



**An evaluation of assessment practices of Work Integrated Learning  
(WIL) in Programmes offering Office Management and Technology  
(OMT): A case study of three South African Universities**

**Pridesworth Nomusa Majiya**

**(19909521)**

**Submitted in fulfilment of the requirements for the**

**DOCTOR OF PHILOSOPHY IN MANAGEMENT SCIENCES**

**SPECIALISING IN**

**HIGHER EDUCATION MANAGEMENT**

**in the**

**DEPARTMENT OF PUBLIC ADMINISTRATION**

**FACULTY OF MANAGEMENT SCIENCES**

**DURBAN UNIVERSITY OF TECHNOLOGY**

**APRIL 2023**

## DECLARATION

I, Pridesworth Nomusa Majiya, declare the content of this thesis represents my own independent work, and this dissertation has not been submitted before for academic examination towards any qualification. Additionally, it represents my own opinions, and not those of the Durban University of Technology. I further declare all the sources used or quoted are specified and acknowledged in a list of comprehensive references.

Pridesworth Nomusa Majiya

Date: 20 April 2023

### Approved for final submission

Supervisor: \_

Date: 20 April 2023

Professor R. Rampersad (DPhil)

Co-supervisor: \_\_\_\_\_

Date:

Dr N Govindsamy (DPhil)

## **DEDICATION**

This thesis is dedicated to my family for their support during the time of this study. My special dedication goes to the memories of my loving parents Gibson and Daphney Mkhize. I also dedicate it to my siblings, Ntombezinhle, Sbongiseni, Zandile, Smangele and Nonsindiso and my grand-daughter, Silethelwe.

## **ACKNOWLEDGEMENTS**

I would like to thank my supervisor, Professor R. Rampersad and co-supervisor Dr N. Govindsamy, for their mentorship, support and guidance during my study.

I am thankful to my colleagues for their encouragement during the course of this study.

A special thank you to my family, especially my siblings, who have been my pillar of strength. Thank you for your encouragement until I could see the end of this journey when I could not, but through your support it was possible.

Thank you to my editor, Ms Helen Richter. A special thanks for allowing me to call on you at any time of the day.

Thank you to Dr Gill Hendry, my statistician, for your assistance in the analysis.

## TABLE OF CONTENTS

DECLARATION .....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS.....	iv
TABLE OF CONTENTS .....	v
LIST OF TABLES.....	xiv
LIST OF FIGURES.....	xvi
DEFINITIONS.....	xvii
ABSTRACT .....	xix
CHAPTER ONE .....	1
AN OVERVIEW OF WORK INTEGRATED LEARNING .....	1
1.1 Introduction.....	1
1.2 An Overview of WIL In South Africa.....	3
1.3 Justification for Focusing on Research Area .....	5
1.4 Purpose of the Study.....	5
1.5 Research Problem and Aims .....	5
1.5.1 Problem .....	5
1.5.2 Aim of the Research.....	7
1.5.3 Objectives of the Study .....	7
1.5.4 Research Questions.....	8
1.6 Methodology .....	8
1.6.1 Population and sample .....	9
1.6.2 Pilot study .....	10
1.6.3 Data collection .....	10
1.6.4 Data analysis .....	10
1.7 Justification of the Study .....	10

1.8 Conclusion.....	11
LITERATURE REVIEW .....	12
2.1 Introduction.....	12
2.2 Definition of Work-Integrated Learning (WIL).....	13
2.3 Paradigm Shift at SA Universities and UoTs .....	16
2.4 Historical Overview of WIL.....	18
2.5 An Overview of WIL in Developed Countries .....	19
2.6 An Overview of WIL in Developing Countries .....	23
2.7 Overview of WIL in SA.....	27
2.8 Universities under Study .....	31
2.9 Summary .....	31
CHAPTER 3.....	33
WIL POLICIES IN HIGHER EDUCATION INSTITUTIONS.....	33
3.1 Introduction .....	33
3.2 Historical Overview.....	34
3.3 The National Skills Development Strategy III (NSDS III) .....	36
3.4 Skills Development Act (SDA).....	39
3.5 White Paper for Post-School Education and Training SA .....	40
3.5.1 Partnerships for WIL .....	41
3.5.2 Staff and placement of students .....	42
3.5.3 The role of universities .....	43
3.5.4 Engagement of Stakeholders in WIL curriculum .....	45
3.5.5 WIL and assessment.....	47
3.5.6 Quality Assurance .....	48
3.6 The National Skills Accord (NSA 2011) .....	49
3.7 The New Growth Path (NGP).....	51

3.8 Sector Education and Training Authority (SETA) .....	53
3.9 Summary .....	55
CURRICULUM AND WIL ASSESSMENT IN HIGHER EDUCATION.....	56
4.1 Introduction .....	56
4.2 Overview of the OMT Programme.....	57
4.2.1 OMT curriculum structure .....	57
4.3 Students' Experiences at the Workplace .....	58
4.3.1 WIL Preparation .....	58
4.3.2 WIL Placement .....	59
4.3.3 Supervision .....	62
4.4 Alignment of Curriculum and WIL Assessment .....	62
4.5 Assessment in the Workplace .....	67
4.5.1 The need for assessment in WIL .....	68
4.5.2 The role of authentic assessment in WIL.....	70
4.6 Challenges in WIL Assessment.....	73
4.7 Stakeholders and Assessment in WIL .....	82
4.7.1 HEIs .....	83
4.7.2 Mentors .....	86
4.7.3 Industry - Co-operative Education Partners.....	87
4.7.4 Students .....	89
4.8 Evaluation of WIL Assessment Practices .....	92
4.8.1 WIL and COVID-19 .....	97
4.9 Quality Assurance in WIL.....	100
4.9.1 Quality assurance in university curricula .....	100
4.10 Theories on WIL Assessment .....	103
4.10.1 Kolb's Experiential Learning Theory.....	104

4.10.2 Vygotsky “Zone of Proximal Development” Theory .....	109
4.11 Summary .....	113
CHAPTER 5 .....	115
RESEARCH METHODOLOGY .....	115
5.1 Introduction .....	115
5.2 Research Design.....	115
5.3 Qualitative and Quantitative Research Paradigms .....	116
5.3.1 Qualitative research .....	116
5.3.2 Quantitative research .....	117
5.4 Population .....	117
5.5 Sampling Methods.....	118
5.5.1 Sample .....	119
5.6 Data Collection Methods.....	121
5.6.1 Student Questionnaires .....	121
5.6.2 Questionnaire for WIL Coordinators.....	122
5.6.3 Interviews .....	122
5.7 Construction of the Student Questionnaire .....	125
5.8 Pilot Testing .....	126
5.9 Reliability and Validity.....	126
5.10 Coding of Data .....	127
5.11 Thematic Analysis .....	128
5.12 Analysis of Data .....	129
5.13 Data Processing and Analysis.....	129
5.14 Triangulation .....	129
5.16 Summary .....	130
CHAPTER SIX .....	132

RESEARCH FINDINGS AND ANALYSIS .....	132
6.1 Introduction .....	132
6.2 Study Sample.....	132
6.3 Research Instrument .....	133
6.4 Reliability Statistics.....	133
6.5 Factor Analysis.....	134
6.6 Interpretation and Discussion of Results .....	137
6.6.1 Student responses .....	137
6.6.2 Section A: WIL Preparation .....	138
6.6.3 Section B: Placement .....	146
6.6.4 Section C: Mentorship .....	152
6.6.5 Section D: Assessment .....	156
6.6.6 Question 5: WIL Experience .....	166
6.6.7 Cross-tabulations .....	174
6.6.8 Correlations .....	176
6.7 Summary of findings from students' quantitative data .....	178
6.7.1 Section A: Wil Preparedness .....	178
6.7.2 Section B: Placement .....	178
6.7.3 Section C: Mentorship .....	179
6.7.4 Section D: Assessment .....	179
6.8 Interpretation and Discussion of Results .....	180
6.8.1 Section A: Coordinator Experience and Qualifications .....	181
6.8.2 Section B: Student Placements .....	183
6.8.3 Section C: Assessment .....	190
6.8.4 Section D: WIL Policies .....	198
6.9 Summary of findings from WIL Coordinators quantitative data .....	200

6.9.1 WIL Coordinators' experience.....	200
6.9.2 Student Placement.....	201
6.9.3 Assessment .....	201
6.9.4 WIL Policies .....	202
6.10 Data from Qualitative Analysis - Mentor responses.....	202
6.11 Research Themes .....	203
6.11.1 The Research Instrument .....	203
6.11.2 Discussion of Themes and Findings .....	204
6.11.3 Summary of qualitative data findings from interviews.....	213
6.12 Triangulation .....	215
6.12.1 Section one: WIL Preparation .....	216
6.12.2 Section two: WIL Placement.....	217
6.12.3 Section three: Mentorship.....	217
6.12.4 Section four: Assessment .....	218
6.12.5 Section five: WIL Policies .....	219
6.13 Summary .....	219
CHAPTER SEVEN .....	221
CONCLUSION AND RECOMMENDATIONS.....	221
7.1 Introduction .....	221
7.2 Aim of the study .....	221
7.3 Objectives of the study .....	222
7.4 Summary of research study .....	222
7.5 Summary of Primary Findings .....	223
7.5.1 Research question 1: WIL policies .....	223
7.5.2 Research question 2: Institutions' learning outcomes .....	224
7.5.3 Research question 3: Role of WIL Stakeholders .....	225

