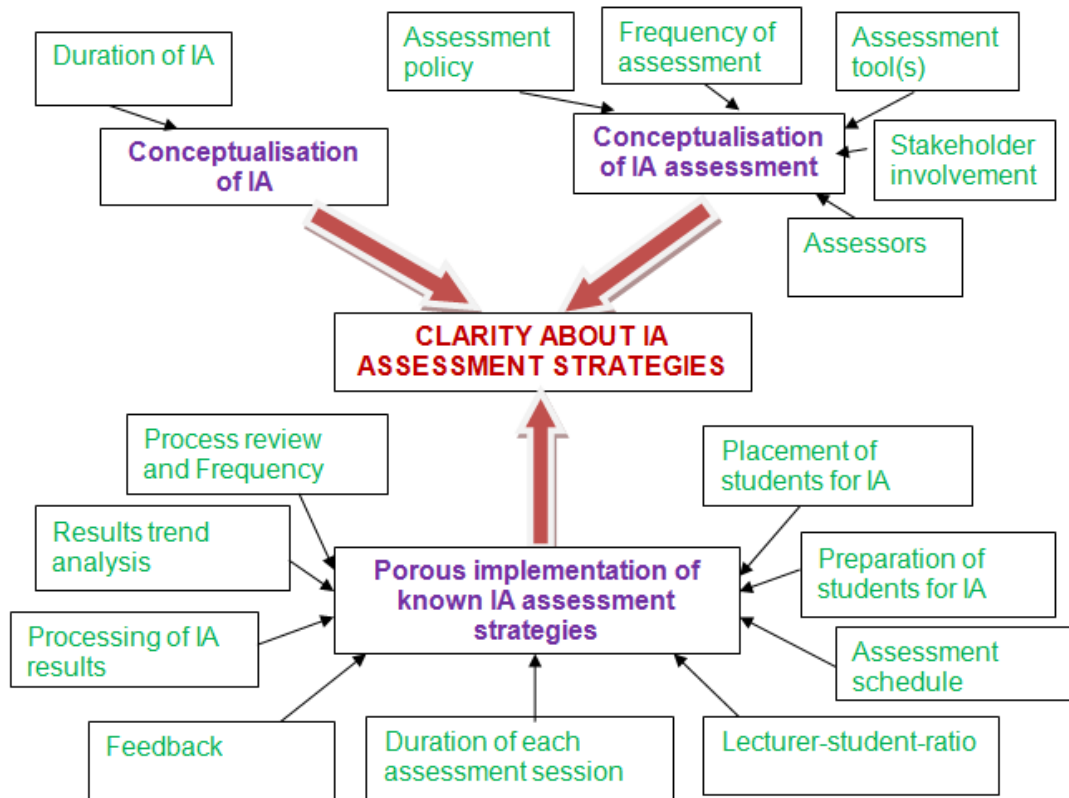


Figure 5.1: Assessment strategies used during IA

CLARITY ABOUT IA ASSESSMENT STRATEGIES

Findings on the IA assessment strategies used in the Polytechnic Colleges in Zimbabwe are discussed below with regards to conceptualisation of IA and IA assessment as well as the nature of the implementation strategies used. It has been established that respondents have a common understanding of IA and IA assessment although there is nothing concrete guiding IA assessment. Also, the various assessment strategies used by both colleges vary in their implementation.

5.3.1 Conceptualisation of IA

Research findings reflect that some book definitions were given by several respondents as they explained IA as a process that connects theory to industrial practice. Some regard IA as a process that exposes students to the real world of work where they put theory into practise. This is evidenced by Mr Toby who said:

My understanding of IA is that when you send students for IA they should be able to adapt to what is happening in industry and to learn specific job aspects that they are able to link theoretical and practical aspects.

This is consistent with Adjei, Nyarko and Nunfam (2014) who explain that IA is a practical skills training enterprise designed to bridge the gap between the theoretical world of academic enterprise and the world of professional practice. Sivotwa et al. (2014) concurs that it is a program designed to close the gap between theory and practice. The world of work is full of machinery and processes which are limited in the college environment as supported by Hosea (2013) who says that IA facilitates the trainee to develop awareness on the requirements of the world of work. This means that students can also learn about different machinery and equipment, specialisation, separation of duties and reporting structures. This was further explained by one of the students at St Erics College, Jill who said:

To me I understand that you are going to gain more exposure in terms of machinery and processes to know how the companies organize their organogram and how they operate that's what I think.

Gumbe et al. (2012) in their definition explain that IA is a process that moulds a student's knowledge; which is the student's ability, skill and understanding of information that every student requires to perform efficiently and effectively. In addition to gaining knowledge and skills, students learn about interpersonal relationships as put across by Jude a student at St Erics College that:

We also get to know how to relate well and work well with others in industry.

This shows that students also learn how to interact and socialise with different kinds of people who may help them improve their attitude with respect to cooperation, tolerance, loyalty, respect of others, being submissive, and ability to work with no supervision.

This means that all respondents are aware that whatever knowledge and skill students acquire in their institutions is regarded as theoretical and that which is

gained in industry is considered practical. So, they understand that in order to train a wholesome artisan in ICDC, there is need to marry the two. The linking of theory and work experience can enhance the total ICDC education helping to ensure that students see the relevance of their college learning (Templeton, Updyke & Bennett, 2012). Therefore, the need for clearly laid down IA objectives.

Objectives of IA

Findings revealed that one of the objectives of IA is for students to gain preliminary experience of the world of work and provides them with future job opportunities as supported by Hosea et al. (2013) that it facilitates the trainee to develop awareness on the requirements of the world of work. Another objective of IA identified through research findings is that IA provides an understanding of the operations of the Clothing Industry in terms of factory layout, organizational structure and how to run a Clothing Company. Gumbe et al. (2012) assert that IA is a process that moulds a student's knowledge; which is the student's ability, skill and understanding of information that every student requires to perform efficiently and effectively.

Furthermore, IA is said to enable students to associate with different kinds of people in the organisation. More so, behaviour and attitude of students are constructed and reconstructed through their professional work experiences. Munyoro et al. (2016) confirm that IA affords acquisition of broader knowledge through increased awareness of the opportunities available, understanding the diversity of the industry sector, personal development for example communication skills, interpersonal skills, self discipline, presentation of self and ability to stand on one's feet. Gumbe et al. (2012) postulate that students should be made aware of the objectives of industrial training namely acquisition of professional, social and skills recognition, enhancement of personality and acquisition of status and money. This entails that when properly monitored IA offers students significant educational benefits even when no formal effort is made to link the experience to the classroom activities (Templeton et al., 2012). Results obtained through further probing and syllabus review indicate that students can bring back a lot of experiences if their learning environments are supportive.

Skills students are expected to bring from IA

From the conceptualisation of IA, results show that students are expected to bring back a wide array of skills and competences. Students are expected to learn from all the departments in a Clothing Company therefore they are expected to gain designing skills, pattern making and grading skills; marker making skills; laying and cutting out skills; putting garment piece together the industrial way, quality controlling and dispatching the finished products to the market. Students are also expected to use different industrial machines mainly those that are not found in their colleges and to use some difficult fabrics. Students are also expected to gain some management skills in Marketing, Purchasing, Finance, Stores, Merchandising, Human Resources, Maintenance and Operations Departments. Guided by their syllabus (555/15/CT/0), ND students in ICDC learn all these areas in their colleges (Vertical Integration) and IA (Horizontal Integration) will provide them the opportunity to gain valuable practical competencies and insights that might otherwise be absent from their curriculum (Templeton et al., 2012). Students become more engaged when they are better able to understand the relevance of their theoretical models (Ibid). Therefore, proper implementation of the IA process will enable realisation of the intended learning outcomes of IA as proposed by Biggs in the Constructive Alignment Theory (CAT) (Biggs, 2003). These research results seem to suggest good opportunities for students to acquire a lot of skills and competencies socially, technically and professionally.

5.3.1.1 Duration of IA

In explaining their understanding of IA, respondents also talked about the duration of exposure to practical experiences. All the participants concurred that the duration of IA is twelve months which is documented in the course regulations. However, some lecturers stated that the minimum duration is eight months. Given hereunder are the responses from the HODs of the two colleges. Mrs Josh from St Erics said:

Students are supposed to complete one year attachment and the minimum period is eight months.

Mr Toby from St Pauls also said:

There are some regulations especially for the National Diploma where it says the student has to spend one year in college then he or she goes for OJET in the second year. It also says the student should be attached for a minimum of eight months.

The eight months that these lecturers referred to are not mentioned in the current syllabus. This was established through corroborating interview and document review data. The current ND syllabus for ICDC (555/15/CT/0) does not state the minimum duration for IA. This could mean that there are problems with the interpretation of the syllabus which is a document that guides the teaching and learning process in terms of course structure, aims, objectives, content, teaching approaches and assessment strategies. As a result information that these HODs cascade to their subordinates may not be correct leading to varied implementation strategies by both institutions.

All students responded that they did their IA in twelve months although one of the students mentioned that some of the students were not going for work regularly as evidenced by the response given by Truth from St Pauls College that:

Some students go for IA up to the time lecturers came for the first visit and then stay home sewing their own things and only to appear a few days before the next visit. This happened at my company. The supervisor didn't care to alert the college. Lecturers never got to know about this lady's continued absenteeism from work. If they did, they did not do anything about it because no action was taken.

This shows lack of supervision by the Host Industries if students absent themselves from work and nothing is done about it. This may also reflect on the nature of companies that take student for industrial training, those that do not care about the objectives of IA. Something must be very wrong with the placement of students in the first place where the institution did not thoroughly assess the companies for fitness for purpose. This means that there are some inconsistencies in the adherence to the IA regulations. What is being reflected in the implementation process contradicts what the regulations stipulate. However, the consequences of such non adherence to regulations are not spelt out in the course regulations.

From the document review on the Regulations and Syllabus for the National Diploma in ICDC Course Code: 555/15/CT/0 duration is 2750 hours plus one year On the Job Training. The 2750 hours are for the institution-based subjects and it is not clear as to how many hours translate to twelve months for IA. This however seems to be the norm with some institutions in other countries in and outside Zimbabwe where IA duration is prescribed in months (Chinyemba et al., 2012; Howard et al., 2014; Andoh et al., 2016) with some in weeks (Abdirahman, 2015; Odugbesan, 2010).

A reflection on IA conceptualisation shows that IA is an important aspect of students' training program. It provides a link between what takes place in colleges with what transpires in the Clothing Industry. It is necessary to produce well rounded graduates who are versatile both theoretically and practically, students who are astute and will fit well in the world of work in order to solve societal problems. In order to produce such a student who is marketable and one who has an initiative to start their own businesses, students should be effectively assessed. This takes us to the next discussion on the respondents' conceptualisation of IA assessment.

5.3.2 Conceptualisation of IA assessment

This section presented and analysed responses given in light of the meaning ascribed to IA assessment. In explaining their understanding of IA assessment, results show that respondents assigned six broad meanings to it. They looked at IA assessment in terms of what assessment in IA entails, policies governing IA assessment, frequency of assessment, assessment tools, stakeholder involvement and who the assessor is.

5.3.2.1 What is IA assessment?

It was important to establish how respondents conceptualised IA assessment in order to set into context their practices and their views with regards to IA assessment procedures used for ICDC students in the Polytechnic Colleges in Zimbabwe.

Assessing students' performance

Some responses indicated that IA assessment of students' performance is done by both the supervisor and the lecturer. Some said the supervisor is the assessor while some said it is the lecturer alone who conducts assessment. This is what Mr Toby from St Pauls College said:

That one comes in two folds, assessment done by lecturers and the assessment done by the supervisor. Basically lecturers monitor whether the student is performing according to the tasks laid down by the college. Students are supposed to visit various departments in the company such as designing and production. In the production department for instance, they should be able to do line balancing, supervision, quality control and at the same time to do production processes. We look at what the student would have written in the Log Book as well.

Mr Toby viewed assessment as measuring students' performance according to what they expect them to cover which concurs with Mrs Josh from St Erics College who said that they have their own criteria in the Department of Applied Arts whereby the college sets out processes which students are supposed to cover during IA. This entails that supervisors are guided by the information given to the company by the colleges. While these colleges come up with the programs of training to be followed during IA, Dickinson (2010) suggests that for the relevance of the curricula, industry must play a key role in the development of the curricula. This means that industry should not bend towards what colleges want but should determine what industry requires thus they must be involved in coming up with tasks to be assessed. The problem that is likely to arise is that of the industry failing to fulfil the college requirements and expectations and the implication would be ineffective assessment.

Assessment of students' performance also includes awarding of marks as explained by Mr Treck from St Pauls College who said:

I think this is when the students' performance is rated e.g. when the supervisors have given students tasks to do they would want to know if they really understand what they are supposed to do. This includes awarding marks for the tasks performed.

While assessment is done by both the lecturer and the supervisor including rating of students' performance, it is only the supervisor who awards marks. This is evidenced by the response from Mrs Tuan as she viewed that:

We assess the progress of students using Log Books on whether the tasks listed in the Log Book are covered or not during the IA period. Both lecturers and supervisors assess the students but rating of performance is done by the supervisor.

This shows that both the lecturers and supervisors assess the performance of students but marks are only awarded by the supervisor. Lecturers seem to only rubber-stamp marks from the supervisor on the basis that they are the ones who spend most of the time with them. All lecturers from St Erics College concurred that they do not put marks in the Log Books with those at St Pauls College contradicting each other. Mrs Treck who said lecturers do not put marks is from the same college with Mr Toby who said they do. This is what Mr Toby said:

In the Log Book after four months there is a section where you need to put marks and this is done whilst the student is out by the supervisor. As a

training officer you need also to concur but the concurrence now you will be doing it on your own. Where am sort of disagreeing with the supervisors the marks change because in most cases they do not understand the ratings. They will give a five where that person is supposed to get a four especially the weight, the weight doesn't go to five but s/he will have given the student a five so I will reduce it down but there will not be many variations.

Mrs Tuan from St Pauls College concurred with Mrs Treck's assertion that ratings are done by the supervisors only. Mr Tony seems to be the only lecturer from St Pauls who adjusts marks in the students' Log Book. This shows that in assessing students in ICDC, lecturers from the same college do not have a standard by which to assess and different approaches certainly yield different results even on the same student.

In addition to assessing tasks, assessment includes monitoring of students' behaviour. There is a certain level of discipline expected in the industry which contributes to the achievement of the goals of the company. If behaviour is negative, production suffers as supported by Nwinyokpugi (2015) who explains that there is a high correlation coefficient between workplace discipline and organisational productivity in the organisations. Tracy, a student from St Pauls said:

It is supervision either from the lecturer or from the supervisor or anyone who has been tasked to assess you at the company. He or she will be monitoring your performance during different tasks or even your behaviour in the company.

However from what Tracy explained, it seems assessment is not factual. Lecturers are not there when tasks are performed and they just base their assessments on what is on paper. This means that there will be an element of bias especially where comments are always positive and where marks are always too high as reflected in the Log Books reviewed by the researcher.

Assessment of facilities

Mrs James from St Erics College said that lecturers do not assess students' work but the adequacy and the state of facilities in the company. This is what she said:

I might not be able to express myself well enough but what I can say is that what we as lecturers assess is not students' work but we assess the companies as to what they have. If we were assessing students, we would be asking them what skills are they gaining in that company but their experience now is based on what that company offers. Even we were to go there and say

this is not good for our students, but that's what they have. So for us to say we assess umm it is very difficult.

Assessment by lecturers is not mainly based on what the student has to achieve but what the company offers since most of the companies do not have the required departments and equipment to learn from. However Jill from St Erics College suggested that students can move to other companies in search of skills and competencies not found in their companies as a result of what the assessment process will have established. This is what he said:

I think concerning the company, when the lecturers assess and find that the company does not offer much in terms of the learning process they may be able to advise the student to look for another company since we are allowed to move to not more than three companies.

Jill concurred with Mrs James from the same college on assessment of facilities but still acknowledged that assessment checks on how they grasp concepts. He reiterated that they can move to other companies as the provision is made in their Log Books to be assessed by three companies.

Assessment for corrective measures

Mr Edy from Glamour Clothing Company said IA assessment checks on how students perform assigned tasks so that they can be assisted if need be. He said:

IA assessment is a necessary tool used to enable the assessor to ascertain whether the trainee has understood the areas covered or not for further assistance.

Mr Toby concurred that:

Now on the supervisors' side, they are supposed to look at the day to day tasks in terms of the training program looking at what the students can now do and what they still cannot do and assist them as much as they can.

This entails that IA assessment is meant to provide corrective measures in the learning process. The external assessor, Mr Dave, added that they check if students are able to link theory with practice. It is not clear how they are able to do so if they are not experts in the area as indicated through their biographic data.

IA assessment is viewed as a process that is two-sided whereby there is assessment of company facilities and achievement of tasks laid down by colleges

with the aim of improving students' performance. The learning environment is assessed for its appropriateness and adequacy of facilities. How far the students have gone in grasping industrial concepts is an integral part of the overall assessment. It moulds the students and most importantly checking on the attainment of skills. Assessment informs further steps to be taken such as correcting students where they are making mistakes and advising them to change companies if not much learning is taking place at a particular company. It is fitness for purpose. There were however some contradictions on what lecturers do and what they assess. Groenwald (2009) asserts that good assessment requires being clear about the mission and goals, the standards to which you inspire and the criteria by which you would measure success. This means that in order to achieve assessment goals, there is need to have clear policies that outline a standard by which IA assessment is anchored. This necessitated the presentation and analysis of data on IA policy.

5.3.2.2 Assessment Policy

Results showed that there is nothing concrete about IA policy. Generally assessment is done through experience, through guidance from the students, through guidance from lecturers and through following what is stipulated in the Log Books. There are of course some statements on the frequency of IA assessment and assessment tools that are highlighted in the syllabus which assessors adhere to. It is however ambiguous to all respondents except for policy makers as to who exactly participates in policy issues. The standard measures to follow when assessing students are not clear to all. Literature indicates that assessment should be shaped by the policies which are the guiding principles for any course of action (De Groff & Cargo, 2009; Vargas-Hernandez, Noruzi & Ali, 2011; Howlette & Cashare, 2014). Assessors need to be directed on which route to follow for a standard outcome.

Respondents described the policy that guides the process and the structure of IA assessment as follows:

General inspection

Myriad responses were provided with a good number proclaiming that they have not seen the actual policy document. This is what Mrs Jack from St Erics College said:

I do not know if there is a policy on IA, I haven't seen one

This response concurs with Mrs Josh's from the same college who pronounced that they did not have the document at their work place; it could be somewhere else if ever it was there. Mrs Treck from St Pauls College also said she had no idea if the policy was in place. This either mean that the document is somewhere in the college or in the department and has not been availed to the lecturers or it is not there at all. This implies that the lecturers will do the most logical procedures which may not be appropriate and may bring out a lot of discrepancies in the assessment of students. Mrs Josh however submitted that there are some regulations that they follow. This is what she said:

Concerning the policy we are saying that when the student is at National Diploma two level she or he is supposed to go for IA, that is the HEXCO policy whereby they are supposed to complete one year on attachment and the minimum period is eight months. We have a syllabus which is written one year on the job training for every course and it says the student should not be attached for less than eight months. The guideline is there but to say that it is written down that if the student does not complete the twelve months and if not assessed three times what will happen I do not know because we do not have such a document. ...Maybe the HOD OJET has one.

This leaves one to wonder what these lecturers use that guide students' training if they are not clear of what documents are there, what they really say and where they can be found. According to her response, Mrs Josh is aware that a syllabus exists which stipulates the duration for IA and frequency of assessment. Nevertheless issues on minimum duration of eight months and that of repeating IA if students are not assessed three times are not stated in the syllabus reviewed by the researcher.

Lecturers at St Pauls seem to share the same sentiments with those at St Erics that they are ignorant of the proper policy document that they use for IA related issues. The external assessors confirmed that they have not used any document that outlines IA regulations. Mr Dave from Supreme Region said:

I do not know of that policy. When conducting external assessment we are given guidelines by the HEXCO link person for the region and these are what we follow when assessing students.

The external assessors follow the guidelines given by the HEXCO link person when assessing students. Policy documents are not known to either of the external assessors involved in this study.

Assessment through experience

Supervisors from the Host Industries indicated that they had not been inducted on IA assessment, neither had they seen any policy document on IA assessment. Mr Edy from Glamour Clothing Company affirmed that:

I haven't seen one for all these years I have been working with students. It is now through experience that we know what to do with the students during IA.

This shows that supervisors do not have a policy to guide them in the assessment process. This may not be the right thing to do, and this could be a source of problems that many students experience at work places as there is nothing written down as a guide for supervisors to follow when training students. This concurs with what Mrs Tom said:

I never got inducted on how to assess students neither was I given even a handout or any document that spells out the regulations on conducting IA. The HOD simply told me that I was going to join other lecturers who were going for IA follow ups. My first experiences were nasty, I really did not know what to do during the first assessments but now I am used to it, it has been 10 years now.

It is good to be experienced but there is no guarantee that these assessors are experienced in doing the correct thing. They may still be using varied and wrong approaches to IA assessment as a result of the absence of an IA assessment policy.

Assessment through guidance from students

Some supervisors actually rely on students who guide them on how to complete the Log Book. This is what Mrs Emma said:

I do not know anything about IA policies. We just train students according to the tasks that we prepare for them and some of the things such as ratings we ask the students to assist us on what to do.

It appears improper to ask the students about how they are to be assessed, an aspect that determines their fate at the end of the year. O' Farrell (2009) argues that students do not always know the assessment criteria or how assessors interpret them, it is considered the business of examiners. Now the credibility of assessment results will be questionable when one who is supposed to be assessed seems to know better than the one who is to assess. Tessa, one of the students from St Pauls College concurred that:

Our supervisor did not know what to do with us, he would ask us what we were supposed to do. It was a great challenge as we wanted guidance from him, we also did not know but we explained the use of the Log Book only from what we remembered through induction at college.

This shows how much both the learner and the supervisor struggle to meet the assessment requirements throughout the training period only because of lack of proper documents to guide IA activities and the assessment process. Supervisors are not even inducted on the use of the Log Book but to rely on students.

Assessment through guidance from lecturers

Supervisors who mentor students during IA also rely on what lecturers tell them to do. Mrs Ema reiterates that lecturers also assist them on what to do. Mr Eno concurred that:

We do not use any policies. When lecturers come, they tell us what to do and we follow that. We just do not do our own things; the lecturers help us a lot.

Mr Toby also said:

What we do as lecturers is that we take the supervisors through the Log Book so that they get to understand what is expected of them when completing them. In most cases we talk to them in the presence of the students so that they will be on the same page in order to avoid problems when the lecturers are not there.

These responses show that lecturers are also responsible for giving guidance to supervisors in the absence of a concrete IA assessment policy. The challenge may be of consistency if instructions come from different lecturers who have not seen the document either. The credibility of the IA assessment process becomes questionable.

Assessment through guidance from the Log Book

Mrs Jerry from the same college seems to think that the Log Book with its rules and regulations is the policy. This is what she said:

We have a policy as an institution, the Log Book has some rules and regulations that the students must follow of which we give them when they are about to go for IA.

As stated above, Mrs Josh said there could be some document somewhere and she seemed to suggest a syllabus could be the IA policy document. With regards to Mrs Jerry's response, it shows that lecturers who are in the same institution have

conflicting ideas regarding “policy”, “syllabus” and “institutional policy”. The impression is given that there is no written evidence of the existence of any policy document guiding IA and IA assessment. This makes IA assessment policy very difficult to determine.

It seems all respondents have only seen and/or used the syllabus and the Log Book and the rest of the rules and regulations are implied. Nonetheless clarity about the issue of IA policy was sought from the policy makers themselves. The HEXCO Deputy Director at that time, Mr Bill said:

Yes it is there I might not be able to pin point what exactly but the curriculum guys will give you because that is where the policy on IA is designed... In the regulations, issues of IA are clearly spelt out yes.... Assessment is through field based assignments, continuous assessment, written evaluations and on the job training.... In terms of how assessment should be done, that information is there, it is written here that on the job training is as per proficiency schedule. (reading from the computer).

The HEXCO Deputy Director was reading from his computer and this shows that there are some guidelines on how IA and IA assessment should be conducted but it seems there is not a proper policy document on IA. He read out some of the contents of the syllabus that talked about OJET although some aspects he mentioned to do with the regional examinations coordinator for OJET, national examinations office and ITTD staff moderating the work are not cited in the syllabus and other documents availed to the researcher by his office or even by the colleges. This entails that there is some information that is very important to curriculum implementers which still remains inaccessible to them. As a result no standard of assessment is adhered to. Mr Bill went on to say:

The way supervisors assess depends with the course. The competencies for each course are developed in the Log Book and this is found under curriculum or in the syllabus.

Here the policy maker is saying the competencies for OJET are specified in the Log Book. It appears now that there are several documents which act as policies guiding IA. The institutions are guided by the syllabus and the companies by the Log Book but this is not clear to most of the users of these documents that these are policies. From the Curriculum, Research and Development organ, Mr Ben concurred with Mr Bill that these two documents are used by the assessors.

Again a definite policy seems not to exist. The TVET Policy Review Framework (2005) gathered that lack of a definite mechanism for policy implementation and the absence of a regulatory authority threatens TVET quality. What is being used in these Polytechnic Colleges are the syllabus and Log Book as the guide to IA and IA assessment. In the syllabus reviewed (555/15/CT/0) are course aims and objectives for each and every subject studied at ND level but there is nothing specific for IA. There is just one short statement that says “Second Year OJET” and this is all for everything that transpires for the whole year of industrial training. Tasks in the Log Books could have been drawn from the other subjects in the syllabus but there is nothing outlined about OJET in the syllabus. Objectives of IA may not be clear to supervisors because theirs is just a Log Book with no assessment objectives as the syllabus where a couple of these policy statements are written is the property for the lecturers. This may be the source of so many inconsistencies happening during IA assessment. This is consistent with the situation in Kenya where training institutions send trainees for IA, according to Kenya National Training and Attachment Policy (2013), but there are no clear criteria for establishing the authenticity of the scores provided to the examination board by the training institutions and industry.

From the document reviews done by the researcher, it was evident that the syllabus for the ND in ICDC (555/15/CT/0) does not outline the content or skills that students should cover during IA. Although not as specific as in the theory and other practical subjects undertaken by the ND students in ICDC, the syllabus refers the implementers to the Log Book for the assessment scheme. The Log Books reviewed showed some important regulations on sickness and working hours. They state that a medical certificate or a written submission by the trainee should be sent to the college should they be absent for three days. In terms of working hours, students should report at the company for the same number of days and hours per day as the personnel working in that company. This concurs with the results from the studies by Sivotwa et al. (2014) and Gumbe et al. (2012) who found out that during IA students follow the usual hours of the Host Industries. Nonetheless, these students are not on pay roll and the implication is that attendance and punctuality may be affected by their financial disposition as alluded to by Mrs Ema, but nothing is said about failure to meet these obligations. Preliminary information on college details, company details and guidelines to the supervisor and the student are similar for both colleges.

Their code of conduct comes right at the back of the Log Book which many supervisors may not see until the end of IA if they had not read the whole Log Book before.

Even if all respondents interviewed on this aspect except for the policy makers implied that there was no policy which they ever used. Only a few seemed to be aware of the IA regulations which they follow. These include the frequency of assessment and assessment tools used. Quite a few are also familiar with the stakeholders involved in curriculum development and review processes.

The following section presented and analysed data on the frequency of assessment.

5.3.2.3 Frequency of Assessment

It was indicated by all respondents and through documents reviewed that IA assessment should be done three times a year by lecturers as is the case with some local universities (Matamande et al., 2012). Mgaya and Mbekomize (2014) indicates that lecturers at the University of Botswana are required to regularly visit students on internship while Andoh et al. (2016) suggest that frequent supervision visits to the companies can improve the assessment program. The specified number of times for lectures in the Polytechnic Colleges in Zimbabwe gives a standard measure for the colleges of their adherence to the regulation unlike in the aforementioned situations where frequency is not specific. The frequency also seems adequate considering that the students have a mentor, the supervisor, who is mandated to assist them every day. Also since lecturers have some other duties at college, they need to balance between these two aspects of students learning, theory and practice.

For some lectures three times is not enough. Mrs James is aware that students should be assessed three times a year but still felt there is need to constantly keep in touch with the students so that they remain on track. Mrs Jerry further concurred that even if the regulations stipulate the number of visits by lecturers, problems that may arise in the students' workplaces may call for more visits. She said:

...we may go there more than three times because sometimes we have some reports coming from students saying the company is not treating them well we have to do some frequent visits just to check or if we get reports that the students are not attending the attachment, we need to go there in order to see how we can help solve the issues.

It was also mentioned that peer assessments were conducted whenever there was need. Most students concurred that supervisors were always there for them. Trish from St Pauls College added that amount of assessment depended upon supervisors and the department in which they were working in. She said:

Depending on the department you are working from, you get a supervisor from that department so it differs from one supervisor to another and with the nature of the department but they were always there for us.

Policy makers elaborated that failure to satisfy the requirements of the course results in serious consequences as Mr Bill made reference to a case that unfolded in one of the regions where some students were deferred for not being assessed three times.

For external assessors, frequency has been reviewed to three times signifying the need to continuously inform the whole IA system for improvements. External assessment is a worthwhile IA assessment component but it needs to be properly documented in policy regulations so that all stakeholders are aware that such assessments are conducted. This follows responses from both lecturers and supervisors indicating that they just heard about them but were not sure of their existence. Some supervisors even said they never saw them in their companies. Students concurred that they were never assessed by external assessors for the whole twelve months they were on IA of which external visits are done three times a year. Hence the assertion by Jumo et al. (2013) that in order for assessment strategies to be employed, regulations should be clear to all stakeholders. Since data shows that the external assessors under study were not from the Clothing Discipline but assessing ICDC students as well, this could justify their non appearance in some of these Host Industries.

Mrs Treck said it is the lecturer's assessments that are specified in the course regulations and non adherence to this would result in the student being deferred and yet it is the supervisor's mark that counts for certification. This could be another source of problems encountered in IA assessment because more value seems to be put on the lecturer's assessment than the supervisor's who generates the IA mark. The research results have shown that if some sections of the Log Book have details missing, students are sent back to the company and get supervisors to complete them (as said by Mr Toby and Mrs Tom) yet for the lecturers' it is a deferment.

Students might regard the lecturer's assessment as more superior than the supervisors'.

The next section presented and analysed data on assessment tool(s).

5.3.2.4 Assessment tool(s)

The Log Book has been identified as the main assessment tool used by both Polytechnic Colleges under study.

What is a Log Book?

Mrs Jerry defined a Log Book as an instrument that is used to measure the performance of students who are on OJET. Mrs Tuan concurred that:

A Log Book is a document that records all the major activities undertaken by students during IA.

This is in support of Chinyemba et al. (2012) who view a Log Book as a profile or record developed to improve continuity of information. It is a booklet that contains information on different aspects of the training program as well as facilitating communication between both the training institution and the Host Industry on the student's progress. In other words a Log Book is a very important assessment tool which every student trained by these two Polytechnic Colleges must complete which is used for certification at the end of the IA process.

From the document reviews conducted by the researcher, the Log Books from both Polytechnic Colleges contain several forms for different sets of records bound together in a booklet format. These include a form that records all the work done weekly for the twelve months and this form is completed by the students. The other form called supervisor's monthly assessment form records major tasks done by the students; ratings by the company supervisors; and weighting and mark allocation by the lecturers. Another form is a progress report that shows quarterly reports on students' performance. Records are written by the students, rated by the supervisor and weighting and mark allocation is the responsibility of the lecturers. The other form found in the Log Book records personal aspects, social responsibilities, working methods and standards of dressing. This form comes right at the end of the Log Book and again rating is done by the supervisor with the weighting and mark allocation sections for use by college lecturers. These Log Books are similar for both

colleges except that the page with learning areas for St Erics is detached where as for St Pauls it is found in the Log Book.

The route followed in assessing students using the Log Book is generally the same as outlined by the lectures, supervisors and focus groups. The general consensus is that students record weekly activities in their Log Books, at the end of the month the supervisors comment, rate the tasks, append signatures and put date stamps. Students comment and sign monthly. Lecturers also sign in the Log Book when they visit the students. Lecturers from St Pauls College put marks in the Log Books during IA visits while those at St Erics College do not.

Other assessment tools

There were only a few participants who said over and above the Log Book they use the assessment forms, students' reports and lecturers' reports. Mrs Tom from St Pauls College said:

We use the Log Book mainly and a visitation form that gives a confirmation that you have been to the company and that you visited so and so students. It contains the name of the student, the supervisors' comments indicating how the student is doing, and signatures. Much of the work is done by the student and the supervisor when they are recording in the Log Book.

From the aforementioned response, it is evident that the assessment forms used at St Pauls College are mainly to provide the information that explains the general performance of students. In addition to what Mrs Tom said, Mrs Tuan said the forms are used to compile reports. While at St Pauls College lecturers compile reports using forms completed by students, at St Erics students are made to write reports which of course are not marked for assessment. There seems to be a missing link between what is happening in colleges with what one of the policy makers said concerning IA reports by students. Mr Bill, the policy maker said:

Isn't it that they are supposed to write IA reports? It is a requirement. Yes every student coming from IA must put their Log Books there and their reports there. I will check on reports, attachment reports must be there which are marked. This is the principle, what must be done then if this is not the case, I must find out.

This shows that it is assumed by the policy makers and the accreditation board, HEXCO that students should write IA reports which should be marked yet St Erics College just asks students to write reports which they do not mark while at St Pauls College, students do not write IA reports at all. This may point at lack of concrete IA assessment policy that guides how IA assessment is being done in colleges and lack of collaboration between the policy makers and college as implementers. This is supported by the TVET Policy Review Framework (2005) that says there is no effective regulatory mechanisms to monitor, evaluate and enforce regulations in order to assure quality in TVET institutions in Zimbabwe. The review acknowledged that the TVET standards only exist on paper.

All responses indicated that the log book is the main assessment tool used for assessing ICDC students during IA. It is evident through documents analysed that it is the only tool that bears marks for grading. These results concur with the assertion made by Jumo et al. (2013) that the Log Book is the only assessment tool used for assessing students in the Polytechnic Colleges in Zimbabwe during IA. A Log Book is also used at Chinhoyi University of Technology for their undergraduate degree programs (Chinyemba et al., 2012; Dandira, 2016). Mgaya and Mbekomize (2014) concur that log sheets are the monitoring tools completed weekly by every intern to indicate work done weekly. The Log Book is therefore a recognised essential assessment tool which is also being used in other countries such as Ghana and Kenya (Howard et al, 2014; Templeton et al., 2016).

According to Olufemi (2012) there are printed and electronic Log Books. Results from this study show that Log Books used are in print form with a predetermined outline bearing headings and subheadings that make it easier for users to fill in information into blank spaces for ease of future reference and scrutiny (Olufemi, 2012). It was also established through the results that these two colleges make individualised Log Books according to their college needs. This was confirmed by one of the supervisors who said Log Books differ according to colleges. This entails that to supervisors different Log Books would guide them differently hence a lot of confusing work for them considering their very busy schedules (Jumo et al., 2013; Chinyemba et al., 2012).

However, the Log Book alone may not be enough given the whole list of possible tools that can be used to assess students during IA. Bell et al. (2010) identify projects, competence statements, portfolio and products as some of the IA assessment tools. Chinyemba et al. (2012) also identify portfolios as an important IA assessment tool. Matamande et al. (2012) and Svatwa et al. (2014) also acknowledge reports as other very important assessment tools. This infers that a number of assessment tools can complement each other thereby removing bias that can be associated with the use of only one tool. Research results strongly show that the log Book alone is inadequate.

Results show that students produce college-based items and prepare files but no marks are obtained from these. At St Erics College students also write IA reports but they are also not considered for assessment. This means time and material resources are not put to good use and if students discover that no marks are generated from these other assessment tools they may not take them seriously. These could be considered for assessment and effectively complement the Log Book. One of the policy makers expressed that students write reports that are marked and he was so much convinced that it is a requirement for assessment yet this is not the case. This could mean that some issues are discussed and agreed upon but are never documented. This could also show lack of effective monitoring structures by the examinations regulatory board as pointed out by The TVET Policy Framework (2005) that there is no effective regulatory mechanisms to monitor, evaluate and enforce regulations in order to assure quality in TVET institutions in Zimbabwe.

Some forms used for quality checking at St Pauls College contain very vital information including strengths, challenges and suggestions but the information just sits in the college offices and is not used even for process reviews and evaluations. This means some information that is meant to benefit the system is wasted. These other support instruments which are not documented in the syllabus are logistic tools and are necessary for authenticating the IA process. They provide evidence that IA assessment has been done. Based on the CA theory educators should create a learning environment that includes learning activities and assessment that facilitate the student achieving the desired learning outcomes (Biggs, 2003; Biggs & Tang,

2011; McNamara, 2011). Therefore assessment methods need to be designed that suit the student conceptions and approaches to learning (Abdullah, 2013).

Next is data presentation and analysis on stakeholder participation in policy development, implementation and review.

5.3.2.5 Stakeholder participation in policy issues

The policy makers explicated how policy development, implementation and reviews are done by the members who take part at various stages. Results revealed that a plausible pool of stakeholders participate in curriculum review and development. These include industrialists through NAMACO, lecturers as course coordinators, principals as HEXCO board members, students through their Student Representative Councils (SRC), HEXCO officials, CRD, Tertiary for Education Programs (TEP) director and the Permanent Secretary in the Ministry of Higher and Tertiary Education Science and Technology Development. This entails that relevant people are involved in policy issues. Other countries such as Nigeria, Egypt, Ireland, Brazil and India work with social and industrial supervisors, private enterprise training companies, trade unions and employer associations (Muchemi et al., 2013). An all encompassing team of specialists in policy making provides an opportunity to streamline TVET instructional policies and curriculum. Kurasha and Chabaya (2013) concur that curriculum development should be a participatory process in which all key stakeholder are involved. This would mean all issues affecting students' learning at any level of training will be critically considered and approved before implementation. This also ensures a vertically and horizontally collaborated curriculum.

The following are the stakeholders and how they are reportedly involved with curriculum and policy issues:

National Manpower Advisory Council (NAMACO)

With regards to stakeholder involvement, National Manpower Advisory Council (NAMACO) is one category involved in policy issues. Mr Bill explained that:

NAMACO plays a central role in curriculum development and review because our main function is to design curriculum that is responsive to the needs of industry.....for our curriculum to be relevant, we must get it through

NAMACO, the industry and the external assessors who are also from the industry. If NAMACO does not pick one thing, external assessors will pick it.

Whereas industry is very much concerned about production, NAMACO is of overall importance as it synthesises all the relevant areas of production and new initiatives. Industry needs this help from NAMACO otherwise it can consider students who come to them to learn as mere employees. The various industries are consulted by NAMACO so that the needs of industry are included in curriculum development. The TVET Policy Review Framework (2005) explicates that HEXCO through Curriculum Research and Development uses NAMACO sectoral committees to determine curricular content so that courses offered address national needs in line with the Nziramasanga Commission (Nziramasanga Commission, 1999). According to Mr Bill, external assessors are from the industry and are involved in curriculum issues through reports that they write after assessing students. In addition to NAMACO, Mr Ben mentioned that the permanent secretary for Higher and Tertiary Education Science and Technology Development is another stakeholder who is involved in policy issues. He described that:

In this ministry in terms of policy development, the HEXCO board is chaired by the permanent secretary. The minister presents issues that are recommended by the board to the cabinet. Because the HEXCO board may say we want this national intervention done regarding education and training and it is the minister who goes to the cabinet and influences whether that position can be taken on board or not.

This response clearly shows that NAMACO advises the minister of Higher Education on the many different aspects of skills training and suggests the inclusion of skills they consider to be necessary. Through the Minister, propositions are presented to the cabinet which may take some on board and rejects others. An example of a current proposal according to Mr Ben is that industries should benefit in some way for taking students on IA. Presently, both Host Industry and individual students on IA benefit with the former receiving \$50 per student and this may encourage companies to take more students. The consultative workshop through the TVET Policy Review Framework (2005) clearly revealed shortcomings in communication between NAMACO and the private sector that it represents. The result of this gap in communication is that industry is not sufficiently conscientised about what happens in TVET. Conversely, this casts doubts on the paucity of advice that NAMACO gives to the ministry of Higher and Tertiary Education (Ibid).

Tertiary Education Programs (TEP) and College Principals

Included on the list of stakeholders are the TEP and college principals as further highlighted by Mr Ben that:

The Director for TEP also sits in the HEXCO board meetings as a policy implementer so that if there is any input or any outcry they would want to express on behalf of lecturers, principals or vice principals he has the word. Currently as HEXCO, our regional chair persons are principals so the principals also have a say. They write their reports directly to us as regional chairpersons and they give us feedback on their observations, obstacles, whatever.

TEP also sits on HEXCO boards as implementers of programs. The Principals of the Polytechnic Colleges also participate in the curriculum review and development meetings. They also contribute through the reports they write as regional chairpersons as a form of feedback that informs policy changes. Mr Ben added that:

We mainly have the directorate for TEP. Those are our direct interface of the programs. We develop the policy and they are direct implementers of the programs. So once we develop curricular together with the industry and is ratified by the examination board, we then give it to TEP directorate so that they disseminate the materials to all Polytechnic Colleges. That's what they use to monitor and evaluate or assess the performance by lecturers.

Lecturers are monitored and evaluated by the Directorate of TEP. CRD packages the policies and give them the TEP for implementation by lecturers in Polytechnic Colleges.

Lecturers

In addition lecturers are said to be involved in a number of ways, as internal assessors and as curriculum developers. Mr Ben said:

Lecturers are involved in internal assessment. They write reports on what they find on the ground. When we develop skill proficiency schedules, qualification standards and course regulations even the content regulations, lecturers are involved as well. We rotate the regions in terms of expertise.

It has been indicated that lecturers are involved at every stage of curriculum development. In addition to internal assessment, they participate in the development of qualification standards, skills proficiency, course content and course regulations. As observed by Gumbe et al. (2012), the trainer plays a key role of shaping trainers and determining their quality, the involvement of lecturers in curriculum issues is

plausible. However some lecturers feel they are not adequately represented in policy issues. This is what Mr Toby said:

My personal feeling and opinion is to involve representatives from different colleges for ownership of programs rather than just picking a few individuals. Like I am saying I disown this thing because I do not even know where it originated from you see but if our college is involved definitely before someone goes there that person compiles issues that will be presented there. Am sure they will come up with something that is user friendly.