7.5.4 Research question 4: Assessment practices .....	225
7.5.5 Research question 5: Quality assurance .....	226
7.5.6 Research question 6: WIL students' perceptions .....	227
7.5.7 Research question 7: WIL contribution to OMT .....	228
7.5.8 Stakeholder Framework .....	229
7.6 Recommendations .....	236
7.7 Recommendation for further research .....	239
7.8 Contribution to the body of knowledge .....	239
7.9 Limitation of the study .....	239
7.10 Conclusion .....	240
REFERENCES .....	241
APPENDIX I: GATEKEEPERS' LETTERS .....	260
APPENDIX II: ETHICS CLEARANCE: .....	263
APPENDIX III: Letter of Consent .....	264
APPENDIX IV: STUDENTS' QUESTIONNAIRE .....	266
APPENDIX V: QUESTIONNAIRE FOR WIL CO-ORDINATORS .....	275
APPENDIX VI: MENTOR INTERVIEW SCHEDULE OF QUESTIONS ...	282
APPENDIX VII: CHI-SQUARE TEST .....	284
APPENDIX X: Statistician Certificate .....	287

## LIST OF ABBREVIATIONS AND ACRONYMS

AC	Abstract conceptualisation
AE	Active experimentation
BIA	Business and Information Administration
CE	Concrete Experience
CESM	Classification of Educational Subject Matter
CHE	Council on Higher Education
CPUT	Cape Peninsula University of Technology
CUT	Central University of Technology
DoE	Department of Education
DHET	Department of Higher Education and Training
e-PoEs	e-Portfolios of evidence
HE	Higher Education
HEI	Higher Education Institution
HEQC	Higher Education Quality Control
HEQF	Higher Education Qualifications Framework
HEQSF	Higher Education Qualifications Sub-Framework
HESA	Higher Education South Africa
KZN	KwaZulu-Natal
MoU	Memorandum of Understanding
NGP	New Growth Path
NQF	National Qualifications Framework
NSA	National Skills Accord
NSDS	National Skills Development Strategy
NSF	National Skills Fund
NUST	Namibia University of Science and Technology
OHS	Occupational health and safety
OMT	Office Management and Technology
PBL	Problem-based learning
PIVOTAL	Professional, Vocational, Technical and Academic Learning
PJBL	Project-based learning
PoE	Portfolio of Evidence

QMD	Quality Management Directorate/Department
SA	South Africa
SAQA	South African Qualifications Authority
SDA	Skills Development Act
SETA	Sector Education and Training Authority
SIWES	Students Industrial Work Experience Scheme
SL	Simulated learning
SPSS	Statistical Package for Social Sciences
TVET	Technical, Vocational, Education and Training
UK	United Kingdom
UNISA	University of South Africa
UoT	University of Technology
US(A)	United States (of America)
USAf	Universities of South Africa
VUT	Vaal University of Technology
WBL	Work-based Learning / Workplace-based learning
WDTL	Work-directed theoretical learning
WIL	Work-integrated Learning / Work in Learning
ZPD	Zone of Proximal Development

## LIST OF TABLES

Table 2.1: The transition of WIL in South Africa .....	22
Table 4.1: SAQA WIL Assessment practice examples – modality Dependent .....	100
Table 5.1: Sample size.....	120
Table 6.1: Cronbach’s Alpha Score .....	133
Table 6.2: KMO and Bartlett’s Test.....	135
Table 6.3: Rotated Component Matrix .....	135
Table 6.4 Province where placed .....	137
Table 6.5: Sufficiency of WIL Preparedness sessions .....	141
Table 6.6: Provision of a logbook .....	143
Table 6.7: Outcomes of WIL programme .....	144
Table 6.8: Duration of placement .....	148
Table 6.9: Sufficiency of training .....	149
Table 6.10: Relationship with mentor .....	150
Table 6.11: WIL Coordinator/University visits .....	151
Table 6.12: Securing permanent employment after WIL.....	152
Table 6.13 Explanation of logbook .....	153
Table 6.14: WIL evaluation by mentor .....	154
Table 6.15: Mark allocation .....	155
Table 6.16: Discussion of marks .....	155
Table 6.17: Type of assessment .....	156
Table 6.18: Person who conducted assessment .....	157
Table 6.19: Assessment by the department.....	158
Table 6.20: Number of assessments .....	159
Table 6.21: Assessment covered outcomes .....	160
Table 6.22: Assessor of WIL in OMT .....	160
Table 6.23 Fairness of assessment.....	161
Table 6.24: Mark allocation .....	161
Table 6.25: Scoring patterns: Satisfaction .....	163
Table 6.26: Scoring patterns: Evaluation .....	165

Table 6.27: Scoring patters: Support .....	168
Table 6.28: Cross-tabulation test results – Happy with training.....	170
Table 6.29: Cross-tabulation test results - WIL considered valuable .....	171

## LIST OF FIGURES

Figure 4.1: Kolb's Experiential Learning Theory.....	106
Figure 6.1: Institution of registration .....	138
Figure 6.2 Number of lessons attended.....	140
Figure 6.3 Topics covered for WIL preparedness sessions .....	141
Figure 6.4 Staff member responsible for WIL.....	142
Figure 6.5 Other material provided .....	143
Figure 6.6 Type of placement company.....	145
Figure 6.7 Person responsible for placement.....	146
Figure 6.8 Additional skills developed during training .....	147
Figure 6.9 Mentor during WIL placement.....	150
Figure 6.10 The experiences and perceptions of respondents on WIL....	164
Figure 6.11 Evaluation of performance and/or assessment of WIL .....	166
Figure 6.12 Support provided by WIL industry mentor during WIL .....	169
Figure 7.1 Proposed WIL Assessment Stakeholder Framework .....	223

## DEFINITIONS

**Accredited Qualification:** a qualification awarded on successful completion of an accredited programme.

**Advisory Boards (or Committees):** are essential infrastructure for a WIL curriculum built on integration of workplace and university. This requires collaboration of experts from both environments. Workplace advisors are critical to the success of the academy, as they embody expert knowledge of the 'real world'.

**Assessment:** the process of determining the capability or competence of an individual against standards by evaluating performance.

**Experiential learning:** (in South Africa (SA) sometimes used synonymously with WIL, work placement or cooperative education) is a term used with a great variety of meanings in the international literature. More broadly, it may refer to learning that has meaningful learner involvement. It is the process of generating meaning from direct experience. International literature describes experiential learning as learning through reflection on doing, which is often contrasted with rote or didactic learning.

**Graduate:** a qualifying learner, irrespective of whether the qualification is a degree or a diploma.

**Graduate attributes:** Graduate attributes are the abilities, qualities and skills students develop as part of their student experience at a higher education institution (HEI). The university experience should enable students to develop useful and unique skills, qualities and abilities that will reflect the character and mission of the institution.

**Level:** a measure of learning demands in terms of types of problems, knowledge required, skills, and responsibility, expressed in terms of level descriptors.

**Logbook:** A document that details and ratifies all practical work done at an approved workstation.

**Problem-based learning (PBL):** a term used in higher education (HE) for a range of pedagogic approaches that encourage students to learn through the structured exploration of a research or practice-based problem.

**Programme:** a structured, integrated teaching arrangement with a defined purpose and pathway leading to a qualification.

**Project-based learning (PJBL):** combines PBL and workplace learning, in that it brings together intellectual inquiry, real-world problems, and student engagement in relevant and meaningful work. Project work is generally understood to facilitate student understanding of essential concepts and practical skills.

**Qualification:** the formal recognition of a specified learning achievement, usually awarded on successful completion of a programme.

## **ABSTRACT**

Work Integrated Learning (WIL) focuses on the integration of theoretical and practical learning at the workplace. Its goal is the development of professional proficiency and the ability of students to achieve competency at the workplace. Assessment has been a critical issue in WIL and, despite assessment being central to the integrity of a university, endorsing quality assessment practices has been difficult.

The purpose of the study was to evaluate WIL assessment practices at three South African universities offering a Diploma in Office Management and Technology. The study adopted both a quantitative and qualitative approach. The sample comprised of 358 respondents from the universities under study who were engaged in WIL, twenty-five industry mentors/supervisors and three WIL Coordinators.

The findings of the study revealed that WIL is assessed by more than one academic staff member, which ensures consistency and subsequently, quality. Additional, findings revealed that industry mentors are also involved in the assessment process, which presents a problem because mentors are not trained as assessors and sometimes are unable to relate WIL outcomes to assessment criteria.

It was recommended that assessment training for mentors is crucial as this will capacitate them and assist in better understanding the importance of assessing students during placement. A further study can be undertaken to explore the relationship of industry supervisors/mentors with students.

## CHAPTER ONE

### AN OVERVIEW OF WORK INTEGRATED LEARNING

*“The demand for **work**-ready graduates who are familiar with organizational practices in the **workplace** is increasing, ... “*

(Cooper, Orrell and Bowden, 2010)

#### **1.1 Introduction**

South African Higher Education institutions (HEIs) are progressively required to confirm employability of their students by offering quality and relevant educational programmes. In November 2013, the Department of Higher Education and Training (DHET) “White Paper for ‘Post-School Education and Training: building an expanded, effective and integrated post-school system” was released. The 2013 White Paper is a policy received for its acknowledgement of all post-school education and training as part of a combined system. It describes students exiting HEIs as lacking the skills required and, as a result, these graduates have difficulty in finding employment.

The Council on Higher Education (CHE), however, cautions “WIL does not offer a “quick fix” solution to national industry’s lack of competitiveness; nor can it transform a “low skills” society into “high skills overnight” (CHE 2011: 6). For these reasons, the 2013 White Paper highlights the value of WIL in improving graduates’ employability and develop students’ learning experience (SA DHET 2013: 64). The National Skills Accord (NSA), signed in July 2011 by business and government, agreed among others, to offer “5 000 internships to 3rd year students at Universities who require the work experience as part of their qualifications” as part of the New Growth Path (NGP) (Department of Economic Development 2011: 6).

WIL focuses attention on the integration of theoretical learning and practical learning in the workplace. An ultimate aspect of WIL is the development of professional proficiency and the ability of students to achieve competency in the workplace (Jackson *et al.* 2020: 5). Therefore, student assessment is

imperative and at a pivotal point in WIL, because it determines their professional competency. In recognition of this factor, the Higher Education Qualifications Sub-Framework (HEQSF), published by the DHET in South Africa (SA), includes a WIL component in the curriculum of new qualifications. As a result, all academic institutions are expected to fulfil the requirements of this framework by devising policies and procedures in line with the HEQSF (DHET 2013).

In line with the above, Universities of Technology (UoTs) practice various models of WIL. This component is compulsory in some programmes and students do not graduate when it is not fulfilled. During placement in a work environment, they are expected to perform the duties/tasks as outlined in the outcomes. These placements need the relationship of three stakeholders, that is, the HE academic departments (where the students are registered), the mentors/supervisors from external companies and the students.

WIL is assessed by more than one academic staff member, which compromises consistency and, subsequently, quality. In industry, mentors are required to assess students on their performance. This poses a challenge, since mentors are not trained as assessors and some are, at times, unable to relate WIL outcomes to the assessment criteria. It was interesting to establish how formative and summative assessments are conducted for WIL in academic institutions. Additionally, WIL is offered at third year level and according to the rules and regulations of HEIs, third year subjects are moderated externally. It was, therefore, beneficial to establish the WIL moderation status at the universities under study.

Considering the background outlined, this study examined the status of assessment of WIL at three selected South African Universities that offer a diploma in Office Management and Technology (OMT). The contribution of this research would assist Universities in ensuring their policies and procedures are in line with those of the DHET. This research will also contribute to the curriculum that meets industry expectations and assist Universities to realise

programme outcomes. Subsequently, the OMT programme would be further developed and the curriculum enriched.

## **1.2 An Overview of WIL In South Africa**

The South African HE system encompasses universities (including research-intensive universities), comprehensive universities and UoTs, as well as Technical, Vocational Education and Training (TVET) colleges. Many universities pride themselves on delivering career-focussed programmes. Therefore, they have found it important and useful to prepare students for the world of work and assist them with practical experience by exposing students to the actual work environment through work placements (CHE 2011: 6). To achieve this, SA has introduced several government policies over the last few years that emphasise the centrality of WIL.

The NGP, the NSA, the National Skills Development Strategy (NSDS) III and the White Paper for Post-School Education and Training, all “reflect a growing emphasis on workplace learning as a core and essential component of vocational and occupation education” (Blom, 2014). Furthermore, the NSA highlights its eight commitments on training and development, which includes making internship and placement opportunities available within workplaces. The Accord also includes the commitment of providing internships for third year university students, who need work placements as part of their qualifications, as well as provide work exposure in a work environment. In recognition of this, WIL was introduced as a component that will assist students to gain this work exposure in industry.

In SA, HEIs are key to developing a nation. They educate and equip citizens with high-level skills required for employment needs of the private and public sector. For these reasons, it is important developed skills are at their optimum level, more so when it comes to scarce skills (Harmse and Goede 2012: 572). Universities need to develop these skills in order for students to be marketable and eventually be employable. Therefore, the role of HEIs is to educate students for global citizenship; it is thus imperative to produce graduates that

are work-ready (Trede 2012: 161). In the OMT programme WIL is practised using different models. Overall, there is a need for the study as there are gaps in how assessments are conducted. The assessments should be more focused to bring out the entire purpose of WIL. In line with this, the introduction of WIL in the OMT programme is a component that assists students to realise their chances of gaining experience, which prepares them for the future.

Jackson (2013: 99) highlights WIL is frequently the “sandwich degree” in the United Kingdom (UK), where two years are spent on-campus and this period is considered adequate for undergraduates to develop technical expertise which they will use in industry. The third year is spent in industry for and when they complete the WIL period, students return to university to complete their studies. In Australia, WIL is an essential part of the curriculum in some areas of professional education. McLennan and Keating (2008: 4) agree many universities in Australia are increasing their involvement in WIL, either through placement-type WIL or through other types that all ensure strong industry/community engagement in their programmes. Work placement is common in undergraduate programmes and is structured; where there is contact time, amount of workplace time and where WIL sits in the programme. Most universities have made substantial commitments to increase WIL in most, if not all, disciplines (Jones *et al.* 2009: 208-209).

In recognition of this factor, the South African Department of Education (DoE) promulgated a new Higher Education Qualifications Framework (HEQF) in 2012. Subsequently, in August 2013, the HEQSF was gazetted. The latter is specific to HE practices and includes the component of WIL. It states certain qualifications will be designed to integrate theory and practice through incorporation of WIL into the curriculum. It further highlights where WIL takes the form of work-based learning (WBL), “it is the responsibility of institutions that offer the programmes to place students into appropriate workplaces”. The HEQSF stresses WBL should be “properly structured, properly supervised and assessed” (DHET 2013: 49).

In addition, the CHE, an independent statutory body responsible for advising the South African Minister of HE and Training in policy matters related to HE, developed a “Work-Integrated Learning: Good Practice Guide” that covers the use of various learning modes for Work-Integrated Learning / Work in Learning (WIL). The focus of the CHE is the several pedagogical, curricular and assessment forms developed across a variety of academic disciplines that combine formal learning and workplace uncertainties (CHE 2011: 4). In line with these documents, South African UoTs have policies that guide the implementation of their WIL. The CHE (2011: 5) explains the common purpose of these policies is to enable achievement of consistent high-quality practices and procedures for WIL. It, however, remains to be assessed whether these policies/procedures are in line with the HEQSF and CHE prescripts.

### **1.3 Justification for Focusing on Research Area**

The researcher engaged in research at UoTs, where WIL is a compulsory component for a diploma in office management. It has emerged that lecturers face challenges when it comes to assessing WIL as they are not qualified assessors. The outcomes from this study will lead to WIL coordinators understanding policies and procedures.

### **1.4 Purpose of the Study**

The study assessed whether assessment practices were consistent with WIL outcomes and determined whether assessment practices contributed to the enhancement of the OMT curriculum. The study aimed to further strengthen the capacity of all partners involved in WIL in OMT programmes at UoTs.

### **1.5 Research Problem and Aims**

#### **1.5.1 Problem**

This study gauged whether the outcomes of WIL and the assessment practices of the three universities offering a diploma in OMT were aligned with the policy requirements of the DoE and whether the WIL assessments were quality assured. In relation to the above, the issue of assessment affects the design of a curriculum as programmes should be able to prepare students who are

employable. Jackson (2018: 556) argues it is problematic for students to assess their own performance. As a result, it is impractical for academic staff to assess students at the workplace, considering the number of students placed. Subsequently, the validity of the assessment might also be compromised should a student be required to articulate his/her own capabilities. Nonetheless, should evidence be provided by the mentor/mentor, the assessment may be unreliable.

Students are assessed by supervisors who, in some organisations, are not trained as assessors. According to Winchester-Seeto, Rowe and Mackaway (2016: 101) the factor that underpins the success of WIL is student supervision. For this reason, mentors should understand their role as supervisors and as drivers of WIL training in the workplace. It is important for WIL stakeholders to, therefore, understand each person's role and there should be consensus on these roles, particularly on the issue of assessment. Academic staff responsible for WIL received feedback from students who have undergone WIL that also highlight the challenges they face when being assessed. As a result, some students are unable to meet the deadline of portfolio submission as mentors take a long time to assess student performance.

Boud and Dochy (2010) argue that assessment has an impact in student development and how they learn, as it directs the future of students in higher learning. In addition, with the rapid change and advancement in technology, it is imperative assessment of WIL be explored. In line with this, student perceptions need to also be examined to establish whether the set outcomes in their logbooks are included in the WIL assessment.

Ferns and Zegwaard (2014: 179) assert students do not work alone in a workplace; they are exposed to other people with different expectations and outcomes. In most cases, there are occupations where assessment is shared by academics and mentors, since both share common accreditation criteria, for example, in the social work and nursing professions. These are regulated

by professional bodies with their own standards and criteria that contribute to the structure of university programme content.

Conceptual and practical skills have to be assessed by both academics and mentors in line with the accrediting/professional bodies' standards (O'Toole 2007: 52). Consequently, in professions where there are no professional bodies, as is the case in OMT, assessment is left to the individual HEIs, specifically, the departments. In line with this, there is a need for departments to examine how students are assessed and what role the three stakeholders (academic staff, mentors and students) play in the assessment of WIL and how they ensure quality in their assessments.