It seems there is inadequate representation of lecturers in policy issues as Mr Toby pointed out that consultations are not being done to all colleges. This seems to have a bearing on the implementation process as the implementers feel policies are being imposed on them which again are not user friendly. The syllabus document reviewed by the researcher indicates that ten Clothing Company representatives were consulted when the ND syllabus was reviewed in 2015 yet according to Mr Ben only two lecturers participate in curriculum issues. This could be the reason why Mr Toby opined that the voice of the lecturers is not loud enough.

Students

It was further acknowledged that students are another important category of stakeholders. Student Representative Councils (SRC) are found in all colleges including Polytechnic Colleges and a member of CRD sometimes meets with curriculum developers. At one time, from these meetings, a compendium was put together. Mr Ben said:

We have got SRCs for Polytechnics through which what they are going through are presented as we occasionally meet them. I coordinated development of the compendium for meetings held which involved the SRCs from all the colleges and came up with this book.

According to the compendium referred to by Mr Ben, the only issues raised by the SRCs concerning IA include payment of full fees by other institutions yet others institutions were paying part of it; Zimbabwe Manpower Development Funds (ZIMDEF) for IA students still being accessed through the institutions instead of banks and IA letters not issued on time, hence short-changing students due for IA. The involvement of students being referred to here were the responses of the SRCs to the Minister of Higher and Tertiary Education Science and Technology Development at the time on different facets of the ministry with the need to come up

with a new mandate. Mr Bill concurs that students contribute towards policy issues through report writing.

While students can participate effectively through report writing, it has been discussed earlier on that students at St Erics College write reports just for the sake of it while those at St Pauls College do not write reports at all. This means that a lot of valuable information is being left out through non involvement of students' feedback which can be provided through IA reports.

Higher Education Examinations Council

The policy makers further described their roles and duties in order to set a clear picture of how important their departments are in policy issues. Mr Bill said his roles are:

To give feedback on assessment, we do the assessment. We asses using a document and whatever results we get will give feedback to the curriculum developers in the ministry. We also make spot checks to the attached students.

As shown in the biographic data, Mr Bill belongs to HEXCO which is the examining board for the Technical and Vocational students including ICDC. This means that his input through IA results and reports from different stakeholders can play a critical role in improving the ICDC curriculum. Although he talked about spot checks, he did not indicate how often which is exactly what was reflected by the TVET Policy Review Framework (2005) that standards control mainly exist on paper and that the existing inspection section of HEXCO is ineffectual as a monitoring body.

Curriculum Research and Development

On the other hand, Mr Ben who is from CRD said:

My role is to engage industry and develop the OJET Log Book and formatting as well as the assessment scheme.

Mr Ben coordinates the policy development and review processes. Both Mr Ben and Mr Bill are also central in policy review and development issues.

Data provided mainly by policy makers identifies NAMACO, external assessors, HEXCO representatives, Permanent Secretary, directorate for TEP, the Deputy Director for QAS and the head of the CRD in the department of QAS, lecturers and students as important stakeholders in policy issues. Their efforts in IA can be

appreciated through the implementation of IA assessment strategies by various categories of stakeholders as presented in the next section.

The following is the presentation and analysis of data on who the assessor is.

5.3.2.6 Who is the assessor?

It emerged through research results that an IA assessor means different things to different people even those in the same category of respondents. Some said the supervisor is the assessor while some said it is the lecturer (Munyoro et al., 2016). Some said it is both the supervisor and the lecturer as supported by Matamande et al. (2013) who assert that students in the Faculty of Commerce at the University of Zimbabwe are assessed by their lectures and the supervisors during IA. Only a couple of respondents in this study mentioned the external assessor as another category of assessors even if they had not seen them ever. Some even felt peers are assessors as well. Although most of the respondents could not concur on who the assessor really is, the research results revealed that the lecturers, the supervisors, the external assessors and the peers are all assessors in ICDC during IA.

How and when they assess is outlined below and variations are also noticed depending on the individual, the college and the company.

Assessment by lecturers

In explaining how they assess students, some lecturers expressed that when they visit the students they are allowed into the work shop to assess company facilities whilst some are not. Mrs Tom said:

Some of the companies do not want us to get into their workshops so we do not have the knowledge on the current state of the industry. In most cases some of these supervisors are not all that welcoming. Sometimes you assess your students by the door or outside the factory by the gate.

This concurs with what Tandy said who mentioned that some companies were restrictive to lecturers, who would simply sign the Log Book without talking to the students. When they meet with students, responses show that most of the lecturers mainly ask questions about their welfare but not about their work progress. Responses also revealed that some lecturers assess students from the management's offices and some talk to supervisors more than the students

themselves. Some lecturers spend more time inducting supervisors in the company with only little time spared for meetings with students. Mr Tom concurred that:

...with this sort of formalised document, this common Log Book is giving us lots of problems because the moment you get to the company the supervisor would want some explanation on the Log Book. That's where you spend too much time besides saying the students is very good, well behaved, you spend most of the time on the Log Book that is on how to put in marks and comments.

Some lecturers seem to be in a hurry always. They do not read what students write or the comments written by the supervisors, they seem to be interested in signing in the Log Books only. Some lecturers at St Pauls College put marks in the Log Books while those at St Erics College do not as already alluded to. This shows that the lecturers at St Pauls who put marks in the Log Books use their own discretion to change the marks already awarded by the supervisors without having seen students performing the tasks. Most of the lecturers seem to be concerned about signatures and date stamps in the Log Books by the supervisors than students' work.

Very few responses show that lecturers read what the students diarise and the comments written by the supervisors before they sign. Very few also take time to look at students' work and discuss with them in the presence of their supervisors. Mrs Tom said:

So we have to see the supervisor first then we see the students in the presence of the supervisors so that it does not look like a fault finding mission. We also get to assess where the student is working from and what they will have done and what they will be doing especially during the first visit. If it is the second or third visit we would want to see if students are improving, maintaining, or the challenges they are facing and so forth.

It is very important to look at students' work and give them feedback but most of the responses presented above show that very few lecturers really take time with students. In other studies the university supervisors will check the Log Book when they visit the students to ensure that proper training is being received and record comments on the paper provided at the end of the book (Abdirahman, 2015). This shows that with some institutions, lecturers thoroughly assess students and record results of their assessment which also makes it easier for follow ups in subsequent visits unlike in these two Polytechnic Colleges in Zimbabwe. Respondents revealed that not only lecturers in the ICDC discipline assess ICDC students during IA so it

may be difficult to go deeper with assessment in areas one is not an expert in. Both colleges are faced with this challenge of lecturers from other fields assessing ICDC students. The difference is that at St Erics College some of these lecturers are from Cosmetology which is under the applied Arts Department from which ICDC belongs whereas at St Pauls College some lecturers who assess students are from other departments in the college such as Mechanical Engineering, Automotive and many others.

Lecturers felt that assessing students in other fields will not yield any good results at all. This could be the reason why some lecturers do not look at students' work, read work recorded in the Log Book or have discussions with students as supported by Gumbe et al. (2012)'s results in which most of the students confirmed that they never had meetings with their lecturers during their visits. It was also revealed that all these lecturers visit students three times but over and above these stipulated assessment frequencies, at St Erics College, LICs for OJET make some spot checks and these lecturers are not from the ICDC discipline as well. All lecturers sign in the Log Books except those doing spot checks. The Log Books analysed show that there is no provision for lecturers' comments but only their signatures. This could be the reason why lecturers from other field find it easier for them to assess as they simply append their signatures and nothing else.

Lecturers and other officials in the lecturing fraternity are critical in the industrial training and they can contribute immensely to the achievement of the intended learning outcomes (Biggs, 2003) in ICDC if they check on the student's IA in totality and guide them accordingly.

Assessment by supervisors

Various responses revealed that some supervisors are always there for the students and they render assistance whenever necessary. Bottner (2009) asserts that a mentor should devote significant time to helping young adults take their skills and knowledge to the next level. The author (Ibid) reiterates that some of the characteristics of the mentor are their willingness and patience to provide guidance and coaching, including constructive feedback and encouragement. This entails that supervisors play a pivotal role in students' acquisition of skills and knowledge hence

if they do not guide them profitably IA will be a sheer waste of resources. It is the workshop supervisor who assigns the day-to-day work of interns. Truth said:

The company supervisor is very important because supervisors were my eight hour companion because they worked with me since morning up to the time we dismissed. He took me through whatever I was supposed to do at the company.

Some supervisors read comments written by students first then sign the Log Book. With some they assist students daily even if they complete the Log Book once a month. While it is a requirement that supervisors complete Log Books once at the end of every month, Abdirahman (2015) in his research said industry-based supervisors make comments on a weekly basis to ensure that if students are to rotate to several departments and units, each unit supervisor comments on the student's performance. This is progressive and ensures immediate feedback which is necessary in continuous assessment.

Some gave remediation after having gone through the comments written by the students. Bottner (2009) emphasises that it is the supervisor's responsibility to provide feedback to the interns on work and progress towards goals at mid-term and final evaluations. Some supervisors assisted students as they worked on their tasks, some even took them step-by-step through the processes. However it was also indicated that some supervisors comment on the tasks that they did not supervise. Some supervisors comment and sign after several months and sometimes doing it when the lecturers visit. Julie said:

Supervisors did not really check my work, they commented on something they did not see how it was done. Sometimes they take two months, three months without signing my Log Book so I will have written a lot of work since they do not have time they will not read through everything I will have written so their comments and marks are not reliable.

In some companies the one who supervises students is not the one who rates them while in some companies students are supervised by different supervisors in the same company. Responses also show that some supervisors keep students on one process for too long while some allow them to visit all departments. Some students complained that some supervisors asked them to move to other areas before they mastered concepts in that particular department yet others even allowed students to seek clarity if they faced any challenges in their operations. This entails that supervisors play a pivotal role in students' acquisition of skills and knowledge hence

if they do not guide them profitably IA will be a sheer waste of resources. As in the case with lecturers, varied approaches produce completely different graduates some who will be far from the intended learning outcomes of their IA program.

Assessment by external assessors

Responses also identified external assessors as another important category of assessors during IA. Bottner (2009) concedes that for more formalised evaluations, an independent evaluator can be hired to assist in designing intern evaluations and interpreting results. External assessors gain entry into the company sites through letters they get from the regions. They report to the Human Resources Management (HRM) first then they assess students using the guidelines given by the HEXCO regional coordinator. Mr Duly explained that:

We meet the students and we explain the purpose of our visit then we ask them what they will be doing that is relevant to their industry for example the Tourism Industry, the Clothing Industry, the Engineering Industry, the Construction Industry and so forth.

The fact that the external assessors are not specialists in all these areas, their assessments may not be effective. As stated by Mr Duly, asking students what they will be doing may not guarantee correct information and external assessors cannot prove it when incorrect information has been given. Mr Dave further explained that the proper external assessment exercise would be that which allows the assessor to check on mastery of skills and competences through students' descriptions and demonstration of processes and artefact evaluations. This is not possible with people who are not specialists in the area. Mr Dave said:

External assessors should assess if students are able to link theory and practice. If there are projects done by students, these should be assessed and student to explain in detail how they did them. They can ask for the procedure or ask the student to carry out the task or just watch the student perform whatever task they were doing so as not to disturb the proceedings of the company.

However checking if Log Books have been signed, the number of times lecturers visited and challenges students encounter as indicated by Mr Duly are general logistics which can be done by anyone. Mr Dave commented that the challenge in external assessment is that no proper criteria are followed in selecting the rightful personnel for the exercise.

In as much as external assessment is important, lack of qualified personnel in each field may compromise assessment standards. Bottner (2009) suggests that these external assessors can be trained to be impartial and they might not have contact with the internship staff or be familiar with the program. However, important as they are, most lecturers, supervisors and students indicated that they were not aware of their existence. This shows that information is not disseminated properly to all stakeholders. Again this shows that the roles and duties of each assessor are not clear as a result assessment modes will be mal administrated.

Assessment by peers

Some peer assessment goes on in the companies involved in this study but this seems not to be recognised by most respondents in this study. With peer assessment, some students found themselves assisting each other and corrections being done on certain processes. Students were helpful in identifying and correcting each other's errors in working garment processes during IA. Some students found it easier to seek clarity from their colleagues and avoided their supervisors who were unapproachable. Joy said:

It was easy to ask your peers and avoid your supervisor maybe on the basis of character or attitude. They were very busy all the time and if you had forgotten something and you ask the supervisor again he would be very angry and could be mad at you but peers would do that willingly and happily.

Besides supervisors displaying unsupportive attributes to students, they were too busy to entertain students at all times therefore learning continued as students assisted in assessing each other's work. Mrs Jack asserted that students can be honest to one another's progress and their criticism can bring positive reinforcement. Mrs James concurred that:

They normally assess each other's work. It is important because they will be encouraging one another at their own level of which they understand each other better than us because they will be together at the Clothing Company whilst we are here at the college.

Truth emphasised that it was better to ask from peers when faced with challenges than to ask the supervisor as they were at the same level and could understand each other better. Peer assessment benefits those of equal status and power so this tool could enable students gain a lot of knowledge and skills as they explain to each other at their own level (Wride, 2017; Topping, 2009). Wride (2017) reiterates that

students' learning in higher education learn from explaining their ideas to colleagues and providing feedback on quality of each other's work and participation is very active.

According to Jill, some students were more experienced and knowledgeable in certain processes so much that some supervisors would task them to help others. Some did not practise peer assessment either because it was all production and had no time to consult each other, some did not have the spirit of sharing knowledge with others or it was a matter of attitude. While peer assessment in this study was based on students assessing each other's work, Bottner (2009) identifies peer assessment in which a co-worker can orient the intern and should be willing to share knowledge and provide support and guidance in order to facilitate the new intern's integration into the work place.

The absence of a clear policy on who really the assessor is may compromise the IA results as the above stated ones may not be sure of what they are really supposed to do. This may affect the achievement of assessment goals as some responses portrayed that there are no standards by which IA assessment is anchored in assessing ICDC students in the Polytechnic Colleges in Zimbabwe. The quality of graduates may also be affected as shown through various implementation strategies used in assessing students during IA as discussed hereunder.

5.3.3 Porous implementation of known IA assessment strategies

It has been revealed that there are some common IA assessment criteria which are followed by these two Polytechnic Colleges. However, in real practise, individuals perform differently either due to ignorance, negative attitude, lack of support or lack of clear guiding principles.

Data on placement of students during IA as an assessment strategy has been presented and discussed below.

5.3.3.1 Placement of students for IA

According to Jumo et al. (2013), students are encouraged to look for their own attachment places. At St Erics College, students start looking for placement very early. Since they compete with students from Technical Teachers' Colleges,

Vocational Training Centres (VTCs) and those from other Polytechnic Colleges, their students stand a better chance of getting better placement. Mrs Jerry said:

Students start as early as April to secure places for the following year and those that secure places bring acceptance letters from the companies and we file them.

When securing IA places, students carry some form of identification since IA is a formal learning program. The forms that they bring back are filed for record purposes. The ones that they are given by their institutions are also required by the companies as a record. With State-owned Companies, everything is procedural where students are supposed to apply in order to be considered for placement. Mrs Ema said:

In fact students go to our Head Quarters (HQ) and leave their applications. When these are processed, they bring their letters here but the HQ phones us first giving us a list of those whom we will be training. We use a Log Book from their colleges and a document from our HQ that shows that they have been offered a place here.

Jullie concurred that they were given letters by the college but were made to apply again through the company's Headquarters where they also got finger prints taken. They were given two weeks to collect offer letters which they were supposed to take to the company. Some companies also expect students to apply such as Fashion Clothing Company so that they select the number of students that they want. This is confirmed by Wallace et al. (2009) that some companies conduct interviews which may take place at either the site or the university. Even though students present letters from their institutions and make applications, responses from lecturers and students from both colleges confirmed that students are sometimes assisted in securing IA places.

While Mrs Josh from St Erics College indicated that they assess companies before placement, Mr Toby said at St Pauls College, they normally phone companies or get phone calls from companies requesting for students. Both HODs seem to exercise their powers in ensuring that all students get placement although St Erics pays attention to the nature of companies before placement than St Pauls. Mr Toby said:

We need to physically go there before we attach our students so that we actually see what is on the ground. Because it is very important to attach a student to a company where you know the student will get as much knowledge..... Because when you physically go there you would find out that

they are maybe only 7 operators and your students now boost the man power needed yet providing cheap labour.

Andoh et al. (2016) assert that there is need to examine the IA program to assess whether companies have policies governing the IA program, determine the willingness of companies to accept students on IA program and examine the benefits the students gain from the program. Mr Toby acknowledged the need to assess companies before placement as this assists in evaluating the nature of companies and the amount of skills and experiences that students are likely to be exposed to. However some economic hardships prevailing in the country are affecting proper placement as lecturers no longer manage to assess some of these new and upcoming companies for their appropriateness to train students.

Howard et al. (2014) assert that if locations of attachment are too far students cannot afford the high costs of transport and accommodation and thus they will be negatively affected. This view was echoed by students who indicated that they were forced to look for placement where training was cheaper for them, which can be a disadvantage when their college is in a town with fewer or no reputable companies.

In securing their own places, students highlighted a lot of challenges that impinged on their learning. Tandy from St Pauls College said that even if lecturers gave them a list of companies to choose from, it was not easy getting places resulting in her starting IA two months later, after everyone else. The research by Bukaliya (2012) also brought to the surface that some students spent the first month looking for internship placement. Tessa concurred that she started IA late worse still in a small company that did not have all the learning departments. She said:

It's only those small small companies that were taking in numbers. I ended up in one of those companies because some had already started before I had secured a place but I did not learn much from this company.

Bukaliya (2012) also realises that the majority may be attached to small firms which may not expose them to more meaningful job experiences. John was forced to move to another company as he was not learning much from the first company. Conversely, results from the research by Abdirahman (2015) indicate that a student is expected to start and finish attachment in one establishment and if it becomes absolutely necessary that they must change, they first secure permission in writing from the institution. Only a few students mentioned that they did not face any

placement challenges especially those at St Erics Colleges where most of the big companies are in close proximity to their college. Even though, some indicated that it was easy getting placement in small backyard companies probably because those companies need cheap labour.

IA bridges the gap between the classroom and the actual world of work (Munyoro et al., 2016; Gumbe et al., 2012; Jumo et al., 2013) for a vertically and horizontally collaborated curriculum (Rafique, 2014; Esubalew, 2017). It involves acquisition of practical work experiences (Howard et al., 2014; Andoh et al., 2016; Munyoro et al., 2016). Therefore ICDC students need to be properly placed for them to achieve the goals of IA. However results show that there have been difficulties in the placement of ICDC students every year. This suggests that some students may end up learning in companies which do not have much to offer and will not acquire the necessary practical work experiences (Howard et al., 2014). This is the case with some students from St Pauls College as their lecturers indicated that companies in their town are not fit for industrial training but they allow students to settle for these local companies as they cannot afford life elsewhere thereby compromising their training.

The next section presented and discussed data on preparation of students for IA.

5.3.3.2 Preparation of students for IA

Responses of lecturers from both colleges show that orientation of students prior to IA is very important. An HOD's hour at St Erics College is used to conscientise the students about IA so that objectionable behaviour that frequently occurs can be avoided. They are also inducted on the completion of the Log Book that they use for assessment during IA. Mrs Jerry said:

We talk to our students about OJET in general, and what they should expect out there. We tell them to adhere to the company rules and regulations. We warn them that if they are sacked out of their workplaces they are also sacked out of college and it is stipulated in their Log Books. Even when treated unfairly they should know how best to go about the situations and remain good all the time, we tell them all this. It is a must that we orient our students. We have an HOD's hour, so as an LIC for OJET I also come in to conscientise our students about IA.

In preparation for IA all students are given a comprehensive lecture on how they are expected to behave when on IA. While induction at St Erics is done by the HOD and the LIC OJET throughout the year, at St Pauls it is done by the Dean of studies at

the end of the year and it is mainly on the completion of the Log Book. Although induction is done by colleges, it is done by lecturers who are not from ICDC which may pose challenges in some specialised areas of IA in their field. The HODs in the ICDC do not play a pivotal role in induction to ensure their students are fully prepared in issues pertaining to the nature of their industry. Some companies induct students on what they expect them to do during IA as well.

Students will quickly adapt to the new learning environment if appropriate and sufficient company information is relayed to them. Kereng (2014) concedes that the host company should orient students on the overview of the organisation and to ensure that the student is properly introduced to all the people that they will be working with. However some responses show that some companies do not take an initiative to orient students or some students miss the orientation stage as they will still be busy securing placement.

This may create a hostile environment to spend the whole twelve months in. Students may feel out of place and they may take time to acquaint themselves with the environment. According to the results from the study conducted by Kathuri-Ogola, Vanleeuwen, Kabaria-Muriithi and Weeks (2015), most supervisors assert that they know nothing or very little about academic preparation of students hence they tend to rely on their understanding of the program. This shows lack of involvement of supervisors in college programs and this is the case with these colleges under study and this may bring about poor IA assessment results. However a number of participants in focus groups concurred that colleges and companies inducted them on the expectations of the companies, rules and regulations and how to complete the Log Books. Only a few said they were not inducted by the companies as said by Tessa that:

Lecturers showed us as a group how to complete the Log Book and that we were supposed to behave well but at the company we were just given the supervisor and the rest we learnt as we interacted.

Results from both colleges show that some form of induction is conducted prior to IA. In support of this, Andoh et al. (2016) stress the serious need to sensitise students on the importance of IA through induction programs. Shrestha (2014) concurs that a brief introduction will be conducted by the IA committee that will provide different steps to be performed by students during IA. This entails that students should be

made aware of the objectives of IA although the results from these two colleges show that induction is mainly on behaviour and how to do the necessary documentation. Consistent reminders at St Erics College through HOD's hour can help keep students reminded of what is expected during IA. Students are also made aware of the consequences of serious wrong behaviour that it may result in expulsion both from the college and from the Host Industry and this is quite necessary in order to avoid surprises when measures are being taken against such rowdy behaviour. Andoh et al. (2016) concur that students' unruly behaviour, lack of space and students wanting to be seen as managers instead of trainees can be a serious problem during IA. Then, it is necessary that students are conscientised about such misdemeanour and consequences thereof.

Problems to do with the completion of the Log Book could be as a result of lack of emphasis by college lecturers during induction. Jumo et al. (2013) concur that failure to use the Log Book could mean students were not properly inducted by their colleges. This implies that the student will not be competent enough to cascade the right information on the completion of the Log Book to their mentors. As a result effectiveness of the assessment tool is affected. This follows that there is need for student induction not only on behaviour and documentation but on the purpose of IA and how they will be assessed so that the whole IA process is conducted successfully.

Next is the presentation and analysis of data on the assessment schedule.

5.3.3.3 Assessment schedule

Concerning assessment schedule, two forms of schedules were discussed: one, the program, a to-do-plan, a list of tasks that the students are supposed to follow or cover during IA. Two, the timetable, the calendar, the list of dates for which the assessments are to be conducted for the three sessions as per IA regulations. Presentation of these two elements was done with tasks to be covered being discussed first followed by the travelling itineraries for the two colleges under study.

Results show that both colleges have a list of tasks that guide students and supervisors in the training and assessment process. They have to use these guidelines so that they ensure the students are exposed to the areas or concepts outlined by their institutions. While the tasks for students at St Pauls College are

found on page six of the Log Book, those for St Erics College are on a separate sheet which Mrs Josh said is forwarded to the companies. She said:

We have our own criteria as a department of applied arts whereby we set out the objectives or processes which the students are supposed to cover on attachment from January to December. So we forward these to the companies where the students will be attached. The supervisors will be guided by these processes and they will check if the students are now able to carry out the processes correctly and they rate them.

Rwanda Development Board (2013) concurs that more than three quarters of interns had the schedule of their responsibilities at the beginning of internship. Karunaratne and Perera (2015) affirm that a well structured internship program will ensure greater opportunities for interns to gain the much needed work experiences. A list of tasks is important in that it assists to check what the student has done and what they are yet to do so that objectives of IA can be achieved. Some focus groups and supervisors also concurred that they used tasks from the Log Books meaning to say that if detached from the Log Book, they may not be used. On the other hand Trish said that they did not follow processes as stated in the Log Book but their companies made sure they covered all the aspects as per the training program in the Log Book. Jill concurred that their company designed training programs for them which they followed throughout the year. Bottner (2009) asserts that it is the responsibility of the supervisor to develop an internship work plan with the intern that outlines the intern's assigned tasks, timelines and learning objectives.

Julie however indicated that they neither used the training program outlined by the college nor by the company's because they were either doing menial jobs or they were mainly doing production. With such kind of approach where no guide is used, learning from other departments requires a lot of effort and persistence. Jude said:

Where I was there was no schedule. It's either you complained that you overstayed in one depart or you perished there. This is only when they could change you but it was difficult to be removed from production.

In such a scenario students must be prepared to take up any tasks assigned to them. With some, the laid down tasks did not work as the departments were nonexistent in their companies. Therefore acquisition of skills and competencies by all students on IA will not be the same. This concurs with the results of the study by Chinyemba et al. (2012) who also discovered that the supervision and assessment activity is not standardised and there are no clear guidelines to assist workplace

supervisors. With some what the student does was determined by what the company was making at a particular given time.

Concerning the calendar of events, the LIC for OJET at St Erics College prepares the itinerary at the beginning of the year. Mrs Jerry responded that this, in most cases is disrupted by other institutional programs resulting in their visits undertaken earlier or later than scheduled when priority is given to other events. Some lecturers according to Mrs James, may be held up by other programs hence may fail to assess students as per schedule. Similarly, the Dean of students at St Pauls College just sets up a date that lecturers will be going for assessment and the timetable is planned in such a way that all lecturers from different departments on one route travel together in one vehicle. Mr Toby conceded that:

The IA coordinator works out a program in consultation with management and it involves all students who are on attachment in various departments. So suppose you go to Harare you do not go as an ICDC lecturer only but in the same vehicle you go with some lecturers from Commerce, Engineering etc, you go as a team and you are focusing on your students only. ...Meaning to say if there are only few students they may be assessed by other departments. If I have three students in Bulawayo I may not go and some lecturers from other areas may asses them.

Travelling arrangements at St Pauls College may disadvantage the ICDC students if they are assessed by lecturers from other fields just because they are the ones who are scheduled for a particular route. The schedule for St Erics is drawn up by a female lecturer at the beginning of the year signifying the organised nature of ladies which is very critical in assessment as lecturers know in advance and prepare fully for the assessment exercise. In order for some lecturers to visit companies for assessment, they must do so by fixing appointments. Mrs Tuan expressed that:

Colleges phone the Head Quarters informing them when they will be coming to assess the students well in advance for them to be allowed to enter the factory and assess the students.

This is important in that both students and supervisors will be ready for assessment. Some respondents revealed that some lecturers only tell the immediate supervisor about when they will be coming for assessment and not the student as they want to find them carrying out their daily routines. Mr Edy concurred that lecturers sometimes phone to indicate when they will be coming to assess students. On the other hand, respondents show that in most cases lecturers from both colleges just

barge into the companies to assess students without notifying the Host Industries. The challenge may be lack of attention by industrialists if lecturers just come unceremoniously.

Some students said they even learnt about lecturers' visits through social media which concurs with the observation made by Mr Toby that if they visit one company, students inform their colleagues that the lecturers are moving around. When visiting students, external assessors are given a schedule by the regional coordinator. These external assessors said that they also just get to companies without notifying either the students or the company management.

It has been revealed by respondents from all categories that it is very necessary to have a program of tasks that directs learning at work places. It has been noted that circumstances such as nonexistence of departments in the companies and the orders being worked on at a given time may affect the adherence to stipulated tasks. However some companies simply do not follow the program because they want to exploit the students during IA. All these varied scenarios will yield varied IA assessment results. While these colleges notify some companies of their visits, they only notify supervisors and sometime never at all. However responses show that it is important to announce their visits for effective assessment.

Next is the presentation and analysis of data on lecturer- student ratio.

5.3.3.4 Lecturer-student ratio

Responses revealed that lecturer-student ratio is not stipulated. It is determined by several factors such as the number of students per company and whether it is a local or distant trip. It also depends on the number of lecturers per visit. This shows that lectures do not assess the same number of students per session and it is very difficult to ascertain the ratio as several factors come into play which cannot be avoided. Some lecturers said they assess very large numbers especially for assessments done in local companies. Mrs Jerry clarified that:

Lecturers can assess about twenty students and it depends on how students are placed. As a department we do not have a policy because someone can see two students placed out of Harare so some can see more and some less depending on placement of the students. If it is local assessment it can be fifteen-twenty but we do not have a stipulated ratio.

The results show that lecturers can assess up to twenty students per visit which sounds too large a number for effective assessment as cited by McNamara (2011) that it may be impractical for the academic supervisor to directly assess professional competence by observation if there are a large number of students in external placements. Generally it was revealed that lecturers at St Erics College assess many students locally because this is where the bulk of their students are attached and the reverse is true for St Pauls College as their students seek placement in other towns due to the nature of their local Clothing Companies. Having many students placed in other towns may impact on travelling costs. It was indicated through responses by lecturers at St Pauls that lack of funds forces lecturers to assess students in other fields which may have detrimental effects on the quality of assessment if some of these lecturers assess students in areas that they are not specialists in.

The fact that lecturers have other duties in their institutions contributes to large numbers of students to be assessed by one lecturer. The travelling arrangements at St Pauls whereby lecturers from several departments travel as a team also determine the number of students lecturers should assess per visit. Assessing too many students in a short space of time can result in lecturers doing a shoddy job as indicated by Mr Toby.

Chinyemba et al. (2012) also note that industrial assessment procedures are sometimes limited by lack of ample time to observe and rate work-related activities by lecturers so in the end scoring is done in a subjective manner. Mrs Jack concurs that if they assess too many students they tend to rush and will not have time with each student, even time to attend to problems students might be facing. However it was noted through some responses that some lecturers are not worried about numbers as they just want to benefit from the travelling and subsistence allowances.

Results show that lecturer-student ratio is not stipulated because of several aspects and these make it difficult to stipulate a ratio as most of these factors are inescapable. However the negative impact of high lecturer-student ratio is apparent.

Presented next is data on the duration of each assessment session.

5.3.3.5 Duration of each assessment session

It was gathered through several responses that duration of each assessment session is determined by quite a number of factors. These include companies' busy schedules, protocols to be observed in order to gain entry into the factory, size of the company and if access into the company has been granted or not.

The number of details lecturers pay attention to during assessment also determine the duration of IA such as assessing the Log Book, artefacts made by students, discussing problems students are encountering and discussions with the supervisor as well. This concurs with most students in both focus groups where Jill said lecturers only took an average of ten minutes because they were mainly concerned about signing the Log Books. Thus what lecturers set out to assess determines the amount of time they are likely to spend. Respondents expressed that the number of students in a company also comes into play. Mrs Ema said:

Some lecturers just take a maximum of twenty minutes depending on the number of students in the company and the number of lecturers who will be looking at the students' Log Books.

Mr Edy affirmed that they take very few students therefore lecturers do not spend much time. In addition the number of students to assess per visit and the number of lecturers from other departments on the same vehicle and on the same assessment route at St Pauls College will make the duration of each IA assessment sessions vary. Mrs Tom said:

There is no stipulated time because we might have one vehicle with seven lecturers from different departments who are supposed to visit quite a number of students so sometimes you just have to see the student for just ten minutes or twenty.

McKenzie, Burgess and Mellis (2015) seem to suggest that time constraints often prevent students from being directly observed or adequately supervised therefore making it difficult to determine the time that can be taken assessing students during IA. Mrs Treck explained that the protocol makes assessment take about an hour in the company but the actual assessment is only about thirty minutes. On the other hand Mrs Tom said that with unwelcoming environments it is just but a matter of seconds. Besides the attitude of the supervisors, lecturers' attitudes also make assessment sessions vary in duration.

In light of these responses it is not possible to stipulate time limits as circumstances are unique and may change with each visit. These responses however create a platform to address some anomalies leading to wide discrepancies in the duration of assessment sessions. Time differences of five, thirty and sixty minutes indicated in assessing students on IA means that there are a lot of inconsistencies. Accordingly something should be done at least to come up with the minimum expected time all things being equal.

5.3.3.6 Feedback

The gathered data has indicated that some lecturers only give feedback when they realise that there is a problem and their feedback is mainly targeted at behaviour. Mrs James said they caution students when supervisors raise issues pertaining to discipline. In some cases students are required to account for their unbecoming behaviour through reports. Some lecturers said students get their feedback through comments and marks written in the Log Books by the supervisors. They feel it is the responsibility of the supervisors who work with students every day and are therefore more familiar with the students' performance and behaviour.

Some lecturers from St Pauls attributed the lack of feedback to time constraints. Mrs Tuan concurred that their time is always inadequate. Most of the students complained that lecturers did not give feedback especially those from other fields. Only a few students said that they received feedback from lecturers occasionally with all those that were assessed by lecturers from other fields expressing their lack of worth. Truth said:

I got feedback second time only when my lecturer visited me. The guest lecturer does not say anything. They will tell you to open the page for them to sign. May be if he or she is your lecturer, s/he takes time to see your work and you sit down and discuss what s/he would have seen from your performance together with my supervisor.

Responses from students revealed that lecturers from other fields did not give them feedback probably because they did not have anything to report on in the area that they are not experts in. Feedback provides students with an understanding of how to close the gap between the current and expected performance (Peach et al., 2014; Molloy, 2017). Therefore if students do not know how they are performing they may not develop. They may also consider the whole IA assessment process as

ineffectual. This may result in some students developing a negative attitude towards tasks assigned to them. Some may even absent themselves with some even seeing themselves as being better than supervisors (Karunaratne & Perera, 2015) therefore posing some disciplinary problems. Lecturers' assessment is some very important component which is lacking therefore the significance of their assessments is questionable.

Truth also acknowledged the importance of getting feedback from both the lecturer and the supervisor when they are together as being more helpful. Results from other researches revealed that students were concerned that they were not part of the discussion between the academic and the work place supervisor (Chinyemba et al., 2012). Very few students said the feedback that was given by some of the lecturers and supervisors was all encompassing as they focused on both performance and behaviour. In the same vein Adjei et al. (2014) assert that the results of the evaluation are discussed first between the supervisor and lecturer and then the student intern is brought in, where corrective measures are carried out in terms of performance for the purpose of successful and effective practical training. This means that it is important for lecturers and supervisors to indicate to students where specific improvements are necessary and make appropriate recommendations. If they discuss students' work experiences together with the student and with reference to the actual learning outcomes, even if the student is found lacking, positive feedback from assessment encourages progress (Adjei et al., 2014; Ryan, Henderson & Phillip, 2017; Ajjawi & Boud, 2017).

Nevertheless only a few students confirmed having received feedback from their supervisors. Jill said:

My supervisors would actually tell me that you have performed in such and such a way, you should have done it this way and also if you were improving they would tell you. Sometimes lecturers would, depending on who visited you that particular time.

Feedback is required to confirm the knowledge gained and potentially add to, reinforce or correct it (Whalley, 2015). Some supervisors concurred that they give feedback on the tasks performed by students as confirmed by Jill that:

Also the supervisor would correct and advise me on the best way to grasp the concept so the supervisor's assessment was more educative and constructive as far as IA is concerned.

McKenzie et al. (2015) argue that effective feedback is critical in skills training as it allows the student to have an insight into their clinical performance and it is the main component of formative assessment. Even if most of the students appreciated efforts by supervisors in guiding them and correcting them, some of them said they never got any feedback from the supervisors because they were ever busy and also because students spent most of their time doing the same processes. Some students said although supervisors were busy they could give comments on their performance. Julie said there was no dialogue; feedback was through the Log Book. Whalley (2015) says that comments on the results such as 'you did well' are not as good as comments on the process by which results are achieved. Tessa and other students concurred with Julie that supervisors did not discuss with them anything concerning either their performance or behaviour but simply wrote comments in the Log Books. This concurs with McKenzie et al. (2015) who assert that formal specific one-to-one feedback that enhances learning is often overlooked. From the Log Books that were analysed by the researcher, most of the comments written by supervisors did not point at what the students could do, what they could not do and remedies. So, such feedback alone may not be worthwhile.

Ryan et al. (2017) feel dialogical feedback can aid students in honing their ideas and arguments for future assessment tasks. This entails that written feedback alone is not enough. There is need for dialogue between the supervisor and students. Ajjawi and Boud (2017) concur that in reality, most students' experiences of communication with their assessors are limited to text-based comments received after submissions of assessment tasks such as handwritten comments or generic rubrics. Nicol (2010) cited in Ryan et al. (2017) refers to these types of feedback as impoverished and fractured dialogue and argues that educators should instead be aiming to have direct, personalised interactions with students. The implication is that engaging students in a dialogue can be extremely rewarding for students as this can increase the level of rapport between assessors and students. More so, this can increase student motivation to improve in the areas identified. Peach et al. (2014) emphasise that for feedback to be relevant and meaningful to students, it is vital that students participate in the discussions establishing what form the feedback will take and how and when the feedback will be articulated.

John expressed that some feedback was delayed and not constructive at all. He said:

I only got feedback here at college when lecturers were marking garments that I made during IA. This is when I was told to do corrections, telling me you should have done this you should have done that. Even on the file they corrected me here at college after IA.

Mr Edy also said that they give feedback once a month basing on rated tasks. This is also delayed feedback and students may continue making errors. Whalley (2015) argues that feedback comments need to be given soon after the activity is performed in order to be effective. IA assessment is meant to identify strengths and weaknesses about the students' learning and guiding the student accordingly. This therefore defeats the whole purpose of assessment if corrections are not done promptly. Adjei et al. (2014) affirm that continual feedback is meaningful induction that will help the student intern make an informed decision as to whether they have attained a 'fit' or consistency with their career choices. Whalley (2015) also argues that feedback comments need to be given soon after the activity is performed in order to be effective. ICDC is such a skills specific area, as such, feedback need to be prompt so that mistakes are corrected and only correct methods are emphasised.

Results also show that external assessors give feedback only in the form of reports presented to the regional board. Their feedback may not be of direct benefit to the students but if their reports are availed to the lecturers, the system may improve. The quality of feedback given, however, tends to be influenced by the way in which requirements are set (Peach et al., 2014).

Some students complained of not receiving feedback at all as they were doing same process repeatedly. This infers that if there are no intended learning outcomes set (Biggs, 2003), there will be nothing that drives the assessors to give feedback to students. Lack of clear IA objectives and lack of clear methods of achieving the objectives as explained in the CAT may result in poor IA assessment methods. This ultimately affects the quality of the student who is to join the industry after graduating. This entails that industrial growth of the Clothing sector will remain low as IA and IA assessment are taken as a routine, just to fulfil the requirement of the syllabus with no significant gains to the industry and society.

The next section presented and analysed data on processing of IA results.

5.3.3.7 Processing of IA results

Responses from the lecturers exposed that IA results are processed at colleges using the ratings done by supervisors in the students' Log Books. Most lecturers from both colleges however do not know how the marks are processed especially those at St Erics College where only the LIC for OJET is involved. While all lecturers at St Erics concur that the LICs process the marks, it is not very clear with St Pauls what they base their decisions on where Mrs Treck said processing is done by lecturers, Mrs Tom and Mr Toby saying it is done by the HOD yet Mrs Tuan asserts that this is done by the LIC for ICDC. This means that there is not a clearly laid down procedure that is followed when processing IA marks and also that there is lack of serious considerations of IA assessment results. Mrs Jerry gave a brief account of how they process marks at St Erics College. She outlined that:

In the Log Book there is a provision for three assessment grids where the student performance is weighted by the supervisor according to the degree of difficulty of the tasks. So we take the total weighted marks and we average them. This becomes the final IA mark. As the LIC I receive the Log Books but the calculation of final marks is done by the OJET department which comprises all the LICs of the whole institution. The mark that is used is the supervisor's mark because the lecturer does not award marks in the Log Book.

This shows that results are deduced from only one assessment tool basing on the supervisor's mark only. This concurs with what is done at St Pauls where the student's final mark comes from the Log Book only.

At St Erics, Mrs Jerry said that students prepare files that are marked by lecturers but their marks do not contribute to the OJET marks. A grade is awarded for certification basing on the Log Book and external assessors for OJET validate and ratify the marks at regional level prior to adoption at national level. Mr Duly said:

We do not process results but we check on marks. Changes can be made if there are issues raised concerning the ratings by supervisors.

External assessors are not directly involved in the processing of marks but can influence the results if there are some anomalies although it is not clear where they base their decision on. Mr Dave added that they can even nullify some results but after thorough investigations. Responses from the supervisors revealed that only Mr

Edy who has been into IA assessment for twenty two years knows that results are processed in colleges using the marks that they award in students' Log Books. Other supervisors said they know nothing about processing of IA results. Mrs Ema said:

I award marks but the actual results I do not know. At the end of IA students take the Log Books with them so I don't know if it's their lecturers or who.

Further probing on processing of IA results revealed that the results for students who complete their IA in December are processed the following year during November/December examination session. This entails that the results of IA for the two colleges under study may not assist students to develop further through reflecting on their experiences during IA as they will go for another complete academic year without knowing their IA results. Feedback on IA should not only benefit the next coming groups but those who just did IA as they still got another year for training. In Botswana students who fail IA repeat the whole program the following year (Kereng, 2014). In the case of the colleges under study, delays in processing of results may pose problems if there are any failing students. How will they repeat IA after having gone for another full academic year without knowing their results? This becomes a problem with failing students if they are to be told a year later that they failed.

Presented and analysed next is data on results trend analysis.

5.3.3.8 Results trend analysis

Some responses show that most of the lecturers at St Pauls were not sure if a results trend analysis was being conducted. Mrs Josh an HOD at St Erics was the only lecturer who said they do not do trend analysis. Mrs Jerry from the same college said it is done but for the whole department and not necessarily for ICDC only. She said:

We do that but as a department and not necessarily ICDC but for the whole college. We say we had so many students for IA this year, has there been an improvement in terms of their results. If there is a decline in the trend I try to find out why it is so. I go back to the assessments to check on what could really have affected their performance.

Although a results trend analysis is done at St Erics, it might not be easy to really trace results back to the cause of the decline in performance in the Log Books

unless issues have been documented separately. Responses from St Pauls show that trend analysis is not being done. Mr Toby said:

Of late we have not been doing that but my observation has been that results for those on IA are always 100% pass the reason being that when somebody is working on a machine up to ten months it is very difficult for that person to get 40%. That person will have done something. So my analysis so far is that if a person is on IA it is a 100% pass rate, there is no way you can expect that person to fail. Failing can only come when that person has not fulfilled the requirements of IA

The fact that ICDC students do not fail IA is supported by the data from the documents reviewed which showed that all students passed their IA from 2013 to 2017. The results from the HEXCO data base for St Erics College and St Pauls College showed that thirty six (36) students had distinction while thirty (30) had credits and only one (1) had a pass. The Log Books reviewed also revealed that marks ranged from 82% to 100%. This shows that IA results are somehow biased if no one has failed in five consecutive years let alone passing with very high marks. External assessors said they do results trend analysis and they present reports to the regional board for ratification. This is also done for the whole college and this may not reflect on the actual trend for ICDC students.