Quality assurance in teaching and learning has been a topic of concern and interest for some time. As a result, assurance of learning is an important matter for universities and WIL experiences can make a substantial contribution to furnishing evidence of students' developing capabilities (Smith, Meijer and Kielly-Coleman 2010: 418). It is important for the quality assurance of WIL to be addressed, as this will also ensure the quality of the programmes offered to students of higher learning.

### **1.5.2 Aim of the Research**

To evaluate whether current assessment practices in the OMT programme at the three universities are consistent with the WIL outcomes and discover whether the assessment practices contribute to curriculum enhancement. The outcome of this study will enhance WIL assessment practices in the OMT domain in HE.

### **1.5.3 Objectives of the Study**

In order to achieve the above aim, the following objectives were addressed:

1. To examine WIL policies at the identified universities.
2. To determine whether the learning outcomes and assessments are coherent to achieve the set institutions' WIL goals.
3. To assess the role of various WIL stakeholders in the assessment process.

4. To evaluate assessment practices in place and how they are quality assured.
5. Develop a Framework for strengthening partner capacity of all involved in WIL assessment at universities.
6. To provide recommendations to improve and strengthen the WIL programme.

#### **1.5.4 Research Questions**

To obtain information on these problems and achieve the study objectives, the following research questions were formulated:

- a) How are WIL policies/procedures at DUT, MUT and WSU in-line with those of the DoE?
- b) How are institutions' learning outcomes coherent with WIL goals at the three institutions?
- c) What is the role of mentors/supervisors, WIL Coordinators and students in assessment?
- d) What assessment practices are in place for WIL at the three institutions?
- e) How is quality of the assessment assured?
- f) What are student perceptions/experiences with WIL assessment?
- g) How does WIL contribute to the OMT programme?

#### **1.6 Methodology**

Descriptive survey research was used since the researcher sought to explain "a past event" requiring an analysis of the information and drawing conclusions. Nassaji (2015: 129) states a phenomenon and its characteristics are described through descriptive research; dealing with what has taken place instead of the "how or why" it has happened, since it describes behaviours, events and situations. This type of research employs case studies, observations or surveys, with Rholetter (2020: 3) asserting, since it focuses on a "single part of a broader topic", researchers have "scope for deeper analysis",

As the focus of the study, three South African Universities were used as a case study, since including all universities was not practically plausible. Two

universities are KZN province based, with the other in the Eastern Cape. The unifier/common denominator is that they all offer WIL as a compulsory OMT component and assessment is done throughout.

It is stated by Hair *et al.* (2013: 76) that qualitative research may be adequate in certain decision-making situations and when consistent feedback is received in focus groups or in-depth interviews. Data from semi-structured interviews in this study, which used open-ended questions, enabled better understanding of the findings through analyses. Nevertheless, quantitative research quantifies the data, as Stumpfegger (2017: 2) explains, “and generalises results from the sample to the population of interest”. Data were, therefore, collected with a questionnaire containing closed-ended questions, from the study sample, specifically students and WIL Coordinators.

### **1.6.1 Population and sample**

Considering the many elements involved in this study, the researcher selected participants from three South African universities; two universities in KwaZulu Natal and one in the Eastern Cape, namely: students engaged in WIL (quantitative – questionnaire), mentors/supervisors in the workplace (qualitative – interviews) and WIL Coordinators (quantitative – questionnaire). Mentors/supervisors are those who mentor or supervise students engaged at companies for WIL.

A sample is described as a “subset of the population” by Sekaran and Bougie (2011: 263) and is composed of individuals selected from the entire population; for this study, 358 students were selected from a total population of 14 300 as an acceptable sample size. In this study, the entire population for the quantitative study, is made up of the quantity of all registered students at the three universities in three faculties, as follows: university A - Faculty of Management Sciences (4 500 students), university B - Faculty of Engineering (6 800 students) and university C - Faculty of Natural Sciences (3 000 students). The sample of 358 students were students who had completed their WIL component.

### **1.6.2 Pilot study**

A pilot study was undertaken to determine the measurement instrument's suitability concerning question clarity, readability, coherence and appropriateness. The respondents to the pilot study were 10 students who had completed their WIL, had been assessed prior to but did not take part in the main study. Feedback was incorporated, with amendments discussed with the supervisor, after which the final version of the questionnaire was developed.

### **1.6.3 Data collection**

Data was collected through a review of relevant literature on the topic, via a questionnaire and interviews. Furthermore, the researcher explored secondary data in the form of WIL policies from the three universities under study, as well as government documents relevant to WIL.

### **1.6.4 Data analysis**

The qualitative data were collected from mentors/supervisors and WIL coordinators by means of semi-structured interviews, with responses analysed using thematic analysis, which Braun and Clarke (2006: 79) define as “a method for identifying, analysing and reporting patterns (themes) within data”. Therefore, themes used to interpret the data were identified through analysis, offering the reader meaning, because “themes should interpret data and not explain it”.

Quantitative data were obtained from students and WIL Coordinators through a questionnaire with closed-ended questions, with responses coded and analysed using the Statistical Package for Social Sciences (SPSS) version 27.0, considered the most used statistical software package in the analysis of quantitative data in social sciences (Arkkelin 2014: 2).

## **1.7 Justification of the Study**

It is anticipated the research findings will benefit WIL Coordinators/academic staff by clarifying the coherence of learning outcomes and WIL goals. They will thus be able to align the DoE policies with that of their institutions and ensure the programme outcomes are clarified. The findings will also contribute to the

development and enhancement of the OMT diploma curriculum. Consequently, the academic departments will be better positioned to produce graduates who have undergone WIL and are fully capable to perform at their best, as their skills would have been properly assessed.

The improvement in OMT curriculum and student performance can be achieved by obtaining feedback, comments, complaints or suggestions from employers where students are provided WIL experience. From the positive or negative feedback, the OMT department can gain an in-depth view of its strengths and weaknesses, allowing improvements to be implemented wherever necessary. The Benefits to mentors/supervisors will be to explain their role in the assessment of WIL and to establish whether students who have undergone WIL have the required skills when employed.

## **1.8 Conclusion**

The chapter provided an overview of the background, introduced the study problem, research questions, and research objectives, while it also offered justification for conducting the study. The chapter revealed the study was motivated by the limited clarity on WIL assessment criteria and the guidelines academics should follow to ensure consistent quality of assessment. The next chapter discusses the review of literature on the study topic and related matters.

## CHAPTER 2

### LITERATURE REVIEW

..... *WIL is the bridge between **classroom learning** and the practical application of theory in the workplace* (David, Kralj, Kay and DeVeau, 2009)

#### **2.1 Introduction**

Employers all over the world seek highly skilled employees who can perform at their optimum potential level. The demand for a highly skilled workforce has necessitated a change in universities, not only in Africa but globally (Lopokoiyit, Amurle and Gakure 2013: 761).

Universities world-wide are concerned with the quality of learning and the qualifications offered to produce graduates who meet industry expectations (Ramlan *et al.* 2017: 30). There is a growing call for universities to produce “job ready” students on graduation, to enable employers access to a pool of prepared employees to join the workforce (Peach and Gamble 2011: 169).

Twenty-first century graduates are faced with the challenge of not securing employment when they complete their studies. Unemployment among youth is high and competition for suitable jobs according to qualifications is a challenge (Bilal and Ummah 2016: 52). Furthermore, every employer would prefer to engage a skilled and professionally trained employee who can “hit the ground running”. Nonetheless, the population group with the greatest unemployment percentage today is the youth, with the official unemployment rate among youth aged 15-34 years, according to Statistics SA (Stats SA 2021), at 46.3 percent in the first quarter of 2021.

Employers are, however, unhappy with the gap between what is required by industry and what HEIs provide, where the disparity of what HEIs offer and what industry requires emanates from the lack of communication between industry and the education sector. Both are concerned with the alignment of graduates and industry requirements. The mentioned challenges propelled universities to generate a strategy to synergise the industry and educational institution partnership. Both parties have a role in developing the appropriate

human resources required by industry at present (Freudenberg, Brimble and Cameron 2011: 79).

This chapter will examine the history of WIL, and the change in basic WIL assumptions at universities in general, and South African universities in particular. The chapter will further discuss how WIL is practised in developed and developing countries and will highlight discussion on the SA White Paper.

## **2.2 Definition of Work-Integrated Learning (WIL)**

In the “Good Practice Guide” (CHE 2011: 4) the CHE uses WIL as “an inclusive term to describe curricular, pedagogic and assessment practices through an array of academic disciplines that incorporate formal learning and workplace concerns”. This integration can occur through a variety of WIL activities.

Authors from various fields have defined WIL differently. For example, Patrick *et al.* (2008: 9) state WIL is “an umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum”. Furthermore, each institution practices WIL differently, depending on its purpose in their academic programmes. The HEI curriculum determines which approach or approaches of WIL to implement. In an academic approach, WIL is used to “reflect the engagement of students with employers, real-life experiences and integration of theory and practice” (Harmse and Goede 2012: 572).

Jackson (2013: 99) agrees WIL is the combination of formal learning and traditional academic study that exposes students to the world of work in their chosen careers; the fundamental goal is to prepare undergraduates to enter the workforce equipped with the required knowledge, skills and values. WIL is more common to undergraduate than post-graduate programmes (Jones *et al.* 2009: 208)

In another study, Trede (2012: 164), found WIL to be a concept under which professionalism and the professional identity of students are developed. It is a space where graduate transformation is accomplished, emerging from “being

a student, to a professional who has to understand the organisation's culture, socialise in a practical environment and develop as an employee in the workforce".