There was also a response from St Pauls that regards the process as not worth the while since every year IA records a 100% pass rate. This was attributed to the fact that supervisors who do most of the assessment and rate their performance tend to give distinctions to any students because they see the student busy working at all times. Some results show that some marks were used as compensation for the cheap labour that the students provide (McNamara, 2011). The fact that the pass rate is always 100% could be a pointer towards some error in the manner in which IA assessment is being conducted which the lecturers and other stakeholders should have sought to investigate long back. Again this has a bearing on the process itself as the results are not informing the process as to where there is need for improvement or where they need to uphold certain values. In the study on trend analysis on students' performance, Bigham and Riney (2014) underscore the importance school leaders should place on analysing data when making decisions related to curriculum and instruction. Ibid reiterate that the analysis of performance is a critical component of curriculum decision making process. However, lecturers are

reluctant to do results trend analysis as they see no value in the whole IA process but it is important to keep looking back at the past performances in order to make future projections (Chattopadhyay & Edwards, 2016). It also appears as if the reports by the external assessors go up but never to return to the implementers of which their findings could assist in making informed decisions on students' training programs. .

A results trend analysis can be extremely valuable in providing an early warning indicator of potential problems. At St Erics College, one of the lecturers said, if the trend shows a decline, the college tries to find out the reasons for this decline, analysing in detail the assessment for each student. This however could be a mammoth task for the college to establish where the problem is unlike when it is done per subject. Also digging into Log Books may be taxing unless there are some challenges documented elsewhere. Those analyses done at regional and national levels are done as per whole Clothing Discipline with its different subjects and different certification levels. Bhattacharya (2012) agrees that it is of vital importance to compile the results conducted by various boards. However it is completely difficult to really tell the trend in IA performance since results are now presented from different colleges through regional boards as composite reports for Clothing as a discipline. Bhattacharya (2012) affirms that properly and systematically analysed data on examination results not only measure the efficacy of the education system, it also indicates the flow of students from school level to higher education and job market. This therefore entails that there is the likelihood that graduates whose performance is not measuring up to the standards are joining the world of work and as a result the Clothing Industry will always be affected hence will not develop.

The following section focused on process review and frequency.

5.3.3.9 Process review and frequency

Respondents from St Erics College expressed that they do not do process reviews except for Mrs Jerry the LIC for OJET who said they do that yearly as LICs and that they have a recently reviewed document that awaits approval by the Principal. Mrs Jerry as an LIC OJET participates in process reviews as supported by Bottner (2009) that IA coordinators are responsible for managing the review and the evaluation of

interns, supervisors and the program as a whole. This shows that the views of other lecturers who participate in the IA assessment of students are left out if only LIC are involved with the rest not even knowing that such a process is being conducted in their college. Some responses from lecturers at St Pauls College show that they conduct process reviews at institutional level but people seem not too keen at implementation. Mrs Tom expressed that the way in which the whole IA assessment process is managed is not very effective. She said:

I think the issue of reviewing the IA assessment process is very difficult because it is being manned by the student affairs, by the Dean of students and not by the departments. If it was the case that the departments are managing the IA I think it could have been reviewed and some aspects altered. But it is not the responsibility of the departments.

This means that there must be some communication breakdown as the Dean of students is not seen to be coordinating the IA review process. Groenwald (2009) asserts that the South African Higher Education imperatives are outlined and perspectives on both defined competencies and/or outcomes of assessment are revealed as well as the more artistic ability derived from unexpected experiences and problem centred learning. It is important that processes are reviewed at the institution and company levels so that implementation will be effective. However Karunaratne and Perera (2015) note that host companies do not carry out an evaluation after the internship program. One of the policy makers echoed that lecturers as internal assessors write assessment reports but if these reports are not considered in process reviews it will be difficult to improve the manner in which IA assessments are conducted.

On the whole, it has been clearly illustrated that respondents have a common understanding of IA and IA assessment although there is nothing concrete guiding IA assessment. It was also revealed through various responses that there are several categories of assessors whose roles are not clearly defined. Their approaches differ within and across categories. The Log Book has been identified as the main assessment tool upon which the student's IA mark is derived. The various assessment strategies used by both colleges vary in their implementation in most cases. Varied approaches could be seen even within the same category of respondents some of which were contradictory. There are however, some aspects which concur in the manner in which students are assessed.

The next section presented and analysed data on the second sub research question:
How user friendly is the IA assessment tool(s)?

5.4 HOW USERFRIENDLY ARE THE IA ASSESSMENT TOOL(S) USED IN THE POLYTECHNIC COLLEGES IN ZIMBABWE?

Under this research question, the main theme, sub-themes and their various categories have been represented in fig 5.2 below.

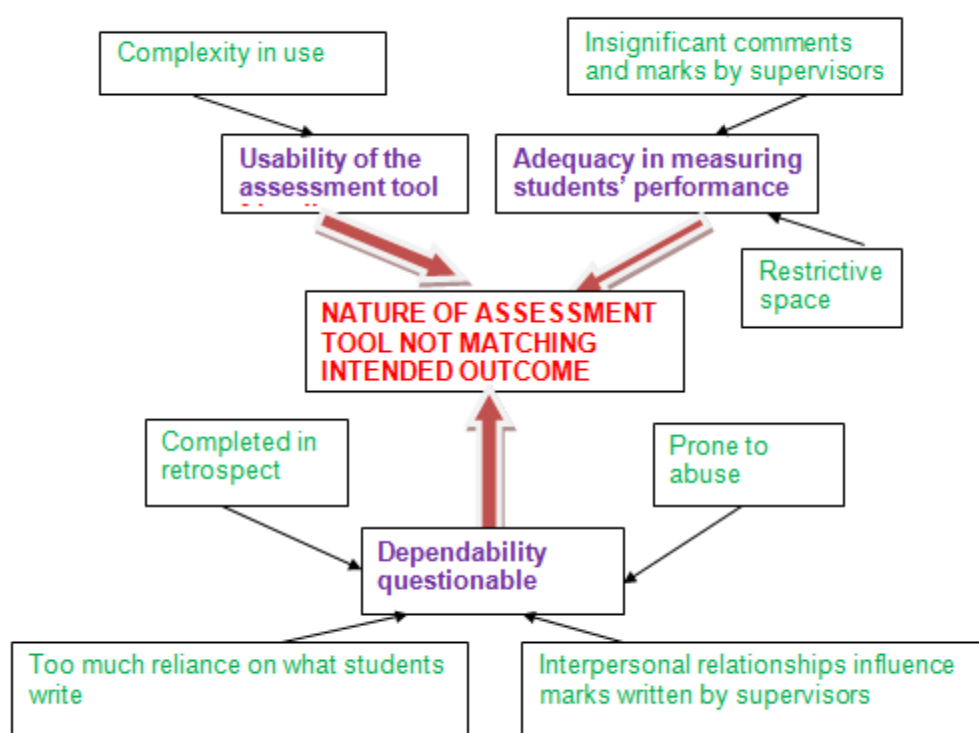


Figure 5.2: User friendliness of the IA assessment tool(s)

NATURE OF THE ASSESSMENT TOOL NOT MATCHING THE INTENDED OUTCOME

The Log Book has been identified as the main assessment tool used by both Polytechnic colleges under study. This tool has been found to be posing a lot of challenges to the users particularly the students and supervisors. There are, however other tools such as reports and assessment forms used by these colleges which are not used to generate IA marks. The Log Books from the previous years,

external assessors' reports and IA results for the past five years were also reviewed to substantiate data provided through individual and group interviews. Tasks performed by students during IA, comments written by assessors and the IA results are of major concern to the researcher and to the respondents at large.

As already described, a Log Book is a tool that profiles events, activities and experiences that enable users to keep account of an activity over a period of time (Olufemi, 2012; Yaghobian et al., 2011). It is a requirement for validating the procedural experience at the advanced training level and reduces the repetition and using it allows the learners to record their learning practices (Yaghobian et al., 2011). However the nature of the Log Book is said not to match the intended learning outcome and a number of issues have been identified about the Log Book used in assessing ICDC students during IA. Discussed hereunder is the usability of the IA assessment tool.

The next section presented and analysed data on the first sub theme, which is usability of the assessment tool.

5.4.1 Usability of the assessment tool

The Log Book has been in use for years but still presents a lot of challenges to those who use it and to the assessment process itself. It has been proved to be very complicated to many users hence the next discussion.

5.4.1.1 Complexity in use.

It has been revealed through responses from lecturers mainly that the Log Book is difficult to use. It was expressed that students and supervisors who are the main users of the Log Book face a lot of challenges so much that during the first visit lecturers spend time explaining to them how to complete it. Mr Toby concurred that during IA assessment a lot of time was spent inducting supervisors on how to use the Log Book. He said:

But with this sort of formalised document, this common Log Book is giving us lots of problems because the moment you get to the company the supervisor would want some explanation on the Log Book. That's where you spend too much time besides saying the students is very good, well behaved, you spend most of the time on the Log Book that is on how to put in marks and comments that is where the challenge is. You will not have time to assess skills acquisition.

It was further stressed by Tracy that both students and supervisors find the Log Book difficult to complete. She said:

Supervisors wanted me to help them on how to fill in the Log Book yet I also did not know because that was too complicated for me as well.

Trish indicated that no matter how many times it was explained to them, the Log Book remained a challenge to complete. She said:

Even if the lecturers told us how to complete the Log Book, I did not understand what the problem was, I still could not complete it properly even after the lecturers' first visit. Maybe it is because of too many things to write.

Other important aspects of assessment are neglected as much of the time is dedicated to the Log Book completion. This involves weighting and comments as well. Mrs Tom concurred that the Log Book is difficult to use and singled out weighting as the most complex aspect in Log Book completion. It was also discovered through documents reviewed that some supervisors were putting the final score instead of just rating the student on the five point rating scale. Some marks were placed in the weighting column which is used by the lecturers to calculate the final score. The Log Book is also said to require too many details which are confusing to many users. Mr Toby further explained that the Log Book gives problems not just to ICDC department but to all other departments in the college and suggested that it needed to be redesigned. He also noted that assessment was a lot easier without the Log Book. Although a Log Book is predesigned for users to easily make entries according to predetermined outlines, with headings and subheadings (Olufemi, 2012), most of the respondents complained profoundly about the tool being confusing and too involving. Jumo et al. (2013) concur that some supervisors find the guidelines in the Log Book not clear and rating scales too difficult to interpret.

Some supervisors find the Log Book very difficult to use especially when they have to deal with different Log Books from different colleges. Some of the participants in focus groups expressed the difficulty in the completion of the assessment grid in the Log Book where they were supposed to summarise tasks done in four months. Julie said tasks were repeated such that they ended up not knowing what to write any more.

Log Books reviewed show a lot of columns with details that are supposed to be entered weekly, monthly and quarterly. Students log in weekly and monthly tasks

and supervisors comment and sign monthly. Students also have to summarise tasks done in four months which are then rated by the supervisors after every four months.

Presented and analysed next is data on the second sub theme which is adequacy of the tool in measuring students' performance.

5.4.2 Adequacy in measuring students' performance

Issues raised under this second sub theme are restrictive space and insignificant comments written by supervisors. Most participants indicated that the space in the Log Books is restrictive and the comments and marks are not worthwhile.

5.4.2.1 Restrictive space

The Log Book is said to be insufficient in measuring students' performance during IA. The space is too small and tasks written by students are not informative. Students cannot capture all important aspects in such limited space. It tends to limit supervisors in giving feedback in written format. Therefore it is difficult to account fully for students' performance basing on the Log Book alone. Mrs Jack commented that:

The Log Book has all the information we need but the space in which both students and supervisors complete is too small. ...Some of the information that you might need when you go for assessment is not reflected in the Log Book yet we do not get enough time to talk to the students to find out how they did the processes and where they are still lacking.

All lecturers concurred that the Log Book has insufficient space to really tell what the student is now able to do and how and what they still need to learn on a particular skill.

The student may not be able to detail how they solved some problems. Therefore the Log Book cannot be a proper reference point if similar challenges are encountered during IA. The study by Abdirahman (2015) shows that the Log Book that the students use has adequate space since students record daily work with clear sketches and diagrams where applicable which is not possible with the ones used in these two Polytechnic Colleges in Zimbabwe. Jill concurred that a description of process is a very important aspect in measuring performance. He said:

I also think the 'how' part of training is missing in the Log Book. It is only the 'what' and can one honestly rely on this? Of cause we can do the same processes but how we do them can differ.

It was also revealed that progress monitoring by supervisors cannot be reflected fully. Mr Toby added that the columns in the Log Book are limited to entries of major tasks only, leaving out many other tasks performed. It is left to the discretion of the student to decide which tasks are important and which ones are not. Those that are performed but not rated may be deemed not important and may not be performed seriously. External assessors also concurred that due to limited space, processes are too summarised. Mr Duly said some ticks are just put which do not say much about students' performance. Any new knowledge and skills gained cannot be reflected if the space is small. Mr Duly reiterates that weighting cannot be accounted for in terms of tasks, time and quality. Joy said little space deprived them from writing what they failed to do so that if the supervisor reads through the processes, they could afford them time to rectify the mistakes. She even said this encourages laziness as little evidence will be there as to whether the process was really done or not. Tandy added that the Log Book alone is not enough because judgment may be biased.

Olufemi (2012) describes a Log Book as the assessment tool that affords the students spaces to clearly explain the details of procedures mastered. Results gathered through reviews of the Log Books revealed that spaces provided to detail weekly tasks is too small. Columns are limited to entries of major tasks. There is no space for description of activities taught and performed, let alone space for diagrams of methods and procedures of operations carried out (Olufemi, 2012; Jumo et al., 20013). Space provided for the description of one month's tasks is less than one fifth of the page. The rest of the space is for comments for the student and the supervisor; for signatures for students, supervisors and lecturers; dates and stamps. This entails that entries may not reflect the actual learning experiences gained at the work place. Yaghobian et al. (2011) concur that in the Log Book only special operations are recorded and the effect of results of the particular operation is not obvious. Being the only assessment tool identified, the Log Book should record events, activities and experiences that enable users to keep account of progress on an activity over a period of time (Olufemi, 2012). This means that if space is restrictive, all important points will not be exhaustive hence, when looking at the students' achievements, the Log Book will not speak to the assessor and false results may be obtained.

The following section presented and analysed data on the insignificance of comments and marks written by supervisors.

5.4.2.2 Insignificant comments and marks by supervisors

Interviews and FGDs showed that some supervisors have challenges on what to write about the students' performance and that some comments that they write do not describe what the student can or cannot do. The marks that they put also do not reflect actual performance. Whalley (2015) explains that marks plus appropriate specific weighted feedback comments should show how well the tasks have been achieved. Mrs James said:

Of cause when they get back now, if a person gets say a 90% in OJET, we test to see whether he or she really has mastered the said concept. We try to make that person our resource person but you can then tell that it is just a mark, nothing was gained from IA.

This shows that there is a mismatch between marks and actual performance. Mr Bill, the policy maker is even aware that marks awarded in the Log Books are too high. The Log Books analysed also revealed that supervisors award very high marks. In these Log Books marks ranged from 82 to 100%. Results from the period of 2013 to 2017 also show that of the 77 candidates at St Erics College for the whole period 58 had distinctions. For St Pauls College, 36 distinctions were recorded out of 66 candidates for the same period. It was interesting to note that in 2015 and 2016 all candidates registered distinctions in IA at St Erics College of which the distinction marks range from 80% to 100%. According to Goddam et al. (2016), students who undergo IA should score highly in practical aspects of their curriculum as compared to how they perform before embarking on IA as vertical and horizontal integration helps with comprehension of the subject matter. These results however are too good to be reflective of the actual performance and proper skills mastery unless if they were awarded for cooking and trimming off threads. FGDs revealed that not only were marks very high, they were also given marks for the tasks that they did not do.

Some FGDs said they were given full marks for the process that they knew very well that they performed dismally in. Trish even said for someone to look at such a mark and say this student is excellent may not be correct because those were not genuine marks. Some indicated that sometimes supervisors give very high marks as compensation for overworking them (McNamara, 2011). Some also said that their first impression determined what they could get throughout IA. Jude said:

With some supervisors your first performance determines your range of marks for the whole IA. Say if you get a 95 first time all your marks will range in the 90s even when sometimes you do not do so well.

This shows lack of fairness in the manner in which supervisors evaluate and score students. Whalley (2015) assert that if we fail to provide comments or if comments are misunderstood, the incorrect understanding of a concept by a student might go uncorrected and in effect this may drive attainment down. Communication challenges were also cited as distorting the meaning of comments written by supervisors.

Data also revealed that some supervisors comment on the work that they did not observe. Supervisors concurred that they write comments and award marks without considering what the students did or wrote. Mrs Ema concurred that although she reads what the student writes, due to pressure of work, she sometimes just puts marks without reading anything. However, only a few lecturers felt that the Log Book is adequate in measuring performance of students during IA.

Most of the respondents felt the assessment tool is not adequate in measuring students' performance as comments and marks written by supervisors are not reflective. The Log Books reviewed by the researcher reflected that some comments did not tally with the marks awarded. For example a "good" was put for someone with 94% which should really have been a distinction. Some comments were repeated for about five consecutive pages and some statements were incomplete.

The next section focussed on the third sub-theme which is dependability of the assessment tool.

5.4.3 Dependability

It has emerged that the assessment tool is not dependable because it is prone to abuse, interpersonal relationships influence marks, there is too much reliance on what the students write and it is normally completed in retrospect. Presented and analysed in the next section is data on the assessment tool being prone to abuse.

5.4.3.1 Prone to abuse

The gathered data indicated that the Log Book is open to abuse. Some supervisors ask students to write comments for them giving room to false impression about students' performance. Mrs James concurred that:

Sometimes supervisors ask students to fill their own Log Books even putting marks for themselves because they do not know the requirements of the Log Book.

If students can put marks in their own Log Books, they can decide the impression they would want to give which is obvious; no one would want to fail so they give themselves very impressive marks. Some responses show that students can diarise processes that they did not do because they determine what major tasks should be rated by the supervisor. Again, due to lack of supervision by most supervisors students just write what they want.

Lack of detailed descriptions of how processes are worked can lead to cheating as no evidence will be there in the Log Book of whether the student did the work or not. In support of this observation Mr Dave said Log Books give students lee way to say what they want. Trish also concurred that:

There is room for lying because some supervisors do not bother to read what you write they just comment and sign. So it does not show what I am really able to do and what I can still not do well.

Some students testified that even when they were absent, they could still write something and be awarded marks although with some supervisors students cannot write what they did not do.

Generally participants felt that the Log Book is open to cheating since most of the assessors do not really check on what the students write against work done. Chinyemba et al. (2012) also discover that documentation submitted to the department upon completion of the internship program were prone to being tempered with by students. The sections in the Log Books reviewed show that the student writes the tasks and comments for the whole month then the supervisor comes in at the end of the month. Marks are awarded once for all the activities done in four months giving enough room for cheating when no proper follow up on tasks is made. In a similar case, Chinyemba et al. (2012) assert that the approach used at

Chinhoyi University of Technology sometimes provides for corruption whereby the assessment forms are left with the supervisor who in turn makes students fill in the details.

The Log Book is open to cheating since not so many supervisors really check on what the students write with regards to work done. Olufemi (2012) concedes that students sometimes present 'doctored' reports which do not represent their actual learning experiences. Therefore students can write whatever they want and still score highly because no one refers them back to the work they did for the whole month which may bring about IA assessment results that may not be depended upon. Olufemi (2012) asserts that a Log Book serves as a training manual for supervisors to guide and follow students learning activities and correct entries made to the Log Book. Supervisors' efforts will be in vain if student falsify activities and self evaluations in the Log Books. It seems supervisors do not trace students' learning activities and no effort to correct entries made by students was shown in the Log Books reviewed so students can abuse the instrument without evidence.

The next section presented and analysed data on marks being influenced by interpersonal relationships.

5.4.3.2 Interpersonal relationships influence marks

Respondents expressed that the way some supervisors and students interact has an impact on the mark that the student gets. With good supervisor-student relations, students often earn high marks and where the relationship is not good, the students succumb to low marks. Mrs Treck said:

Depending on their relationship with the students, the supervisor may end up awarding the student marks which are not relevant. Where the relationship is good the student is given very high marks whereas the student will not be performing well. Also if there is a tension between the supervisor and the student, the student is awarded very unfair marks because of that tension.

This response also shows that some marks are not objective. Joy concurred that:

If the supervisor likes you, you are always the best. There is too much favouritism with some supervisors, what they write in the Log Books and the marks they give may not tell what I can do and what I cannot do.

Some students are prejudiced for the whole IA period if relations are not good. Trish said:

On awarding marks, one of the supervisors said to us the students from this college you think you know too much then he would give us low marks basing on that yet there was never a time we tried to challenge them. So what is in the Log Book is not what I was able to do, I deserved more marks than I got.

Some participants complained of favouritism in assessment by supervisors where as those who did not perform so well were sometimes given higher marks while some complained about low marks being awarded on the basis of unpleasant relations.

Results show that some interpersonal relationships influence the mark that the student gets. In some cases where the student has strong interpersonal relationships with the supervisor, there is the likelihood that the students will get favours from the supervisor and score highly and the reverse is true (Andoh et al., 2016). Favouritism has been seen to destroy the value of the IA assessment process as a result the IA results cannot be depended upon for they are not true in most cases. This infers that IA may give a false impression about the student's performance.

Next section focused on too much reliance on what students write.

5.4.3.3 Too much reliance on what the students write

Supervisors, external assessors and FGDs indicated that what students write in the Log Book in most cases informs the mark the students get. Mrs Ema said that one can deduce work covered from what the student has written. She said:

Students write all the tasks they do and I give them marks. You can tell what the student has done because they write what they did.

Mr Dave concurred that supervisors base their comments on what students write. He said:

Log Books should tell us what the student should do when you go out there but then the supervisor just comments mainly according to what the student will have written.

Some of the focus groups expressed that because they write the tasks first, they can write what they want therefore basing comments and marks on what they write can be misleading.

Participants concurred that some supervisors rely on what students write for the marks that they award in the Log Books. The Log Books reviewed showed that some comments written by the supervisors were the same as those written by the students. Moreover the supervisors wrote comments after students had already

written theirs and this explains why in most cases they just duplicated students' marks. Brodie and Irving (2007) cited in McNamara (2011) acknowledge that currently assessment of WIL is provided by students to support their own claims for learning as in reports and Log Books. Ibid posit that basing assessment on the evidence provided by students for professional competencies is flawed as a result assessment should look beyond the evidence provided by students.

Following is data presentation and analysis on the Log Book being completed in retrospect.

5.4.3.4 Completed in retrospect

Some participants responded that the Log Book is completed months after the tasks have long been performed by the student. Tandy said:

Sometimes they take two months, three months without signing my Log Book so I will have written a lot of work since they do not have time they will not read through everything I will have written so their comments and marks are not reliable.

It can be very difficult to recall what the student did and how they did the work if supervisors take too long to assess them. Mrs Josh concurred saying:

The supervisor in some cases does not sign due to too much pressure of work or in some cases the supervisor will sign using wrong dates maybe the dates that fall on a weekend or on public holidays because they do it in retrospect so they no longer remember when tasks were performed.

Credibility of results is distorted if there is no proper account of what students did and when. Jude concurred that whatever supervisors wrote after such a long period was not true. Tessa also concurred saying:

For me the supervisor was just writing what was not even related to what we had done because they would comment later.

It has emerged that some supervisors do not comment and put marks as soon as work is done but they do it later after weeks, even months. Some students also mentioned that they ended up not completing the Log Books regularly and some could even do it when they heard that lecturers were moving around. The Log Books reviewed have shown that dates written by supervisors were not for the particular month the student was assessed. In some cases same dates on the stamp were used for a number of pages, making such results undependable. This means that whatever the supervisor is writing, then, is not a true reflection of what the students

did because they cannot still remember all the tasks done by the student and how they were done after say three months as indicated by some students. It has been established that recording and scoring the daily activities gives student an opportunity to better understand their strengths and weaknesses making training more objective and real (Yaghobian et al., 2011). This is somehow lacking in the colleges under study because it is not possible to identify strengths and weaknesses when some tasks are not recorded and are lost on the way. Therefore the Log Book is not being used appropriately regardless of the fact that, on its own, it poses some completion challenges.

Overall, results have revealed that the Log Book which is being used as the only assessment tool in the Polytechnic Colleges in Zimbabwe is not user friendly. It is said to be complex in use, inadequate in measuring students' performance and cannot be reliable upon for students' IA assessment results that are used for certification.

The next section focused on how respondents viewed the process of assessment during IA.

5.5 HOW DO RESPONDENTS VIEW THE PROCESS OF ASSESSMENT USED IN THE POLYTECHNIC COLLEGES IN ZIMBABWE DURING IA?

Under this research question, the main theme, sub-themes and their various categories have been presented in fig 4.3 below.

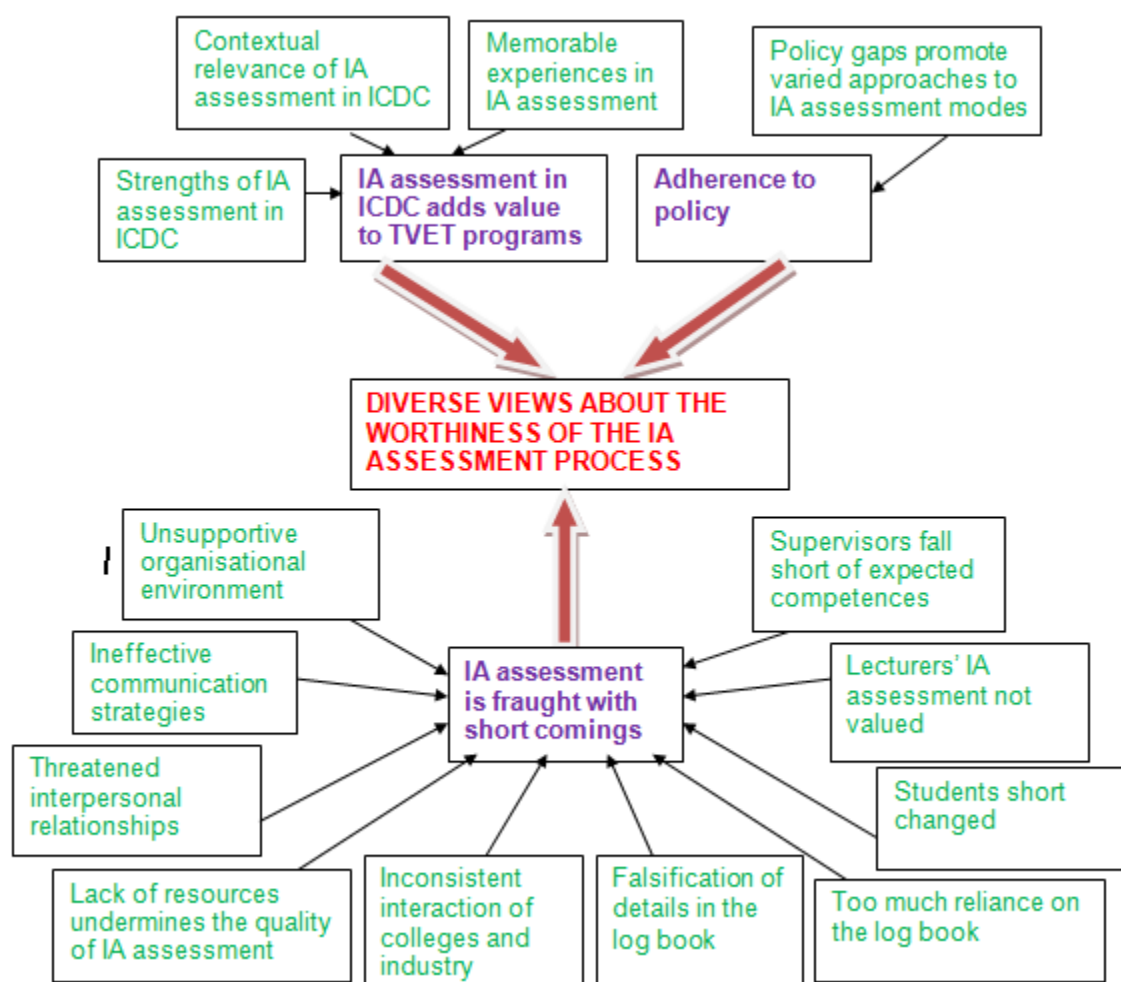


Figure 5.3: Respondents' views on the assessment process

DIVERSE VIEWS ABOUT THE WORTHINESS OF THE IA ASSESSMENT PROCESS

The strength and the contextual relevance of IA assessment in ICDC were clearly outlined but these were given in most cases in the context of what is expected all things being equal. Respondents revealed that there are still very few aspects that they consider as achievements in IA assessment. Only a few noted some lessons that they learned throughout IA assessment and some isolated cases were recorded of exciting events that they experienced in this IA assessment journey. Students had

varied experiences about the typical day of assessment by their various assessors. A lot of weaknesses were given based on the prevailing situations in these two Polytechnic Colleges. These have been put forward as factors negatively affecting the proper training and proper assessment during IA. Participants view the IA assessment process as being marred and as a result varied approaches to assessment of ICDC students are being used which yield varied IA assessment results.

The next section presented and analysed data on how IA assessment in ICDC adds value to the TVET programs.

5.5.1 IA assessment in ICDC adds value to TVET programs

Some participants viewed IA assessment as being a necessary process in the training of ICDC students as presented and analysed in the following sections.

5.5.1.1 Strengths of IA assessment in ICDC

Respondents viewed IA assessment in ICDC as having quite a number of strengths. Some said students are exposed to new technologies and their skills and knowledge are enhanced. Students become confident and they can appraise themselves. It can expose where students may be lacking in the world of work and they can improve in areas of weakness they become aware of. It also improves team work amongst students (Cohen, 2014). Some said students learn how companies are run and can give students the stimulus to start their own businesses. Karunaratne and Perera (2015) argue that internship programs not only provide benefits to students in terms of career preparation and income, but also strengthen their self-confidence and self-satisfaction in the lifelong learning process. Mrs Jerry said:

It helps boost confidence if someone is appraised positively. It also improves team work amongst students. Industrialists also gain certain skills from some of the students although they may not openly say it, they also benefit this is why they sometimes keep the student in one department for too long. Assessment also helps in validating our training to say is it still relevant to the industry.

IA assessment is said to expose some short comings by students and they become aware of non-acceptable behaviour.

Through IA students learn faster and easier methods of working processes. They get to have better communication and problem solving skills. External assessors can pick out weaknesses in the assessment process and bias will be reduced. Mr Duly said:

Basically external assessors validate the whole assessment process and reduce bias. They pick mainly on the weaknesses of the college which internal assessors cover up for , for example on frequency, they may visit students twice instead of three times if the college says it does not have money for travelling and subsistence or if there are no vehicles.

Participants perceive the process of assessment during IA as an important one as it has a lot of gains. They have noticed that students gain knowledge and acquire skills in the areas they are exposed to, they learn new and faster methods of working processes, mistakes are identified and corrected, performance improves, progress is measured and attitude changes among other things.

The next segment focused on the contextual relevance of IA in ICDC.

5.5.1.2 Contextual relevance of IA assessment in ICDC

As a result of the strengths identified by various categories of respondents, IA assessment has been viewed as being relevant in ICDC training. Some respondents expressed that sometimes students are not serious about what they are there to learn and to achieve hence regular assessments help them understand the purpose of IA. IA assessment requires careful check-up of students' attendance and they get feedback from the company if students absent themselves and their reasons for being absent. Lecturers need to emphasise over and over again the importance of serious application of the tasks on hand. Mrs Jack said:

Sometimes the students just go and forget why they have gone there, thinking of the ZIMDEF allowance that they are getting. But if you go there you actually see if what they are doing is the correct thing. When you go to other companies you find that supervisors do not even know what to do with students. ...So when you go there you enlighten them. You tell them what you expect from them, exactly what you want.

As lecturers control students' training processes, they also need to evaluate their own assessment processes and their IA experiences can help both trainers and students improve in many different ways. Gumbe et al. (2012) realise though their research that institutions of learning from which students come also benefit from IA

as it provides them with an opportunity to improve their curricula. Lecturers and the people from industry have different knowledge and expectations so it is important that they learn from each other. This means there is need for collaboration between colleges and Host Industries in the training of the ICDC students during IA.

Lecturers' assessments are of great importance for the combining of college work and industry work, hence the vertically and horizontally integration curriculum. As lecturers interact with students, students will see the importance of what they are doing in the industry. Lecturers coming to assess students in ICDC can make the supervisor more serious and they will give them meaningful tasks. On the other hand, if students know that they will be assessed they work very hard and complete their Log Books on time. While students also concurred that IA assessment helps keep them in track, some felt it should be conducted in a more effective way to make sure that when the students finish IA, they are really equipped with industrial knowledge.

Some students said that assessment by both supervisors and lecturers was not relevant. Mrs Tuan shared the same views that while IA assessment is good in itself, it is not relevant in ICDC. She expressed the following sentiments:

It could be relevant if it were done properly because it will enrich someone's Curriculum Vitae if one is said to have acquired a certain skill truthfully. But if it is done for other reasons like just making somebody sail through the course then I am so much worried as to how this assessment can improve in order to be relevant. It is good if it highlights the strengths and weaknesses of a student although the negatives are rarely reflected through this process.

This concurs with what Mr Toby said when he talked about lack of process reviewers in IA assessment citing reasons that students do not fail IA. Groenwald (2009) asserts that the primary purpose of assessment is to improve performance and not to audit it. Mrs Tuan even expressed that if the negatives are not talked about then, assessment may not be necessary.

The data that was gathered through interviews with lecturers, supervisors, external assessors and focus groups revealed that IA assessment in ICDC is relevant although some respondents felt it is relevant only to some extent with some perceiving it as irrelevant at all. The experiences of assessors in IA assessment denote how much value some respondents still place on IA assessment in ICDC.

5.5.1.3 Memorable experiences in IA assessment

Respondents helped define how they viewed the process of IA assessment in ICDC through their own experiences. What they cherish most is what participants described under achievements, lessons and excitements. Achievements are presented first.

Achievements by assessors

Some lecturers revealed that there have been quite a bit of achievements noted through IA assessment process. All students from both colleges have been able to get some placement even if some a little late and some getting it in small and newly established companies where not much learning takes place.

Mr Eno concurred that as a company, being able to take students for IA every year is a great achievement. This means that no students are deferred for failing to get attachment places. Although some lecturers and supervisors acknowledged that all students get placement, Chinyemba et al. (2012) and Chiweshe et al. (2011) describe the challenge of securing placement as phenomenal resulting in students getting places in companies that do not provide relevant skills.

In addition, lecturers have been able to assess students no matter where they are placed. Mr Toby said:

We are able to visit all students on IA no matter where they are placed and our students pass OJET with distinctions mainly.

Mr Edy concurred that most of the students they assessed since the '90s pass with distinctions. It was also noted through results reviews that students pass mainly with distinctions which is an excellent performance. Some lecturers acknowledged the notable changes in students' behaviour, knowledge and skills after IA. Mrs Ema also conceded that students acquire a lot of skills through their supervision.

Students become proficient in garment making processes although there are other departments that they are supposed to acquire knowledge about. Some companies are happy about students' performance as they request for more of the same calibre so lecturers are happy that they nurture their students well. Mrs Jerry said:

Some companies request for students who are like the ones they previously had and you feel there must be something good about our training here at the college which enables them acknowledge what our students can do. Some of

the students we churned out have joined industry and some become managers or supervisors after training.

Some students from St Erics College are getting jobs in the Clothing Industry after graduating and this is considered an achievement as well. Mr Dave said as an external assessor just the opportunity to validate the IA assessment process is an achievement to him.

All the participants who responded to this aspect have shown that all students get placement. Lecturers are able to assess all students regardless of geographic sites. There have been some improvements in skills, knowledge and attitude by students. Reports that inform the process have been written and students pass with flying colours. Lessons were also drawn through this assessment process as discussed in the next section.

Lessons by assessors

Some lecturers concurred with external assessors that there are a lot of machinery out there that are not found in colleges which enable students gain vast amounts of skills and competences. Mrs Tuan said:

Some of the equipment is not there in the college and there are some skills which are not offered here at the college but are there in the companies. There are also certain processes on apparel which we do not do as we are restricted by the syllabus but in industry they are exposed to all those e.g. elasticating. The syllabus is mainly on ladies wear but in industry they do men's and children's wear as well.

Mr Dave concurred that there is a lot of machinery out there and he learns a lot from both students and supervisors when he is taken through some processes. However some companies do not allow students to operate some specialised machinery. Most of the lecturers said they have learnt that companies operate differently as a result students are exposed to different environments and learning situations. Although learning environments are different, this is reflective of the real situation in the Clothing Industry.

Lecturers also learnt that students are exposed to other methods different from what they learn theoretically some which are faster and easier to accomplish. Even if students benefit a lot from their mentors, some lecturers also learnt that some students know much better than their supervisors as some supervisors were

consulting them especially in Pattern Making. This was supported by Mrs Ema who said:

Although they are students, some come with a lot of knowledge and they will teach you something that you didn't know. Because it is said no one knows everything I learn a lot from them. As an assessor I have learnt a lot of things.

It was noted that proper assessment would encourage students to express themselves and give them room to grow than to be treated as blank slates and be manipulated. In the same vein, Mr Edy noticed that there has been some great improvements in the amount of knowledge that students bring from their college which makes training a lot easier to them. This could be because the students already hold a National Certificate in ICDC and they possess a number of plausible skills and knowledge that qualify them to be awarded this qualification before IA.

However, there are some areas that the colleges need to focus on in preparation of students for IA. Mr Eno also noted that average students do not put effort to learn while the good ones work hard to learn more. In addition lecturers also learnt that placement needs to be done properly for effective training. Mr Toby said:

We really need to physically go there before you attach your students so that you actually see what is on the ground. Because it is very important to assign a student to a person or a company where you know the student will get as much knowledge as you would want him/her to acquire.

Lecturers conceded that companies vary greatly in their operations. Supervisors also acknowledged that the students that they get for placement are different in their skills levels and in their attitude towards learning. The external assessors said they learnt from both the students and the supervisors on how some processes are performed. Following is data presentation and analysis on excitement by different assessors during IA assessment process.

Excitement by assessors

Lecturers had mixed feelings on whether they still find anything exciting or not during their IA assessment journey. Some of them expressed that they were excited by the positive comments they received from supervisors about students' attitude and performance. Some were excited that some students adapted very well to the new work environment and complied with company rules and regulations. Some

supervisors expressed that they got some pleasure in assessing students who work hard and are keen to learn. Mr Edy said:

I get very excited when students are able to follow instructions and show some improvement in their work after pointing out to them what they would have done wrong and how they should have done it.

This concurs with what Mr Dave said when he expressed that he got excited by the students' ability to solve some problems that are peculiar to their areas of specialisation during IA. While respondents viewed the IA process as being exciting, some did not find anything exciting about the whole process at all. Mr Toby expressed that they used to enjoy company tours and that they had adequate time with their students which is no longer the case nowadays. He said most companies are no longer viable and they are mainly chasing after production and little time is dedicated to students' training. This is what he said:

To begin with when we started, I used to enjoy this assessment the reason being that in the mid 2000, our Clothing Industry was still viable right now it has been shaken, it has gone down, it is shrinking. So when I started I used to enjoy because we used to attach our students to very big companies such as Paramount, Bravette, Concord, Diesel Gear and others. Personally I would say instead of spending 10 minutes, you would want to spend even an hour with them moving around because back then the industrialists used to understand the essence of IA.

Assessors like Mr Dave and Mr Eno are still young and new in assessment programs therefore they find the exercise exciting compared to assessors like Mr Toby who is mature and experienced so much that he has noticed some drastic changes in assessment. Various assessors noted some several achievements by the institutions, students themselves and Host Industries that take students for placement. They indicated that things have changed a lot and there seems to be more challenges than success stories. They also could identify some very important things that they learnt in this journey as assessors. Most of them highlighted some bursts of exciting experiences of late but openly expressed that they no longer enjoy IA assessment as they used to in the past.

Typical day of assessment by the lecturer

Most students expressed that on the typical day of assessment by their lecturers they were eagerly waiting for them as they expected them to assess their work. They were happy to see them when they arrived but were disappointed that they only

signed the Log Books and did not even enter the workshop. Some were anxious because they did not know when lecturers were going to assess them. Jude said:

When they finally came I was not settled, I had this fear in me as to how they were going to assess. They did not ask for much, just the Log Book which they said I was doing the wrong thing by describing the processes but rather I was supposed to just list the tasks.

Some students panicked, some were happy that lecturers did not ask for much while some were disappointed. Some who were happy to see their lecturers were later disappointed because their grievances were not attended to. Some students were happy that they could update their Log Books and got them signed to date before lecturers met them. Some learnt from previous groups that most of these lecturers are not concerned about the work done by students so they were composed.

Some students said they were nervous, unsettled and confused. Those who panicked the most, with incomplete log books were mainly females and this could be attributed to anxiety and them failing to adjust to a different learning environment. Although most of the encounters yielded not so favourable results, some students actually benefitted and were thrilled. John said:

My first assessment from the lecturers was beneficial and I was very happy to see them because at first our supervisor wanted us to work in the production line only but when the lecturers came and asked if we had any challenges, we told them. They then told the supervisors that these students must learn from every section of the company and the supervisor then gave us the opportunity to rotate, it was beneficial.

Students' feelings were varied. Some were anxious, nervous, afraid, unsettled, confused, expectant, unhappy while a few were excited, happy and calm. Most of them indicated that they did not get the kind of assessment that they anticipated from their lecturers therefore their assessments were not valid to them.

The following are the reactions of students on the day they expected supervisors to assess them.

Typical day of assessment by the supervisor

Focus groups explained how they felt on a typical day of assessment by their supervisors. Tessa said she was given work and was surprised that two weeks later the supervisor asked her to explain how she had performed the task. Others said supervisors did not tell them when they were going to be assessed. Jude said she

was just asked to explain the process she was working on. Some students said they were afraid of making mistakes during their first assessments. John said he was just given a blazer to construct and the supervisor monitored him from the first process until the blazer processes were finished. He said:

He assessed every stage making sure that what he had taught me was exactly what I was doing. It was a tough and boring assessment but very educative.