What these authors highlight is the importance of students to be able to navigate the workplace. Students have to develop from being a "learner" to a professional through WIL, which incorporates learning about theory and practice. It becomes important for them to know themselves and be a good fit in this new work environment.

Ibrahim *et al.* (2017: 73) postulate WIL has been recognised as an instrument for improving professionalism and work readiness to recently graduated students. It is suggested students who have undergone WIL Benefit from the work exposure, as a result, it is believed they "improve on their attributes and develop work competencies" (Ibrahim *et al.* 2017: 73). WIL has further been shown to enhance student skills, insights and knowledge in a solid and realistic way not achievable in a customary classroom setting.

Ibrahim *et al.* (2017: 73) and Trede (2012: 159) concur with Kramer and Usher (2011: 2) that WIL refers to the employment experiences students have and are arranged by their academic institutions, relevant to their fields of study. Nonetheless, Kramer and Usher (2011: 4) argue these experiences should "build correlations between classroom learning and on-the-job experiences". Students should be able to create a connection between the classroom and the workplace early in their student life. WIL provides students with the opportunity to understand the work environment and how they will navigate similar situations in the future, while also assisting them to realise the Benefits of crafting their careers.

SA HEIs are progressively required to confirm employability of their students by offering quality and relevant educational programmes., The DHET released the "White Paper for Post-School Education and Training: building an expanded, effective and integrated post-school system" (hereafter referred to as the White Paper 2013. This White Paper is a policy received for its

acknowledgement of all post-school education and training, as part of a combined system; it describes students exiting HEIs as lacking the necessary skills and as a result, having trouble finding employment.

The CHE cautions, “WIL does not offer a “quick fix” solution to national industry’s lack of competitiveness; nor can it transform a “low skills” society into a “high skill” one overnight” (CHE 2011: 6). For these reasons, the White Paper highlights the value of WIL to improve the employability of graduates and develop the learning experience of students (White Paper 2013: 64). The NSA, signed in July 2011 by business and government under the NGP, agreed to offer, among other things, “5 000 internships to 3<sup>rd</sup> year students at Universities who need the work experience as part of their qualifications” (Department of Economic Development 2011: 6).

WIL focuses attention on the integration of theoretical and practical learning in the workplace. An ultimate aspect of WIL is the development of professional proficiency and the ability of students to achieve competency in the workplace. In recognition of this factor, the HEQSF, published by the DHET in SA, includes a WIL component in the curriculum of new qualifications. As a result, all academic institutions are expected to fulfil the requirements of this framework, by devising policies and procedures in line with the HEQSF (DHET 2013: 11).

In order to fulfil the above, UoTs practice various models of WIL. This component is compulsory in some programmes and students do not graduate when this requirement is not fulfilled. During this timeframe they are placed in a work environment where they are expected to perform the duties/tasks as outlined in the outcomes. These placements need co-ordination by the three stakeholders, that is, the HE academic departments (where the students are registered), the mentors/supervisors from external companies and the students.

Although literature offers variations of WIL definitions, it appears these are centred on numerous concepts, amongst these are: enhanced graduate employability, self-efficacy, job-readiness, and an integrated classroom and

workplace, as well as reflection on learning and professionalism. The next section introduces the main elements on which this case study is based, providing the orientation to the study, while highlighting the study contribution to the body of knowledge on WIL policies, practices and processes, with specific reference to SA Universities and UoTs.

### **2.3 Paradigm Shift at SA Universities and UoTs**

The SA education sector has undertaken key changes since 1994. Du Pre' (2013: 93) states prior to 1994, the common idea was "education for the sake of education" and not "education for the world of work". Academic institutions did, nonetheless, provide students with skills that assisted them to cope in the workplace.

In addition, SA government policies pre-1994 did not address education, training, and provision of skills for most people in the country. As a result, the workforce was unskilled, and SA did not feature on the global map (du Pre' 2013: 92). Nonetheless, the education landscape of SA has drastically changed, according to Kuriakose and Swart (2014: 1), with some Technikons merging with other Technikons. In other cases, Technikons merged with traditional universities to create comprehensive universities (Lewis, Holtzhausen and Taylor 2010: 25). The change was affected to categorise existing diverse universities.

The shortage of skills in the country called for a change in basic assumptions in educational institutions. Students needed constant training and development in technical skills to provide the workplace with a skilled workforce, where SA Technikons were the institutions that provided and developed students in technical skills. Hence, in October 2003, the Minister of Education proclaimed some Technikons would be restructured and become "universities of technology" (UoTs), while some were combined with other universities to form comprehensive universities; for example, Technikon SA was merged with the University of South Africa (UNISA) (du Pre' 2006: 5).

Kuriakose and Swart (2014: 2327) explain, whereas "... a traditional university was intended to train and produce, for instance, a qualified engineer who would construct and develop infrastructure, a UoT would, similarly, produce a technician and technologists who repair and maintain the infrastructure".

Therefore, students who graduate from a UoT should possess technical "know-how". The aim of a UoT is thus to equip students with technical skills and produce technically trained graduates who can be employed by industry in the various fields offered at tertiary level (Alhassan, Aigbavboa and Atepor 2016: 599). This concurs with findings by du Pre' (2013: 94), who added UoTs are "innovators in the introduction of innovative programmes and methods that prepare students for the workplace and the national market".

HEIs that offer career-oriented programmes, mostly UoTs, have included a component of WIL in their programmes as part of the curriculum. WIL is a strategy that combines theory learned in class and relevant work experience (du Pre' 2013: 95). This allows educational career-focused programmes to "empower and employ" graduates, streamlining students from the lecture room into future careers.

UoTs in SA had until 2021 to phase out National Diplomas and Bachelor of Technology (BTech) qualifications, replacing these with Diplomas and a mix of new qualifications, due to revised legislation in 2016 by the HEQSF. "This means a student at a UoT can now progress from a diploma to an advanced diploma, a postgraduate diploma and a master's degree before studying for their doctorate" (Fengu 2020: para 7). Students would previously study for a national diploma and BTech to achieve master's and doctoral qualifications.

The 2016 directive has seen changes to academic pathways and the introduction of new HEI qualifications, in compliance with the amended framework, which impacts the legal, financial and accreditation status of UoTs (Fengu 2020: para 8). In other programmes, for example engineering, some UoTs are set to introduce changes that will include or exclude WIL (Makhathini 2016: 56), with the expectation that soft skills are included in the curriculum.

According to the revised legislation, these changes will enable HEIs to:

“...pursue their own curriculum goals with creativity and innovation in order to produce graduates who will contribute to the social, cultural and economic development of SA and the global economy, while at the same time being compatible with international standards” (HEQSF 2016).

## **2.4 Historical Overview of WIL**

Cooperative education was founded in 1872 by Herman Schneider, an American engineer (Cedercreutz and Cates 2010: 20). As an engineer, he decided to involve students who were recent graduates in civil engineering. These students were to build bridges as part of their training. During their work he noticed gaps in what they were doing, as it was not related to their area of study or future careers. Herman observed there was a problem, which required students be inducted in learnerships to improve their practical skills.

In bridging these disparities between theory and practice, co-operative education was introduced, which advocated students should be able to perform the skills learned in class, “to connect the mismatch between classroom and industry” (Zegwaard and Coll 2011: 16).

Freudenberg *et al.* (2010: 79) asserted co-operative education drew from earlier concepts such as apprenticeships, mentorships, and other models. The introduction of co-operative education took place during the industrial revolution in the United States of America (USA), when industries were looking for a qualified workforce with skills (Zegwaard and Coll 2011: 8). The intention of co-operative education was to equip students with relevant skills that would improve their graduate attributes, which is what the industry required.

Leong and Kavanagh (2013: 3) attest to a long history of WIL. In addition, terminology used to describe WIL in the literature is diverse and includes terms such as co-operative education, experiential learning, internship and action

learning, amongst others. These terms are often used interchangeably, and various literature recognise them as having the same meanings.

## **2.5 An Overview of WIL in Developed Countries**

SA is not the only country where WIL is embedded in the curriculum of its universities. Other countries introduced WIL well before SA did, therefore, a summary of how WIL is practiced in developed countries follows. According to du Pre' (2013: 98), universities with experiential training have had a major influence on their countries and regional economies, by training graduates for the world of work, preparing them to use their research skills in detecting society and industry needs, and finding solutions to those problems.

Leong and Kavanagh (2013: 3) argue WIL has a long history and assists students to develop their career paths. WIL is thus an essential part of the curriculum in some areas of professional education. Many universities in Australia are growing their participation in WIL. In the sample of universities where McLennan and Keating (2008: 5-6) reviewed WIL; it was established different approaches were used, which amongst others, are:

- community based learning (in the students' local communities);
- service-learning (in the university);
- workplace as a teaching and learning site;
- a place physically different from a university;
- can be within university setting and/or community setting.

In Australia there has been a paradigm shift from programmes that do not provide opportunities for entry into the labour sector, to programmes that secure work-ready qualifications (Smith and Smith 2010: 1).

Jackson (2013: 99) re-iterates the importance that industry needs to develop its partnerships with the community and academic institutions. In Australia, these partnerships grew and progressed in a conducive policy setting. For these reasons, a national strategy on WIL in university education was developed. The aim was to foster synergy in partnerships with all stakeholders

(Universities Australia 2015). Australian universities realised for WIL to be inclusive, it needed to incorporate industry as partners.

In several countries such as Australia, New Zealand and the USA, work placement is common in undergraduate programmes, structured in a way that students have enough time for contact time, amount of workplace time and where WIL is the main component in the programme. A number of universities in developed countries have made substantial commitments to increase WIL in most, if not all, disciplines (Jones *et al.* 2009: 208-209). Hence, other countries such as the UK have adopted WIL to assist students be prepared for the industry world (Purdie *et al.* 2013: 117).

Seminal research in four Australian universities, namely, Central Queensland University, RMIT University, Swinburne UoT and the University of Wollongong, reveals funding was received from the Australian Government, through the Committee of University Teaching and Staff Development, to set out a comprehensive staff development programme for industry supervisors and academic staff (Jancauskas *et al.* 1999).

The Australian universities found it crucial to create a development programme that would assist mentors and supervisors in industry to understand and manage the WIL process during student placements (Freudenberg *et al.* 2010: 82).

The UK found itself copying other European countries by integrating WIL into their curriculum, with WIL frequently referred to as the “sandwich degree”, where learners’ professions are initially formed (Jackson 2013: 99). Programmes with WIL are offered at both under- and post-graduate stages. These programmes are also referred to by Jackson (2006: 3) as “thick sandwich”, where the placement in industry is for more than a year in the 3<sup>rd</sup> year of a 4-year programme. The “thin sandwich” has a shorter timeframe (usually a semester or six months, but it can be 12 to 15 weeks) of work placements.

The above programmes are considered adequate to develop technical expertise students will use in industry. WIL enhances undergraduate employability, as it is an integral part of degree programmes and students are confident the skills attained will increase their chances of employability (Purdie *et al.* 2013: 117).

Freudenberg *et al.* (2010: 44) postulate WIL infuses theory into practice, which assists students to transfer what they have learned in class to the workplace. Industry usually complains students are good at agitating information learned yet are unable to implement that knowledge at the workplace. Hence, WIL has a positive effect in improving the transfer of knowledge from class to workplace.

Universities in Australia, according to Freudenberg *et al.* (2010: 82), created a comprehensive professional development programme, compiled for academics and industry mentors. The programme addresses the critical issue of “student unpreparedness” for employment, which involves the gap between educational and practical work and exposes students to develop graduate attributes and professional skills.

Reinhard *et al.* (2016: 254), furthermore, explain universities in Germany use what they refer to as a “dual system”, where universities work closely with industry partners. WIL is structured such that students’ alternate semesters between attending classes and the workplace. The advantage of rotating class and work is the continuous link between practice and theory. In addition, industry plays a very important role in shaping the curricula, making it easy to match the skills required by industry. Therefore, these companies are comfortable to employ these students on completion of their studies, as they contributed to their training.

It was also established by Reinhard *et al.* (2016: 250) that working and attending classes are of Benefit to students, as it ensures a close link between study and work, while student attainment of practice and theory remains intact. Students are able to relate what they have studied to the experience they gain in the workplace.

The inclusion of WIL in Germany and many other countries in Europe, such as the Netherlands, France and Greece university programmes, is also explained by Reinhard (2006: 16), who describes the model used by the Berufsakademie, an academy of eight cooperative education universities. The academy implemented a study model that differs from other universities in Germany. In this model, for a student to be accepted for WIL, a university degree is required, together with a three-year work contract from a company or a government institution. Technically, the participants of this work-integrated study model are, simultaneously, students and employees, as they sign contracts of employment (Reinhard 2006: 16).

The WIL programme in Australian universities is structured in such a way it combines theory and practice (McLennan and Keating 2008: 4). In many Australian universities, WIL is embedded in the curriculum and should carry credits and be assessed, to allow students to graduate for a particular qualification. It is interesting to note Gribble, Blackmore and Rahimi (2015: 7) agree with McLennan and Keating (2008) that in the School of Business at Bellwood University there are three WIL choices intended to prepare students for industry. They include developing the students professionally, harnessing theory and practice, which earns credit points, and assisting students in becoming more competitive graduates in the world of work.

In the USA, WIL incorporates internships (temporary professional placements) and cooperative education, which is a structured programme that combines formal classroom learning with practical work-based activities (Jackson 2013: 99). Furthermore, Jackson (2013: 28) explains employers in the UK and US understand the workplace is where students learn and it is the environment where student development is enhanced. There also seems to be similarities in how WIL is practiced in European countries.

Reinhard *et al.* (2016: 17) attest students in SA typically spend up to two semesters with industry, while they are still studying at a university. In other

cases, students use their vacation/ holiday time or spend the entire year undertaking WIL.

The next section will discuss WIL in developing countries, its implementation and its relevancy to the developing countries.

## **2.6 An Overview of WIL in Developing Countries**

WIL, which is also referred to as “Industrial Attachment” by other developing countries such as Zimbabwe, Nigeria, Ghana, and others, is embedded in the curriculum and is a common element in technical and vocational education (Chiwese, Motsi and Edziwa 2011: 277).

Kiplagat, Wanjiku and Karei (2016: 84) state industrial attachment (WIL) is an important phenomenon practised globally, particularly at HEIs. WIL provides opportunities to students studying in undergraduate programmes to apply what they have learnt in class through realistic job experiences.

Bilal and Ummah (2016: 52) agree universities in a country with a high rate of unemployment, such as Sri Lanka, should be keen to provide industrial training as a major task to develop students. The development will enhance students’ graduate attributes and increase their chances of employment.

In 2013, the Minister of Education in Namibia selected a national working group for cooperative education, with different stakeholders relevant to the education sector included. The working group’s main task was to draft a national strategy and, subsequently, develop a national policy for cooperative education (Reinhard *et al.* 2016: 250).

In a comparative study conducted by Reinhard *et al.* (2016: 250), where WIL from Germany, SA and Namibia is compared, it was found Namibia has only one university that offers WIL; namely, Namibia University of Science and Technology (NUST). NUST founded a cooperative education centre in 2010 and its first policy was implemented in 2011 to enhance student learning and provide students with work experience.

Batholmeus and Carver (2017: 2) confirm the NUST has integrated WIL in all its programmes, with the aim of enhancing graduate employability. WIL is regarded as a learning strategy that incorporates theory and practice. In Namibia, WIL is reserved for traditional academic qualifications that include teacher education, nursing and engineering. Undergraduate degrees incorporate WIL with a minimum credit value of 10 percent of the total degree credits. Namibia is thus able to expose students to first-work experiences with companies (Reinhard *et al.* 2016: 254). It is hoped these experiences will assist students in gaining exposure in their educational careers.

A high rate of difficulties with employment and other economic challenges are faced by developing countries such as Nigeria, Ghana, SA, Zimbabwe, and so on. While the government in Nigeria has made strides to alleviate these challenges of unemployment and poverty, graduates at tertiary level have been unable to secure employment after graduating (Ugwoke *et al.* 2016: 307). Unemployment also includes graduates from TVET colleges, which the African Union (AU) Department of Human Resource, Science and Technology explains should produce students with knowledge and skills required by the world of work (AU 2007).

According to Awonuga (2010: 3), WIL structure in Nigeria “lacks the flow of its delivery and is not properly co-ordinated”. WIL induction is provided at secondary school or technical colleges, thus enabling students to shape their educational judgements prior to exposure to the WIL form of education. Unfortunately, the orientation is uncoordinated and unorganised and for this reason, students are not interested in programmes that offer WIL.

Ugokwe *et al.* (2016: 307), in a Nigerian study, confirm employers and TVET colleges are unaware of the Benefits they can derive from engaging students in WIL. Among the difficulties in implementing WIL, the authors cite the lack of national policy and support for WIL’s efficient implementation. In addition, much effort is required to update the curriculum to include WIL in the programmes, which should be done in conjunction with industry as partners.

The Government of Nigeria introduced an Industrial Training Fund to assist employers with the training needs of employees; both in the public and private sectors. The fund assists organisations with staff training and development, for companies to produce a highly-skilled workforce (Aroge 2012: 80).

Usman and Tasmin (2015: 254) explain the collaboration of Nigerian academic institutions and industry developed a Students Industrial Work Experience Scheme (SIWES). The scheme is intended to offer opportunities for students to gain exposure in their chosen fields. The Industrial Training Fund administers SIWES, while also providing training programmes for graduates, as well as youth self-employment (Aroge 2012: 82).

The SIWES programme aims to groom students for the country's labour markets and develops the human resource of Nigeria. In other academic programmes the scheme forms part of the approved minimum educational standards at colleges and universities. SIWES is a fundamental academic requirement that carries four credits in the curriculum (Ugwuanyi and Ezema 2010: 2).

Chiwese *et al.* (2011: 277) attest the inclusion of industrial attachment (WIL) in the curriculum in academic programmes is common in Zimbabwe. Moreover, technical and vocational programmes incorporate the element of WIL. The authors further agree WIL is critical in any country as it develops its nation's human capital.

Nevertheless, Matamande *et al.* (2013: 2) agree in one university, the faculty requires all programmes to have a WIL component, which the authors refer to as industrial attachment. Students should spend at least eight months attached to a workplace relevant to the student's academic qualification.