While some supervisors chose items for students to construct, some students were at liberty to choose the processes they wanted to be assessed doing from those being done in the production lines.

Some were eager to be assessed and their assessment was beneficial. Some were assessed whilst in the production lines without noticing. On the other hand some focus groups indicated that supervisors did not assess them but just signed in their Log Books. Some signed the Log Books but never said anything to them. Some signed the Log Books hurriedly whilst lecturers were waiting by the reception. Truth said:

We were just working and supervisors would just comment in our Log Book. There was not a time I was told I was going to be assessed or when I saw them assessing me even without telling me.

Some students said there was nothing like assessment at their companies because they were the ones teaching others including the supervisor so there was nothing to assess them on.

Students had mixed feelings about their first assessment by their supervisors. Some were happy, some were not at ease and were afraid of making mistakes, some found it boring but educative while some said they were never assessed at all. Although some supervisors were said not to have assessed students at all with some only signing in the Log Books without any meetings with students, they were viewed as being important by most of the students compared to lecturers.

Some focus groups also described how they felt when they were assessed by their peers as presented below.

Typical day of assessment by the peers

Some focus groups saw it beneficial learning from their peers. Some said peers would comment and correct them. Some had to ask from their peers for assistance. Jude said:

When I was working for example on a collar I asked them if I was doing the right thing, they commented on my work and corrected me. It was helpful to ask other peers because it was not always that we did the same processes at the same time.

Some fast learners would help others grasp concepts well. Some supervisors would always ask students to help one another. With some, it was never announced but they just saw themselves assisting one another. Others said they never had peer assessment because they had different attitudes towards work while some were always doing production so there was no time for peer assessment.

With regards to peer assessment, students perceived it as being of benefit to those who practised it, while some did not practise it at all. From these categories of assessors, students seemed to place more value on the supervisor's assessments than the other assessors. Therefore according to the students' views, the supervisor is the most important assessor in ICDC.

The next section presented and analysed data on the second sub-them: Adherence to policy.

5.5.2 Adherence to policy

It was established that although there are some policy statements that are being followed, there are some issues identified by respondents that may prevent effective IA assessment in ICDC to take place.

The following are the views of respondents on the policy.

5.5.2.1 Policy gaps promote varied approaches to IA assessment modes

Most of the respondents viewed the policy gaps as having a bearing on the quality of assessment during IA. There are no assessment grids for IA assessment therefore there will be nothing to guide supervisors towards objective assessment. Chinyemba et al. (2012) concur that, in their study, employers had not been supplied with assessment guidelines on what the university wanted conveyed by the students in the form of programs. Some aspects will be ignored during assessment if there is no proper guide as to what to assess and if there is no proper weighting.

Another concern was on frequency of reviews. Mr Duly said:

Industry and curriculum do not tally because the process taken to review the curriculum by HEXCO takes long such that it would have changed already in industry. HEXCO is supposed to review the curriculum after three years but it takes longer so students remain irrelevant.

Process reviews take long therefore some industrial components may no longer be relevant. Aring (2011) recognises that there is a chronic skills misalignment of the education system to the needs of the labour market which is exacerbated as new technologies contribute to shift skills requirements for how work gets done. So, if reviews take long the impact of skills shortage will continue to be felt in the Clothing Industry. Some respondents raised issues of ZIMDEF allowances, duration of IA and frequency of visits by lecturers as some areas which take long to be reviewed. Mr Duly also noted that Principals of Polytechnic Colleges who sit in regional board meetings are also national board members and he felt there is an anomaly there.

It was noted that the current regulations are silent about some issues which pose challenges when situations arise. Mr Eno said:

There is a lady who was given just one week after giving birth and I felt it was not enough. Health-wise she needed to rest so that she would be able to cope with the pressures here.

Assessing a student who is not physically fit will not be rational and the student may not perform well. There is nowhere it is stated how long the student should be allowed off due to such circumstances therefore, it becomes difficult for the companies to determine this. This also points at gender issues which are not addressed in the current regulations. Some companies are abusing students by making them work overtime for nothing due to lack of a clear IA policy and clear regulations. The current policy statements put more weight on the lecturer as their three visits determine the completion of the course yet it is the supervisor's mark that counts. There seems to be a gap as evidenced by the documents reviewed and several responses especially from students who did not see the worthiness of lecturers' visits. It has emerged that policies that are not clear are difficult to follow thereby affecting the process of assessment during IA in ICDC in the Polytechnic Colleges in Zimbabwe.

As long as the policies are not clearly defined, each stakeholder is bound to use their own methods. Lecturers from the same college and those from different colleges using the same so called policy documents interpret the policy statements differently and use varied approaches for the students who will compete for the same job after graduating. Andoh et al. (2016) assert that there is need to examine the IA program to assess whether companies have policies governing the attachment program. This entails that the policies should establish guidelines for the industry as well because lack of it is giving companies leeway to do what they want. Most of the students are not gaining anything out of IA attachment because the policies are not clearly defined. Companies can afford abusing students and using them to provide cheap labour because policies are not clear. The policy statements currently available put more weight on the lecture yet it is the mark of the supervisor that counts. Also there is not a clear outline of how the lecturers should conduct their assessments. The operations of the external assessors are also not clear and their existence is quite a surprise to many other stakeholders in this study.

The next section focused on other issues that militate against the proper attainment of reliable and credible IA assessment results.

5.5.3 IA assessment is fraught with short comings

It was established that both supervisors and lecturers are viewed as having some short comings. Most students are failing to acquire the expected competencies due to the manner in which they are trained. There are also a number of approaches to IA assessment that respondents viewed as having flaws thereby affecting proper assessment in ICDC. One of the identified aspects is that most of the supervisors in the Clothing Industry do not really qualify to assess ICDC students during IA as discussed hereunder.

5.5.3.1 Supervisors fall short of expected competences

A workplace supervisor is an alternative source of evidence of the student's professional competence. However relying on the workplace supervisor raises issues such as quality assurance and reliability of assessment (McNamara, 2011). Some respondents said that most of the supervisors do not qualify to assess students as they do not even have the basic academic and professional qualifications. Some are supervisors by the virtue of being relatives of the company

owners. Some just established small backyard companies where some students even assume supervisory positions. In the study by Chinyemba et al. (2012), the majority of the students acknowledged that there were inexperienced staff in most organisations where they were attached. Mr Toby commented that a person might be financially stable and decides to venture into a clothing manufacturing business without the necessary skills and knowledge and these people rely on students' few basic skills in production. Jude observed that some companies employ people who are not well educated so that they give them low wages and these are the people who are assigned to assess students. While knowledge and experience can be beneficial in assessment, Mr Toby said:

The issue of qualifications is one challenge. You know in industry we do not base on qualifications, we base on skills. Yes you may be skilled but in terms of computing and writing things down is one challenge I have seen. Most of these supervisors are using experience, they are very good but the detailing of the Log Book they may not understand it, it is a challenge.

Although most of the supervisors have vast amount of experience as shown by the biographic data of supervisors, they may not have knowledge of how to complete the Log Books. This has been alluded to by McNamara (2011) that workplace supervisors may not have the specialised skill that is required for assessment and it is questionable whether it is possible to ensure each supervisor has a consistent perception about what they are assessing and what standards are expected. They are mainly concerned with production and meeting targets with students being used to provide cheap labour. Some are said to be very old and cannot write. Mrs Jerry said these old experienced supervisors cannot write and they ask some personnel who do not work directly with students to complete the Log Book. These people will not know how the students will have performed except relying on what the students have written. Jumo et al. (2013) concur that company mentors with relevant qualifications are able to guide the students better while those that do not, rely on the students and the academic supervisors for a successful completion of the work experience.

Responses also showed that some of the supervisors cannot express students' performance in written form because their command of English is bad. Most of the students complained that their supervisors did not know what to write in the Log Books, they repeated same comments for several months, they duplicated students'

comments, they asked students to complete the Log Books for them so they could just sign, and some marks could not be accounted for. Some wrote comments which did not mean anything while some comments and marks did not tally. Respondents attributed all these to lack of training in assessment issues. This shows that there is not even some form of training done to equip supervisors with assessment skills and proficiencies.

This is confirmed by some lecturers who said they spent most of their assessment time explaining to supervisors how the Log Book is completed. This has also been confirmed by Jumo et al. (2013) that lecturers are expected to induct mentors on the use of the assessment instrument. Some students also said that some supervisors think IA is all about production and they refuse to take students through other departments such as Designing, Pattern Making, Procurement and Marketing. This lack of knowledge on IA disadvantages students and IA assessment results may be difficult to rely on. Mrs Tuan said:

Supervisors who are not used to working with students normally do not know their expectations, they do not know what they are supposed to do with the students in various departments, what is the information they are supposed to furnish the students with during IA, the skills they are supposed to impart, they are in a dilemma, they do not even know.

Mrs James stressed that supervisors are not qualified to assess students yet they are entrusted with students for the whole year. She said that the fact that supervisors can run production processes successfully does not automatically qualifies them to assess students whose IA results are solely dependent on the supervisor's judgment.

Mrs Jerry said some external assessors from Industrial Trade Testing Department (ITTD) ask for supervisor qualification and she expressed that it is quite an embarrassment that some of these supervisors do not have any qualification although they have so much experience. Even if she stressed the need for supervisor qualification, she also acknowledged that not all of them lack the expected competencies.

Even though some supervisors possess the right qualifications as shown on the demographic data, Bukaliya (2012) acknowledges that qualified staff to supervise interns has been in short supply. Lunes (2014) concurs with Bukaliya (2012) that

while there is a good supply of potential assessors existing in terms of people with industry experience, assessment bodies with the capabilities and resources to train individuals appropriately in assessment are currently in short supply. It was also revealed that some supervisors do not plan adequately for the students whom they will have for the whole year and some of them are always too busy for the students. Several responses indicated that most of the supervisors in the Clothing Companies that take ICDC students for placement do not help students enough in terms of assessments. External assessors and policy makers concurred that the Clothing Industry lacks personnel who are qualified to assess students and to equip them with necessary skills that make them fit in the world of work. McNamara (2011) asserts that the supervisors' assessments may not be reliable because it is heavily dependent upon the professional ability of the supervisor.

Data on participants' views on lecturers' assessment is presented and analysed next.

5.5.3.2 Lecturers' IA assessment not valued

It has emerged that assessment by lecturers is not very important due to the manner in which it is conducted. Several responses revealed that most of the lecturers do not take time to talk to students and getting to know how they are progressing in terms of knowledge and skills mastery, challenges they are facing and their expectations.

Lecturers are said to be in a hurry all the time and take very little time assessing students. Respondents highlighted that some lecturers just flip through the Log Books, ask supervisors a few questions and leave without talking to students. Chinyemba et al. (2012) ascertain that assessment can be biased because lecturer ask supervisors how the student is performing and their views can be affected by factors such as conflicts that may have occurred. Some responses showed that some lecturers are just concerned about appending their signatures in the Log Books. Several responses showed that lecturers from other fields are even worse, they do not know what is expected of ICDC students. Mrs Tuan said:

We also do not only assess students from ICDC Department. In the previous visit I ended up assessing students from the Accounting and IT Departments. ...I also took limited time with the supervisors there. I was trying hard to avoid them because I did not want to expose myself. I even blew a trumpet when I came back to college highlighting the dangers of assessing students in areas

one is not a guru in, what if questions were posed on me for clarity on subject related concepts by students, how embarrassing was it going to be?

This testimony by an ICDC lecturer assessing students from other fields also applies when other lecturers assess ICDC students. Assessment will not be done effectively. Jude said she asked for help but could not get any because the lecturer who was assessing her did not know anything about that area. Some students said some of these guest lecturers asked them to explain what they had written which was subject specific.

Chinyemba et al. (2012) discover that assessment by different lecturers sometimes cause confusion and misunderstanding of expectations. One of the students said he was taken to task when he was found in the HR Department on the basis that ICDC students should only be found in the production floor, sitting on a machine and leave the other areas to other students such as those studying HRM as a course. These lecturers are not well versed with ICDC as it consists of several subjects including HRM so there is a danger that these lecturers may mislead ICDC students. Mrs James even said that some students come back to college with incomplete work because those guest lecturers do not know what is expected of ICDC students during IA. This has been underscored by Lunes (2014) that the interpretation of some guidelines can be challenging because some qualifications are more practical than others and require different assessment considerations. Mrs Treck was concerned about the reports that these lecturers write concerning ICDC students.

Mrs James reiterated that these lecturers can be lied to by students they are assessing. Tracy also stated that not only guest lecturers are lied to but subject experts too can be lied to by the supervisors. This means there is an element of cheating going on whereby supervisors cover up for students. This is aggravated by lack of proper assessment by lecturers. It was also commented by Chinyemba et al. (2012) that rarely do lecturers have a look at work done by students, they rely too much on the supervisor's word which in most cases does not provide correct information. Truth said some lecturers find it very difficult to confront supervisors if students complain about some unfair treatment fearing for a worse treatment thereafter. So, students regarded the lecturers' visits not worthwhile. Jill pointed out some skills and knowledge deficiencies in some lecturers. He said:

I think they lag behind some of the technologies in terms of methods and machinery because they are not allowed to enter the production floors to see some of these new technologies physically and in operation.

Lectures may not assess effectively if students are exposed to some technologies that they are not acquainted with. Donkor et al. (2009) posit that the quality of TVET is dependent on the competence of the teacher which is partly measured by being abreast with new technologies in the workplace. On another note, most recurring response from all categories was that some lecturers are more concerned about the issue of Travel and subsistence (T/S) allowances at the expense of students' learning.

When responding to the question on lecturer-student ratio Mr Toby also mentioned that some lecturers do not mind how many students they assess because all they need is money. He said this compromises assessment standards when one lecturer assesses too many students since they will not be able to pay attention to individual needs. Jill from St Erics College complained that he was told to make corrections on the things that he made at the company during IA when he was back at college the following year. Julie also said she only discovered when she returned to college that she was supposed to produce a file with samples. This is quite startling as lecturers visited these students three times but no one ever cared to check what the students were doing not only in terms of progress on their assignments but on some other work they would have done as well.

However a few students valued the visits by lecturers. They said some lecturers helped both students and supervisors in the completion of the Log Books. Some looked at the work that they were doing and discussed areas of concern with the supervisors. Some took time to scrutinise their Log Books and identified some anomalies which they corrected. Tandy said:

The lecturer is important because there was a day when the lecturer came and found one student absent but the Log Book was completed, with marks filled in by the supervisor. The lecturer was not happy and she lowered the mark.

Jude also acknowledged the importance of lecturers' assessments.

While there are a few sentiments about how important the lecturer assessment is, the majority viewed it as not worth the while at all. It has been noted with concern that if students are assessed by lecturers from other fields they are not assessed effectively. Some lecturers are said to lag behind technology in terms of machinery and processes. It also emerged that lecturers do not take time to assess but were interested mainly in the Log Book; they do not look at students' work nor listen to their grievances; challenges reported to them by students were not resolved; some lecturers looked unprepared and some seemed to be in a hurry always; and some were only after T/S. As a result their assessment was viewed as being of no value.

It has been noted that both lecturers and supervisors have some short comings in terms of assessment. These and many others challenges may lead to students being short changed in their training programs as presented in the next section.

5.5.3.3 Students short changed

Some participants felt that the process of IA assessment does not help students achieve the objectives of IA. Some lecturers concurred with students that most of these students spend most of their time doing menial jobs, some being used as errand boys and girls while some are used to provide cheap labour. In the study conducted by Owusu-Acheampong et al. (2014) students reported that the work they were involved in during IA did not relate to their field of study. In this study many students expressed that they were used to boost company production with other companies laying off some of their workers so that their duties are taken up the students. Some students go to very small back yard companies that capitalise on their basic knowledge and give them supervisory posts instead of them learning from the supervisors. Mrs James underscored that:

They do menial jobs and because IA is a course requirement, they are forced to do it. They are used as cheap labour. At the backyard companies they end up as managers and no learning takes place, students will be at different levels at the completion of the course.

Of course students require managerial skills but doing this for the whole twelve months deprives them from gaining other important skills. Mrs Jerry and Mrs Tuan commented that when some industrialists discover that the student is good at some process such as designing, they stay there forever. Responses also revealed that some students spend most of their IA time in the production lines.

Students are expected to learn from all departments during IA according to the tasks outlined by their colleges. If they concentrate on one department it will be impossible to produce a well rounded person who is equipped with all the necessary skills and competencies. Results from the study by Karunaratne and Perera (2015) also illustrate that students had lower opportunities to get the internship covering each department of the organisation. Some students in this study reported that they were kept in one department for too long doing the same process such as cotton cleaning which is not beneficial at all. While some complained of being overused on the sewing machines, some were not allowed to use them at all as some companies felt the students would derail production or break the machinery. Donkor et al. (2009) assert that lack of free access to machines and equipment is quite disturbing as skills development which is an integral feature of work-based learning programs can hardly take place. In addition some students said they were not allowed to use some special fabrics. Mrs Tuan said:

With some companies it is a tradition that students are not supposed to use certain equipment as they feel they will break it. Students complain that this machine is not at our college but we were told not to touch it at all. Another problem is that there are a variety of fabrics at some companies which are not at this college and we expect the students to learn how to handle them but these fabrics will be very expensive so the company will not risk giving them to students as they fear that it will be wasted and then incur losses.

Some responses indicate that some companies even run out of fabric so students will not have material to practise with. This concurs with the results from the study by Owusu-Acheampong et al. (2014) in which some students reported that they had inadequate work to do during IA as their main challenge. There will be minimum hands on experience if machinery and materials are not availed to students. Mrs Tuan also discovered that even if there are some companies where students can visit several departments, some are still using the same old garment production techniques.

It was further revealed that with some companies there is no room to plan for their own learning processes. There is no room to select machinery they would want to use in working certain processes. Karunaratne and Perera (2015) and Biggs (2003) argue that work-based learning should encourage a more participative, learner-centred approach which places an emphasis on direct engagement, rich learning events and construction of meaning by learners. Jude concurred that:

The supervisor always criticised our designs as he did not believe students could do something good. They were supposed to help us grow from level to level than just criticising us yet no constructive comments came from them.

Some respondents revealed that some students are moved to other departments before they master concepts at all yet they are awarded very high marks which were not reflective of their performance. Whalley (2015) asserts that a single activity produces learning achievements by accomplishment of the task and the next task is enhanced by the feedback received on the first task. This provides a step or ramp-up in the achievement therefore if students are moved to the next department without acquiring adequate skills and knowledge the consequence may be that the next activity will be done less well than expected (Ibid). Mrs Tuan shared the same sentiments and added that students will not learn anything new in small companies which are inadequately equipped and with inexperienced supervisors.

It was also revealed by most respondents that students are faced with placement problems as a result most of them are left with no option but to take up placement in such companies where students do not gain any new learning experiences. However, students should not acquire knowledge so that they talk about it but they need to put that knowledge to work to make it function as functional knowledge is preferred to declarative knowledge in the CA theory. Students go out for IA in anticipation of acquiring a lot of skills but some are shocked and disappointed with what they experience on the ground.

Respondents viewed issues such as tasking students to do menial jobs, keeping them in production for too long and using them as cheap labour as aspects that short change the students. They also expressed concern on the fact that some companies do not allow students to use specialised machines and special fabrics whilst some companies still use old and outdated production techniques. This contradicts the assertion by Karunaratne and Perera (2015) that IA provides access to techniques in handling machinery that may not be available in the institutions. Some students spend quite some time without doing anything as companies will not have material to work on. Some students spend too much time on the sewing machines and no varied experiences gained from other departments. Comments written about them were not reflective of their performance and marks were too high. All these were considered issues that short changed students as they trained. This is also in

contradiction to the CA theory which states that supervisors should act as catalysts that facilitate the learning of the students through creating learning activities and assessments that are aligned with the learning outcomes in such a way that students can construct meaning in any given learning event (Reaburn et al., 2009).

The next section presents and analyses results on too much reliance on the Log Book.

5.5.3.4 Too much reliance on the Log Book

Data gathered on assessment tools used in assessing students during IA revealed that only the Log Book is used from which the final IA mark is drawn. Several responses also indicated that the other IA forms that are used at both colleges are support documents used mainly to confirm visits by lecturers. The forms that are used at St Pauls College are sort of an interview form or questionnaire and these are used to compile reports for each student assessed but the reports seem not to be useful. Mrs Tuan said:

I write reports and submit them to various offices but the management does not have time to go through all those reports for each student on IA so challenges are never attended to and our suggestions are never taken on board.

When asked about assessment portfolios, lecturers, students and supervisors concurred that students produce portfolios. Responses showed that from the assignments that students are given by their institutions, they are supposed to produce different items according to what the company specialises in. These are submitted to the colleges at the end of IA but the mark does not contribute to the IA final mark.

Over and above the projects that they do during IA which are submitted to the college, students even make presentations of which the marks are not part of the final IA mark. Students also prepared files which were not marked. Mrs Jerry even indicated that students write IA reports which they do not mark as supported by Jude that:

We also wrote IA reports at the end but I don't know what they did with the reports. We just wrote but up to now we have not received feedback on reports and Log Books.

This shows that even if there are other assessment tools that can be effectively used and complement each other in generating IA mark, all the 100 marks come from one assessment tool. Responses however revealed quite a number of weaknesses with regards to the use of the Log Book alone as illuminated in the second theme discussed in the previous section. Even during industrial visits, discussions are centred on the Log Book. Again only one person, the supervisor determines the IA results. Mr Toby alluded that he has never seen any student failing IA and in most cases they pass with distinctions. Mr Duly, one of the external assessors concurs that:

Students on IA do not fail even when they do not deserve to pass. Pass marks are mainly in the 80% and 90% range but when you ask the student, they do not even know the processes they would have logged in their Log Books.

This shows that there is overdependence on one person and one assessment tool which may bring about a lot of subjectivity. Muchemi et al. (2013) posit that reports which must document students' weekly activities at the workplace are assessed by lecturers of the department and weighted 60%, the other 40% is on students' performance during IA as assessed by workplace supervisors. With the Polytechnic Colleges under study, it is only the Log Book that matters from which the supervisor's mark only is considered.

Presented next are results on falsification of details in the Log Book.

5.5.3.5 Falsification of details in the Log Book

Most of the respondents indicated that there are a lot of irregularities in the way in which the Log Book is completed. Some students said they wrote the processes that they did not do and some completed the Log Books even when they were absent from work when the processes were carried out. Truth said:

We were given marks even when we were absent. Nobody could prove that I did not do what I wrote. Lecturers came and gave marks on processes they did not see me doing, supervisors also gave me marks on processes that they did not see me doing.

Some students just copied from their colleagues whatever processes that were done during their absence. Some students said they logged in processes for departments

which did not exist in their own companies. Supervisors awarded marks for the processes that they did not see the student perform.

In some companies, the one who completed the Log Book was not the one who supervised them daily. Some students repeated same information on previous pages but supervisors did not query such behaviours. Mr Eno concurred that there is some degree of cheating in the Log Books as they try and compensate for the work that students do for their company for no pay. He said:

To write that the student is not doing well is very difficult especially when we consider that they also help us with production. Sometimes students are not honest in what they write but I cannot say to them you did not do this because we very often keep them in the production line for too long so I simply put a mark and sign. There is no way the lecturers can find out that the student did not do that process because they are mainly interested in the Log Book.

McNamara (2011) asserts that a grade may be viewed as a reward for student interns, who are frequently unpaid. Mr Edy concurred that if supervisors are not thorough students can write tasks which they did not perform. Mr Dave also said that some supervisors may not tell the truth about the performance of students. Chinyemba et al. (2012) agree that some supervisors do not provide enough tangible evidence on student performance and some give false information to protect students on IA. This shows that students are given compensatory marks for over working them and the cheap labour that they provide. All these could reflect that most of the details in the Log Books do not say the truth about students' learning processes and performance. According to the CA theory, the ratings that the supervisors arrive at when assessing students on IA are very important as they inform the final grade the student will get (Biggs, 2003). It is imperative that supervisors consider the intended learning outcomes so that they rate the students according to what they achieved.

The next section focused on inconsistent interaction between colleges and industry.

5.5.3.6 Inconsistent interaction between colleges and industry

Participants viewed interaction between the colleges and industry differently. Some lecturers indicated that there is some interaction between colleges and industry when they conduct industrial visits or through phone calls when something goes wrong with students during IA. Mrs Jack said:

Like for example, at one time we had a problem with some of our students who were sent by their companies to train here in order to further their education. The students came here during IA period and lied that they were wanted back at their organisation and they would not go for IA for two-three days without notifying the company. The company phoned to say these students are not here.

Mrs James also conceded that companies sometimes come to the college to request for students so that is how they interact. Mrs Tuan added that they only interact with company management when they visit new companies in search for IA placement. Furthermore, external assessors are drawn from the industry to participate in college programs through validation of their assessment procedures so this is how they interact. Some felt there is no interaction at all because of the attitude of employees at Host Industries.

This could be the reason why most students face challenges in securing IA places. Some students also felt that lack of effective interaction results in their challenges not fully addressed during IA. Jill said:

I perceived that in the event that a student is having some challenges with the supervisor or some workers in the company and the student tells them, they may find it very difficult to resolve the issue since they do not have powers over the organisation.

Some lecturers and external assessor concurred that they are the link between college and industry but mainly wait till time for assessment otherwise lecturers hear from companies when there are problems with students or when securing IA places. Some lecturers felt that there is no interaction this is why supervisors always have negative attitude about lectures when they go for assessment. Focus groups indicated that lack of interaction caused challenges they encountered during IA to persist. In support of this notion Esubalew (2017) explains that a lot of challenges emanate from lack of coordination and integration among stakeholders due to the fact that there has been very little involvement of implementers in curriculum issues. Implications of challenges that Host Industries and Polytechnic Colleges encounter due to lack of synergising their functions include students not having adequate work to do; students given menial jobs; overstaying in one department; overworked and abused (Alsaggaf, 2010; Rafique, 2014; Esubalew, 2017). The prevalence of lack of synergies among the key players in such programs not only affects the service delivery but also the optimisation of the scarce resources which could be devoted to

students' training in Host industries (Esubalew, 2017; Perez-lara, 2018). This means that the college strategies and the industrial strategies are not collaborated in IA assessment of the ICDC students. This lack of emphasis given to issues pertaining to vertical and horizontal coordination and integration among stakeholders engaged in the training and assessment of students during IA, functioning independently from one another in all phases of the students' training has far reaching implications unless addressed (Esubalew, 2017; Dick et al., 2009).

The next section focuses on lack of resources undermining the quality of IA assessment.

5.5.3.7 Lack of resources undermines the quality of IA assessment

Lack of time was cited as the biggest challenge that affects the assessment process during IA. Participants viewed time for assessment by supervisors and time taken per each assessment session by lecturers as inadequate. They cited that supervisors always have long production lines to monitor as a result they approved of anything students wrote just to fulfil IA assessment requirement of producing a mark. Sometimes when lecturers visit they only discuss the Log Book and are not taken through various departments in the company. Mr Eno said:

We have too much pressure to assess students regularly. Sometimes we go for days without even looking at their work. Some of the things that we are required to do are time consuming such as writing comments, if it was just the signature it was ok because we just do not have time.

Mrs Ema concurred that even when students are absent, they leave the spaces in the Log Book uncompleted because they do not get time to take them through what others will have done. It was also noted that some supervisors keep postponing assessments because they will be chasing after production. Tracy added that some supervisors have too many tasks they are involved in such as designing, pattern making, production, quality control and dispatch. There will be no time left to assist the students because of the size of the company which compels some supervisors do tasks outside the mandate of the positions they hold. Respondents also revealed that some lecturers have limited time to assess students meaningfully during IA. Mr Eno said:

For lecturers maybe time is not enough on their side because they do not get time to really talk to students on their progress. Most of them seem to be in a hurry always.

Lecturers at St Pauls College are the ones who mainly complained about time constraints in assessing ICDC students during IA. As already alluded to, the itinerary for this college is drawn up by the Dean of studies who is not from the clothing discipline who may not be well versed with the dictates of assessment in the clothing industry. It seems the HOD for clothing who also participates in assessment does not assist in getting travelling programs allow for effective assessment of their students.

Unavailability of transport for lecturers is another factor identified as acting against the achievement of IA assessment objectives. At St Erics College even if they prepare their itinerary on time, sometimes there arise situations whereby the Vice Principal prioritises something else thereby delaying the schedule making it very difficult for them to complete the assessments on time. Similarly, St Pauls College requires a number of departments to travel as one team due to transport problems. Transport challenges can impact negatively on assessment when it is delayed or when it is hurriedly done.

Lack of proper training equipment has also been identified as another aspect that affects the quality of IA assessment. Some companies that have state-of-the-art equipment and machinery are now taking as little as one student from a college yet they have all the technologies that students are expected to learn. Some respondents indicated that with some increasing numbers in enrolment, students cannot all find places in such good companies and will end up in companies with poor training facilities. Students learning in such varied learning environments do not get similar industrial experiences.

Another resource that was talked about was an incentive for the lecturers and for the supervisors as well. It was revealed that inadequate incentives for lectures and lack of incentives for supervisors have led to compromised assessment standards. With St Pauls College, Mr Toby said lecturers do not care about the number of students they assess for long distance visits because they are mainly interested in the T/S that they get. In the same vein, Mrs Jack said local assessments are not conducted effectively because they are not given T/S. This may impinge heavily on the IA assessment process. While this is so at St Erics College, Mr Toby said at St Pauls College lecturers are give \$10 for local assessment trips.

Mr Toby added that they are no longer able to assess companies physically before placing students due to financial constraints that colleges are facing. Students are also faced with serious financial challenges and they cannot afford to pay rent and transport in towns where some big companies are found. As a result lecturers end up allowing them to go to these local companies that have nothing to offer to their students. This also compromises assessment standards. In addition some respondents revealed that although students receive some ZIMDEF funds, they do not suffice. Due to financial constraints, Mrs Tuan said some students end up arriving late for work and some absenting because they will not have bus fare.

More so, Mr Eno said they do not give students material for practise therefore this can be a serious challenge for students to get money to buy training resources. In support of this, Kathuri-Ogola et al. (2015) point out that it is a challenge to facilitate the trainee's ideas with inadequate resources within the organisation. Students may want to participate in various activities but resources do not allow for this. Mr Eno further pointed out that students on IA also pay tuition fees at their institutions which was also the same observation made by Mrs Josh that this is a great challenge to students. As already discussed, some students do not have materials to practice with which may see most of them idle for the greater part of their IA time. Bottner (2009) is conscious of these problems that directly impinge on students direct acquisition of skills and competencies hence the suggestion that supervisors should ensure the intern has a work space, supplies, equipments, information, and any other resources needed to perform assigned tasks.

Lecturers, supervisors, external assessors and focus groups viewed the success of IA as being affected by the amount of time available to assess the students, financial support for students, incentives for both lecturers and supervisors and availability of transport for lecturers to conduct assessments as scheduled.

The next section presents and analyses data on threatened interpersonal relationships.

5.5.3.8 Threatened interpersonal relationships

Some interpersonal relationships between supervisors and lecturers and between supervisors and students have been perceived as having a negative impact on the effectiveness of assessment during IA. Some supervisors always intimidate students

and force them to do tasks that are not aligned to their training programs. Some threaten to terminate their contracts. A lot of unfair treatments have been cited by most of the respondents under study. Some students are not even allowed to give excuses, they are treated with contempt. Mrs Tuan said:

In assessment, our students are sometimes given marks that are low when they have performed better than the marks awarded. This is because in cases where there is a lot of work to do, for instance, in cases of overtime, if they say I cannot come because I stay far, they do not give them the marks they deserved and students are being punished for not coming for overtime yet they have good reasons for that.

Some respondents also revealed that some students are rated highly and some lowly on the basis of their relationships yet in either cases they may not deserve those marks. Tessa said that if supervisors propose love to students and they refuse, the mark will be low. Mrs Jack concurred that even students who do not do anything get very high marks basing on intimate relationships. Mrs Treck added that relatives to supervisors are sometimes awarded very high marks even when they do not come for work regularly.

Some respondents indicated that some supervisors feel inferior to students who have a higher professional qualification than them and this may cause some supervisors to treat students unfairly. John concurred that some of these supervisors are afraid they will take their jobs so they do not give them all the information. Bukaliya (2012) in support of this assertion says that some employees regard interns as a threat to their positions and in some cases some supervisors possess inferior qualifications than them.

On the other hand some respondents felt that some students are rude and do not respect their supervisors. Mrs Ema explained that some students refuse to sweep the workshop, especially the young ladies and this frustrates them when they refuse to take orders. Mr Eno even said some students say they cannot perform assigned tasks without putting effort. All these may create a rift between students and supervisors thereby affecting assessment. Julie concurred that some students do not take instruction as given. She said:

Some students were not taking instructions as given so to keep correcting them was a challenge so supervisors ended up saying it is ok even when the process was wrongly or poorly done.

Gumbe et al. (2012) posit that cooperative trainees must not be difficult to work with, thus should allow the trainer to show them the right way of doing things from the start as unlearning may be difficult. Trish however argued that most of these supervisors do not treat them like humans and they communicate with them harshly. Mrs James concurred that some students are scolded and harassed for the things they did not do and this may cause a clash between supervisors and lecturers. Mrs James reiterated that:

Company supervisors and lecturers can clash for example if lecturers complain of students being used as cooks all the time and not given time to work in various departments, some supervisors will even become worse and the students suffer.

Female students at St Pauls reported that if things went wrong between them and the supervisor, they would rather did not tell the lecturer because the problem would worsen after the lecturer left (Munyoro et al., 2016). One of the lecturers at St Erics concurred that some supervisors victimised students for complaining about doing menial jobs every day after which they were treated unfairly (Bukaliya, 2012; Jumo et al., 2013). Most of the challenges faced by students could not be addressed by lecturers probably because lecturers were mainly females in a male dominated supervisory setting. Results show that some students were implicated for crimes committed by full time workers and female students were the most vulnerable species who were always intimidated by male supervisors. In such cases students' marks can be affected and they may not reflect any truth about what the student can and still cannot do. Some students would get lower or higher marks than their actual performance which could mean that their degree of relationship determine what the students get which is very unprofessional and unethical.

Bottner (2009) asserts that mentoring requires a mentor to be directive and supportive without being overbearing and dictatorial, while the intern should listen and follow through the professional advice given. Some students resorted to not telling their lecturers about how they were being treated because they feared for worse treatment after assessment by lecturers.

The next section focussed on ineffective communication strategies.

5.5.3.9 Ineffective communication strategies

Communication challenges were also viewed as impinging on assessment during IA if not done properly. Some supervisors may not be at the company when lecturers visit because lecturers may not have communicated. This means that they will not hear the supervisor's comments concerning students' work therefore their assessment may not be fruitful. Sometimes lecturers communicate with students who will then inform their supervisors and most supervisors are not happy about this channel of communication. Mr Edy complained that:

Some lecturers communicate with students that they will be coming for assessment and the students are the ones who tell us instead of lecturers phoning us so that we prepare for their coming because sometimes they come when we are overwhelmed with work.

Chinyemba et al. (2012) also recognise that there is a poor coordination between academic supervisors and students before assessment.

Mrs Ema expressed that it is disappointing to note that students do not share their problems with them. She further explained that some students do not come for work regularly while some always come late but they do not use proper communication channels, she often got information from other students. Some supervisors put effort to get information about students' challenges yet they are the ones who should communicate for effective assessment. Although it was reported that most students pose a lot of challenges in assessment, Mrs Ema showed that ladies care much about students' welfare during IA as she could make a follow-up on absent students through other students.

It was also established through results that some students find language as a barrier to achieving intended learning outcomes since some supervisors give them instruction in their vernacular which students do not understand. This means that students will take time to learn and may miss out some very important aspects in their training. Again assessment will be affected because already there is an issue of attitude that may affect IA results. Mrs Tuan observed that:

Language barrier is also another factor that prohibits effective assessment. Students go for months without being told what to do in the language they understand especially in Matabeleland where they speak Ndebele. Shona-speaking student learn the hard way. They are ignored if they use English, they say they must speak in their own language (Ndebele).

This kind of attitude can compromise IA assessment. Bottner (2009) asserts that mentors should be sensitive to cultural diversity and personal differences by realising that mentoring deepens participants' individual sense of being valued.

Supervisors who fail to express students' performance in their Log Books will not give a true reflection of students' performance. Students' attitude is another barrier to effective assessment. Some supervisors find it hard to assess students who do not want to take instruction and those that are rude to them.

Therefore unavailability of supervisors due to lack of communication by lecturers, inappropriate channels of communication by students and lecturers, language barrier, students' negative attitude, written communication by supervisors and lack of collaborative efforts in assessing students by both lecturers and supervisors have been identified as some aspects that negatively affect effective assessment.

Data on unsupportive organisational environment is presented and analysed next.

5.5.3.10 Unsupportive organisational environment

Some organisational climate prevents effective assessment from taking place. Some lecturers expressed that some companies do not allow them to get into the workshops where students will be working so they will not be able to evaluate adequacy and appropriateness of training facilities. Mrs Tom said:

In most cases some of these supervisors are not all that welcoming. Sometimes you assess your students by the door or outside the factory by the gate. They do not have the knowledge or they are not educated about the importance of the assessor coming to see the student on the ground. ...you find out that most industrialists do not want to divulge information about their companies.

There may be some company secrets to protect but the down side will be ineffective assessment by lecturers. Some lecturers are not allowed to talk to students during lecturers' visits. The objectives of IA assessment will be difficult to achieve if assessment shifts focus from the student to the supervisor. Jude explained that the fact that lecturers were not allowed to get into the workshop gave them an opportunity to write in their Log Books that they used some specialised machines yet they were not even allowed to touch them as there was no way lecturers could prove that they did not use them. Mr Toby also complained that sometimes lecturers waste time waiting for supervisors at the reception who take long to attend to them thereby

reducing assessment time. Mrs Ema confirmed that in case of state-owned companies, lecturers may take long to get to the workshops because of the protocols to be observed there. If companies are not welcoming to both students and lecturers, assessment will be difficult.

While acknowledging the benefits of IA to students, it must be noted that there are times when managers have tended to over-exploit the students on internship by letting them work for longer hours or refusing to give them stipends for the labour expended (Owusu-Mintah & Kissi, 2012). In line with this remark, Mrs Treck also observed that some companies are not sensitive to students' training needs and expect them to work like slaves. She narrated that:

Some companies that produce some seasonal products like graduation regalia towards some graduation ceremonies for certain institutions have a lot of work to be done and they end up working overtime and they will involve our students sometimes up to 11pm 12 yet these students are not on pay roll, they are not given anything.

Students will have difficult time learning from such an environment that is aggressive. Sivotwa et al. (2014) and Kereng (2014) in their different studies on the Faculty of Business at the University of Botswana explicate that payments of subsistence allowances to students is the discretion of the host organisation but Kereng (2014) further explains that except in very special cases are companies obliged to remunerate students. This shows some flexibility and some consideration about the students' welfare by management during industrial training.

Mrs Tuan also explained how students are treated in some of these companies where students are accused of the things that they did not do. However, due to lack of IA places, students are forced to endure yet there will not be comfortable learning in the environment that is hostile to them as they will not learn much. This may affect students' learning and ultimately their IA results.

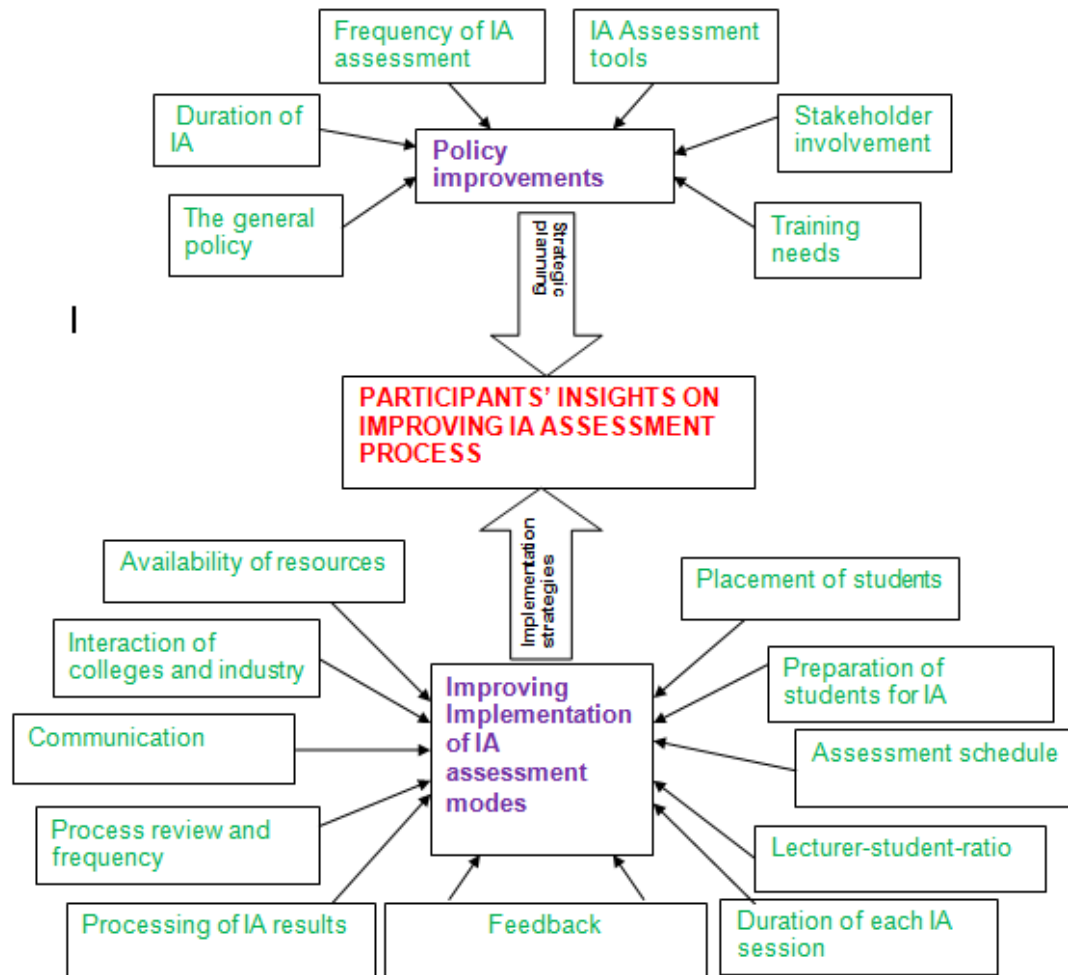
This section presented and analysed data gathered from lecturers, supervisors, external assessors and focus groups. It has emerged through various responses that IA assessment has both a positive and a negative side. IA assessment has been hailed for its strengths and its relevance in the acquisition of technical skills in a properly administered procedure. Some assessors' experiences in the form of achievements, excitements and lessons gained were highlighted. Students also

narrated some of their experiences when they were assessed by different assessors and they had different views on the most and least effective assessor. Policy gaps that promote varied IA assessment modes were identified.