Gumbe, Svatwa and Mupambireyi (2012: 13) assert that graduates from the University of Zimbabwe had difficulty in securing employment because of stiff competition from graduates. The challenge is caused by graduates from other universities, who have industrial experience and have developed skills and

exposure to the workplace. For this reason, an industrial attachment (WIL) programme was developed and students are placed in both public and private sectors.

Matamande *et al.* (2013: 2) affirms that a four-year degree is offered at the University of Zimbabwe in the Faculty of Commerce. Students engage in WIL for a minimum of between eight and 12 months at third-year level. The time spent in industry is to enhance their practical skills (Matamande *et al.* 2013: 2).

In SA, WIL is an approach of practical learning (learning integrated with work) comprising a co-ordinated educational programme, which combines productive, relevant work practice with academic study and “professional reflection”. Students are expected to undertake a certain period in the workplace as part of their studies. The timeframe varies from a few weeks to six months, to a year (du Pre’ 2013: 95).

The structure of HE in SA is a graduate from a UoT completes a three-year qualification for a National Diploma. The distinct advantage of graduating from a UoT is that one-third of the National Diploma comprises a component that includes practical training and industrial practice, referred to as WIL (Kuriakose and Swart 2014: 2327).

Elsewhere, such as the USA, Europe and Africa, traditional universities have much in common with SA UoTs. In SA the universities have set a trend in the introduction of innovative programmes that acquaint students with workplace preparedness (du Pre’ 2013).

In the above discussion it is evident that WIL has been introduced by most universities around the world. Governments and industries in many countries have been instrumental in devising policies and frameworks that assist universities to implement WIL in their programmes.

Kiplagat, Wanjiku and Karei (2013: 106) agree industrial attachment (WIL) is a significant element at tertiary and higher institutions, as it provides opportunities to students to apply what they learned in class, to the workplace.

WIL is valuable in universities as it allows students exposure to practise as “future employees”.

In order to increase the employment expectations for students, universities have adopted strategies to equip students with employability skills sought after by employers. Kaider, Hains-Wesson and Young (2017: 153) agree employers seek to hire employees with job-ready skills.

## **2.7 Overview of WIL in SA**

In many countries, HEIs are faced with the challenge of offering opportunities relevant to the world of work (Ramlan *et al.* 2017: 297). They are also under pressure to determine the relevance of their programmes in this dynamic and competitive environment. Consequently, the curriculum should also integrate these experiences in the professional occupations offered by universities (du Pre’ 2013: 94). The curriculum of the programmes offered by universities should relate to the careers students are studying towards to enable their absorption in the work industry.

In addition, industry expects universities to produce “job-ready” students after graduation (Milne and Caldicott 2016: 175). However, there is a substantial gap between university supply and industry demand for graduates with the desired attributes (van Niekerk 2016). These mismatches include not only subject knowledge and skills but specifically, “soft skills” that assist an employee to be efficient at work (Freudenberg *et al.* 2010: 79).

Considering these challenges, universities where no integration between work and study previously existed, have introduced WIL in some of their programmes. However, troubling features in HE includes deliberations and plans concerning HE growth have not been driven by sectoral or national role players, instead, institutional interests seemed to have been the sole driver. The researcher concurs with Vlok (2010: 4), who is of the opinion “when higher education programmes are actively engaged with WIL, industry demands cannot be ignored”.

According to Vlok (2010: 8), WIL's significance as part of a curriculum is confirmed "with a comparison between the Fashion and Clothing Management courses at the Cape Peninsula University of Technology (CPUT). Clothing Management has been involved with a structured work-integrated learning programme for the past 30 years". In addition, the author states "industry generally snatches up these students due to their work experience and readiness acquired through the work-integrated learning programme" (Vlok 2010: 8).

WIL has developed as an effective method to equip students from academic institutions to become a "work-ready" workforce (Jackson 2013: 99). Moreover, WIL capacitates students to integrate what has been learnt in class, with what they will do at the workplace (van Niekerk 2016: 14).

As stated by Govender and Wait (2017: 50), WIL and WBL are increasingly gaining momentum in HEIs, which includes SA. Benefits derived from WIL include, amongst others, personal, academic, professional and work ethos. SA has nearly 70 percent of 50 million citizens who are under the age of 35, therefore, HE needs to play a huge role in the development of future ready graduates able to participate in the growth of the country's economy.

Gellerstedt, Johansson and Winman (2015: 38) add the qualities required for the best and most efficient students in HE, are the same needed in a workplace. WIL enables students to develop the qualities by industry and can do this in a work environment.

Universities should value and recognise the nature of learning and the knowledge gained by students at the workplace through WIL. Smith *et al.* (2010: 410) indicate students and universities should acknowledge industry experiences differ from formal learning received at university. Skills learnt in a workplace setting enhance competence, knowledge and experiences, which better prepare students to find employment and eventually have successful careers (Purdie *et al.* 2013: 117).

Wait and Govender (2016: 279) concur that WIL has gradually infused the HE environment at a fast pace, proposing a Multi-Stakeholder WIL Model for HE in SA as a trans-disciplinary approach to streamline the process and eliminate challenges. For this reason, academic staff are required to include WIL in the curriculum to expose students to industry experience and increase their chances of employability (Batholmeus and Carver 2017: 410). Study findings on the “Significance of Career Development Learning in Higher Education Curricula” were presented by Batholmeus and Carver (2017: 410) at the 10<sup>th</sup> International Conference on Researching Work and Learning at Rhodes University, illustrating the success of WIL as a strategy to ensure student preparedness and placement.

The transition of graduates to the world of work is never an easy progression, particularly in view of corporate sector demands for a set of relevant work skills. Students are challenged to cope with work pressures and adapt quickly to the new environment. WIL is able to alleviate these challenges, with Rambe, Khoza, and Meda (2015: 604) describing WIL as a strategy that is internationally renowned as an instrument for developing graduate attributes and enhance their employability. The research by Rambe *et al.* (2015) involved a case study of OMT students at the Central University of Technology (CUT), examining student preparedness for the work environment.

Most universities pride themselves on delivering career-focussed programmes and have, therefore, found it important and useful to prepare students for the world of work and assist with their practical experience through exposure to the actual work environment by way of work placement (CHE 2011: 6). Moreover, some universities are constantly forging relationships with employers. This means tertiary institutions are at the centre of up-skilling students in readiness for the world of work, with employers frequently requiring fully trained graduates to join the workforce (Matamande *et al.* 2013: 2).

To achieve this, the SA government has made significant strides in ensuring WIL is accommodated in the HE agenda (Blom 2014). This has been done by

developing several government policies, introduced over the last few years, which emphasise the centrality of WIL (CHE 2011: 6). These documents are illustrated in the table below (Table 2.1):

**Table 2.1: The transition of WIL in SA**

<b>NAME OF DOCUMENT</b>	<b>REASON</b>	<b>YEAR</b>
White Paper for Post-School Education and Training	The White Paper introduced policies and strategies, and created institutions intended to plan for skills development to expand the training available in workplaces.	2013
National Skills Development Strategy III (NSDS)	To provide linkages between academic institutions and workplace learning to encourage employability and work readiness of graduates	2011-2013
National Skills Accord (NSA)	To make internships and placement opportunities available within workplaces	2011
Sector Education and Training Authority (SETA)	SETAs developed key institutions in the effort to bridge the gap between education and work	2000

The White Paper for Post-School Education and Training, the Sector Education and Training Authority (SETA), the NGP, the NSA and the NSDS III, all “reflect a growing emphasis on workplace learning as a core and essential component of vocational and occupation education” (Blom 2014).

The NSA, furthermore, highlights its eight commitments on training and development, with amongst these the provision of internship and placement opportunities within workplaces. The Accord also includes the commitment of providing internships for third year university students, who require work placement as part of their qualifications, while additionally providing exposure in a work environment. As a result, WIL was introduced as a component that will assist students to gain this work exposure in industry (DHET, 2011).

In recognition of the above, the SA DoE promulgated a new HEQF in 2012. Subsequently, in August 2013, the HEQSF was gazetted, which is specific to HE practices and includes the WIL component. The sub-framework states

“some qualifications will be designed to integrate theory and practice through the incorporation of work-integrated learning (WIL) into the curriculum”. It further highlights, where WIL takes the form of WBL, it is the responsibility of institutions that offer the programmes to place students into appropriate workplaces (DHET 2013: 49).

The CHE, an independent statutory body responsible for advising the SA Minister of HE and Training in policy matters related to HE, furthermore, developed a guide titled “Work-Integrated Learning: Good Practice Guide” that covers the use of various learning modes for WIL (CHE, 2011: 4).

In line with the above documents, SA UoTs have policies that guide their WIL implementation. The CHE (2011: 5) explains the common purpose of these policies is, on the one hand, to enable achievement of consistent high-quality practices and procedures for WIL.

On the other hand, Blom (2014: 2) suggests the purpose of the documents is to ensure access to training opportunities, with training taking place in both educational institutions and workplaces. The documents commit all social partners; namely, government, organised business, the labour movement and communities, to assist students with workplace experience.

## **2.8 Universities under Study**

This study is conducted at three South African Universities, selected as a case study. The universities under study offer an OMT course that has been re-curriculated and recently renamed to Business and Information Administration (BIA), however for the sake of this study I will refer to OMT. WIL is credit bearing and offered at third year level. In the OMT programme, WIL is compulsory and students do not graduate when they have not completed the WIL component.