Short comings were pointed out and these were identified as supervisors lacking knowledge on assessment, lecturers' assessment not being of value, students short-changed, too much reliance on the Log Book and falsification of details in the Log Book. Inconsistent interaction of colleges and industry, lack of resources, threatened interpersonal relationships, ineffective communication strategies and unsupportive organisational environment were also viewed as impediments to effective IA assessment. Participants expressed that they have diverse views about the process of assessment during IA. Generally they concurred that the process of IA is marred with challenges which act against achievement of IA objectives.

The next section presented and analysed data on how best IA assessment procedures can be improved.

Under this research question, the main theme, sub-themes and their various categories have been presented in fig 5.4 below.



PARTICIPANTS' INSIGHTS ON IMPROVING IA ASSESSMENT PROCESS

Presented and analysed below are suggestions on the policy improvements.

5.6.1 Policy improvements

The CA framework suggests that learning objectives, methods, activities and assessment should be aligned (Biggs, 2003). Participants suggested that policies be reviewed frequently for activities and execution procedures to remain relevant to the desired outcome.

5.6.1.1 General policy review

Groenwald (2009) assert that good assessment requires being clear about mission goals, the standards to which you aspire and the criteria by which you measure success. It emerged through responses from the lecturers, supervisors, external assessors and policy makers that the current policy statements found in the syllabus and the Log Book should be reviewed in order that they provide clear guidelines on how IA assessment should be conducted. It was also suggested that there should be clear IA assessment objectives in the IA policy. In the CA framework, teaching and learning activities as well as assessment tasks are so aligned to the outcomes in a manner that helps students achieve those outcomes more effectively. Some respondents suggested that a course outline for IA should be included in the syllabus just like in all the other courses that are covered during residential learning. Mrs Tuan said:

Maybe also besides just having a list of process as a guide, a proper course outline for IA drawn from the syllabus could be attached to the top of the Log Book which is designed with the involvement of supervisors from the industry or other representatives especially from those companies that take students for IA and all other colleges.

This could be accessed easily for easy referencing rather than to spend time looking for the page with guidelines in the Log Book which most of the students said some supervisors never opened. This will also keep both students and supervisors reminded of what they are supposed to cover. It will also become easier for those college assessors and external assessors to quickly check on progress. The one from St Erics is detached but could be made more comprehensive and be attached to the Log Book. In addition to an IA course outline, a proper IA policy hand book should be designed. If this can be designed with appropriate stakeholder representation and availed to all stakeholders involved in IA assessment, a lot of positive results can be realised.

Another suggestion that was given by almost all respondents was the issue of regular policy reviews. It was pointed out that the current regulation states that syllabi are reviewed after every three years but this has not been adhered to. Mr Duly said:

Syllabus must be reviewed regularly according to policy review statements.

Although Mr Ben, one of the policy makers attributed inconsistencies in policy reviewing to lack of resources, this is important in keeping abreast with changes in the Clothing Industry. Gaddam et al. (2016) assert that there is need for the curriculum to move from the existing traditional training patterns to integrated curriculum through strong policies, meticulous planning and commitment towards curriculum reforms.

These suggestions on policies will help in providing proper guidelines as to how IA assessment should be done in order to produce a graduate who fits well in the world of work. Some looked at other specific aspects about the policy such as duration of IA, frequency of IA assessment, assessment tools stakeholder involvement and assessors' training needs.

The duration of IA is discussed next.

5.6.1.2 Duration of IA

Most of the respondents indicated that twelve months IA duration is adequate for students to learn from several departments in the Host Industries and in order for them to understand what really transpires in the Clothing Industry. Mrs Treck said:

I think the period of twelve months is fine because it exposes students to all the machinery and departments in the company.

This concurs with Mr Ben's assertion that the current twelve months was reviewed from the previous eight months after industry had identified some skills gaps. Some lecturers and students indicated that they would appreciate the current duration if students are attached to companies that are willing to train them and these companies should take IA assessment as an important component of industrial training. In addition some said for the duration to remain as one year, guest lecturers

should not assess students and their lecturers should spend adequate time with students.

Mrs Josh felt twelve months was too long a period and she suggested that four months would be adequate considering the amount of learning that students are exposed to in those twelve months. She also cited the expensive life that some students are exposed to which most of them cannot afford. Students also pay tuition fees during IA so she suggested a shorter duration. This concurred with some of the students who felt that twelve months are just too many. Trish said:

I spent most of the time either trimming threads or pressing so what is the twelve months for. It should be reduced unless there is a shift in the manner in which both lecturers and supervisors assess. IA is a good program but if I do not gain anything in twelve months then we are wasting time.

It seems most of the respondents felt that the duration could make much more sense if the program itself is revamped so that students really benefit from it. They seem to appreciate the need for students to acquire industrial skills but this should be done effectively. If not then twelve months is a sheer waste of resources to many students. One suggestion from the study by Karunaratne and Perera (2015) is that a period of six to twelve months is most applicable whereby within the first three to six months students will be doing overall training and the rest of the time will be used for specialised training. This indicates that a longer period is beneficial and is more effective if what students are doing is meaningful.

Only one lecturer at St Erics College suggested that duration of IA be reduced to four months because it is very expensive for students who also pay fees at college during IA. Some respondents feel that the twelve months duration is adequate. Empirical studies endorse a longer period of industrial training for the acquisition of new skills and knowledge needed for the world of work (Andoh et al., 2016; Howard et al., 2014; Karunaratne & Perera, 2015; Chiyemba et al., 2012). The tone of the policy makers indicated that the industry determines the duration of IA basing on the skills gaps they would have identified that the students should close after graduating. Therefore, since Polytechnic Colleges train for the industry, it is imperative that they abide by industrial needs. It means the duration can remain twelve months unless and until industry sees otherwise but it requires more explicit, more meaningful and more beneficial tasks for students. Reviews from eight months to twelve months

according to the policy maker could infer that a shorter duration was no longer viable taking into consideration market demands.

Discussed next is frequency of IA assessment.

5.6.1.3 Frequency of IA assessment

Participants suggested that assessment should be done frequently. Some lecturers said that the first visit is mainly to assist students settle and to ensure they are properly placed so they would need the number of visits to be increased to four times a year. Mrs Tom said:

During first term we should visit our students twice. The first visit in term 1 should be for assisting students settle down well and ensure that supervisors are aware of what they are supposed to be doing. We will also be able to assess facilities earlier so that if there is need to remove the student from that company this is done whilst there is still time. The other visit during term three will be for checking if students have covered the required areas before winding off IA so that some grey areas may be identified and ironed out whilst there is still time.

So lecturers feel they need to keep all students on track therefore the need for more frequent visits. Mr Eno also concurs that frequent visits make supervisors and lecturers work closely so as to improve the training process. This will bring about a vertically and horizontally collaborated and integrated learning which helps in achieving IA training goals. One of the external assessors said the three assessments are adequate for external assessment but felt lecturers need to be engaged more than three times.

However, some lecturers at St Pauls College felt that three times is adequate if they assess their students as a department as they will have enough time with their students. Mr Edy concurred that three times are adequate so that lecturers are not overwhelmed with their teaching loads. However some supervisors and students did not see the worth of lecturers' visits so they are contented with the three assessments and not more. Mrs Ema said:

I might not know exactly how lecturers are supposed to assess but from what I see most of them doing, I do not think it is necessary to increase the number of times they come to assess students. Theirs is mainly to sign the Log Book so three times should be enough.

Most of the participants concurred that students should be assessed frequently than the scheduled three times per year. A few felt that three times are adequate as long

as assessment is done properly. Donkor et al. (2009) indicate that regular IA visits by lecturers are necessary in ensuring students are engaged in various aspects of work that are relevant to their occupational areas. This could minimize the chances that students are taken advantage of and used as cheap labour.

The next section presented and analysed data on assessment tools.

5.6.1.4 Assessment Tools

Participants suggested how they would want the Log Book be adjusted and they also suggested other tools that they would want to complement the Log Book for effective assessment.

Data on redesigning the Log Book is presented and analysed next.

Redesigning Log Book

Participants expressed that the Log Book should continue to be used but suggested that it should be improved. The Log Book has been described as having restrictive space so most of the respondents suggested that more space should be provided so that whatever is written by both students and supervisors is comprehensive and reflective of how much learning is taking place. Mr Duly said:

Log Books should be comprehensive; notes should allow the student to link theory and practice effectively, for linking theories and models. Log Books need to be explanatory for students can use these notes later in life if they want to produce something they simply refer.

Mr Edy further concurred that in order to improve the user friendliness of the tool there is need to clearly define the tasks to be measured hence the need for enough space in the Log Book. In addition, other respondents said the student should not only describe the processes but to also indicate new knowledge gained. Mrs Tuan said:

In terms of the Log Book, the individual student should highlight the new technologies that they gained during IA and be able to explain them. New knowledge gained should be a new component in the Log Book whereby the student specifies that I learnt this and this and this is how I did this on their own. Adequate space must be allowed for clear explanations by students.

Having expressed the need to define tasks to be measured, need for comprehensive notes, step by step description of tasks performed and new knowledge gained, several suggestions on how space can be improved were given. These include

increasing size of columns as adequate space will also allow informative evaluations to be done for the improvement of the whole IA assessment process.

Furthermore, a suggestion to have assessment forms independent of the Log Book was also given so that the students can be given back their Log Books after final IA in which no mark is written. If students are given back their Log Books, this can be a very important reference point when they continue with their course after IA. Students feel that their ability to describe processes would indicate how much they have gained than simply stating, therefore, they need adequate space to do that. Most of the lecturers suggested that the Log Book should be department specific and not college specific so that it is designed according to specific requirements for ICDC. They felt that instead of having different colleges using different ICDC Log Books, they would want it to be specific to ICDC but general for all colleges. Mr Toby suggested that if all lecturers from all colleges offering ICDC come together and come up with a common Log Book this will also make life easier for supervisors if they know students are assessed on the same aspects. Since the Log Book is used by students and supervisors, another suggestion was that both stakeholders be actively involved in redesigning the Log Book. With the experience they have in completing the Log Book, post IA students will be very helpful and can make very useful contributions in redesigning a Log Book. Mrs Treck also said:

Supervisors should be involved in compiling this Log Book, to hear their sentiments and also what they expect from us, from institutions. Maybe also to have workshops with supervisors together with students so that both will not face challenges in completing it.

Mrs Tom also suggested that industrialists from new and upcoming companies be engaged so that when using the Log Book, they do not face challenges. The purpose of the Log Book determines how it should be used. It is important that relevant people are involved so, for an ICDC Log Book, it has been suggested that ICDC lecturers should take the central role and can do it together with supervisors with an input from post IA students.

Most of the participants concurred that the Log Book be redesigned. Olufemi (2012) observes that across the globe paper Log Books are popular but digital Log Books are generally more advantageous as they give students more opportunities to upload files in many formats and presenting learning experiences in many other ways than

writing. Digital Log Books enrich the document and make explicit things learnt especially where different techniques and methods have been used for a process or procedure to be complete (Ibid). This implies that the problems of little space in detailing concepts covered can easily be resolved and also given the requirements of technology in the global world, it will be easier to track progress during IA.

Although the Log Book was black painted by most of the students, lecturers, supervisors and external assessors, it is still considered a good instrument which can be improved and used alongside other assessment tools. This means that a Log Book is still an important tool which needs to be revised and complemented with other assessment tools. This is important in that it removes the bias and over reliance on supervisors' mark.

Presented next is data on complementary tools.

Complementary tools

All respondents suggested other tools to be used together with the Log Book in order to adequately measure students' performance. Most of the respondents suggested that students should write IA reports. Some suggest that supervisors write reports too. Some lecturers at St Erics College suggest that the reports that their students write be marked and marks be combined with the Log Book marks for the final results. Mrs Jerry said:

They can write reports as they used to do in the past which we can mark and consider for final mark as well.

Kereng (2014) even indicates that students in the Faculty of Business present a report to the faculty with specified length and quality. Bindura University of Science Education and National University of Science and Technology in Zimbabwe require students to submit internship reports as one of the assessment tools for their internship programs. Merwe (2013) asserts that guidelines on areas of focus when writing reports are outlined in the IA policy documents that are used as rubric for marking the students' work. So reports were seen as a vital assessment tool to be used during IA. Mr Eno commented that as supervisors, it will be easier for them to write reports than completing the Log Books which they do not have time for.

In addition to the IA assessment reports, some suggested that since students have been doing presentations for the project where some items made during IA are presented, the mark should go towards IA assessment mark. Mrs Jerry also suggested that students can prepare portfolios which they can also present either at the company or at the college so that the portfolio mark and the viva/voce mark are combined with the Log Book mark. She said

Students can be asked to make portfolios which they present either at the company in the presence of a lecturer or at the college in the presence of an industrialist in the middle or at the end of the IA program.

This concurs with Wallace et al. (2009) who suggest that students can make oral presentations at the company and on returning to university. This shows how much value is being placed on presentations as the students can really display how much knowledge they have gained through aspects being presented. Mrs Jerry also suggested that marks can be calculated from the Log Book and then combined with the report and presentation marks each with its own weighting.

On the portfolios proposed by Mrs Jerry, Julie added that these should be checked upon by lecturers when they come for assessment and supervisors should sign to show that all work was done at the company. According to the report by the African Union (2007), students should be encouraged to build a portfolio of projects undertaken or items produced of evidence of proficiency and proof of ability to perform prescribed profession tasks. Hence, in order to adequately measure students' performance during IA, portfolios together with presentations can be very reflective. John also suggested that the files that students prepare should also be marked. He added that the practical projects that they are given as an assignments be collected each time the lecturers visit as a measure to ensure all students construct their own items as some of them task other people to make the items for them. Jullie concurred that having the file assessed will compel supervisors to give them time to work on samples of several processes done in their companies.

As a solution to the restrictive spaces in the Log Book, Jill and Mr Duly suggested that a separate book should be used to actually describe processes that have been logged in the Log Book. On the same issue of space, Wallace et al. (2009), in their

study recommend to students that they develop their own on-going portfolios of evidence to show what they have achieved at certain levels in skills development during their work placement. Groenwald (2009) asserts that while data sources such as diaries and portfolios are recommended, observation is also important. This shows that it is equally important to observe students perform some tasks so as to confirm how much they can do because some may do the tasks very well but may fail to describe them fully in their write-ups. Again, as already alluded to by John, some students may not be the ones who will have produced those items so observations ascertain honesty in students and prevents falsification of details in the Log Books as well.

Mrs James also suggested that interviews can be used on what the student has really done and she said this can be more reflective than a Log Book. Some proposed a questionnaire as an assessment tool that complements the Log Book. Mrs Tuan said:

Even a questionnaire will do which is kind of open ended. This can be a tool that complements a Log Book.

It was suggested that reports, presentations, portfolios, files, practical projects, samples, a separate exercise book, interviews, questionnaire and observations can be used to complement the Log Book. It was also suggested that the Log Book be revised so that it measures what it is supposed to measure. Electronic Log Books too are also worth considering in this era of technology.

Next is data presentation on stakeholder involvement.

5.6.1.5 Stakeholder involvement

It was suggested by a number of lecturers that there is need for colleges to be well represented during curriculum review sessions so that issues from each college are considered. Some suggested wider consultations through questionnaires which should be analysed critically and considered for curriculum modifications. Mrs Jack said:

All institutions must participate in these reviews by forwarding areas we feel need review. All suggestions should be put together and if there are queries with some issues, they should come back to us or cross examine with other colleges before they make final decisions. We need to reach a consensus because we are the ones who use these documents.

An important suggestion was also raised that representatives can check with other colleges how they view certain issues raised by other colleges. In addition some suggested that if students write reports which include suggestions and recommendations, these could contribute significantly to curriculum issues. Mrs Tuan added that lecturers at St Pauls write reports on every student assessed including strengths and recommendations which could be very helpful in curriculum reviews. Groenwald (2009) asserts that assessment fosters wider improvements when representatives from across the educational community are involved.

The policy makers held that involvement of the industry in policy issues is important as alluded to by Mr Ben that it is the industry that determines the skills and competencies that the students should be equipped with in order to be relevant to the world of work. Owusu-Mintah and Kissi (2012) posits that the involvement of industry in the design of the curriculum would ensure their satisfaction regarding the type of training to be provided to students.

The next section focussed on assessor's training needs.

5.6.1.6 Assessors' training needs

It has emerged that for assessors to assess effectively they require some training and some staff development programs. Bottner (2009) concurs that supervisors play a central role in any successful IA programs and for this reason, training them, prior to the internship ensures a more productive experience overall as expectations are laid out clearly from the beginning. All respondents concurred that most supervisors need to be trained on how to assess students specifically on the awarding of marks in the Log Book, the tasks that they give to students, feedback and how to treat students during IA. Some suggested that both new and old assessors need some training. Mrs Josh said:

New supervisors can be trained on how to assess and even the experienced ones need refresher training time and again. I feel it is worth investing in industrial training for a properly trained workforce that can make a change towards the development of our nation.

Some respondents suggested that workshops be held in order to make supervisors aware of the importance of IA and to educate them on the purpose of lecturers' visits to the companies where students will be attached. Mrs Tuan added that this can start

with a few representatives at national level who can cascade the information down to the rest of the workers. Mr Ben concurred that:

As the economy revives we should engage the industry more and train the supervisors, at least if we train one person per organisation on how to supervise these students on IA. Right now we are leaving it to good faith I guess.

It was also suggested by supervisors that workshops can be conducted either in colleges or at companies. McNamara (2011) also proposes that the institution may provide some guidance as to what is expected where workplace supervisors are involved in assessing students such as providing them with information on the assessment policy. Mrs Ema suggested that supervisors can be involved in these workshops either as participants or as facilitators. On the same note Mr Edy felt that only new supervisor should be identified and inducted. In addition, policy makers responded that they can even offer support by facilitating in the capacity development programs as they acknowledged that the Clothing Industry has many people who do not know how to assess students on IA. McNamara (2011) asserts that an alternative to a list of skills and performance objectives would be to use standard criteria in relation to expected professional competencies.

Not only supervisors were said to require some knowledge about assessment but lecturers as well. It was suggested that lecturers should be attached to the relevant fields as a staff development process. Mr Duly said:

Lecturers should go for IA themselves, for example, two weeks during vacations to keep abreast and to give our students relevant materials as they are divorced from industry. When lecturers go for industrial visits they should identify what is new, come back and research then teach students.

If lecturers need to up their skills through some IA, it follows that lecturers from other fields will not assess ICDC students. It was also suggested through Mr Duly's response that lecturers also need to engage in research work so as to align their content and methods (Biggs, 2003) with what is happening in industry. Some respondents also suggested that lecturers need to be trained so that they change their attitude for effective assessment.

Some training needs for students were also identified such as attitude and communication skills. Mr Duly conceded that even if some students are given menial

jobs, some of these are done in good faith. This shows that there are different views concerning the duties given to students. Although this may not be in the curriculum, it is an essential component as students also need to appreciate working in a clean environment. In addition, Mr Eno and Mrs Ema complained of students' lack of proper communication channels with Mr Eno actually saying that some students tell them in their face that they did not go to industry to work as labourers. It was therefore suggested that colleges should train students on communication so that they work well with their company assessors throughout IA. This follows that students need to change their attitude and have a more positive mind toward IA. Gumbe et al. (2012) comment that cooperative trainees must not be difficult to work with, thus, should allow the trainer to show them the right way or correct procedure of doing things.

It was also deemed important to have students thoroughly inducted on the completion of the Log Books through workshops. Joy saw the need then to have students, lecturers and supervisors inducted together. She said:

There must be workshops for supervisors and students together with lecturers so that each one knows what to do in terms of assessment. Some lecturers asked to see what we were doing, some didn't. Some supervisors asked us what they were supposed to do with the Log Book yet they were the ones to assist us. I also did not know what to write in the log book so these workshops are very important.

Muchemi et al. (2013) suggest that the host organisation should assign a supervisor, preferably a professional in the students' occupational area, to mentor, supervise and assess students. In addition, Bottner (2009) suggests that supervisors may require guidance on managing interns which could be covered during in-house training or through a supplementary leadership training session carried out by a third party. They can be trained in person or they can use online training strategies for certain activities and can be used privately with no time constraints. ACT (2011) also sees the need for assessors to be sensitive and constructive because any assessment has an emotional input. This will help in simplifying all the complex aspects of the Log Book and providing every stakeholder with a clear structure of what should be assessed, exhibiting assessment activities in a professional manner.

It was suggested that supervisors need proper training through workshops and seminars. Lunes (2014) asserts that good assessors possess up-to-date industry knowledge combined with an understanding of the principles of assessment such as relevancy, transferability, and ability to apply those principles to the assessment process. It also emerged that lecturers need staff development through workshops, researches and to upgrade their industrial knowledge through IA so that they assess effectively. Students also need training on attitude, communication and completion of the Log Book. This therefore means all the three parties, the student, the lecturer and the supervisor needs some training of some sort in order for IA assessment to be done effectively. This will bring an improvement of various assessment strategies as presented in the next section.

5.6.2 Improving implementation of IA assessment procedures

Having suggested how policies should be reviewed in order to inform the implementation process, respondents suggested how they would want to see the implementation of IA assessment strategies change. Groenwald (2009) argues that the methods of work-based assessment should target the action level. Suggestions were therefore made concerning placement, induction, assessment schedule, frequency of assessment, lecturer-student ratio, duration of each IA assessment session, feedback, processing of IA results, process review, communication, interaction of colleges and industry and availability of resources.

Data on placement of students is presented and analysed next.

5.6.2.1 Placement of students

Participants expressed that students need to be placed in companies where they gain the required skills and competencies. Some of the lecturers suggested the need to assess companies especially the upcoming ones for their credibility to train students effectively. Some suggested a thorough audit of companies that have the capacity to training students and to recommend students to take up placement in those companies. Bukaliya (2012) also agrees that credible organisations should be approached by the university to offer places for interns. There should be an audit of these organisations to establish the level of personnel qualification (Ibid). Some lecturers recommended that students should move to other companies in search for the right skills and competencies if no proper learning is taking place. Mr Toby said:

When lecturers discover that there is a skill at company A which is not at company B they should advise the student to transfer to this other company. This is allowed and it is there in their regulations that they can change companies two times that is, they can be to three companies during their IA period.

Mr Edy discouraged lecturers from engaging students in these backyard companies as well and urged them to assist students to secure IA places. Bukaliya (2012) concurs that in order to gain maximum benefits from internships, the institution should accredit and recommend suitable companies for internship. Almost all lecturers concurred that students should not be allowed to go to back yard companies and there should be no compromise on this aspect if IA is to yield desired outcomes. Mrs Tom explained that even if good companies are few, there should be no negotiation on this. She said:

Students to be attached to credible companies and there should not be a compromise. Even if these credible companies are few, if companies acknowledge their role in training our students am sure they can even take more students and we will not have problems.

It is now a matter of college-company relationship that will spur companies to train many students. There is need for effective collaboration between these two entities for an easy and smooth placement process. CA theory is learner centred so that the student does the real work therefore lecturers should ensure students are placed at workplaces where there are adequate facilities to support student learning.

Mr Duly and Mrs Treck concurred that colleges can start their own production lines since most of them are better equipped than most of these companies. This will solve problems of shortage of IA places and also will allow students to be exposed to better learning environments.

Next is data presentation and analysis on the preparation of students for IA.

5.6.2.2 Preparation of students for IA

Karunaratne and Perera (2015) assert that it is generally accepted that students should be well guided for their internship programs so that they can understand the university expectations and the expectations of the industry training provider as well as the trainees' expectations. It was discovered that both Polytechnic Colleges induct their students prior to IA but suggestions were that they should be adequate

time allocated to such sessions so that students, most whom induct their supervisors are conversant with the assessment tools. Some respondents felt that students should be familiarised with other assessment tools and assessment rubrics as well. Mr Tom said:

We need to take induction seriously and allocate adequate time so that we go through all the assessment tools with students. We need to demonstrate to them how to complete the Log Books. We also need to introduce them to other assessment tools and how they will contribute to the assessment mark.

It was also suggested that students be cautioned about their behaviour and attitude towards work. Some said the post IA students can role play different scenarios of the various challenges that students face during IA. Mrs Treck said:

We can make use of students who have IA experience to equip other students with work experiences. Some had very nasty experiences while others full of success stories so other students will go there prepared and they will go there with an idea of what industry is like. By sharing suggested solutions can help many of them to survive industrial pressures.

This can be very helpful and will assist them to know how they can respond when faced with similar situations. With the same view as Mrs Treck is Wallace et al. (2009) who assert that if facilities exist, the group that returned from IA could be brought back for a week during the first year to allow for an exchange of views and experiences. Students would learn from each other, become more aware of what to expect and what to be gained, and will be determined to get the most from their placement.

On the other hand suggestions were that companies should not just do casual introductions but should really take students through work ethics and health and safety issues among other things. Mrs Josh said:

In the companies I think managers should assist students settle comfortably and adjust to the new environment. Some students do not even know what is expected of them at work, things like work spirit, behaviour, workshop rules and regulations. They should know all these things so that they take IA seriously.

When properly inducted, students quickly adapt to the new environment and they will not be taken by surprise when some of these things happen. They will also be prepared to work within the confines of the company rules and regulations for easier assessment processes.

It was suggested that both the institutions and Host Industries should up their efforts in preparing students for the new work environment. Wallace et al. (2009) suggest that a period at the university, before the start of the academic session bringing together students to share experiences is to be welcomed. Students need thorough orientation on the assessment tools they will be using, life skills and problem solving techniques. In addition Wallace et al. (2009), posit that during induction students should be made aware of their specific objectives and work programs, when and whom to report to, definite boundaries and responsibilities with their supervisors, how performance will be assessed and to be frank about errors with their work considering accuracy, reliability and significance of their own results.

Presented and analysed next is data on assessment schedules.

5.6.2.3 Assessment schedule

Supervisors suggested that institutions should come up with a common assessment schedule since these students are doing the same course using the same syllabus. Some expressed the need to design the program together with lecturers so that they infuse both company and institutional programs, hence a vertically and horizontally integrated curriculum. Mrs Ema said:

Colleges should appreciate that we provide what we have so they should design their schedules with us because when students come I prepare my own schedule which suits our situation here.

This will also ensure that students do not spend most of their time on production or doing menial jobs. Tandy commented that leaving companies to come up with their own programs will leave them to be treated as machinists throughout the year so to them it is important that both supervisors and lecturers draft the program together. Students also strongly felt that there must be a program that should be adhered to by companies so that they benefit immensely from IA assessment. Some students suggested that they should be involved in coming up with the training program as well for ownership. Some also expressed the need for lecturers to forward the programs to companies in advance for planning purposes. Tessa said:

The list of tasks in the Log Books should be extracted as a program which should be sent to companies before the start of IA so that companies plan head. The problem with keeping the tasks in the Log Book is that supervisors do not use the Log Book unless I ask them to sign otherwise they take it as

my own document which is there to guide me and has nothing to do with them.

This means that those supervisors who do not refer to the tasks in the Log Books will now have the programs at their disposal at all times. If the program is sent to the companies well on time, student training may be taken seriously. Some of the students also suggested that college assignments be given in written form and also be sent to companies so that students will not be denied time to work on them. Some suggested that these assignments should be divided into three sections so that lecturers assess them each time they come for assessment.

Although most respondents felt IA is all about discovering new things they also believed a program is necessary. Jill said:

IA is an expedition, a journey of discovery so there is need to have a guideline on how you are supposed to travel throughout IA. This schedule is necessary in that it contains the activities that if possible you must cover.

Mr Edy added that there must be a program that ensures students cover all departments. In support of this view students in the study by Karunaratne and Perera (2015) suggested that they needed proper training schedule to cover all departments of the company. They also indicated that they needed more time to apply theoretical learning into industrial activities, freedom to work independently, proper evaluation and feedback from the company. This entails that with a proper assessment schedule, students will be exposed to a number of learning experiences. In addition, Bottner (2009) proposes that interns must also be allowed to pursue opportunities outside the program such as observing presentations relevant to specific duties, attending lectures by experts on areas of interest, participating in internal and external training programs, networking at professional events, joining social group outings and volunteering.

In CA, teaching and learning activities are suitably aligned as well as the assessment tasks to the intended learning outcomes. Therefore, the instructor should specify the desired learning outcomes in terms of topic content with clear assessment tasks that reassure students are on the right track to reaching their goals (Biggs & Tang, 2011). Concerning the visiting dates and times, supervisors and students felt they need to be informed so as to prepare fully for the assessment exercise. Tessa said:

We were not told when lecturers were coming but I feel we need to know so that they are not denied entry into the factory. Sometimes we will be very busy with production and we do not have time to tell our lecturers the challenges we are facing but if we know and if supervisors know, they will release us.

Supervisors also said if lecturers come when they are very busy it will be difficult to accommodate them but if they tell them they make prior arrangements or they can negotiate on shifting assessment dates. While a few lecturers agreed on notifying the companies, most of them still felt that they need to assess students in their normal working situations. For external assessment, all categories concurred that there is no need for them to announce their visits.

It was opined that there must be a program that should be used in industry so that students have an equal chance to be assessed in every department. It was also suggested that both students and supervisors should be involved in coming up with the training programs. Also that separate lists of tasks should be sent to companies and that the schedule should include assessment of assignments and files by lecturers during IA. Concerning visiting timetables, there were mixed feelings with some saying it should be given to companies while some saying it should remain anonymous.

Data on lecturer-student ratio is presented and analysed next.

5.6.2.4 Lecturer-student ratio

Some participants suggested that the number of students to assess be reduced to three or to five per lecturer per session. However due to various circumstances the ratios could vary. Some suggested that if there are many students at one company, they can be assessed as a group then individual attention will be given when analysing Log Books. Mrs Treck said:

... if under one roof you can assess all of them because students will be in the same environment learning the same things.

Even though, group assessments may only work when giving feedback but where it has been suggested that lecturers should assess students' projects and tasks that they will be doing, there might be a challenge of group assessments. Some suggested that IA assessment visits should be rotational. This will help so that the same lecturers will not assess the same students throughout the year. However Jill

felt that no matter how many students there are, given adequate assessment time and good incentives, lecturers can still do a good job without being fatigued. He said:

There are so many factors that come into play such as where the students are placed and the number of students on attachment, also the number of lecturers excluding those from other fields but I think if they are given enough time they can assess as many students per trip.

Respondents suggested that the number of students to be assessed by each lecturer should be reduced but may vary depending on circumstances. Some respondents proposed a rotation so that at the end of the program they will all have assessed the same number of students. This however may pose challenges of continuity if assessors keep changing and follow up on issues may be difficult. Maybe assessment critiques by each lecturer who visited previously may assist the next assessor. It was also suggested that if there are a number of students in one company, they can be assessed together as a group and then the lecturer will check the individual projects and Log Books. This could reduce the workload associated with assessing many students for effective assessment.

Presented and analysed next is data on duration of each IA assessment session.

5.6.2.5 Duration of each IA session

Some participants suggested that the duration for assessment should be increased to between thirty to sixty minutes. Some students even felt each assessment session could take up to two hours so that lecturers get time to look at the work that they have already done and even to observe them working on some processes. They also explained that adequate time will allow lecturers to discuss issues on skills mastery and not just questions on treatment and their general welfare. Trish said:

We want lecturers to see us perform some of the tasks and this will make supervisors give us some work to do rather than to sweep or cook all the time. So one or two hours will do, even whole day.

The fact that lecturers do not spend adequate time assessing students, supervisors may not give students meaningful tasks to do. Some students expressed that there should be adequate time for lecturers to assist them and not just to concentrate on the Log Book only. Lecturers also felt that they need adequate time to tour the company, assessing company facilities and have fruitful discussions with both students and supervisors.

Although duration may vary depending on a number of factors as alluded to before, most of the respondents felt that it should be increased from the five minutes some lecturers take to a reasonable period. Mrs Ema acknowledged that they can be very busy when lecturers visit and may not give them much attention but they may spend as much time with students. Some lecturers suggested IA assessment that can take some weeks but because these lecturers have others duties at college this may not work unless proper planning is done. Jude suggested that colleges should be more supportive and release lecturers for a reasonable period of time. Some students also suggested that because they pay fees that money should benefit them fully by giving lectures all the financial support that they need. They felt that they could not spend the whole year out there with all the challenges that they encounter and come back to college empty handed. External assessors also indicated that they require a longer period as the days allocated to them are not enough.

While most respondents concur that supervision time should increase, some students felt otherwise. They view lecturers' assessment as not valuable at all so to them increasing assessment time will not benefit them at all especially if they are still to be assessed by lecturers from other fields. Truth said:

Only if they are serious with the way they assess us should the duration increase otherwise they are not interested in our work so why should they spend more time with us, they can even just phone to check on our well being like they do when they visit us.

Most of the participants suggested that assessment time should be increased. Time was given in ranges as it was noted that there were a lot of aspects that determine the actual time to be taken. Bottner (2009) in his study says the National Mentoring Centre recommends that mentoring partners interact for four to ten hours per month for face-to-face mentoring while e-mentoring programs recommend thirty to sixty minutes of on-time interaction or communication per week. However, some students felt it is not worth the while having lecturers taking more time assessing them.

The next section presented and analysed data on feedback.

5.6.2.6 Feedback

Feedback has been identified as a very important aspect of the assessment process. Some lecturers attributed lack of feedback to inadequacy of time so they suggested

that there should be enough time to really look at students' work, listen to their challenges and give constructive feedback. Mrs Jack said:

We need more time so that we are able to give feedback to students after assessing them. We should pay attention to their concerns and be able to assist them.

Tandy also concurred that lecturers always come in a hurry so they need adequate assessment time to be able to give feedback. Some students said lecturers give feedback but no follow-ups are made on issues raised in the previous assessments. Mrs Josh suggested that supervisors should also give constant feedback so that students are guided on every process they do. Mrs Jerry concurred that feedback should come from all parties. In addition, Supervisors admitted that they should also give feedback, but advocated for some behavioural and attitudinal changes by some students.

On the other hand students felt supervisors should be made to understand the purpose of IA so that they find feedback being beneficial to their learning process. Jude said:

If supervisors understand what they are supposed to do, they will give us feedback. So training for them is not important because we are kept doing menial jobs like trimming thread and cooking. So if they know feedback is required, they let us do the processes that are beneficial to us as well.

Furthermore some students suggested that lecturers from other fields should not assess them because they do not have much to report on. Lecturers also concurred that guest lecturers should not assess students in ICDC because they cannot give meaningful feedback. Mr Dave, the external assessor said they give feedback indirectly in the form of reports and these reports should be availed to all stakeholders concerned. It was also implied that reports be written per department so that issues pertaining to ICDC directly benefit the department. Mr Toby also suggested that feedback through IA results should be given timely. This will enable failing students to repeat IA the following year. In other words, reports from external assessors should cascade down to appropriate departments and IA results should be published the same year IA is conducted.

The CA theory explains that the assessment of professional competencies is important in order to provide feedback to students on their performance in the workplace (McNamara, 2011). Adjei et al. (2014) acknowledge that knowledge of

results and feedback provides objective information regarding the adequacy of one's performance. Feedback has been identified to be of critical importance as it gives pointers as to whether objectives of IA will be met or not. Strengths and weaknesses are established and problems rectified timeously. Therefore continuous feedback is important and it should be given frequently so that students do not relax or go astray. ILO (2014) asserts that more transparent feedback mechanisms should be encouraged so that mutual improvement is established. As a way of giving feedback, Howard et al. (2014) propose that the institution should organise a post industrial training program seminar for their students to share their work experiences and give feedback on their attachment. This entails that collaborated feedback with post IA students will have more weight in informing the steps to take in the assessment of the next groups.

Feedback usually spells out the success or otherwise of the student's ability to acquire the related skills or experiences of the workplace. Adjei et al. (2014) suggest that feedback in workplaces be based on assessment of reports by both supervisors and lecturers, and also from the written reports by the student intern after the completion of IA. McKenzie et al. (2015) suggest that to create good feedback, learners need to be directly observed, provided with clear goals and outcomes and that the assessors must be able to provide positive and negative feedback. Additionally, knowledge of both self and environment, realities on the ground and continual feedback are meaningful indicators that will help the student interns to make informed decisions as to whether they have attained a 'fit' or consistency with their career choices (Adjei et al., 2014). This process is a reflection of action and must be considered seriously. As a result, feedback should be given frequently and timely. Both lecturers and supervisors should give feedback but lecturers from other fields should not be allowed to assess ICDC students.

The next section presents and analyses data on processing of IA results.

5.6.2.7 Processing of IA results

It emerged that most of the lecturers require some knowledge on how IA assessment results are processed. Some suggested that they need some staff development programs. Mrs Treck said:

It is not fair that we assess students but some of us do not know how these are processed. We want to be staff developed on IA results even if we are not involved in the actual exercise.

Some lectures at St Pauls College felt that since LICs who are involved in computing IA marks rotate, every lecturer in the department should be staff developed. Some lecturers at St Erics College also felt that processing of IA results should be clear to everyone involved in the assessment process. Concerning the results themselves, some lecturers at St Pauls College felt that the use of supplementary Log Books was a better option as this allowed students to have their results the same year they complete IA. If students wait for another whole year to get their IA results, they may not see the impact of their results.

It has been revealed that lecturers be educated on how IA results are processed so that they get to understand some ratings done by supervisors and how these affect the final mark. Chinyemba et al. (2012) posit that there should be a mechanism to moderate marks given by industry supervisors because some of them have negative attitudes towards students and some are under qualified to give meaningful marks. Wallace et al. (2009) concur with Chinyemba et al. (2012) that supervisors marks are often much higher than academic marks and scaling process may have to be used. This will assist in getting more real marks than what students currently get. It was also established that IA results should not take too long to be released as is the current scenario.

The next section focused on process review.

5.6.2.8 Process review

Participants expressed the need to conduct process review exercises. Some lecturers suggested that reviews should be done at the end of every year at institutional level and those that are done at national level be done after every three years. In addition, suggestions were that reviews at college level should be done per discipline and not for the whole college so that outcomes are relevant to individual departments. Mrs Josh said:

IA should be looked at per course and not per all TVET subjects because what can be a challenge to the Clothing Industry can be an opportunity to some other subject areas so IA assessment should be crafted to suit a particular trade in terms of duration and assessment criteria.

In support of what Mrs Josh said, some respondents suggested that reviews should include departmentalising Log Books so that everyone in the department understands it and that it should be designed by lecturers perhaps with contributions from supervisors and post IA students. Mr Duly also suggested that external assessment reports be course specific. In addition, Mr Bill suggested that students should also write reports as these may benefit the system.

Another aspect that lecturers said require immediate attention is the issue of guest lecturers. Mrs Treck suggested:

Lecturers from these other departments should not assess our students because they do not have the know-how. Am comfortable with lecturers from my department but we should rotate, not having one person going to the same company over and over again.

Mr Edy suggested that reviews should consider coming up with some guidelines in the form of a booklet that all stakeholders can constantly refer to in order to be guided in all the IA assessment processes. He further suggested meetings after each IA period so that lecturers and supervisor deliberate on important issues that can keep IA assessment as a program worth undertaking.

It was also suggested that policy reviews be done more frequently both at national and institution levels so as to correct anomalies identified about assessment procedures during IA. Groenwald (2009) says a good assessment is on-going and not sporadic, it is about continuous improvements. According to Bukaliya (2012), students felt that there should be careful examination of feedback from employers and interns followed by the modifications of the internship program accordingly.

Applying the CA approach to IA emphasises the need for reflection to be integrated when designing learning programs. It is important to design activities and programs to determine whether a program has achieved its stated objectives and outcomes and make a judgement of its merit and effectiveness so that the ICDC department employs relevant interventions (Timm et al., 2013). Kiplagat et al. (2013) asserts that objectives cannot be achieved unless training institutions review the ways in which IA is planned. At St Erics College the LIC OJET said they just recently revised the IA document as a college and the draft has been forward to the principal for approval. If process review is done at institutional level, there is nothing to prevent subject-level audits as well so that IA assessment procedures can be looked at in depth (Timm et

al., 2013). This will ensure allocation of sufficient resources according to good processes in order to produce good results. This is very important if it is done frequently so that all the practices to do with IA assessment in ICDC remain relevant.

Presented and analysed next is data on communication strategies.

5.6.2.9 Communication strategies

Some of the participants expressed the need for effective communication during IA assessment. Some lecturers expressed the need to communicate their visiting timetables so that they can be accommodated fully for effective assessment. Both supervisors and students echoed the same sentiments that they expect lecturers to communicate their assessment dates. John said:

Lecturers should communicate with companies so that they are allowed to come on days in which they can be fully accommodated for the benefit of us students.

Most of the respondents suggested that lecturers can use telephone calls or emails to communicate the weeks or dates they intend to visit. However Mrs Tuan still felt that even if they are to notify companies of their visiting dates they may not need to tell the supervisors or students the exact dates but perhaps just the period for example from the 21st to the 30th of April.

Trish also contributed by saying that companies should phone institutions immediately if there are any acts of misconduct rather than to wait for lecturers' visits after four months. On the other hand Mrs Ema urged students to communicate their intentions of being absent or when they are not able to come for work. Mr Eno concurred that:

It should be emphasised to students before they leave college that communication is very important and they should follow the proper channels.

External assessors concurred that the issue of communication should be addressed so that students get the best from their supervisors. According to Wallace et al. (2009) what this means is that the students need to develop or refine a number of skills so that they are prepared for the industrial context. Supervisors are said to require some basic communication skills to enable them to write meaningful remarks and ratings in the Log Books. Some lecturers felt there is not much communication between lecturers and supervisors during assessment visits therefore a suggestion

to have this improved by creating a platform for discussion and feedback. Some students suggested that lecturers should communicate the tasks students are supposed to cover by forwarding programs to companies in advance. Therefore, a program of tasks to be accomplished and the itinerary should be communicated to the companies before hand. Chinyemba et al. (2012) in their study show that there is need for attachment coordinators to communicate with employers on the assessment process.

Students also felt that the environment should enable them to communicate how they find their training program with their supervisors. It was suggested that supervisors should communicate well with students and resolve issues amicably rather than threatening them. Gumbe et al. (2012) propose that students should be able to say what they think and feel during training thus the ability to share their opinions with others. Effective communication was said to be very important for the achievement of meaningful IA results.

Data on interaction of colleges and industry is presented and analysed next.

5.6.2.10 Interaction of colleges and industry

It was suggested that there must be some synergies between colleges and industry so that the objectives of IA will be achieved. Karunaratne and Perera (2015) assert that establishing close relationship and understanding between the two institutes will create a flexible work schedule comfortable for the trainees that will lead them to achieve a wider scope of training and opportunities to learn more. Some respondents said that institutions should engage industrialists during induction sessions so that they can also give their input. Truth said:

Company representatives should take part during sessions that we are prepared for IA and they should be given some slots so that it will be easier for them to practice what they preach. So if there are strong ties with the companies life will be a lot easier for us out there.

Mr Edy suggested that company assessors can also be asked to teach some topics in ICDC as resource persons. According to Mr Bill external assessors are obtained from the industry therefore colleges can step up efforts to cement relations with the industry by inviting some industrialists to conduct lectures on some topics. This concurs with the assertion by Owusu-Mintah and Kissi (2012) that seasoned experts and resource persons in business and industry are invited to campus to take the

students through major daily activities in their businesses and industry. Mgaya and Mbekomize (2014) asserts that internship programs also enable organisations to establish links with universities through sponsoring some university activities or providing guest lecturers. Sangpikul (2009) also encourages the industry to sponsor research by students in tertiary institutions for the results to be used for the development of the industry. This may help to bring the two entities together for a vertically and horizontally integrated curriculum.

In addition Mr Duly suggested that colleges should organise symposiums so that industry can come and talk to students with students also asking about industry in preparation for what they will experience later during IA. Some said it is important to invite companies during graduation ceremonies and project presentations for students in colleges.

Emphasising on the issue of companies participating in college presentations, Trish echoed that companies can rotate as panellists during presentations so that all companies that take students for placement place great value on IA assessment. She referred to one of the subjects, History of Fashion (Code 555/15/S02) that requires them to provide company history that it should assist in reflecting on the nature of companies that should take students for placement. Mr Eno concurred and added that even if they are always busy they can create time if notified on time to attend to college events. Mr Edy suggested that lecturers should get feedback from the supervisors before placing the next group of students. He said:

Lecturers could just go back to the companies to evaluate together with the supervisor the assessment process maybe bringing out areas of improvement.

Mrs Tuan agreed that lecturers should be afforded time with supervisors outside assessment time in order to appraise each other on assessment issues. Mrs Ema suggested mid-year reviews where students on IA, lecturers and students reflect on IA assessment process so as to keep students on track.

It was also suggested that IA officers should keep good relations with companies that take students for IA and try and establish new ties with other credible companies. This can be helpful as students in other institutions in United Kingdom are well placed and have strong relationships with industry for research and/or placement opportunities (Wallace et al, 2009). Educational tours are also said to

bring colleges and industry together. Gumbe et al. (2012) support this by saying the faculty should establish good links with the companies in order to secure attachment for all students and create a database for all components. This will allow forward planning to occur and students will be placed and assessed at ease and they will acquire a lot of knowledge and skills. Donkor et al. (2009) observe that for IA programs to be effective, such that companies are always prepared to take on students for practical work, educational institutions must enter into partnerships with relevant organisations or companies. This serves as a wake-up call for Polytechnic Colleges under study to enter into partnerships with relevant companies.

In a study conducted by Adjei et al. (2014), students ascertained that their view in relation to the linkage between Polytechnics and industry was on the participation of industry in drafting and reviewing the curricular for Polytechnics. Muzenda and Duku (2014) concur that there was need to improve the link between universities and industry so that what is being taught in universities aligns with the needs of the industry so as to enable the universities to produce a holistic student with the theory and hands-on attributes of Clothing and Textiles. Policy makers identified industrialist through NAMACO as one of the stakeholders in curriculum reviews and their involvement does bring the two entities closer. However, supervisors can also participate in process reviews conducted in colleges so as to improve the delivery of IA and IA assessment procedures.

The next section focuses on availability of resources.

5.6.2.11 Availability of resources

One of the resources identified through interviews with lecturers, supervisors external assessors and focus groups is transport. Participants said that since transport smoothens the flow of assessment activities by lecturers it should be available when needed. Some lecturers at St Erics College suggested that the college should purchase more vehicles so that assessment schedules are not affected by other college events. In addition to that some lecturers at St Pauls College suggested that vehicles should be allocated to departments so that each department will have adequate time for assessment. Mrs Tom said:

There is need for the institution to purchase vehicles for OJET only so that we assess students as per our own schedule.

Mrs Tune also suggested that for local trips transport should be provided as well so that individuals desist from rushing through assessment in order to attend to their own businesses as this normally happens when lecturers go with individual transport. Concerning the transport issue, Mr Ben also suggested Private Public Partnerships (PPPs) as colleges or government alone are finding it difficult to purchase adequate vehicles for IA. He said:

I think institutions need more vehicles for IA follow ups. Honestly most institutions do not have the capacity to follow up on all students on IA. Most institutions do not have the capacity to fund OJET follow ups so I think there is need for a model to be developed between industry and training institutions where industry plays a role in facilitating lecturer movement. Industry is not in the best of its state but I think models can be developed where facilitation of OJET is not only left to the institutions or government but where PPPs can be done in terms of procurement of vehicles and in terms of facilitating hotel bookings for lecturers.

Mr Ben further suggested that the issues of accommodation for lecturers who go out to assess students be looked into as this may motivate them to assess students effectively. Concerning monetary incentives some lecturers at St Erics College suggested that there must be an allocation for local trips as is the case with St Pauls College where each lecturer gets \$10 each.

Another suggestion was that company assessors should be given an allowance for training students and that they should be incentivised by tax rebates and removal of tax on certain raw materials so that they conduct IA assessment whole heartedly. Mrs Jerry also suggested incentivising companies that take students for IA. Donkor et al. (2009) assert that there should be a way of compensating firms/industries for providing placement for students on IA. Although Mr Ben indicated that companies are given \$50 by the government for each student they train most of the respondents including supervisors themselves were not aware. Therefore anything that impacts on the students' learning during IA should be clarified to all parties concerned. However, Mgaya and Mbekomize (2014) consider accepting interns as an act of corporate social responsibility. According to UNESCO-UNIVOC (2012) ZIMDEF provides TVET institutions with resources for training, materials and equipment and infrastructure for improvement and expansion. It funds financial skills, upgrade courses from semi skilled workers and apprentice/training. These efforts by ZIMDEF must be harnessed in order for IA programs to be successful. Mrs Treck suggested

that ZIMDEF allowances for students be increased. In addition, Mrs Tom suggested that companies also give students some transport allowances and should provide them with lunches since most of them are not paying them.

Some suggested colleges can start their own production units and get their students attached where facilities are said to be better than those in these small back yard and newly established companies. Mr Toby said:

We should not allow our students to go to these backyard companies and we can have our production units in colleges.

Gumbe et al. (2012) concur that the same thing should happen where the University of Zimbabwe should have facilities for instance, a hotel school where students can learn all practical courses which are actually done at hotel establishments. This will ensure students are all attached on time and that they acquire relevant skills from these college production units which have better facilities. In addition, Muzenda and Duku (2014) say that teacher training should include the use of modern equipment so as to equip lecturers with skills needed in the delivery of clothing and Textiles. Infrastructure should be upgraded continuously in order to keep training institutions in tandem with the world of work.

Some suggested that students on IA should not pay tuition. This is in support of Gumbe et al. (2012) who say that some students felt there was no support of IA programs by the University of Zimbabwe and advocated that they should not pay tuition whilst they are on IA. As already discussed, some students do not have materials to practice with which may see most of them idle for the greater part of their IA time. Bottner (2009) is conscious of these problems that directly impinge on students direct acquisition of skills and competencies hence the suggestion that supervisors should ensure the intern has a work space, supplies, equipment, information, and any other resources needed to perform assigned tasks. If students do not pay tuition whilst on IA they may also be able to provide for the IA training program on their own.

Availability of adequate transport at the stipulated times is said to aide in conducting assessments as per schedule. It was also suggested that the PPPs can help ease transport and accommodation issues for lecturers conducting assessment among other support strategies. Incentives for lecturers, supervisors, students and

companies through tax rebates and removal of tax on certain products were also considered to be important in assessment issues. It has been expressed that if supervisors and lecturers get some form of incentives they work very hard, their attitudes change and they do their work whole heartedly. ZIMDEF allowances are said to help improve the training facilities and to cushion students during IA but it was suggested that they should be reviewed. Starting production units in colleges is said to circumvent the problem of poor, out-dated and inadequate training facilities in most companies in the Clothing Industry. Abolishment of tuition may allow students to purchase training materials during IA for effective IA assessment.

This section presented and analysed data on suggestions from various respondents on how to improve the IA assessment strategies used in the Polytechnic Colleges in Zimbabwe. It was revealed that there is need for policy improvements on the general policy through reviews which should be done consistently. An IA policy hand book was viewed as a very important policy instrument to be used during IA. It also emerged that the Log Book needs to be revised and that some complementary tools be used with assessment rubrics specified. Adequate and appropriate stakeholder representation should be considered. Assessors' needs were suggested through training and staff development programs. Furthermore implementation of IA assessment procedures was said to require improvements through considering placement procedures, induction, assessment schedule, frequency of assessment, lecturer-student ratio, duration of each IA assessment session, feedback, processing of IA results, process review, communication, interaction of colleges and industry and availability of resources. Alignment is central to effective assessment. It is therefore important to use the right procedures in assessing ICDC students during IA (Surgenor, 2010, Petorius et al. 2013; Biggs, 2003).

5.7 CHAPTER SUMMARY

To conclude this chapter, there seems to be overwhelming evidence that the strategies of IA assessment currently in use are similar at the two Polytechnic Colleges but are undertaken differently by lecturers within the same college and across colleges. Lecturers, students and supervisors perform some activities routinely but most of these are not written down as a guide for quality measures. A

number of issues were raised that militate against proper implementation of the IA assessment modes. Lack of clear IA assessment policy and lack of clear, specific, laid down IA assessment objectives have been identified as the major contributors to lack of standard of IA assessment strategies.

The Log Book that is used for assessment contains a myriad of issues that discredit it from yielding credible IA assessment results. Such a tool is said to be inadequate for measuring students' performance during IA.

Moreover, there are various opinions on the worthiness of IA assessment in ICDC. While the process has been deemed worthwhile, a number of issues need to be addressed. McNamara (2011) and Biggs and Tang (2011) clearly explain that components in the teaching system (methods), and assessment tasks should be aligned with the learning activities.

Lastly, in light of the CA theory, findings in this chapter seem to indicate that, despite phenomenal efforts by a number of stakeholders to fulfil the requirements of this course, there seems to be a lot of gaps in the design and implementation of the program. Lack of collaborative governance as well as unintegrated curriculum seems to be creating a lot of challenges in the assessment of ICDC students during IA. This suggests the need to adopt a vertically and horizontally integrated and collaborative curriculum.

The next chapter provides a summary, conclusions and recommendations.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapter discussed the research findings based on literature and the theoretical framework guiding the current study. In order to conclude this thesis, this chapter looks back, reviews the findings and results in order to draw the strings together critically. This chapter is divided into six sections. The first section comprises a summary of research findings. Section two contains the conclusions while section three focuses on contextual relevance of IA assessment. Section four presents recommendations whereas sections five and six present contributions to new knowledge and areas for further study respectively.

This thesis reports on the results of a qualitative study conducted in the two Polytechnic Colleges in Zimbabwe. The following are the main and the sub-research questions that this study sought to answer as well as objectives of the study:

Main research question

How is assessment undertaken in the Polytechnic Colleges in Zimbabwe during Industrial Attachment?

Sub- questions

- What assessment strategies are used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment?
- How user friendly is the Industrial Attachment assessment tool(s) used in the Polytechnic Colleges in Zimbabwe?
- How do respondents view the assessment process used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment?
- On the basis of the findings, how best can Industrial Attachment assessment procedures used in the Polytechnic Colleges in Zimbabwe be improved?

Research objectives

The study sought to:

- Unpack assessment strategies used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment.
- Assess how user friendly the Industrial Attachment assessment tool (s) used in the Polytechnic Colleges in Zimbabwe is.
- Explore the respondents' views on the assessment process used in the Polytechnic Colleges in Zimbabwe during Industrial Attachment.
- Suggest strategies that can improve assessment in Industrial Clothing Design and Construction in the Polytechnic College in Zimbabwe during Industrial Attachment.

6.2 SUMMARY OF RESEARCH FINDINGS

This section summarises the major research findings with regards to the IA assessment procedures for ICDC students used in the Polytechnic Colleges in Zimbabwe. Proceedings of this section are guided by the four research themes that were identified during data analysis and interpretation process. These are the clarity about IA assessment strategies, nature of the IA assessment tool(s) not matching the intended outcome, diverse views about the worthiness of IA assessment and participants' insights on improving IA assessment process.

6.2.1 Assessment strategies used during IA

Results on conceptualisation of IA, IA assessment and the assessment strategies are summarised below.

6.2.1.1 Conceptualisation of Industrial Attachment

IA has been regarded as a process that exposes students to the real world of work where they put theory into practise. Skills are enhanced and they become proficient in the use of different machinery and fabrics. IA helps students see the relevance of the abstract concepts they learn in the colleges. Students are provided with an understanding of the operations of the Clothing Industry in terms of factory layout, organizational structure and how to run their own companies. Students are able to associate with different kinds of people in the organisation. Behaviour and attitudes of students are constructed and reconstructed through their professional work experiences. Students can bring back a lot of experiences if their learning

environments are supportive. These include technical and managerial skills. Students acquire can a lot of social, technical and professional skills and competencies therefore proper implementation of the IA process will enable realisation of the intended learning outcomes.

Duration of IA

ICDC students are placed on IA for one year and this has been considered adequate for the acquisition of required skills and competencies. One year can be seen as a period long enough to allow students to rotate and visit all departments in the company and to allow them to move to other companies in search for other skills not found in their present companies. This could also cater for the unexpected eventualities such industrial strikes and shortages of company resources and even the annual events such as public holidays and company annual shut downs. However, the twelve months are not clear as to what they translate to in terms of expected learning hours. IA seems to be highly dependent upon the companies in terms of number of working hours. What happens when the students has not fulfilled the required duration is not documented making implementation very difficult.

6.2.1.2 Conceptualisation of Attachment Assessment

Results on what IA assessment is, assessment policy, frequency of assessment, assessment tools, stakeholder involvement and who the assessor is, are summarised hereunder.

What is IA assessment?

IA assessment is regarded as a process of checking on tasks performed by students and making judgements about whether skills and competencies have been achieved. Colleges set out processes which students are supposed to cover during IA. This entails that supervisors are guided by the information given to the company by the colleges. Industry simply bends towards what the colleges want which may cause implementation problems. IA assessment is about the ratings and marks written by supervisors in the Log Books on the tasks performed by students. Some results show that IA assessment is about the comments written in the Log Books and the signatures by different assessors. In another dimension, results show that lecturers do not assess students but company facilities. IA assessment is also a process that aims at providing corrective measures where performance does not measure up. It

informs further steps to be taken such as correcting students where they are making mistakes. In a nutshell, IA assessment has been described as assessment of students' performance, assessment of facilities and assessment for corrective measures.

Assessment policy

There is nothing concrete about IA policy. Some of the assessments are done through experience but there is no guarantee that these assessors are experienced in doing the correct thing. They may still be using varied or wrong approaches to IA assessment as a result of the absence of an IA assessment policy. Some assess through guidance from students. This is not proper to ask the students how they should be assessed, an aspect that determines their fate at the end of the year. Some rely on lecturers who explain to them how the Log Book is completed some who may not be conversant with the Log Book. This brings out a lot of discrepancies in the assessment of students. Some however are guided by the Log Book which most assessors find difficult to complete. This may be the source of so many inconsistencies happening during IA assessment. Respondents have only seen and/or used the syllabus and the Log Book and the rest of the rules and regulations are implied. Lecturers who are in the same institution have conflicting ideas regarding "policy", "syllabus" and "institutional policy". The impression is given that there is no written evidence of the existence of any policy document guiding IA and IA assessment. This makes IA assessment policy very difficult to determine. Assessment is being done through experience, through guidance from students, lecturers and the Log Book. The policy makers implied that there is some information that is very important to curriculum implementers which still remains inaccessible to them. As a result, no standard of assessment is adhered to.

Frequency of assessment

Lecturers assess students three times as stipulated in the syllabus although in case of some problems at the workplace some lecturers at ST Erics make more visits. The specified number of times for lectures gives a standard measure for the colleges and this was deemed adequate considering the availability of mentors who assist students daily and also the college responsibilities lecturers have to fulfil. Supervisors monitor progress daily as well as adherence to company standards in

terms of productivity and quality of work. They conduct monthly and quarterly assessments although results show that most of the supervisors are not consistent in their assessments. For external assessors, frequency has been reviewed to three times demonstrating the need for continuous assessment in skills acquisition.

Assessment tool(s)

Results indicated that the Log Book is the main assessment tool used for assessing ICDC students during IA and grading is done basing on this just but one assessment tool. The Log Book at St Pauls College contains the tasks to be covered by students throughout IA and it is meant to serve as a training manual to supervisors. Results from this study show that Log Books used are in print form with a predetermined outline bearing headings and subheadings. Different Log Books from different institutions would guide supervisors differently hence a lot of confusing work for them considering their very busy schedules.

Students sew college-based products and prepare files but no marks are obtained from these. At St Erics College students also write IA reports but they are not considered for assessment. These were considered essential assessment tools that could effectively complement the Log Book. Some forms used for quality checking at St Pauls College contain very vital information which is just redundant. These other support instruments used are logistics tools. Basing on the CA theory, lecturers should choose the best assessment methods and tools that enable students realise the intended learning outcomes.

Stakeholder involvement

Results revealed that a plausible pool of stakeholders participate in curriculum review and development. These include industrialists through NAMACO, lecturers as course coordinators, principals as HEXCO board members, students through their Student Representative Councils (SRC), HEXCO officials, CRD, Tertiary for Education Programs (TEP) Director and the Permanent Secretary in the Ministry of Higher and Tertiary Education Science and Technology Development. This entails that relevant people are being involved in policy issues. NAMACO has been identified as a key stakeholder in curriculum related issues. While the whole list of stakeholders is very relevant, there seems to be inadequate representation of the curriculum implementers mainly lecturers. The syllabus document reviewed showed

that ten Clothing Companies were consulted for the ICDC syllabus which was reviewed in 2015 yet according to research results, no such consultations were done on colleges that implement the program. It seems there is too much reliance on industry at the expense of other stakeholders. Results also show that students are an important category of stakeholders however, some reports that ICDC students are reported to be writing at St Erics College are not considered. This shows there is a missing dimension here as the voice of the student is suppressed.

Who is the assessor?

It emerged that lecturers, supervisors, peers and external assessors all assess ICDC students during IA. Results show that lecturers' approaches to IA assessment vary across and within the same college. Some spend more time with supervisors and very little time is dedicated to discussing important issues with students. Some are only concerned about challenges students are facing while some are worried about company facilities with the majority concerned about appending their signatures in the Log Books. Some lecturers at St Pauls put marks in the Log Books during IA while those at St Erics do not. In both colleges, lecturers from other fields assess ICDC students during IA. The LIC OJET at St Erics also makes some spot checks to validate the IA assessment process.

Supervisors' approaches also vary. Some devote their time to assisting students. They show their willingness and patience to help students acquire the expected skills and competencies. They provide guidance including constructive feedback and encouragement. Some show less dedication and do not guide students profitably. External assessors are from other fields but they assess ICDC students as well. They are not experts in the field and it was established that their purpose is mainly to confirm visits by lecturers and to validate the IA process. Their objectives are however not clear to almost all the participants in this study. Peers assess each other's work and make corrections before the supervisors' assessments. Those who did not practise peer assessment either did not have time or felt inferior to their peers who produced good work. This lack of clarity on how these different categories of assessor should actually assess students during IA was attributed to lack of clear IA assessment policy and this led to lack of collaborated efforts by most assessors.

6.2.1.3 Porous implementation of assessment strategies

This section provides a summary of findings on how those involved in assessment of ICDC students conduct their assessments.

Placement of students

Results show that a lot of students face challenges in securing IA places resulting in them being placed in backyard companies, companies that are not adequately equipped and which do not help them acquire the expected skills and competencies. Students have freedom to choose companies and some are sometimes assisted by their lecturers to get placement in well established companies. Some students choose companies near their homes so that they cut on transport and accommodation expenses. Most students at St Pauls College train at their local companies which are not even recommended by their lecturers. This is so because they do not afford life in other towns where there are better companies as they have to pay for accommodation and transport.

Some places are secured through phone calls either by the college or by the company but without examining the state of the company. Some state-owned companies have standard procedures for placement. Students at St Erics College start as early as April to secure placement for the following year and there are high chances of securing places in better companies. Some students miss out on important learning activities such as induction as they will still be busy looking for placement. Students are expected to bring IA forms from their colleges for authenticity and Log Books for assessment. While a good number of students are placed at ease, majority of the students still struggle to get placement.

Preparation of students for IA

Both colleges sensitise their students about behaviour and completion of the Log Book prior to IA. At St Erics College students are constantly reminded of the IA expectations during HOD's hour throughout the year. Students are also made aware of the consequences of serious wrong behaviour that it may result in expulsion both from the college and industry. At St Pauls, the Dean of students inducts all students at the end of the year. Results from these two Polytechnic Colleges show that induction is mainly on behaviour and how to do the necessary documentation. Induction of students is also done by some companies.

Assessment schedule

For St Erics, the list of tasks are outlined on a sheet separate from the Log Book while at St Pauls the tasks are found on page six of their Log Book. These act as guidelines to the supervisor on what the student should cover. Research results however show that most of the Clothing Companies in Zimbabwe do not follow proper training programs resulting in work overload and more responsibilities for students. It also surfaced that industrial processes are limited in their scope and no precise departments are available in most of these companies. It was heartening to note that some students are placed in companies where a precise plan is prepared and followed closely. Results show that even where the schedule is available there is need for flexibility in workplace learning due to the nature of some processes in clothes production.

Regarding a calendar of events, some lecturers make appointments to visit some companies especially the state-owned companies. Some only notify the supervisor while some do not inform them at all. Results show that IA assessment should be conducted professionally and not as a witch hunting exercise. Students need to display their abilities in a natural and relaxed environment. They should be ready for assessment if the purpose of assessment is to make a value judgement about their learning. IA assessment schedules at St Erics College are drawn up early at the beginning of the year and are often disrupted by other institutional programs. Assessment schedules for St Pauls College are prepared by the Dean of Studies for the whole Technical and Vocational Education department and lecturers can assess students from other fields as per travelling arrangements made.

Lecturer-student ratio

Results show that lecturer-student ratio is not stipulated. It depends on the number of students per company and whether it is a local or outside trip. It also depends on the number of lecturers per visit. It surfaced that lectures do not assess the same number of students per session and it is very difficult to determine the ratio as several factors come into play which cannot be avoided. Some lecturers assess up to twenty students per visit making it impossible for one-on-one assessments. Some local assessments comprise large number of students compared with long distance ones as is the case with St Erics College. With St Pauls College, they assess many

students during distance assessments since their students seek IA elsewhere as their local companies are not ideal for training.

Duration of each assessment session

Results show that duration of each assessment session is determined by quite a number of factors. These include companies' busy schedules, protocols to be observed in order to gain entry into the factory, size of the company and whether access into the company has been granted. Some find their travelling schedules and number of students to be assessed as the main determinants. With regards to these factors, results show that it is not possible to stipulate time limits as circumstances are unique and may change with each visit. It was noted that lecturers' assessments can be as brief as five minutes although some spend up to thirty minutes or more.

Feedback

Feedback provides students with an understanding of how to close the gap between the current and expected performance. This current study established that some lectures give feedback while some do not. Feedback is however given mainly on behaviour by most lecturers. Some lecturers feel it is the duty of the supervisor to give feedback and some attribute lack of feedback to inadequate time allocated to assessment trips. Some feel students get their feedback through comments and marks written in the Log Books by the supervisors. On the students' side, most of them from both colleges complained that they did not get feedback from lecturers especially the guest lecturers. Very few students received all encompassing feedback from lecturers and supervisors which focused on both performance and behaviour, specific areas for improvements and appropriate recommendations. Results also show that some supervisors do not give feedback at all. Most of the supervisors are said to give written feedback most of the time through comments in the Log Books. Results also show that external assessors give feedback only in the form of reports presented to the regional board but not directly to the students.

Processing of IA results

Results indicate that marks are processed at the colleges. At St Pauls College marks are processed from the ratings given by the supervisors and the lecturers in the Log Books and these are processed by all the lecturers in the department. At St Erics

College, only the supervisor's mark is considered and marks are processed by the LIC OJET. Some supervisors do not even know what happens when the Log Books are submitted to the colleges, somehow justifying lack of seriousness by most of them in the comments and marks that they write in the Log Books when assessing students. A grade is awarded for certification and external assessors for OJET validate and ratify the marks at regional level prior to adoption at national level. No guidelines were found on the processing of IA results.

Results trend analysis

Results show that some lecturers are not aware that results trend analysis is done in their colleges. Some lecturers at St Pauls indicated that it is not necessary to carryout trend analysis since the pass rate in ICDC is always 100%. Some lecturers from both colleges are aware that results trend analysis is done but for the whole college and not necessarily for ICDC. At St Erics, if the trend shows a decline, the college tries to establish the reasons by analysing in detail the assessments for each student which can be very cumbersome. The analysis of results at regional and national levels is done for the whole Clothing Discipline with its different subjects and different certification levels and these do not reflect performance of a particular college. It also appeared that reports written by external assessors do not reach the implementers such as the supervisors and the lecturers who assess students during IA.

Process review and frequency

The results show that generally reviews are not being done especially at subject level in colleges. Some respondents at St Pauls College show that they review processes at institution level but people are not keen at implementation. At St Erics College the LIC OJET said they just recently revised the IA document as a college and the draft has been forward to the principal for approval.

6.2.2 User-friendliness of the IA assessment tool(s)

The Log Books used by the two Polytechnic Colleges are almost similar except for the tasks that are found on page 6 of St Pauls' which are detached for the St Erics one. Also the writing space for the St Erics Log Book is much smaller than the one for St Pauls otherwise everything else is the same.

6.2.2.1 Usability of the assessment tool

Results show that the Log Book is very complicated to use.

Complexity in use

Results show that generally the Log Book is difficult to complete because it requires too many details mainly by the student and the supervisor. Although it is predesigned with a predetermined outline of headings and subheadings, most respondents complained that it is confusing and too involving. Even those assessors who have been into IA assessment for years still find it complicated. Supervisors find guidelines not clear and rating scales too difficult to interpret. It was also discovered through document analysis that some supervisors were putting the final score instead of just rating the student on the five point rating scale. Some marks were placed in the weighting column which is used by the lecturers to insert the final score. This indicates the degree of complexity and as portrayed by several respondents, this ultimately impacts on the IA assessment results.

6.2.2.2 Adequacy in measuring students' performance

It was gathered through research results that the Log Book is not sufficient to measure students' performance because of its restrictive space and insignificant comments and marks written by supervisors.

Restrictive space

Results revealed that spaces provided to detail weekly tasks is too small. Columns are limited to entries of major tasks. There is no space for description of activities performed, let alone space for diagrams for methods and procedures of operations carried out. Only 'major' operations are recorded and the effects of the results of a particular operation are not obvious.

Insignificant comments and marks by supervisors

Most of the supervisors show limited understanding of the best way to pass comments and to rate students' work. Their English is limited resulting in some comments losing meaning. Some comments are not in sync with the marks awarded making interpretation of results very difficult. Even where comments tally with marks, the marks are just too high. Some ticks that are put in the Log Books do not say much about the students' performance. A lot of marks in the Log Books reviewed

were in the distinction category yet in most cases, not much information is provided to substantiate some of these very high marks. Some students were awarded marks for the tasks they did not perform. Some of these marks were highly disputed by most respondents. This tool does not express students' performance and research results label it defective as it does not yield results that can be relied upon.

6.2.2.3 Dependability questionable

Research results raised the following as issues that reduce the credibility of the Log Book as an assessment tool.

Prone to abuse

Results show that the Log Book is open for cheating. Some students 'doctor' entries in the Log Book so that they score highly. Some detail tasks they did not perform because they know most supervisors do not refer back to the work they did for the whole month. Some simply duplicate their colleagues' entries for tasks undertaken during their absence while some write tasks for the departments that do not exist in their companies. Results show that in all these scenarios students still get high marks. All these issues bring about wrong IA assessment results that may not be depended upon.

Inter-personal relationships influence marks written by supervisors

Results show that some interpersonal relationships influence the mark that the student gets. Where the student has strong interpersonal relationships with the supervisor, high marks are likely and the reverse is true. Favouritism has been seen to destroy the value of the IA assessment process and results may give a false impression about the students' performance.

Too much reliance on what students write

Participants concurred that some supervisors rely on what students write for the marks that they award in the Log Books. So many supervisors do not check on what the student writes with regards to work done. Some supervisors take long to assess students and may not remember everything that the student did as a result they rely on what the student has written. This means that it is what the student writes that informs the mark and not performance per se. The Log Books reviewed showed that some comments written by the supervisors were the same as those written by the

students. It was evident through results that supervisors either have written communication challenges or it is lack of adequate content to assist students.

6.2.2.4 Completed in retrospect

It was revealed that both supervisors and students complete the Log Books in retrospect. The nature of the Log Book is that the supervisor completes it at the end of every month yet in most cases they complete it after several months. They may not still remember all the tasks done by the student and how they were performed, say after three months. The main contributing factor was identified as **lack of time** due to tight production schedules. On the other hand most of the students do not complete their Log Books weekly as per assessment requirement. They also take advantage of the laxity by their supervisors and make entries even after several weeks. Research results show that the Log Book alone as an assessment tool produces results that cannot be depended upon.

6.2.3 Respondents' views of the process of assessment during IA

Research results have identified success stories as well as several gaps in the manner in which IA assessment is being conducted in the Polytechnic Colleges in Zimbabwe.

6.2.3.1 IA assessment adds value to TVET programs

Research findings show that some success stories on the IA assessment journey are that all students get placement and lecturers are able to visit them wherever they are placed. Notable changes in behaviour and in performance have been cited and some very excellent results are recorded yearly. Assessors learnt that companies offer varied learning experiences due to the nature of facilities and abilities to train students. Institutions are working hard to prepare students with the theoretical knowledge in all aspects that form the basis for industrial training. With regards to this, most supervisors learn a lot from students. Results also revealed that assessors get excited by the level of maturity exhibited by some students who are entrusted with production of large company orders. Some students integrate well into the company system and they adhere to company rules and regulations strictly. Majority of assessors however still do not find anything exciting as standards in most companies are depreciating. The typical day of assessment reflect the nature of assessment students receive during their training. Although very few students

appreciated assessment by supervisors, they viewed them as the most important assessors mainly for being there with them throughout the year.

6.2.3.2 Adherence to policy

Results show that policies that are not clear are difficult to follow. This means that as long as the policies are not clearly defined, each stakeholder is bound to use their own methods for assessment. Lecturers from the same college and those from different colleges using the same policy documents interpret the policy statements differently and use varied approaches for the students who will compete for the same job after graduating.

6.2.3.3 IA assessment is fraught with short comings

A number of factors that militate against achievement of reliable IA results have been identified.

Supervisors fall short of expected competencies

Findings show that most supervisors lack knowledge on how to assess students. Some supervisors are reported to have challenges in the comments that they write in the Log Books. Some even ask students to write comments for them. Results show that some sign and award marks without reading what the students have written. Their lack of involvement in the completion of the Log Book leads to students becoming dishonesty in what they write. Some supervisors do not have any form of professional qualifications but are tasked to supervise and mentor students who already have a National Certificate (NC) in ICDC causing instructional challenges.

Lecturers' IA assessment not valued

Results revealed that students do not benefit anything from assessments by lecturers from other fields. Some ICDC lecturers lag behind in terms of industrial technologies but assess students who know more than they do. Some lecturers are reportedly conducting their assessments hurriedly without looking at students' work or attending to their grievances. It also emerged that some lecturers engage in IA assessment with other motives such as getting allowances rather than assisting students. Lecturers' visits have been condemned by most of the respondents including lecturers themselves for their lack of seriousness therefore their assessments are considered less important.

Students short changed

Results show that some students are being short changed during IA. Some are not allowed to use specialised machinery which they do not have in their institutions. Some students spend time doing absolutely nothing when companies run out of materials for production. Some spend most of their time on production and are denied access to knowledge about other departments in the companies such as marketing, designing, purchasing and dispatch. Results show that some students are used to provide cheap labour as they produce lots of orders without pay. Some are even used as drivers or supervisors. Results also show that some companies actually lay off their staff and replace them with students on IA whom they overload with work. It was gathered that the colleges under study are better equipped than some of these companies, so there will be nothing new to add to their basic theoretic knowledge from their institutions. Such companies are not fit to train the students, worse still having them for the whole year. Some students are not given room for critical thinking as is the thrust of the CA theory. Students are said to be awarded very high marks even when nothing is taking place in their companies. This defeats the whole purpose of assessment if objectives of IA and students' expectations are not met.

Falsification of details in the Log Book

Results established that there are a lot of issues that discredit a Log Book as an assessment tool. It became apparent that there is no honesty in the manner in which Log Books are completed by both students and supervisors. Some students at St Pauls lamented lack of action to curb such practices yet most of the stakeholders are aware of such malpractices. This confirms that the system has some loopholes that promote cheating of results.

Inconsistent interaction of colleges and industry

Results show that colleges and industry mainly interact when lecturers visit companies for IA assessment, when securing IA places for students or when there are problems with students on IA. There is not adequate time for further interactions during lecturers' visits as lecturers will be having other companies to visit and also supervisors might be very busy with company programs.

Lack of resources undermines the quality of IA assessment

Results show that IA assessment has greatly been affected by lack of resources such as transport for lecturers to visit students, time that lecturers take assessing students, company schedules for supervisors, finances and incentives for supervisors and lecturers as well as proper training equipment. Although students are given \$100 ZIMDEF allowance every month, it is said to be too little as they are also required to pay college fees and to cater for transport, food and accommodation in some cases.

Threatened interpersonal relationships

Interpersonal relationships among assessors and students and amongst assessors themselves have been said to have a negative impact on the effectiveness of assessment during IA. Where lecturers and supervisors do not go along, the student suffers and where there is a misunderstanding between students and supervisors, the student's mark is affected.

Ineffective communication strategies

Communication challenges are also viewed as an impediment on IA assessment if not properly done. Lecturers failing to notify companies of their visits and language barrier are said to affect quality of assessments. Supervisors who fail to express students' performance in their Log Books will not give a true reflection of students' performance. Students' attitude is another barrier to effective assessment. Some supervisors find it hard to assess students who do not want to take instructions and those that are rude to them.

Unsupportive organisational environment

Some organisational climates prevent effective assessment from taking place. Some companies do not allow lecturers entry into their workshops therefore they will not be able to assess facilities and students' work. Some keep them waiting for too long while some assess students from the company reception and some even by the gate.

6.2.4 Respondents' insights on improving IA assessment process

Comprehensive and conceivable strategies were suggested as a road map to improving the implementation of the current IA assessment strategies in ICDC. These have been categorised as strategic planning and implementation strategies.

6.2.4.1 Strategic planning

Policy improvements, duration of IA, assessment tools, stakeholder involvement and assessors' training needs are summarised in this section.

General policy improvements

It was suggested that there must be an IA policy separate from the syllabus and the Log Book which spells out the objectives of IA, methods of achieving the objectives, assessment criteria and grading rules. Assessment tools should be indicated with a template for report writing being given so that students know what to include in their reports which will provide a standard for marking and awarding of markings. The policy and regulations on IA should include processing of IA assessment marks. It was suggested that a hand book be produced which can be given to institutions and the industry so that all stakeholders are clear of what IA entails and the IA assessment criteria to be used.

Duration of IA

Majority of the respondents were contented with the twelve months IA period for proper acquisition of skills and knowledge needed for the world of work. Only one lecturer from St Erics College suggested that duration be reduced to four months the reason being that students pay fees and other expenses during IA so it becomes costly for them. One of the policy makers indicated that the industry determines the duration of IA basing on the skills gaps therefore since Polytechnic Colleges train for the industry, it is obligatory to comply.

Frequency of assessment

Some respondents showed that three times is not enough for assessment by lecturers as the first visit is considered as mainly to help students settle. Some students felt that they wanted lecturers to visit more often so that grievances are resolved early enough. Supervisors also suggested more frequent visits by lecturers so that they monitor students' progress and discuss pertinent issues with them.

However it was reported that some lecturers do not conduct assessment effectively, especially guest lecturers so some students even consider the three times as unjustifiable. Some students feel the three assessments are adequate if only assessment is done properly. Results also show that since lecturers have some workloads at the institutions three times will allow them to balance between college and IA duties.

Assessment tools

Results revealed that designing of the assessment tool used in ICDC be done by experts in textiles, clothing and related fields. Some respondents suggested that the Log Book be redesigned so that enough writing space for tasks performed will be provided. Some respondents want the Log Book individualised as per discipline as the current one is universal for all technical subjects. Some suggested an electronic Log Book that helps lecturers keep track of events in companies and for real time feedback. Some complementary tools such as reports, portfolios/projects, sample files, *viva/voce* and college assignments were suggested for triangulation purposes and to remove the bias and over reliance on the supervisor's mark. Weighting of each of the recommended assessment tool should be clearly indicated. Results seem to strongly recommend the use of reports and that they should carry more weight than any other assessment tools.

Stakeholder involvement

Some responses suggested that there must be wide consultations with lecturers and students in policy reviews and development. It was also suggested by one of the external assessors that since some principals want to protect their colleges and do not want some of the issues included in regional reports, they may not all be involved in curriculum issues but only one or two representatives who eventually rotate.

Assessors' training needs

It was revealed that assessment is a process that cannot be conducted by anyone, it requires experts. It was therefore suggested that supervisors need proper training and can be sponsored by their companies. Workshops could also help equip supervisors with necessary assessment skills. Supervisors also need to improve in

writing communication skills. A minimum academic qualification should be a must to all supervisors for them to provide meaningful assessments. An introduction of qualifications for assessors as being developed by the International Labour Organisations (ILO) may also fill up the gap. Lecturers require staff development programs to upgrade their industrial knowledge. Both lecturers and supervisors need skills on how to provide feedback. It is important then to put up viable strategies to have all concerned parties trained in areas they lack.

6.2.4.2 Implementation strategies

Aspects summarised in this section are placement of students, preparation of students for IA, assessment schedule, frequency of assessment and lecturer-student ratio. Duration of each IA assessment session, feedback, processing of IA results, process review and frequency, communication, interaction of colleges and industry and availability of resources are also implementation strategies summarised in this section.

Placement of students

Effective connection between the colleges and industry can result in students being placed in special companies where they derive maximum benefits. Colleges should assist students in search for IA places through a closer working relationship with the industry. A permanent IA coordinator could give the job priority rather than to leave this task to students themselves. This will ensure proper learning and use of proper assessment strategies for the attainment of intended learning outcomes. A database of well-to-do companies could be kept for easier placement each year.

Students in Polytechnic Colleges are encouraged to start looking for placement early so that they get places at good companies since they compete with universities and VTCs. In case of inadequate facilities, students are encouraged to move to other companies in order to gain the expected competencies. There may also be challenges however, since good companies are few. Colleges are encouraged to start up some production units in order to accommodate ICDC students since some institutions are better equipped than some of these backyard and upcoming Clothing Companies.

Preparation of students for IA

Proper induction should be made prior to IA with post IA students who have experienced the IA environment before. Demonstrations on the completion of the Log Book should be done and the process should ascertain mastery of the procedure by all students. Colleges should put stern measures to ensure a 100% attendance by students. Supervisors or some industrial representatives can be part of the induction process in colleges. Some real workplace scenarios can be role played to sensitise students of some challenges they are likely to face and how they can circumvent them. All companies are also encouraged to induct their 'new employees' in order to help them quickly adapt to the new environment. Some supervisors urged students to visit IA places before the commencement of IA for familiarisation.

Assessment schedule

Lecturers, supervisors and students should design assessment programs together at the beginning of IA that ensure students have a chance to visit all departments in the company. Students need to know exactly what is expected of them as this helps identify areas that are lacking in that company so that alternatives can be considered in order to train a wholesome student. Projects instead of a precise training schedule can be used which will ensure coverage of all tasks by the student regardless of how much time is spent in a department.

Lecturer-student ratio

Some lecturers suggested that the ratio be reduced to three-five students per lecturer for quality assessments. Visits could be rotated to give others a chance to assess few students in the next visits. Results show that challenges of continuity may arise if assessors change. Assessment critiques could be kept to inform the next assessor of students' performance and issues if there are any. Group assessments could help and this could reduce the workload associated with assessing many students.

Duration of each IA assessment session

Results show that each assessment session should last between thirty and sixty minutes on condition that lecturers do not assess too many students per visit and

that the travelling schedules do not include departments other than ICDC so that meaningful and effective assessments take place.

Feedback

Feedback has been identified to be of critical importance as it gives pointers as to whether objectives of IA will be met or not. Strengths and weaknesses are established and problems rectified before it is too late. Therefore continuous feedback is important and it should be given frequently so that students do not relax or go astray. Feedback in workplaces can be based on assessment of reports by both supervisors and lecturers, and also from the written reports by the student intern after the completion of IA. It should also be dialogical to help students reflect more deeply on their performance and attitude so that they will be motivated to improve in areas of weaknesses. Institutions should organise post industrial training programs or seminars for their students to share their work experiences and give feedback on their attachment.

Processing of IA results

Results established that IA assessment regulations should include processing of results. It was also established that the assessment tools from which the marks will be obtained from should be indicated with their percentages. It was suggested that IA results should be processed the same year students complete IA than to wait for another whole year in case of failing students. With the use of the Log Book with its complicated entries, calculation of marks should be done by experts and staff development sessions are important. There should also be some mechanism in place to moderate supervisors' marks whose ratings are always high.

Process review and frequency

Results suggest that process reviews should be done more often so that anomalies within the system are addressed promptly. Reviews should be conducted at college, regional or national levels. Companies should also review their assessment methods with regards to tasks they assign students to do, nature of supervisors who assess students and how they treat students among other things. Supervisors and external assessors can participate in reviews through reports that they write or as part of review teams. Students' reports should be considered as they can offer information

that could be valuable in revising and refining assessment strategies. It was also established that the current ND syllabus is due for review and something should be done as a matter of urgency in order to keep the ICDC curriculum relevant to the industry. Process review is therefore one of the quality control mechanisms which should be taken seriously.

Communication

If there is good communication, companies prepare for lecturer assessments so that they get adequate time to look at students' work and to tour the companies. Lecturers will also find students present at the companies so that they will be able to assess all students assigned to them than to waste college resources when they find students away. Students also said they need communication concerning when and how they will be assessed so that they do not become anxious. Emails and phone calls could be used to communicate lecturer visits and any other programs by both the college and the company. This can also improve collaborative environment between industry and academia. Results also suggest that information on policies and regulations should be cascaded down to the curriculum implementers and those who review the curriculum should make wide consultations with all colleges for IA assessment to be conducted systematically. There must therefore be dual communication so as to lay bare all assessment gaps for possible considerations and for further developments of current programs so that they meet desired needs. It was also suggested that institutions equip students with proper communication skills required in the world of work so that they take orders from supervisors without being rude to them either through verbal or non verbal interfaces.

Interaction of colleges and industry

Participants suggested that there must be synergies between colleges and industry so that IA assessment objectives can be achieved. It was pointed out that industry can be involved in some college workshops during preparation of students for IA, supervisors can participate in symposiums and graduation ceremonies. Links can be established through making use of guest lecturers from industry. Policy makers identified industrialists through NAMACO as one of the stakeholders in curriculum reviews and their involvement does bring the two entities closer. In addition, supervisors can also participate in college-based process reviews so as to improve

the delivery of IA and IA assessment procedures. Relationships can be cemented through industry giving prizes to students; sponsorships for ICDC college-related projects, ideas and support for projects in colleges and collaborated researches on college and industrial issues.

Availability of resources

Lecturers at St Pauls suggested that vehicles be released as per department so that students are allowed time for effective assessment. Lecturers for local assessments need to be incentivised no matter how little they can get for motivation sake. Results suggested that ZIMDEF allowances for students should be reviewed upwards so that students who find placement in other towns can be self sufficient and be able to find placement in better companies without being prejudiced by lack of finances for accommodation, transport and food. Although payment of subsistence allowances is of the discretion of the host organisation, companies are encouraged to give students some token of appreciation for their service.

Companies that take students for IA should be incentivised by tax rebates, removal of tax on certain products and by getting some allowances from ZIMDEF as a way of encouraging them to take students for IA. Some companies are not aware of the \$50 they are entitled to get from ZIMDEF for each student they take for placement while some just do not make a follow up. It was suggested that policies on supporting resources should be made clear to all stakeholders and follow-ups should be made by the companies so that they receive the funding from government. However, some consider accepting interns as an act of corporate social responsibility. It was also suggested that the PPPs can help ease transport and accommodation issues for lecturers conducting assessment among other support strategies. College IA officers should get government support to travel across the country seeking for IA placement. Infrastructure should be upgraded continuously in order to keep training institutions in tandem with the world of work.

6.3 CONCLUSIONS OF THE STUDY

This study sought to analyse the IA assessment procedures for ICDC used in the Polytechnic Colleges in Zimbabwe. The aim was to come up with a model for improving IA assessment procedures. Findings revealed that some form of procedure is being followed by both colleges but implementation strategies vary

within the same college and across colleges. IA assessment procedures were analysed through establishing the current assessment strategies, the user friendliness of the IA assessment tool(s) and the views of various categories of participants. Participants' insights were sought as a contribution to improved IA assessment procedures. The conclusions drawn from the research findings are presented based on themes that the study identified through data gathered from interviews, FGDs and document reviews. The major themes were: clarity about IA assessment modes; nature of the assessment tool not matching the intended outcome; diverse views about the worthiness of IA assessment and participants' insights on improving IA assessment.

6.3.1 Assessment strategies used during IA

It was unearthed through this study that the two Polytechnic Colleges studied follow some procedures when assessing students during IA. They are guided by some policy statements in the syllabus that state the duration of IA, frequency of assessment by lecturers and the assessment tool. Some general course objectives and different course outlines in the ND syllabus have been useful in preparing assessment tasks for students during IA. A plausible number of stakeholders participate in curriculum review and development. Their different contributions revealed that there is too much reliance on industry with little involvement of curriculum implementers. Generally, findings show that there is nothing very concrete with regards to the policy that guides IA and IA assessment.

The study established that colleges ensure that all students are placed. They prepare them for IA through some sensitisation programs. Schedules are drawn up for follow-ups by lecturers. Assessment is conducted, results processed, analysed and processes reviewed. Approaches by lecturers are however varied in these routine processes. Varied also are the issues to do with assessment schedules, feedback, duration of each IA assessment session and lecturer-student ratio. There are a number of documents identified in this study but the Log Book is the only tool that is used to generate marks for grading. The supervisors rate students' tasks and the lecturers calculate the final mark. However the specific duties of the lecturer, the supervisor and the external assessors are not clear in this IA assessment. It seems their conceptualisation of IA and IA assessment enables all those involved in IA assessment to follow a certain assessment pattern no matter how varied.

6.3.2 User-friendliness of the IA assessment tool(s)

From the findings it is evident that the Log Book presents a lot of challenges in assessing students during IA. It was established that it requires lots of detail making it difficult to use. Restrictive space and insignificant comments and marks written by the supervisors make the tool insufficient in measuring students' performance. Results revealed that the Log Book cannot be relied upon because it is open to cheating by both students and supervisors, it is mainly completed in retrospect, there is too much reliance on what students write and interpersonal relationships affect what students get at the end of the day.

6.3.3 Respondents' views of the process of assessment during IA

Findings show that IA assessment process is fraught with shortcomings. Participants identified that there are some policy gaps that are promoting varied approaches to assessment. It was established that most of the supervisors in the Clothing Industry are not qualified to assess students. It has become evident through this study that many Host Industries and Polytechnic Colleges are facing sustainability challenges due to lack of horizontal and vertical collaboration and integration among stakeholders who fail to work in partnership. Lecturers' assessments are not valued because they only spend very little time with students, they do not assess students' work and some are from other fields without any knowledge about ICDC.

Students are short changed by the current assessment strategies. Some are denied access to sophisticated machinery; some are kept in one department for too long; they are used to perform company errands and doing menial jobs, some spend weeks with no work to do when companies run out of material; some work on company orders for no pay, some are not allowed to move to other departments in the company while some companies have virtually nothing to offer. This means that the students will not acquired the experiences that they expect to get through industrial training. The tasks, methods and assessment are not aligned to the intended learning objective. Falsification of details in the Log Book; inconsistent interaction of colleges and industry; lack of resources; threatened interpersonal relationships; ineffective communication and unsupportive environment are other factors that negatively affect proper implementation of IA assessment strategies. It emerged however that some assessors had some few achievements, excitements

and lessons gained through IA assessment. IA assessment has also been viewed as being important in the acquisition of technical skills if properly administered.

6.3.4 Respondents' insights on improving IA assessment process

It was suggested that for IA assessment to be conducted effectively, there is need for full governmental, ministerial, institutional and industrial support as well as support from the NGOs. Proper IA assessment policies should be put in place and duties of each assessor, assessment tools, IA assessment objectives, duration of IA, frequency of assessment and processing of IA results should be explicit and be presented in a form of a handbook. Lecturers, students and supervisors should be considered very important stakeholders in policy review and development through wide consultations. It was also suggested that supervisor need to be trained to assess students meaningfully and lecturers need some form of staff development to keep abreast with technologies. Students should be supported so that they construct meaning out of their IA activities. They must be central to their learning and supervisors and lecturers should only be facilitators or brokers and this is only possible if companies are adequately equipped with no restrictions to the usage of specialised equipment by students.

Colleges are encouraged to assist students with placement in well-to-do companies and a pool of such companies can be drawn. A full time IA/OJET officer should work hard to get better companies for placement and students are encouraged to look for placement early. It was established that both colleges and companies should induct students. Some serious induction is necessary on the completion of the Log Book. Assessment schedules for training are mandatory and should be accessible to all stakeholders. Travelling schedules should be done per discipline to avoid inconveniences. Visits should be communicated to the companies for assessment to be conducted successfully. It was suggested that lecturers should assess a sizable number of students per visit and only ICDC lecturers should assess ICDC students. Duration of each IA assessment session should be determined and should be communicated to the companies. All assessors should give some form of feedback. Tripartite discussions by the lecturer, supervisor and student will yield more effective results. Both written and oral feedback is important. Process reviews at college level are very important as they quickly and directly address implementation challenges. Reports from regional and national reviews should be availed to lecturers.

Communication should be done effectively. A rift between colleges and industry can be closed through inviting industrialists to teach in colleges as resource persons and through support by industry in other college events and activities. Industry can collaborate with colleges in research work. Lecturers appealed for support toward local visits and that ZIMDEF allowances for students should be reviewed upwards. All these strategies will improve the assessment procedures for ICDC used in the Polytechnic Colleges in Zimbabwe.

6.4 CONTEXTUAL RELEVANCE OF IA ASSESSMENT

Although results show that IA assessment is marred by a myriad of short comings, it remains a legitimate exercise that should be conducted by all the Polytechnic Colleges in and outside of Zimbabwe. Results show that regular assessments help students understand the purpose of IA and conduct their work seriously. Lecturers need to control students' training process and make careful check-ups of students' behaviour and attainment of skills. Supervisors' assessments help to see if students are gaining new skills and if their behaviour and attitude change. Lecturers can get feedback from the company which helps mould the student. Lecturers' assessments are viewed as being important for the combining of college and industry work. Lecturers and external assessors have to assess if students are benefiting from IA or not. Lecturers and the people in industry may have different knowledge and expectations so it is important that they learn from each other.

Results show that during IA students often develop, change their attitude and become interested in work procedures and how companies are managed and run. As lecturers interact with students, they can help the latter become very confident in the course they are taking. If lecturers make a follow up on students and assessing them, they see the importance of what they are doing in the industry. While lecturers said their coming to assess students can make the supervisors become more serious and give students meaningful tasks, supervisors feel if students know they will be assessed they work very hard and complete their Log Books on time. This means that it is the student who benefits much from IA assessment.

IA assessment also helps lecturers to evaluate their own assessment processes as to whether or not their evaluations highlight all the varied experiences and challenges of their students. The lecturers also need to check on the fulfilment of the

policy regulations. Assessment checks if processes are being followed. Supervisors check on proper procedures and timing. Assessment helps validate the training that the Polytechnic Colleges offer. OJET appears on the students' final certificate as a separate but important item hence its assessment is of great relevance. ICDC is a practical field which needs to be assessed to ascertain the level of understanding of students. Overall, students' IA assessment in ICDC is relevant but it only needs to be conducted appropriately for positive results.

6.5 RECOMMENDATIONS

The following recommendations are based on the major findings of this research study and the literature that complements it. This study has revealed that there is nothing very concrete with regards to policies guiding IA and IA assessment. This means that there is need to facilitate and improve IA assessment policies. Based on this result it is recommended that:

- The policy makers were putting absolute responsibility to industry leaving the personnel of colleges voiceless in contributing to policy making and the educational benefits for all learners. Hence it is imperative that college personnel and industry meet for exchange of ideas and moving forward techniques that are so badly needed.
- Nets should be cast wider for a greater representation and wider consultations on policy issues in order to improve the IA assessment process. More consultations should be made by involving more people through various means such as use of a questionnaire. Evaluation reports from companies and institutions or web conferences can be used. All stakeholders that matter in curriculum issues should be taken onboard.
- Very few clauses are highlighted in the syllabus that inadequately addresses IA assessment issues. A handbook on IA should be drawn which specifically address IA and IA assessment issues.
- Principals of the Polytechnic Colleges who are board members should not participate in ratification of national results and other curriculum issues. There must be an independent board to deliberate on these issues as principals are interested parties.

The results have revealed that the Log Book is not user friendly. It is difficult to complete and it is not sufficient in measuring students' performance during IA. Thus, it is essential that the Log Book be modified and/or complemented with other IA assessment tools. In order to achieve these, following recommendations were proposed:

- Adequate space should be provided for students to detail their processes in the Log Books.
- An electronic Log Book could be used which is easy to monitor progress and to ensure entries are done on time.
- Garments and files with samples produced by students during IA from their college assignments should be marked and the marks to contribute to final IA mark.
- IA reports should be produced where students write their own experiences. These should be marked and contribute to the IA final mark.
- There is need for unification of reports from supervisors and students because assessors are measuring performance of the same students who will compete for the same job after graduation.
- Viva voce and projects can also be used to complement the Log Book.
- To prevent over reliance on one assessment tool and to eliminate bias associated with one assessment tool, all tools adopted for IA assessment should be weighted so that, put together, a final mark is produced.

The study has also exposed that it is not clear who the assessor is between the lecturer and the supervisor so their responsibilities in IA assessment are not clearly defined. As such policies should clarify who should be the assessor. For this purpose, some recommendations are as follows:

- The industry person should be in overall charge of the students.
- There is provision for lecturers to award marks in the Log Books. Lecturers will be defaultive in the manner in which they assess theoretically and what is done in industry. So the supervisor should be the only legitimate person to award marks in the Log Book and the lecturers can put marks on other assessment tools.

- Lecturer's assessment was considered not valuable as lecturers from other fields are not competent in ICDC issues. As such, guest lecturers should not assess ICDC students for justice to prevail.
- Assessment should be a tripartite exercise which involves the student, supervisor and lecturer.
- External assessors should be drawn from ICDC or any other textiles and clothing related areas.

Based on the findings, the study has revealed that there are quite a number of aspects of the current IA assessment strategies that are flawed. These include supervisor incompetence, lecturer inadequacies, students short changed, falsification of details in the Log Book, inconsistent interaction of colleges and industry, lack of resources, threatened interpersonal relationships, ineffective communication and unsupportive environment. In order to address these aspects, recommendations are that:

Supervisor incompetence:

- Practical work needs to be looked at carefully not just written about.
- Greater liaison between lecturer and supervisor where the lecturer explains clearly the college expectations in terms of supervisor's assessment.
- A more competent supervisor could complete the Log Book with at least some consultations with the immediate supervisor regarding what is to be assessed.
- Workshops could be held to clarify IA assessment issues.
- Companies to support training programs for supervisors.
- Being in charge of students on IA does require at least a minimum of academic and professional qualification.
- To do justice for the students, the supervisor needs linguistic competence in explaining procedures and professional ability in carrying out assessment.

Lecturer inadequacies:

- If assessment by lecturers is only done three times a year, they should be able to organise the trips differently. One trip should be solely for one department. It cannot be a multidisciplinary trip. They should have enough vehicles for lecturers to get to places where different companies are situated.

- Each assessment and each student should be given adequate time by the lecturer for them to look at all aspects about student's IA training.
- Time and opportunity needs to be put in place for lecturers to acquaint themselves fully with the machines and all modern technologies available at the student's work place.
- Assessment critiques by each lecturer who visited previously may assist the next assessor.

Students short changed

- If there is totally new, intricate machinery in which the company puts in a lot of money to purchase it, students should be allowed to watch while the industrial staff designated to operate the machine work on it.
- In case of shortages of company resources, students should be allowed to bring their own materials to work on with the guidance of the mentor.
- Time in each department must be planned for the whole year so that each student spends an appropriate length of time in each department.
- Students can move to the next company in cases where the company has not much to offer.
- Assessment schedules should be available to both students and supervisors by colleges as a manual to guide assessment tasks.
- There must be a tripartite involvement in students' assessments; the supervisor, lecturer and student must agree on the mark the student should get.
- Students should be placed in companies with adequate training resources; this is an important component of students' assessment.
- Students should be attached for the stipulated HEXCO period and not less.

Falsification of details in the Log Book

- Cheating and falsification of information in Log Books should be treated as a serious offense which should disadvantage the candidate.
- IA needs to be seriously monitored by both the institutions and the continuous assessment by external assessors.

- Undeserving students should be weeded out of the system before they join the world of work.

Ineffective communication

- Lecturers should communicate to companies their visiting dates well in advance so that they can be fully accommodated by these Host Industries for effective IA assessments.
- Relevant documents should be availed to respective users and beneficiaries.
- Students should be equipped with communication skills prior to IA.
- Some forms of social media such as emails, tweeter and skype can be used for communication at low costs.

Inconsistent interaction of colleges and industry

- Colleges and industry should collaborate in research work.
- There should be collaborative efforts between Colleges and Host Industries in the assessment of students during IA in order to reduce the number of challenges encountered by students during IA.
- Serious discussions should be held by lecturers and external assessors with the industry personnel during company visits.
- Industrialists can be used as resource persons to teach some topics in ICDC in colleges.
- Curriculum implementers should be involved at every stage in the student training process.
- Industry can be invited to participate in college events such as career fairs.
- A memorandum of understanding can be drawn by the two entities to improve quality of IA assessment strategies.

Lack of resources

- Companies that take students for IA should be rewarded for their philanthropic gestures. They should be getting some tax rebates on certain raw materials that they import and there can be tax exemptions on some products. They should be given some big tenders for example, of making cargo shirts to be worn on the World Tourism Day which is going to be celebrated in Zimbabwe.

- The government should support the Host Industries financially in order to help train students on the program for better results. This will invariably help the students to acquire the needed skills required for the world of work.
- The government should increase ZIMDEF allowances for students on IA and these should be disbursed to the Polytechnic Colleges on time. Students should easily access these funds so that most students who rely on this allowance for food, transport and accommodation do not struggle for funds for an effective IA assessment.
- Colleges should provide transport for lecturers to conduct local assessments just as is done for long distance IA assessment trips so as to motivate these lecturers to conduct IA assessments effectively.

Threatened interpersonal relationships

- Training and staff development programs should be conducted frequently to improve professionalism.
- Students on OJET should market the institution's positive image.

Unsupportive organisational environment

- Clear policies and effective communication will make organisations appreciate the importance of IA and IA assessment hence will allow lecturers to assess students without any restrictions.
- The institutions should start production units to facilitate the placement of students, monitoring, assessment and reporting on issues concerning the performance of the student.
- A calendar of events should be availed to companies so that lecturers are fully accommodated upon visiting the company.

6.6 THE STUDY'S CONTRIBUTION TO NEW KNOWLEDGE

This study has contributed to the body of knowledge through results from open ended research questions and the interpretations of the research findings made. This study has created a deeper understanding of the way in which IA assessment is undertaken in the field of ICDC in the Polytechnic Colleges in Zimbabwe and how these strategies impact on the education system of the TVET programs. In addition this study accommodated the views of lecturers, students, supervisors, external

assessors and policy makers therefore their lived experiences acted as evidence of actual procedures used in assessing ICDC students in the Polytechnic Colleges in Zimbabwe. This is a contribution not only to ICDC field but other fields in the Polytechnic Colleges in Zimbabwe and beyond. Hence a suggested model for improved IA assessment procedures has been designed (Fig 6.1).

Industrial Attachment Policy (Review and Developments)

For IA assessment in ICDC to be effective, there is need for clearly a designed IA policy that provides instructions to institutions and industry. A policy with guidelines and regulations will be the document against which success of a program or lack of it is measured. The policy should show the title of the policy, rationale, aims and objectives of IA, duration of IA, IA attachment guidelines for students, guidelines for the organisation, expectations/responsibilities of different parties (the student, placement institution, training institutions, external assessors), assessment tools (and guidelines where applicable, weighting), submission details, some assessment forms (student placement forms, IA orientation form, student attachment feedback form), processing of results and conditions of service. Any other salient aspect can be included in this policy because this document will form a pillar upon which all other assessment activities will rest. The policy should be reviewed after every three years. The policies should include vertically and horizontally integrated and coordinated curriculum strategies. Such a policy accommodates every key player in curriculum development and implementation such that the ICDC students benefit fully from IA and IA assessment. Current and traditional training methods need to be revised and integrated with methods that yield results skewed towards the fulfilment of the TVET mandate.

The current scenario has been reported to be individualised and uncoordinated. Policy makers seem not to be aware of what really transpires during the IA and IA assessment process. Some were surprised that students use only one assessment tool and that no IA assessment reports are submitted at the end of the IA program. Some documents were not available for the researcher, neither were they in the training institutions. Most respondents were not aware that external assessors actually conduct IA assessments on ICDC students during IA. Colleges design their

own tasks for students to undertake during IA while most Host Industries do not even follow those schedules. Some do not know what to do with students while some deny students the chance to learn from other departments in the company. Lecturers in the same college assess differently for example, some rate students during assessment while some do not. Furthermore, most supervisors assess students without the knowledge of how this should be done as they are not trained or inducted. Most of them are not conversant with the Log Book. Lecturers from fields other than ICDC assess these students yet they are not specialists in the area.

As a result, most students are exposed to harsh learning environments where they are deprived of proper acquisition of skills and competences. Most of them do not take IA seriously as their assessors are also seen not to be serious with IA assessment issues. Integration and collaboration therefore play a great role in focusing students' attention to the relevance of the subject content delivered at the colleges. This also improves the student's diagnostic approaches to problems and problem solving techniques. Integrated approach to teaching and learning will result in better comprehension of the subject which in turn leads to production of quality and meaningful grades during IA. This will help boost confidence in the students and they will develop positive attitude towards IA. All assessors will play their roles religiously and all challenges currently being faced in IA assessment will be addressed.

Intended learning outcomes

The policy documents will govern the learning experience that the students should acquire during IA. The intended learning outcomes should measure the end result of what a student is to think or do differently as a result of the program. These should complement the program outcomes which measure the end result of what the program sets to achieve as outlined in the IA objectives. Institutions should set out content, methods and tasks that will show how the student will attain the stated outcomes. Availability of learning outcomes will assist all stakeholders in guiding the students during IA so that meaningful learning activities are given to students and appropriate methods towards achieving the goals are implemented. This will also be realised through collaborated efforts from all stakeholders for a vertically and horizontally integrated curriculum.

Placement

When what the student needs to achieve is set out, placement can be done. IA officers should assist student get placement in companies where meaningful learning will take place. Lecturers should not approve of companies that do not allow students to realise the intended outcomes. Interactions between colleges and industry should improve to increase companies' willingness to train students. Some responsible authorities such as HEXCO that certify student and ZIMDEF that offers financial support to cushion students during IA should approve the companies that engage students for IA for the whole year.

Induction

Induction should be done by both institutions and organisations to prepare the student fully for the new learning environment. At institution level, thrust should be on work ethics, communication, indemnity and life skills. Company's rules and regulations, expectations, issues of overtime and communication channels should be included during workplace induction. This is also a very crucial collaborative strategy that brings the two entities together for a smooth training process hence, a vertically and horizontally integrated curriculum.

Practice

Students should be allowed to construct meaning through relevant tasks during IA. The learning environment should support the learning activities that are appropriate to achieving desired learning outcomes. Quality of mentors should be taken into consideration. Students should be able to meet targets. Interpersonal relationships matter a lot at the practice level so that students tap into the expertise of the experienced supervisors. Attitude, punctuality, absenteeism and dress code are some very important aspects that help IA produce an all rounded person. Students should be able to marry theory and practice thus a vertically and horizontally integrated curriculum.

Assessment

The supervisor's assessments should be on-going and for lecturer and external assessors assessment should be as per policy. Lecturers should be from ICDC field and external assessors should be from the Clothing Industry. Assessment visits and

duration of each assessment session by lecturers should be communicated to the organisations. During assessments, assessment schedules and assessment rubrics should be used. Use of various instruments should be clarified. Feedback should be given after every assessment session. Assessment marks should be processed at the end of IA and results should be released before the start of the new academic year so that those who failed will not proceed but have to repeat IA. Results trend analysis should be conducted at subject level for a five year period.

Evaluations

Reports from students, supervisors, lecturers and external assessors; students' results and any other encounters should be reviewed in order to keep the program well resourced and well supported in order for the Clothing Industry to have a skills resource base that is useful in steering the economy for the benefit of the nation. Evaluations will also influence revision of the intended learning outcomes through previous experiences and in line with program objectives stipulated in the policy.

Milestones

Milestones are right in the middle of the cycle as all the aspects assist in the achievement of targets and set goals of IA assessment. Appropriate action should therefore be taken at every stage to ascertain success of the IA assessment program.

Vertical and horizontal integration and collaboration

Vertical, horizontal and integrated curricular are explained in the next sections. It has been clearly shown that an integrated curriculum is the solution to effective IA assessment strategies.

Vertical integration

A vertical curriculum links knowledge from one lesson to the next across a program of study (Gaddam et al., 2016; Rafique, 2014). In this case it is the curriculum that is practised in the Polytechnic Colleges which is considered to be theoretical. It establishes skills and knowledge which are used and further develop across a whole program of study (Gaddam et al., 2016). In this way, basic skills and knowledge are both developed and reinforced as other elements are introduced into the study. This

method of teaching is structured and progressive, focussing on building to advanced levels of knowledge (Ibid). A vertically aligned curriculum is scaffolded so that the information students learn in one level prepares them for more advanced and challenging work (Rafique, 2014). Lecturers play a role in developing, implementing, assessing and modifying the curriculum. The curriculum acts as a road map for teachers and students to follow on the path to academic success. Standards of learning represent only one part of an education system.

Horizontal integration

A horizontal curriculum integrates knowledge across different disciplines or departments. In this case horizontal integration takes place in the Host Companies where learning takes place from the various departments. The kind of knowledge is considered practical. Horizontal integration improves cognitive and psychomotor domains (Gaddam et al., 2016; Rafique, 2014). A horizontal approach strives to deliver knowledge in a conceptual and contextual manner relevant and sufficient for adequate skills acquisition and subsequent performance in skills delivery (Goddam et al. 2016). It allows for hands-on, where theory is put into practice.

Integrated and Collaborated curriculum

An integrated curriculum uses both vertical and horizontal approaches. It refers to linking all types of knowledge and experiences contained within the curriculum plan (Rafique, 2014; Esubalew, 2017). It provides a correlation between colleges and industry, theory and practice. All subjects are integrated and interconnected. Lines between subject matter are erased. Students begin to relate content from different subjects in a much more meaningful way. Integration brings relevance to the ICDC subjects that are taught theoretically such as Human Resources Management, Principles of Marketing, Principles of Purchasing and Supply Management, Research Methods, Garment Design, Garment Construction and Computer Applications among others. With an integrated approach, Polytechnic Colleges cannot disconnect from industrial activities and the Host Industries cannot exist as a separate bit.

In the traditional curriculum relevance of the various subjects is not appreciated, and the knowledge gained is inadequate for clinical application (Gaddam et al., 2016).

The outcome of the curriculum gets defeated when the students on graduation are unable to meet the needs of the society (Ibid). Lack of integrated approach to the different aspects of training (College and Industry) brings out graduates lacking in graduates lacking holistic approach towards industrial demands while employed. This newer insight will develop and promote self-directed learning, gradually unfolding into lifelong learning (Esubalew, 2017; Gaddam et al., 2016). There is need of balancing the educational concepts of practical experiences with academic inquiry; being dynamic and practical, providing and maintaining a strong identity positioned between theory and practice (Esubalew, 2017; Alsaggaf et al., 2010; Rafique, 2014). Strategically, this task will be accomplished by weaving vertical and horizontal integration into ICDC IA curriculum in the Polytechnic Colleges in Zimbabwe through collaborated efforts by all stakeholders at every stage.

The final piece of game plan necessary to implement the vertically and horizontally integrated and collaborated curriculum is to create mechanisms for continuous evaluation and feedback (Gaddam et al., 2016; Perez-lara, 2018; Rafique, 2014). These should occur both internally and externally and to make this work, there is need to review progress at every stage to ascertain achievement of intended learning outcomes and the fulfilment of the TVET mandate through ICDC curriculum. Furthermore, it is essential that assessment follow some integrated pattern. This can be accomplished by developing an integrated outcome-based curriculum. Curriculum that is structured to utilise vertical and horizontal integration unifies knowledge and students continue to learn even long after training (Dick et al., 2009; Rafique, 2014). There is need for moving from this disjointed and disorganised approach to learning to a complementary curriculum in order to bring up the dignity in the Polytechnic Colleges. This study therefore saw the need to have official policies regarding integrated curriculum to be made compulsory.

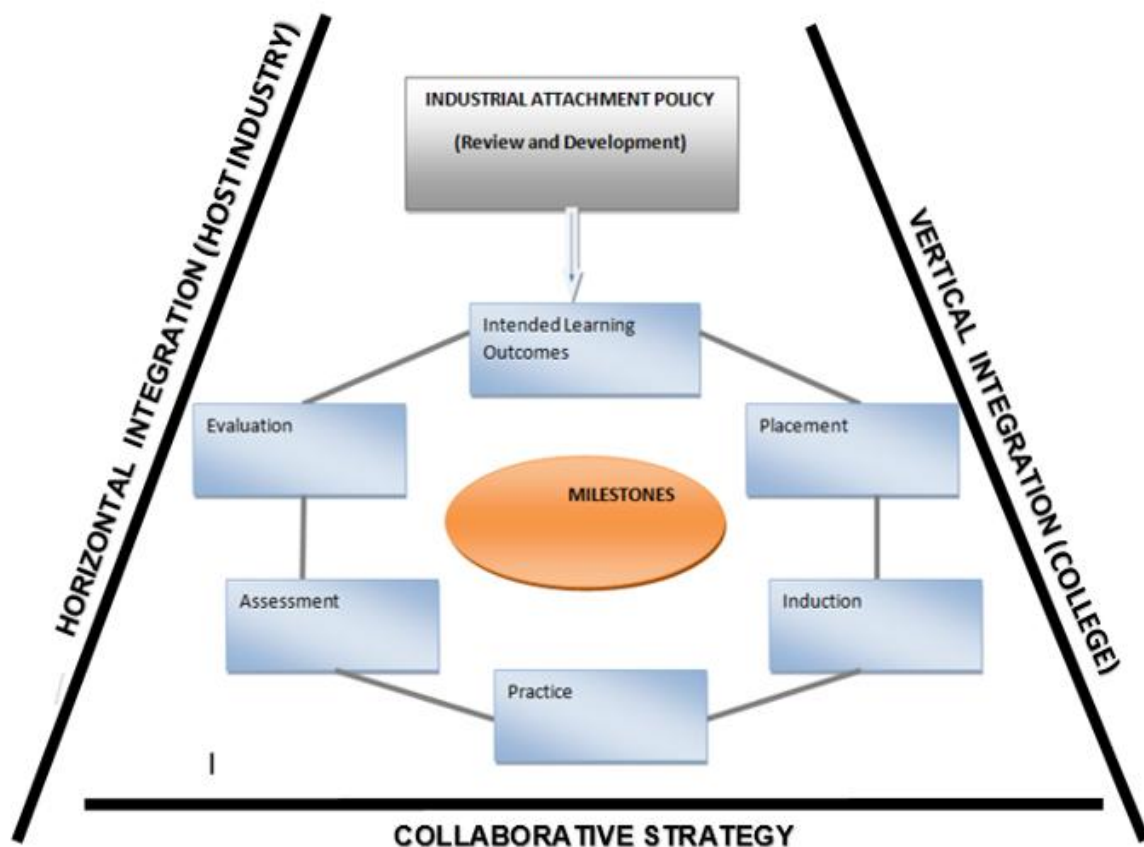


Figure 6.1: Masina's Model of Industrial Attachment Assessment Process

6.7 RECOMMENDED AREAS FOR FURTHER RESEARCH

Research in any field is an ongoing process and no research in itself is considered complete but it always opens the way for future endeavours. Every investigation lays down the foundation for a number of new researches. It is likely that the current study has not covered all the aspects of the topic. Future research efforts are needed to develop effective strategies for improving the IA assessment procedures for ICDC used in the Polytechnic Colleges in Zimbabwe. Hence, studying the results obtained through this study, the researcher makes the following suggestions for further investigations:

- The present study was conducted at two Polytechnic Colleges only and this can narrow the scope of the study and makes generalisations impossible. The study could be extended to the other Polytechnic Colleges in Zimbabwe to

provide more comprehensive and more generalisable results with a wider perspective.

- For more information to be produced in this area, similar studies could consider changing the setting, sample size, sampling procedure or data collection methods employed in this study. For example, data may be gathered from students who are still on IA, in their work settings. Probability sampling techniques can be employed to a wider population in order to provide more diversity and wider perspective to the study.
- The present study was conducted using the qualitative methods, the future studies on this topic could utilise a mix of both qualitative and quantitative methods as well.
- The same study can be conducted at one college over a period of time analysing the procedures used to assess different groups of ND students in ICDC during IA.
- This study considered the lecturer, the supervisor and the external assessor as stakeholders responsible for assessment of ICDC students during IA. A more in depth study can be conducted with supervisors only as they play the most critical role in assessing students during IA.
- This study included ND students in the Polytechnic Colleges only. A comparative study can be undertaken with universities in order to gain more insights on assessment issues.
- This study was conducted with the researcher being the main data collection instrument. Further studies can be conducted with the researcher separated from the researched.

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APPENDIX 1: INTERVIEW SCHEDULE FOR LECTURERS

Codes for Research Sites

College A

College B

SECTION A: DEMOGRAPHIC DATA

- 1a) Age.....
- b) Gender.....
- c) Academic qualifications.....
- d) Professional qualifications
- e) Current position.....
- f) Experience in Industrial Attachment.....

SECTION B: PROCEDURES USED FOR ASSESSING STUDENTS DURING IA.

- 2a) How do you conceptualise:
 - i) Industrial Attachment?
 - ii) Industrial Attachment assessment?
- 3a) Please take me through your journey as an Industrial Attachment assessor.
(Achievements, excitements, challenges, disappointments, pains, lessons etc)
- b) Please take me through the policy that guides the process and the structure of Industrial Attachment assessment. (Lecturer to student ratio, preparation of students for Industrial Attachment, Duration of each assessment session, processing of Industrial Attachment results)
- ci) Describe the assessment procedure(s) that you employ (in terms of assessors, assessment tools)
- ii) The contextual relevance of the assessment in this field
- iii) Interaction of colleges and industry on issues of assessment
- v) Frequency of assessment
- vi) Assessment schedule

vii) Feed back

viii) Processing of Industrial Attachment results, results trend analysis, post IA performance

ix) Review process, frequency?

d) Can you please share with me:

- i. The strengths of Industrial Attachment assessment
- ii. The weaknesses of Industrial Attachment assessment

e i) What is the importance of peer assessment?

ii) How do students assess themselves?

iii) Do students prepare assessment portfolios?

iv) What tools do they use and how?

SECTION C: QUALITY OF THE ASSESSMENT TOOL(S)

4a) Who is involved in designing the assessment tool(s)?

b) How do you find the tool(s) in terms of measuring students' performance? (do you think the tool(s) is sufficient?)

c) What do you suggest should be done to improve the quality of the assessment tool(s)?

SECTION D: PERCEPTIONS OF RESPONDENTS

5) What do you perceive as challenges faced by:

- a) Supervisors
- b) Students during Industrial Attachment assessment?

SECTION E: HOW TO IMPROVE IA ASSESSMENT PROCEDURE

6) In your own opinion, what do you suggest could be done to improve the whole industrial attachment assessment process?

APPENDIX 2: INTERVIEW SCHEDULE FOR SUPERVISORS

CODES FOR RESEARCH SITES

Company 1

Company 2

Company 3

SECTION A: DEMOGRAPHIC DATA

- 1a) Age.....
- b) Gender.....
- c) Academic qualifications.....
- d) Professional qualifications.....
- e) Position held.....
- f) Experience on the position.....
- g) How long have you been involved with assessment of the students on IA?
-

SECTION B: PROCEDURES FOR ASSESSING STUDENTS DURING IA.

- 2a) How do you conceptualise:
- i) Industrial Attachment?
 - ii) Industrial Attachment assessment?
- b) Which institutions supply you with students for Industrial Attachment?
- c) How do you identify feeder institutions for Industrial Attachment?
- d) On average what is the duration for Industrial Attachment?
- e) How is the Industrial Attachment program developed?
- f) Which documentation do you expect students to bring when they embark on IA?
- 3a) Please take me through your journey as an IA assessor. (Achievements/successes, excitements, challenges, disappointments, pains, lessons)
- bi) Describe the assessment procedure(s) that are employed (in terms of assessors, assessment tools)

- ii) The contextual relevance of the assessment in this field
- iii) Frequency of assessment
- iv) Assessment schedule
- v) Feed back
- vi) Who processes Industrial Attachment results?
- c) Can you please share with me:
 - i. The strengths of Industrial Attachment assessment
 - ii. The weaknesses of Industrial Attachment assessment

SECTION C: QUALITY OF THE ASSESSMENT TOOL(S)

- 4a) Who develops the assessment tool?
- b) Comment about the quality of the assessment tool
- c) How do you find the instrument in terms of measuring students' performance (do you think the tool(s) is sufficient?)
- d) What do you suggest should be done to improve the quality of the assessment tool(s)?

SECTION D: PERCEPTIONS OF RESPONDENTS

- 5) What do you perceive as challenges faced by:
 - a) Lecturers
 - b) Students during Industrial Attachment?

SECTION E: HOW TO IMPROVE IA ASSESSMENT PROCEDURE

- 6) In your own opinion, what do you suggest could be done to improve the whole Industrial Attachment assessment process?

APPENDIX 3: INTERVIEW SCHEDULE FOR EXTERNAL ASSESSORS

SECTION A: DEMOGRAPHIC DATA

Codes for Research Sites

Region A

Region B

- 1a) Age.....
- b) Gender.....
- c) Academic qualifications.....
- d) Professional qualifications.....
- e) Department/company/sector/division.....
- f) Position(s) held.....
- g) How long have you been involved with assessment of the students on Industrial Attachment?

SECTION B: PROCEDURES FOR ASSESSING STUDENTS DURING IA.

- 2a) How do you conceptualise:
- iii) Industrial Attachment?
 - iv) Industrial Attachment assessment?
- b) On average what is the duration for Industrial Attachment?
- c) How is the Industrial Attachment program developed?
- 3a) Please comment on the policy/policies that guide Industrial Attachment
- (Are there national guidelines on IA and IA assessment?)
- 3b) Please take me through your journey as an Industrial Attachment assessor. (Achievements/successes, excitements, challenges, disappointments, pains, lessons)
- ci) Describe the assessment procedure(s) that are employed (in terms of assessors, assessment tools)
- ii) The contextual relevance of the assessment in this field
 - iii) Interaction of external assessors, colleges and industry on issues of assessment

- iv) Frequency of assessment
- v) Assessment schedule
- vi) Feedback
- vii) Processing of Industrial Attachment results, results trend analysis, assessment reports

d) Can you please share with me:

- iii. The strengths of Industrial Attachment assessment
- iv. The weaknesses of Industrial Attachment assessment

ei) How do students assess themselves?

ii) Do students prepare assessment portfolios?

iii) What tools do they use and how?

SECTION C: QUALITY OF THE ASSESSMENT TOOL(S)

4a) Who develops the assessment tool?

b) Comment about the quality of the assessment tool

c) How do you find the instrument in terms of measuring students' performance (do you think the tool(s) is sufficient?)

d) What do you suggest should be done to improve the quality of the assessment tool(s)?

SECTION D: PERCEPTIONS OF RESPONDENTS

5) What do you perceive as challenges faced by:

a) Lecturers

b) Students during Industrial Attachment?

c) Supervisors

SECTION E: HOW TO IMPROVE IA ASSESSMENT PROCEDURE

6) In your own opinion, what do you suggest could be done to improve the whole Industrial Attachment assessment process?

APPENDIX 4: INTERVIEW SCHEDULE FOR THE POLICY MAKERS

Codes for Research Sites

PM 1

PM 2

SECTION A: DEMOGRAPHIC DATA

- 1a) Age.....
- b) Gender.....
- c) Academic qualifications.....
- d) Professional qualifications
- e) Department/company/sector/division.....
- f) Position(s) held.....

SECTION B: PROCEDURES USED FOR ASSESSING STUDENTS DURING IA.

2) As a curriculum developer, what are your duties with regards to:

- a) Industrial Attachment
- b) Industrial Attachment assessment

3a) Please comment on the policy/policies that guide Industrial Attachment

Are there national guidelines on Industrial Attachment and Industrial Attachment assessment?

b) How do you perceive the quality of documents used by Technical Colleges?

c) Comment on other stakeholders' involvement in curriculum development and/or review) (policy developers, implementers, reviewers)

4) In your own opinion, what do you suggest could be done to improve the whole Industrial Attachment assessment process?

APPENDIX 5: FOCUS GROUP DISCUSSION SCHEDULE FOR POST INDUSTRIAL ATTACHMENT STUDENTS

Codes for Research
Site

College A

College B

SECTION A: DEMOGRAPHIC DATA

1a) Age.....

b) Gender.....

c) Academic qualifications (For each respondent in the group).....

SECTION B: PROCEDURES USED FOR ASSESSING STUDENTS DURING IA.

2a) How do you conceptualise:

- i) Industrial Attachment?
- ii) Industrial Attachment assessment?

b) How long were you exposed to Industrial Attachment?

c) How did you feel when you went for Industrial Attachment and why? (Curiosity, anxiety, pains, disappointments, frustrations, excitement)

3a) Please take me through the typical day when you expected to be assessed by:

i) The supervisor

ii) Peers

iii) Lecturers

c) Out of these 3, which one do you think is the most and least important and why?

4ai) Describe the assessment procedure(s) that were employed (in terms of assessors, assessment tools)

ii) The contextual relevance of the assessment in this field

iii) Frequency of assessment

iii) Training schedule

iv) Assessment portfolios

v) Feed back

vi) Assessment results, post Industrial Attachment assessment

b) Can you please share with me:

- i. The strengths of Industrial Attachment assessment
- ii. The weaknesses of Industrial Attachment assessment

SECTION C: QUALITY OF THE ASSESSMENT TOOL(S)

5) How did you find the instrument in terms of measuring your performance (do you think the tool(s) was sufficient?)

SECTION D: PERCEPTIONS OF RESPONDENTS

6a) What do you perceive as challenges faced by:

- i) Supervisors
- ii) Lecturers during Industrial Attachment assessment?

SECTION E: HOW TO IMPROVE IA ASSESSMENT PROCEDURE

7) In your own opinion, what do you suggest could be done to improve the whole Industrial Attachment assessment process?

APPENDIX 6

DOCUMENT REVIEW GUIDE FOR INDUSTRIAL ATTACHMENT RESULTS FOR THE PERIOD 2013-2017

YEAR	COLLEGE (College A, College B)	CANDIDATURE	GRADE (Distinctions, Credits, Passes, Fail)
2013			
2014			
2015			
2016			
2017			

APPENDIX 7

DOCUMENT REVIEW GUIDE FOR LOG BOOKS FOR THE PERIOD 2013- 2017

ASPECTS REVIEWED	RESEARCHER'S COMMENTS
Tasks diarised by students	
Students' evaluations	
Supervisors' comments	
Lecturers' comments	
Range of marks	
Relevance of comments to marks	
Date of assessment	

SAMPLE LOG BOOK FOR COLLEGE A

2019



ZIMBABWE

MINISTRY OF HIGHER AND TERTIARY EDUCATION

SCIENCE AND TECHNOLOGY DEVELOPMENT

ON THE JOB TRAINING

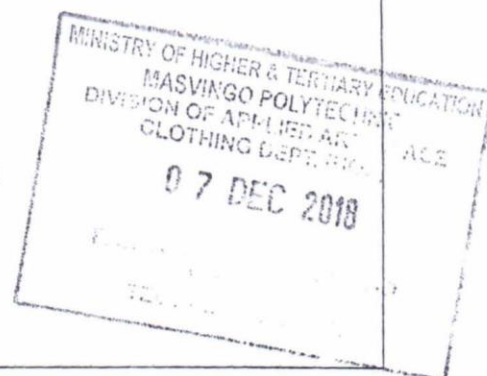
LOG BOOK

COURSE: *NATIONAL DIPLOMA IN INDUSTRIAL CLOTHING DESIGN & CONSTRUCTION*

INSTITUTION: **MASVINGO POLYTECHNIC**
BOX 800
MASVINGO

NAME OF TRAINEE : **MUKWAKWAMI ELDER**

CANDIDATE NO : **1118005F00025**



MUKWAKWAMI ELDER 2019

RECORD OF WORK DONE

DAY /DATE	DESCRIPTION OF WORK DONE	TRAINEE'S COMMENTS
WEEK 1		
WEEK 2		
WEEK 3		
WEEK 4		
WEEK 5		
WEEK 6		
WEEK 7		
WEEK 8		
WEEK 9		
WEEK 10		
WEEK 11		
WEEK 12		
WEEK 13		
WEEK 14		
WEEK 15		
WEEK 16		

Supervisor's Comments

.....

Trainee's Name:

Trainee's Signature:..... Date.....

Supervisor's Signature:..... Date.....

Training Officer's Signature..... Date.....

SUPERVISOR'S MONTHLY ASSESSMENT

Trainee's Name.....

Month	Aspects Covered	5	4	3	2	1	Weight	Mark

Supervisor's Comments

Month 1	
Month 2	
Month 3	
Month 4	

Trainee's Comments.....

Signed

1 SUPERVISOR.....DATE.....

2 TRAINEE..... DATE.....

KEY

5- Excellent 4 - Very good 3 - Good/Satisfactory
 2- Unsatisfactory 1 - Unacceptable

WEIGHTS

4- Core and Very important
 3- Very Challenging
 2- Difficult
 1- Easy (Non-Essential Tasks -If Any)

ON THE JOB TRAINING PROGRESS REPORT

(TO BE FILLED ONCE EVERY 4 MONTHS)

Name of Institution

Name of Student:Student No:.....

Course:Year:.....

Assessment Period:To

ASSESSMENT OF PERFORMANCE

Aspects Covered	5		4		3		2		1		Weight	Mark	
	S	T	S	T	S	T	S	T	S	T		S	T

Supervisor's Overall Comment:

Trainee's Comments:

Signed

1. Supervisor.....Date

2. Training Officer:..... Date

3. Trainee Date

DATE
STAMP

KEY: SSUPERVISOR'S MARK

TTRAINING OFFICER/LECTURER'S MARK

MARK: 5-Excellent 4-Very Good 3- Satisfactory 2-Unsatisfactory 1-Unacceptable

WEIGHT: 4-Core/Very important 3 - Very Challenging 2- Difficult 1- Easy (Non Essential Tasks -If Any)

TASKS TO BE CARRIED OUT DURING ON THE JOB EDUCATION AND TRAINING
ND 2 INDUSTRIAL CLOTHING DESIGN & CONSTRUCTION

DEPARTMENT	PROPOSED PERIOD	ACTIVITIES
PATTERN MAKING & DESIGN	1 month	-free hand drawing -Design sketching/ interpretation -pattern making/development & grading -CAD/CAM-(use of ICT) literacy -quality specification sheets formulation.
CUTTING ROOM	3months	-cutsheets interpretation -marker planning and making -cutting room calculations. - fabric laying and cutting. -cutting room supervision. -preparations(fusing, stamping, bundling)
PRODUCTION	4months	-machining work/ production-use of various machines -line feeding and balancing -production planning and scheduling -work & method study -Line supervision -quality checking and control -Product costing
ACCOUNTS, PERSONNEL & ADMINISTRATION	2month	-reception management. -customer care -Human resource needs -Recruitment and selection -problem solving/ personal affairs -rules and regulations. -wage calculations - accounting -code of conduct & disciplinary procedures
STORES & DISPATCH	1 month	-order sourcing/origination - product marketing -vouchers/ material requisitions -buying /purchasing procedures -stores issues and records -receiving and dispatch procedures -negotiation -documentation
PROJECT WORK	Open	-production of the required, designs patterns and products. -compilation of required information

SAMPLE LOG BOOK FOR COLLEGE B



**MINISTRY OF HIGHER AND TERTIARY EDUCATION,
SCIENCE AND TECHNOLOGY DEVELOPMENT**



**HARARE POLYTECHNIC
ON THE JOB TRAINING LOG BOOK**

COURSE.....

IINSTITUTION.....

NAME OF TRAINEE.....

DURATION.....

COMPANY INFORMATION

(COMPANY ONE)

NAME OF COMPANY:.....

CONTACT PERSONS (1)

(2)

ADDRESS :

.....

.....

PHONE:FAX NO.:.....

Email:

ON THE JOB TRAINING PERIOD:

From.....To:.....

COMPANY REPRESENTATIVE'S SIGNATURE:.....

(COMPANY TWO)

NAME OF COMPANY:.....

CONTACT PERSONS (1)

(2)

ADDRESS :

.....

.....

PHONE:FAX NO.:.....

Email:

ON THE JOB TRAINING PERIOD:

From.....To:.....

COMPANY REPRESENTATIVE'S SIGNATURE:.....

(COMPANY THREE)

NAME OF COMPANY:.....

CONTACT PERSONS (1)

(2)

ADDRESS :

.....

.....

PHONE:FAX NO:.....

Email:

ON THE JOB TRAINING PERIOD:

From.....To:.....

COMPANY REPRESENTATIVE'S SIGNATURE:.....

PREAMBLE

The Ministry of Higher and Tertiary Education through all Institutions shall issue this log book to trainees on the first day of commencement of on- the- job training. It shall be filled daily by the trainee, every two weeks by the trainee's supervisor where he / she is attached and every four months by a representative from an Institution.

The log book shall guide both the trainee and the employer as to what aspects of the training have to be covered.

The logbook remains the property of the Institution until completion of the course and the trainee shall be responsible for the safe keeping of the logbook.

GUIDELINES TO THE EMPLOYER / SUPERVISOR

The following are guidelines for the benefit of the employer supervisor where a trainee is undergoing on the job training.

- The trainee on the job training is expected to work as much as possible under the supervision of a skilled worker.
- The trainee should be placed in the normal operations of the organisation and afforded the opportunity where possible to acquire individual experience.
- We request you to give the trainee guidance and assess his/her performance as closely and as accurately as possible.
- Please fill in your objective assessment of the trainee in his/her log book once every two weeks for record.
- A skills task table has been prepared to guide you. These are in no way conclusive and extra tasks/skills can be taught to the trainee.
- We believe a trainee would have got adequate training if he/she covers at least all the listed tasks.
- Trainees who do not abide by the code of conduct (appendix 1) may be withdrawn from the course.

GUIDELINES TO TRAINEE

This logbook forms an important record of your college studies and practical training. It serves as a means of checking whether you would have had balanced and adequate practical training.

If and when you apply for employment it will serve as proof of your practical training. In the case of engineering trainees it will serve as proof of your practical training when applying for membership of professional bodies such as the Zimbabwe institute of engineers.

- You are therefore requested to fill in the log book daily, detailing all work done and tasks performed.
 - Any tasks performed that are not on the task list in this log book should also be included.
 - Care should be taken to record all work done as accurately as possible and in detail.
 - Ensure that you present your log book to your supervisor regularly for confirmation and signature.
 - Read and understand the code of conduct. Failure to abide by it will lead to disciplinary action being taken against you, which may lead to withdrawal from the course.
-

RECORD OF WORK DONE

DAY/DATE	DESCRIPTION OF WORK DONE	TRAINER'S COMMENTS
Week 1		
Week 2		
Week 3		
Week 4		

Supervisor's Comments.....

.....

.....

Trainee's Name.....

Trainee's Signature:.....Date:

Supervisor's Signature.....Date:

Training Officer's Signature.....Date:

ON THE JOB TRAINING PROGRESS REPORT

(TO BE FILLED ONCE EVERY 4 MONTHS)

Name of Institution:

Name of Student:Student Number.....

Course :Year:.....

Assessment Period:to

ASSESSMENT OF PERFORMANCE

	5		4		3		2		1		Weight	Mark	
	S	T	S	T	S	T	S	T	S	T			

Assessor's Comments.....

Trainer's Comments:.....

Signed

1. Supervisor.....Date.....

2. Training Officer.....Date.....

3. Trainee.....Date.....

DATE STAMP

KEY: S-----SUPERVISER'S MARK

T-----TRAINING OFFICER/LECTURE'S MARK

(TO BE FILLED ONCE EVERY 4 MONTHS)

[illegible]

Trainer's Comments:.....

1. SUPERVISER.....DATE.....

2. TRAINEE.....DATE.....

APPENDIX (I)

MINISTRY OF HIGHER AND TERTIARY EDUCATION, SCIENCE AND TECHNOLOGY DEVELOPMENT

CODE OF CONDUCT FOR TRAINEE ON ON-THE-JOB-TRAINING

College training involves the relevant theory in class and relevant practical and, or work experience activities. Work attachment provides the trainee with an opportunity to work in a real work environment of the trade. This enables the student to acquire and apply the requisite trade skills in a realistic work/production environment.

During work attachment, the trainees (Students) are expected to conduct themselves in an exemplary and respectable manner in which is compatible with both the college and the company culture. The following are guidelines on the conduct expected of the trainees while on work attachment:

1. During on-the-job-training the trainee will report at the company for the same number of days and hours per day, as the personnel working in the same trade in that company.
2. Once attached, trainees are not allowed to move from one company to another without the express permission of the co-ordinator of the parent institution.
3. No trainee is allowed to ask for any remuneration or favours from the company and the company is not obliged to pay anything to the trainee.
4. The trainee's co-ordinator and the company's attachment controller or training officer shall be informed by the trainee, of the reasons for any absence from duty within 24 Hours of the absence.
5. Should a trainee be absent from the company for periods longer than 3 Days due to sickness or any other acceptable reason, a medical certificate (signed by a qualified medical practitioner) or a written submission by the trainee, on the reasons of absence, shall be sent to the company's attachment controller or training officer. The student should send a copy of the same reason to the college.
6. The trainee is expected to maintain a high standard of time keeping and must be punctual at all times.
7. Trainees should take care of, economically and correctly use all company property, tools, resources and equipment and should ensure that any items borrowed from the company's stores are returned within required time.
8. The trainee should not smoke during hours in the workshop or other places. However, they may do so in those places set aside for smoking by the company (where they are available).
9. Trainees should not drink alcoholic beverages or take dangerous drugs during working hours, including lunch and others breaks. If a student is on prescribed medication, which is likely to impair his/her judgement, the student should inform his/her supervisor.
10. Any company information concerning manufacturing processes, products, costing and financial results and other activities obtained by the trainee during attachment shall be regarded as confidential. The information should not be passed to other people in any form, without the express permission of the company's management.
11. The trainees are expected to comply with all company work procedures and safety regulations throughout their attachment.
12. Trainees shall comply with all reasonable requests and orders by the company's supervisors and management staff. Should it be felt (by the trainees) that the order or request seems unreasonable guidance should be obtained from the appropriate college's co-ordinator.
13. At all times within the best of his/her ability, experience and training, the trainee shall work to the standard of quality, accuracy and time specified by the supervisor.
14. The trainee is expected at all times to act as an ambassador for the Polytechnic and Ministry and to behave in an acceptable manner, both professionally and socially.
15. The trainee is to follow the company's channel of communication if the need to do so arises and all communication with the college must be channelled through the co-ordinator.

16. Any behavior or conduct likely to bring disrepute and disrespect to the Polytechnic or to the Government may lead to appropriate disciplinary action being taken against the trainee.

17. A trainee who is dismissed from the company may be withdrawn from the course.

18. Any trainee found guilty of violation, or failure to observe the above code of conduct may have disciplinary action taken against him/her ranging from suspension to withdrawals.

19. Any student expelled from attachemnt is deemed to be expelled from the college as well.

I.....have
read and fully understood the above code of conduct and promise to abide by it during my period of attachemnt.

Signedthis.....day of.....

Co-ordinator.....
Name Signature Date

Witness.....
Name Signature Date

HARARE POLYTECHNIC

Ministry of Higher and Tertiary Education Science and Technology Development

P.O. BOX CY 407, CAUSEWAY, HARARE, ZIMBABWE

TELEPHONE: 263-4-2918081

HEBERT CHITEPO AVENUE, HARARE, ZIMBABWE

Email: hrepolytech@gmail.com

Web site: www.hrepoly.ac.zw

All correspondence to be addressed to the Principal marked for the attention of

Your Ref.

Our Ref.

ON THE JOB TRAINING ASSESSMENT BY LECTURER

Name of student.....Telephone.....

Physical address.....Course.....

Attachment Organization.....

Physical address of Organization.....

Telephone of Organization.....

Date visited.....

NB: Ratings are as follows:

5 – Excellent

4 – Very good

3 – Good

2 – Average

1 – Poor

ITEM	JOB/TASKS DUTIES	5	4	3	2	1
1	Physical presence, determination, focus					
2	Initiative, practical perception and enthusiasm					
3	Ability to meet deadlines					
4	Problem solving and articulatory					
5	Record keeping of assigned tasks					
6	Appropriateness of attachment to course being pursued					
7	Do you recommend the student to continue in the organization?					
COMMENT:						

Name of Lecturer.....Signature.....Date.....

Name of Supervisor.....Signature.....

Name of student.....Signature.....

Company Date Stamp.....

APPENDIX 8

DOCUMENT REVIEW GUIDE FOR POLICY DOCUMENTS

DOCUMENT	ASPECTS	RESEARCHER'S COMMENTS
INDUSTRIAL CLOTHING DESIGN AND CONSTRUCTION SYLLABUS	-Year of syllabus development/review -IA course structure -Occupational standards - Conditions of awards	
INDUSTRIAL ATTACHMENT POLICY	-Duration of IA -IA assessment criteria	



ZIMBABWE

**MINISTRY OF HIGHER AND TERTIARY EDUCATION AND SCIENCE TECHNOLOGY
DEVELOPMENT**

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

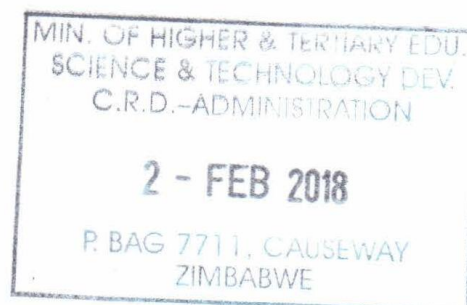
2015

REGULATIONS AND SYLLABUS FOR THE

NATIONAL DIPLOMA

IN

INDUSTRIAL CLOTHING DESIGN AND CONSTRUCTION



Course Code: 555/15/CT/0

Implementation date: January 2015

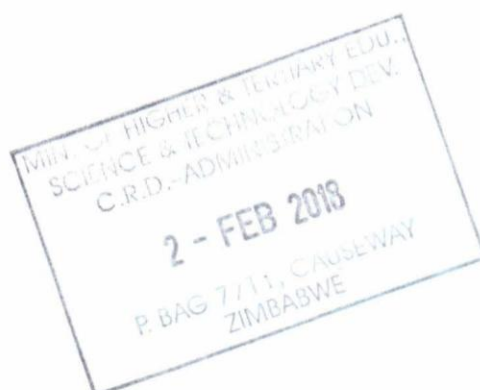
PREAMBLE

The course is designed to develop an Industrial Designer with the knowledge, skills and attitudes required in the Clothing Industry. The entry requirement is a National Certificate in Industrial Clothing Design and Construction or equivalent. The course duration is **2750** hours plus 1 year On the Job Education and Training (OJET). The course is offered on a full time, part time, block release or open distance learning (ODL) basis. Assessment will be through continuous assessment, theory and practical examinations.

CONSULTATIONS

YEAR

1.	Concorde Clothing (Pvt) Ltd	2014
2.	National Manpower Advisory Council (NAMACO)	2014
3.	Edgars Stores	2014
4.	Bernstein	2014
5.	Bravette	2014
6.	Paruche House of Fashion	2014
7.	Laine Mennas Clothing Company	2014
8.	Michelle Fashions	2014
9.	Pridel Enterprises	2014
10.	Coh Coh Taig	2014



PART I: COURSE REGULATIONS

1.0 TITLE AND LEVEL OF AWARD

National Diploma in Industrial Clothing Design and Construction

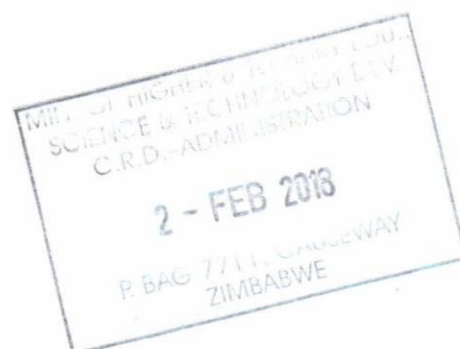
2.0 AIM

The course is designed to develop Industrial designers with the knowledge, skills and attitudes required in the Clothing Industry.

3.0 OBJECTIVES

By the end of the course the student should be able to:

- 3.1 integrate historical aspects of fashion with current trends;
- 3.2 interpret various designs, develop patterns and produce merchandise for export market and fashion shows
- 3.3 produce quality garments in the Clothing Industry
- 3.4 develop entrepreneurial skills in the production of clothes and create employment;
- 3.5 apply economic and efficient practices in the production of clothes;
- 3.6 supervise production teams in garment production;
- 3.7 implement health and safety regulations in the work environment;
- 3.8 demonstrate a critical, logical and objective approach to problem solving within the workplace
- 3.9 demonstrate patriotism on national issues
- 3.10 apply colour and ornamentation on fashion and household products
- 3.11 demonstrate appropriate industrial experience



4.0 STRUCTURE

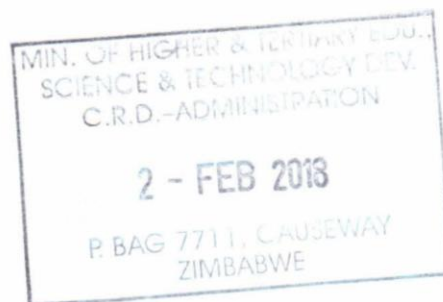
FIRST YEAR

Subject Title	Code	Duration in Hours
1. History of Fashion	555/15/S01	150
2. Principles of Marketing	555/15/S06	120
3. Advanced Pattern-Making & Grading	555/15/S03	380
4. Garment Construction	555/15/S04	390
5. Research Methods	555/15/S10	120
6. Advanced Textile Technology	555/15/S05	200
TOTAL		1360

SECOND YEAR ON THE JOB TRAINING

THIRD YEAR

Subject	Code	Duration in Hours
7. Clothing Factory Management and Operations	555/15/S07	210
8. Garment Design	555/15/S02	240
9. Principles of Purchasing & Supply Management	555/15/S09	120
10. Quality Control & Assurance	555/15/S12	160
11. Computer Applications	555/15/S11	180
12. Human Resources Management	555/15/S08	120
13. National Studies	401/13/S01	80
14. Entrepreneurial Skills development	402/13/S02	80
15. Project	555/15/S13	200
Total Duration		1390
Overall Total		2750 hours



- National and Strategic Studies and Entrepreneurship skills development are exempted to those who have passed the subjects at other levels.

5.0 DURATION

2750 hours plus 1 year on the job training, for all modes of study:

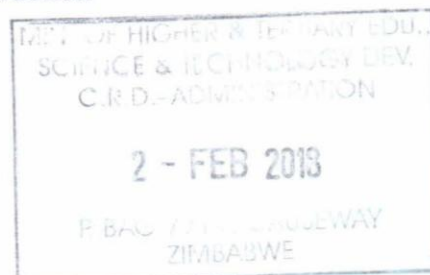
- Full time spread over at least two years, institution based learning
- Part time spread over at least four years, institution based learning

6.0 ENTRY REQUIREMENTS

A National Certificate in Industrial Clothing Design and Construction

7.0 MODE OF STUDY

Full time
Part time
ODL
Block Release



8.0 ASSESSMENT SCHEME

EXAMINABLE SUBJECTS	MODE OF ASSESSMENT		TOTAL
	WRITTEN EXAMINATIONS 40%	CONTINUOUS ASSESSMENT 60%	
1. History of Fashion 555/15/S01	Four (4) hour theory paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
2. Garment Design 555/15/S02	7 hour practical paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
3. Advanced Pattern Making and Grading 555/15/S03	7 hour practical paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%

3. Garment Construction 555/15/S04	14 hour practical paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
4. Advanced Textile Technology 555/15/S05	Three (3) hour theory paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
5. Principles of Marketing 555/15/S06	Three (3) hour theory paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
6. Clothing Factory Management & Operations 555/15/S07	28 hours practical paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
7. Human Resources Management 555/15/S08	Three (3) hour theory paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
9. Principles of Purchasing & Supply Management 555/15/S09	Three (3) hour theory paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
10. Research Methods 555/15/S10	Three (3) hour theory paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%



11.0 RE-WRITES

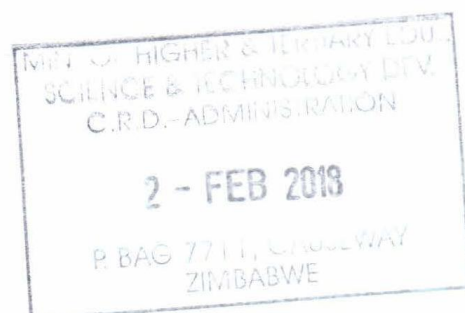
- 11.1 Re-write(s) should conform to current course structure.
- 11.2 Candidates should pass at least two thirds of the course to qualify for a referral.
- 11.3 Any candidate who fails to pass at least two thirds of the course should repeat the whole course, including the subjects they would have passed.
- 11.4 There is no time limit for which to re-write a failed examination.
- 11.5 There is no aggregation for re-writes.
- 11.6 All re-writes should pass on performance in the examination.
- 11.7 If a candidate fails coursework he/she repeats the subject

12.0 EXEMPTIONS

- 12.1 Exemptions are only granted in subjects already attained from a complete accredited qualification provided an exemption certificate specifying subjects of exemption is produced.
- 12.2 Exemption Certificate should be applied for at enrolment and produced before registration for examinations.

13.0 IRREGULAR PRACTICES

- 13.1 Cheating in continuous assessment and or examinations will result in disqualification from the whole course. The candidate will be suspended for two years from undertaking any HEXCO course.
- 13.2 The penalty for plagiarisms shall be as in 13.1.

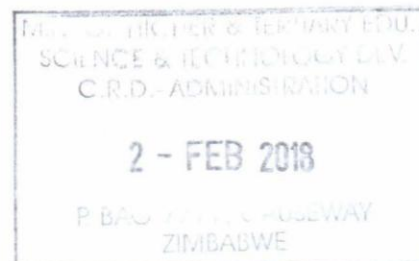


		testing 30%	
11. Computer Applications 555/15/S11	Four (4) hour theory paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
12 National and Strategic Studies 401/13/S01	Three (3) hour theory paper	A minimum of • 3 Field work based assignments 30% (weighed 10% each) Skills competency testing 30%	100%
13. Project 555/15/S13	90 hours	4 coursework projects out of the given 7 on the project guidelines	100%
14. On the job education and training	1 year	As per Log Book	100%

NB: Advance information is required for the practical papers. The information should reach institutions 2 weeks before the date of the practical examination.

9.0 GRADING

0% to 49 %	-	Fail
50% to 59%	-	Pass
60% to 79%	-	Credit
80% to 100%	-	Distinction



10.0 CONDITIONS OF AWARD

- 10.1 A candidate should attend at least 85% of learning sessions to qualify for examinations.
- 10.2 The final mark should be obtained through aggregation provided the candidate scores at least 40 % in each of continuous assessment and examinations.
- 10.3 Candidates should pass all subjects.

APPENDIX 9

UNIVERSITY ETHICAL CLEARANCE CERTIFICATE



University of Fort Hare
Together in Excellence

ETHICAL CLEARANCE CERTIFICATE REC-270710-028-RA Level 01

Certificate Reference Number: DUK231SMAS01

Project title: **Analysis of the Industrial Attachment assessment procedures for Clothing and Textiles Technology used in Technical Colleges in Zimbabwe.**

Nature of Project PhD in Education

Principal Researcher: Rumbidzayi Masina

Supervisor: Prof N Duku

Co-supervisor: Dr N Khewu

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

Special conditions: Research that includes children as per the official regulations of the act must take the following into account:

Note: The UREC is aware of the provisions of s71 of the National Health Act 61 of 2003 and that matters pertaining to obtaining the Minister's consent are under discussion and remain unresolved. Nonetheless, as was decided at a meeting between the National Health Research Ethics Committee and stakeholders on 6 June 2013, university ethics committees may continue to grant ethical clearance for research involving children without the Minister's consent, provided that the prescripts of the previous rules have been met. This certificate is granted in terms of this agreement.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
 - Any unethical principal or practices are revealed or suspected
 - Relevant information has been withheld or misrepresented
 - Regulatory changes of whatsoever nature so require
 - The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely



Professor Wilson Akpan
Acting Dean of Research

29 June 2017

APPENDIX 10

RESEARCH PROMOTERS' CONFIRMATION LETTER

Faculty of Education

*Cnr Fleet & Cambridge Street
East London*

*PABX 043 704-7222 |
Fax: 086 628 2139
Email: nduku@ufh.ac.za. |*



University of Fort Hare
Together in Excellence

CONFIRMATION: MRS RUMBIDZAI MASINA (STUDENT NUMBER: 201510145)

Our University of Fort of Fort Hare hereby confirms that the above mentioned student is currently registered for PhD in Education in our institution. The student is conducting a research study titled, **"An analysis of assessment criteria used during Industrial Attachment (IA): towards a more effective assessment model"**. The purpose of the study is to analyse the assessment criteria used in IA for a more improved assessment model. Ethical clearance has been granted by the institution.

We hereby request your assistance with regards to permitting the relevant stakeholders to participate in all the research activities entailed in this study, e.g. interviews, focus groups, document analysis, etc. Please understand that your institution is not forced to take part in this study and the choice to participate in this study or not is yours alone. However, we would really appreciate it if you do share your thoughts with us, as the results of this study will be used for academic purposes only and may be published in academic journal articles, books and conference presentations. In any of these publications, we guarantee the participants' right to anonymity, and no institution or organisation names or any other identifying information will be used.

Thanking you in anticipation,

Professor Ntombozuko Duku (Supervisor) 043 704 7222/nduku@ufh.ac.za

Dr Noncedo Khewu (Co-Supervisor) 043 704 7118/khewun@ufh.ac.za

APPENDIX 11: INTRODUCTORY LETTER



University of Fort Hare
Together in Excellence

Ethics Research Confidentiality and Consent Form

I, Masina Rumbidzayi from the University of Fort Hare am asking people from your organization /institution to participate in the interviews for this study which I hope will benefit your organization/institution and possibly other communities in the future.

I, Masina Rumbidzayi am conducting research regarding **Industrial Attachment assessment procedures for Clothing and Textiles Technology students used in Technical Colleges in Zimbabwe**. I am interested in finding out more about the assessment procedures used while students are on Industrial Attachment. I am carrying out this research in order to suggest ways of improving the assessment procedures and the quality of the assessment tool(s) used during Industrial Attachment for Clothing and Textiles Technology students in Technical colleges in Zimbabwe.

Please understand that you are not being forced to take part in this study and the choice whether to participate or not is yours alone. However, I would really appreciate it if you do share your thoughts with me. If you choose not to take part in answering these questions, you will not be affected in any way. If you agree to participate, you may stop me at any time and tell me that you don't want to go on with the interview. If you do this there will also be no penalties and you will NOT be prejudiced in ANY way. Confidentiality will be observed professionally.

I will not be recording your name anywhere on the questionnaire and no one will be able to link you to the answers you give. Only the researcher will have access to the

unlinked information. The information will remain confidential and there will be no “come-backs” from the answers you give.

The interview will last around 45-60 minutes. I will be asking you a questions and ask that you are as open and honest as possible in answering these questions. Some questions may be of a personal and/or sensitive nature. I will be asking some questions that you may not have thought about before, and which also involve thinking about the past or the future. I know that you cannot be absolutely certain about the answers to these questions but I ask that you try to think about these questions. When it comes to answering questions there are no right and wrong answers. When I ask questions about the future I am not interested in what you think the best thing would be to do, but what you think would actually assist in order to improve assessment procedures used in Clothing and Textiles Technology during Industrial Attachment.

If possible, I would like to come back to this institution/organization once I have completed my study to inform you of what the results are and discuss findings and proposals around the research and what this means for all people in this area.

Principal Investigator’s Name: MASINA RUMBIDZAYI

Signature.....

Date.....

Contact Details +263 772445050, +263732445050, +277748597147

rumasina@gmail.com

APPENDIX 12: INFORMED CONSENT FORM



University of Fort Hare
Together in Excellence

Ethics Research Confidentiality and Informed Consent Form

CONSENT

I hereby agree to participate in research regarding **Analysis of the Industrial Attachment assessment procedures used in Technical Colleges in Zimbabwe**. I understand that I am participating freely and without being forced in any way to do so. I also understand that I can stop this interview at any point should I not want to continue and that this decision will not in any way affect me negatively.

I understand that this is a research project whose purpose is not necessarily to benefit me personally.

I have received the telephone number of a person to contact should I need to speak about any issues which may arise in this interview.

I understand that this consent form will not be linked to the questionnaire, and that my answers will remain confidential.

I understand that if at all possible, feedback will be given to my community on the results of the completed research.

.....

Signature of participant

Date:.....

I hereby agree to the tape recording of my participation in the study

.....

Signature of participant

Date:.....

APPENDIX 13

PERMISSION LETTERS FROM THE MINISTRY

All official communications should be addressed to:
"The Secretary for Higher & Tertiary Education
Telephones: 795891-5, 796441-9, 730055-9
Fax Numbers: 792109, 728730, 703957
E-mail: thesecretary@mhet.ac.zw
Telegraphic address: "EDUCATION"



Reference:

MINISTRY OF HIGHER AND TERTIARY
EDUCATION, SCIENCE AND
TECHNOLOGY DEVELOPMENT
P. BAG CY 7732
CAUSEWAY

18 August 2017

University of Fort Hare
South Africa

Dear Mrs. Masina

RE: REQUEST OF AUTHORITY TO CARRY OUT A RESEARCH ON "ANALYSIS OF THE INDUSTRIAL ATTACHMENT ASSESSMENT PROCEDURES FOR CLOTHING AND TEXTILES TECHNOLOGY USED IN TECHNICAL COLLEGS IN ZIMBABWE": MINISTRY OF HIGHER AND TERTIARY EDUCATION, SCIENCE AND TECHNOLOGY DEVELOPMENT

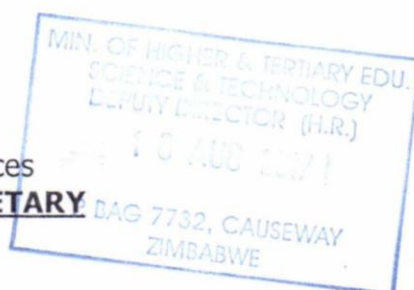
Reference is made to your letter in which you requested for permission to carry out a research on **"ANALYSIS OF THE INDUSTRIAL ATTACHMENT PROCEDURES FOR CLOTHING AND TEXTILES TECHNOLOGY USED IN TECHNICAL COLLEGES IN ZIMBABWE"**.

Accordingly, please be advised that the Head of Ministry has granted permission for you to carry out the research.

It is hoped that your research will benefit the Ministry and it would be appreciated if you could supply the office of the Permanent Secretary with a final copy of your study, as the findings would be relevant to the Ministry's strategic planning process.

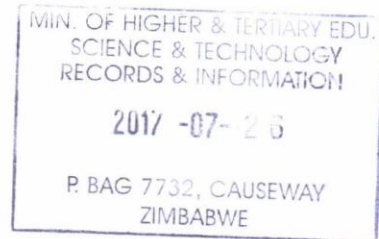

P. Mavhondo (Mr)
A/Director – Human Resources

FOR: PERMANENT SECRETARY



MEMORANDUM

To : Mr. J.T. Dewah
A/Principal Director, Academic Affairs



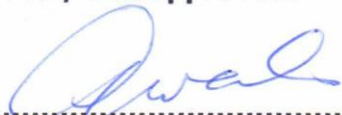
From: R. Gotora
(Acting Director, Tertiary Education Programmes)

Signed  Date 26 July 2017

RE: PERMISSION TO COLLECT RESEARCH DATA FROM POLYTECHNICS

Mrs. R. Masina, a Principal Lecturer at Belvedere Technical Teachers College, is a PhD student with the University of Fort Hare seeking authority from the Ministry to collect research data from Harare, Mutare, Masvingo and Gweru Polytechnics. TEP Department strongly recommends that she be granted the permission since it is our conviction that members of staff in tertiary institutions acquire higher qualifications in the face of the imminent transformation into degree-awarding institutions.

Approved / Not approved:

 Date: 26/7/17
A/Principal Director, Academic Affairs



APPENDIX 14

PERMISSION LETTERS FROM THE POLYTECHNIC COLLEGES

All official communications should be addressed to:
"The Secretary for Higher & Tertiary Education
Telephones: 795891-5, 796441-9, 730055-9
Fax Numbers: 792109, 728730, 703957
E-mail: thesecretary@mhet.ac.zw
Telegraphic address: "EDUCATION"



ZIMBABWE

Reference:

MINISTRY OF HIGHER AND TERTIARY
EDUCATION, SCIENCE AND
TECHNOLOGY DEVELOPMENT
P. BAG CY 7732
CAUSEWAY

18 August 2017

University of Fort Hare
South Africa

Dear Mrs. Masina

RE: REQUEST OF AUTHORITY TO CARRY OUT A RESEARCH ON "ANALYSIS OF THE INDUSTRIAL ATTACHMENT ASSESSMENT PROCEDURES FOR CLOTHING AND TEXTILES TECHNOLOGY USED IN TECHNICAL COLLEGS IN ZIMBABWE": MINISTRY OF HIGHER AND TERTIARY EDUCATION, SCIENCE AND TECHNOLOGY DEVELOPMENT

Reference is made to your letter in which you requested for permission to carry out a research on **"ANALYSIS OF THE INDUSTRIAL ATTACHMENT PROCEDURES FOR CLOTHING AND TEXTILES TECHNOLOGY USED IN TECHNICAL COLLEGES IN ZIMBABWE"**.

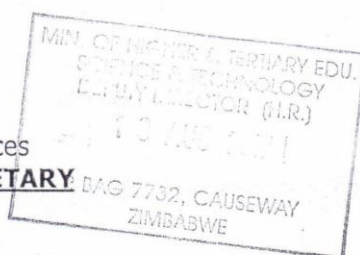
Accordingly, please be advised that the Head of Ministry has granted permission for you to carry out the research.

It is hoped that your research will benefit the Ministry and it would be appreciated if you could supply the office of the Permanent Secretary with a final copy of your study, as the findings would be relevant to the Ministry's strategic planning process.


P. Mavhondo (Mr)

A/Director – Human Resources

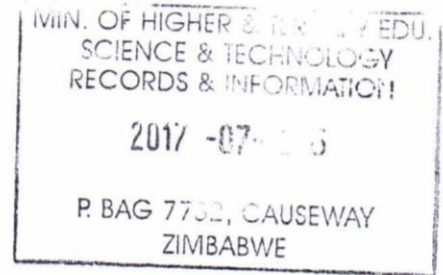
FOR: PERMANENT SECRETARY



AMute
H&C clothing

MEMORANDUM

To : Mr. J.T. Dewah
A/Principal Director, Academic Affairs



From: R. Gotora
(Acting Director, Tertiary Education Programmes)

Signed [Signature] Date 26 July 2017

RE: PERMISSION TO COLLECT RESEARCH DATA FROM POLYTECHNICS

Mrs. R. Masina, a Principal Lecturer at Belvedere Technical Teachers College, is a PhD student with the University of Fort Hare seeking authority from the Ministry to collect research data from Harare, Mutare, Masvingo and Gweru Polytechnics. TEP Department strongly recommends that she be granted the permission since it is our conviction that members of staff in tertiary institutions acquire higher qualifications in the face of the imminent transformation into degree-awarding institutions.

Approved / Not approved:

[Signature]
A/Principal Director, Academic Affairs

Date: 26/7/17





University of Fort Hare
Together in Excellence

House No. 2203

Granary Park Phase 2

Harare

09 May 2018

The Principal

Harare Polytechnic

P.O Box CY 407 Causeway

Harare

Dear Sir/ Madam



Secretary

*Please advise that she
Come and peruse the documents*

naoko 11/8/18

RE: REQUEST FOR OFFICIAL DOCUMENTS

I am a PhD student studying with the University of Fort Hare. My project title reads: **Analysis of the Industrial Attachment assessment procedures for Industrial Clothing Design and Construction used in Technical Colleges in Zimbabwe.**

With reference to the permission granted to collect data at your institution on the 2nd of August 2017, I am kindly requesting for the following documents as part of my data collection instruments as well:

- Log books for the Industrial Clothing Design and Construction students for the period 2013-2017 (at least 15)
- External assessors' OJET reports for the same period
- Internal assessors' reports

- Assessment forms
- A copy of log book

For ethical reasons, all these documents will be treated confidentially and the information extracted from these will only be used for academic purposes.

Your assistance will be greatly appreciated.

Yours Faithfully



Masina Rumbidzayi

0772 445050

0732 445050

APPENDIX 15

PERMISSION LETTERS FROM THE HOST INDUSTRIES



Suite 2 - Jean Court

113 Kaguvi Street

Cnr. Jason Moyo Ave; HARARE

Cell: +263 772 943 327

E-mail: inquiries@stanlim.co.zw +263 733 597 720; +263 713 944 735

31st August 2017

The Acting Dean of Research

University of Fort Hare

SOUTH AFRICA

Dear Sir

RE: PERMISSION TO COLLECT DATA FROM STANLIM
BUSINESS SOLUTIONS: MASINA RUMBIDZAYI.
STUDENT NUMBER 201510145

The above subject refers.

We write to inform you that we have granted Masina Rumbidzayi permission to carry out research on **Analysis of the Industrial Attachment assessment procedures for Clothing and Textiles Technology used in Technical Colleges in Zimbabwe.**

We hope the information collected will go a long way in meeting the research objectives.

Thank you.

Sydney Marisa

(Stanlim Business Solutions)

ZIMBABWE PRISONS AND CORRECTIONAL SERVICE

Telephone : 706501/2/3/4, 777384
754197,710095

Telegrams : "PENAL", HARARE
Fax : 754157
Email : zps@gta.gov.zw



Reference: G/24/17

OFFICE OF THE COMMISSIONER - GENERAL
Private Bag 7718, Causeway
Harare
ZIMBABWE

06 September 2017

Masina Rumbidzai
2203 Grenary Park
HARARE.



APPLICATION FOR CLEARANCE AND AUTHORITY TO CONDUCT RESEARCH IN PRISON.

1. The above subject refers.
2. You are hereby informed that your application for clearance and authority to conduct an academic research entitled, "*Analysis of the industrial attachment assessment procedure for clothing and textiles Technology used in Technical Colleges in Zim. A case of Harare Prison Workshops.*" was approved.
3. You can now make arrangements at your convenient time during working hours and at your expense for data collection.
4. On completion of your project you are required to submit a soft and hardy copy of your findings to the Research and Development office for the Commissioner General's information. During your data collection exercise you are required to observe all the necessary rules and regulations including ethics appertaining to your study and you shall not be allowed to divulge to any unauthorised person/s information regarding the operations of the ZPCS .
5. By copy of this letter, the A/CSO – Prison Workshops and OIC – Harare Prison Workshops are advised of this approval.

pp. Madanzu
.....
D. Garauzive (SUPERINTENDENT)
RESEARCH AND DEVELOPMENT.

Action.

SO- Security

Info.

A/CSO – Prison Workshops

OIC – Harare Prison Workshops

SO – Admin

File

ZIMBABWE PRISONS AND CORRECTIONAL SERVICE**DECLARATION FOR RESEARCH/ATTACHMENT IN THE ZIMBABWE PRISONS AND CORRECTIONAL SERVICE**

I, MASINA RUMBIDZAYI..... I.D Number 32-102379P-32.....a

student at FORT HARE UNIVERSITY (SA).....subject to the conditions prescribed in the **OFFICIAL SECRETS ACT** Chapter 11:09 part 4(2)(b) which states:

***Any person who** – publishes or communicates such model, article, document or information to any person in any manner or for any purpose prejudicial to the safety or interests of Zimbabwe; - shall be guilty of an offence and liable to a fine not exceeding twenty thousand dollars or to imprisonment for a period not exceeding twenty years or both such imprisonment.*

I am fully aware of the serious consequences which may follow on breach of these provisions.

I further understand that those provisions apply not only during my period of research in the Zimbabwe Prisons and Correctional Service but also after my period of research has ceased.

I acknowledge that my research will commence from 07/09/17 to 08/09/17

This done at ZPCS NHQ.....in Zimbabwe, this 6th day of 09.....

20 17.....

Signature [Signature].....

Witness [Signature].....

Date 06-09-17.....



APPENDIX 16

LANGUAGE EDITOR CERTIFICATE

EDITOR'S CERTIFICATE

I **JOYCE TSITSI MHIRIPIRI** hereby confirm that I have proof read and edited the following:

AN ANALYSIS OF INDUSTRIAL ATTACHMENT PROCEDURES FOR INDUSTRIAL CLOTHING DESIGN AND CONSTRUCTION: IMPLICATIONS FOR A VERTICALLY AND HORIZONTALLY INTEGRATED CURRICULUM using windows tracking system to reflect my comments and suggest language corrections for the author to effect.

During the process of proof reading the following changes were recommended: punctuation, grammatical and sentence construction. In addition, noted were; consistency in the use of abbreviation, referencing style, and capitalisation. Although the greatest care was taken in the editing of this document, the final responsibility for the product rests with the author.



Joyce Tsitsi Mhiripiri

Editor

Graduate Diploma in Purchasing and Supplies (CIPS)

Masters in Business Administration