## **2.9 Summary**

WIL has developed into a global phenomenon, with universities around the world including the WIL component in their programmes to prepare students

for employment. The changes in the employment sector and the shifting of economies in different countries, worldwide, holds huge implications for HE. As countries develop, so does the need for a skilled workforce. WIL is a driving force in preparing students to be work-ready, hence almost all universities, globally, have included its component in the curriculum.

The next chapter will discuss WIL policies at HEIs.

## CHAPTER 3

### WIL POLICIES IN HIGHER EDUCATION INSTITUTIONS

*“... the government has over the past years introduced policies that emphasize the significance of WIL. The New Growth Path (2011), the National Skills Development Act (1998), the National Skills Accord (2011), the National Development Strategy III (2011), the White Paper for Post-School Education and Training (DHET 2013), all allude to the growing emphasis on workplace learning as a core and vital component of vocational and occupational education, and the role this type of education and training plays in economic development and job creation” (Ndlovu and Mofokeng 2018: para 5).*

#### 3.1 Introduction

The review of literature related to WIL in the previous chapter examined the history of WIL, how the paradigm of WIL has shifted at universities in general and in South African universities in particular. The chapter included a discussion on how WIL is practised in developed countries, specifically in European countries, including developing countries. The literature review highlighted WIL as “a structured theoretical education” and the universities and employer WIL partnership, which basically form a “co-operative education model”.

The Vaal University of Technology (VUT) states, “WIL refers to that component of co-operative education that can only be conducted by the employer” (Johnson and Patrick 2016: 4). The student is provided with an opportunity, through WIL, to deal with relevant industry problem situations by not only applying and developing academic knowledge obtained during their studies at university, but also through “exposure to typical working conditions, human relations and organisational culture” (Johnson and Patrick 2016: 4).

A University WIL document sets out the guidelines as well as the policy and procedures that are a pre-requisite to the cooperative partnership between the university, the student, and the employer. The practically applicable structure supplied in the WIL policy and procedures is crucial to effective educational programme development and introduction. Furthermore, it allows both student

and university to quickly adjust to technological developments. Students are thus taught the responsibility of working independently, with suitable guidance and supervision, while growing their awareness of industry ethics and requirements.

WIL has been described as “an example of re-contextualising conceptual knowledge into procedural knowledge at the workplace” (Bohloko 2016: i), with the Council on HE’s Good Practice Guide for WIL including an entire range of “educationally-driven strategies such as apprenticeships, cooperative education, service learning, work-based learning, work experience and workplace learning” (Dell 2018: para 6).

However, this requires a foundation of quality HE that will spill over into the workplace. Moreover, education has been a problematic issue in SA, even prior to 1994 and the beginning of democracy, with the education and training problem left to education providers and stakeholders involved to struggle with.

### **3.2 Historical Overview**

The new democratic government of SA, after taking power in 1994, had to address issues the former apartheid regime created. The two main issues in education, revolved around: a work environment that was unfriendly and unable to cater for its citizens with an inadequate educational system. In their workplaces, employees demanded better wages and employers declined, citing employees lacked required skills and therefore, could not support demands for higher wages. To qualify for better wages, employees understood the importance of training. The government saw a need to develop processes to restructure the education system (Maseko 2018: 3).

Among the universities education and training system challenges, were the curriculum inequalities and segregation, as well as budget allocation for provision of staff in academic institutions. In the post-apartheid period, there was a need for HE to transform. The curriculum transformation was significant; it changed to meet international demands that require graduates to produce new information and solve problems using innovative techniques. In addition,

graduates must also have vital professional and social attributes to enable participation in society. Due to past imbalances, the masses were excluded from receiving an education because of segregation, thus transformation was aimed at educating the masses (Rampersad 2018: 33).

Although education was no longer for a select few, massification in HE allowed access to even those who are not academically able, which brought its own challenges. When masses access the HE system, among the negative aspects is it creates uniformity and restricts individual thinking, a requirement at the workplace. Workers are expected to generate, acquire and transform information; therefore, curriculum design should reflect the attributes graduates have to achieve in order to produce high-level thinkers (CHE 2014: 4).

During the 1980s, the government realised the significance of skills development for the country, necessitating a rethink by the education and training system of the importance in developing and improving SA's workforce skills (Grawitzky 2007: 1). To address these issues, the SA government consulted with various stakeholders in education and training, both nationally and internationally. These consultations resulted in the introduction of new strategies and policies. Furthermore, new institutions were designed for the purposes of improving information on training needs, as well as opportunities available to the workforce. In addition, it was established the education and training quality required to ready students for employment, would be enhanced by the partnership between HEIs and industry. These policies and strategies were introduced to close the gap between work and education:

- The National Skills Development Strategy (NSDS) III
- The Skills Development Act (SDA)
- The White Paper for Post-School Education and Training
- The National Skills Accord (NSA)
- The New Growth Path (NGP)
- The Sector Education and Training Authority (SETA)

These government policies are relevant to WIL and should inform WIL policy development at academic institutions. The purpose of reviewing these national level policies in depth is to better understand how SA universities structure their WIL policies, considering their significance to WIL.

Not only do these policies provide structure and recourse, but they also offer Universities and employers the opportunity to work together in a structured manner, within a defined framework. While the groundwork has thus been laid with policies and regulations, it falls to the HEIs to incorporate WIL as part of their curricula in offered programmes, in order that students may Benefit from the assistance and become productive, contributing citizens, schooled by the workplace and supported with knowledge gained at university.

### **3.3 The National Skills Development Strategy III (NSDS III)**

The NSDS III (2011) is driven by the Minister of DHET, with the purpose of improving the proficiency and efficacy of the education system, used to develop worker skills in SA. The strategy integrates HE and skills development into one department, namely the DHET.

Additionally, the NSDS III (2011) supports student career-paths and assists in their schooling route, from lower level to HE and even from being unemployed until they can secure employment (NSDS III 2011: 3). Furthermore, the NSDS III (2011: 5) inspires the combination of workplace training with theory, as this enables students to enter formal employment and therefore, have a source of self-support. The strategy inspires WIL as a key element, which can contribute to employment.

The NSDS III includes stakeholders who provide education and training at different levels under the DHET. Collaboration and partnerships between employers, HEIs, private training providers, and the SETA are encouraged, as they can help South Africans in skills development and ensure everyone has access to training and development in their respective professions (NSDS III 2011: 3). Furthermore, at post-school level, university students are provided

with opportunities and access to various organisations where they can be placed for WIL.

The NSDS III advocates that workplace learning should be integrated in all vocational courses. Universities have implemented this approach by including WIL in their programmes. One such programme is the diploma in OMT. UoTs collaborate with universities to provide WIL to OMT students. The establishment of efficient collaborations between employers and education and training structures assist to provide training at the workplace. The type of training would produce skills relevant to the job market and provide first entry employees an opportunity to be exposed to the world of work (NSDS III 2011: 5).

The NSDS III objectives = are to improve WIL placement of students who are studying and provide employment to those who have graduated, particularly from TVET colleges and UoTs. Moreover, NSDS III emphasises skills development to support government goals by providing skills training to the country's workforce (NSDS III 2011: 3).

In addition to the above, the NSDS III highlights South Africans lack adequate skills and are not professionally ready to enter the work market as first-time employees. This is concerning, as it reduces the chances of employment for students. Therefore, collaboration of all stakeholders, which is encouraged by the NSDS III, can assist academic institutions to connect with organisations so that students are placed for WIL.

The NSDS III (2011) provides synergy for all stakeholders to work together and not in isolation and this nurtures the co-operation and linkages required promoting skills development. The relationship of all WIL stakeholders, particularly at HE level, grants an opportunity for universities to work together with public and private sectors to place students. In other words, the NSDS III (2011) promotes a deeper interaction between formal education and the workplace.

One of the pillars of the NSDS III comprises the professional, vocational, technical and academic learning (PIVOTAL) programmes, with qualifications studied being occupationally directed at a college or university. One of the requirements of such programmes is the inclusion of a practical component (WIL), supervised at a workplace. NSDS III postulates such courses are offered as per arrangement between academic institutions, an employer and a learner (NSDS III, 2013: 9). The Pivotal programme supports the Diploma in OMT offered by universities. It is a stipulated requirement that students studying towards this diploma must undergo WIL training for a certain timeframe, as determined by the WIL Policy at respective Universities.

At post-school level, there are qualifications and courses that combine classroom learning and learning at the workplace. This is accomplished by placing students for WIL, apprenticeships, internships and learnership skills programmes. To attend to the issue of economic growth and skills development, access to the higher education level is necessary, because the gap between economic growth and skills development is filled through exposure to the world of work and quality learning needs to be provided.

The NSDS III emphasises the objectives of the White Paper for Post-School Education and Training (DHET, 2013), echoing the Skills Development Act (SDA) of 1998, in that strong partnerships are needed between universities and employers, from both the public and private sectors, with these collaborations encouraging linkages between universities and industry. Because of such connections, students will be able to secure WIL placement to develop their skills at workplaces (NSDS III, 2011: 26).

Policies of UoTs include that WIL is a structured method, which combines classroom learning with practical work experience. The UoTs should ensure WIL partners are apprised of the requirements of teaching and learning of WIL, which include, assessment, mentoring and monitoring. WIL partners are responsible for developing the skills of students at the workplace.

In SA, the SDA regulates skills development, with the Act initially tabled in 1998 and subsequently amended in 2011, where the main SDA aims to improve workers quality-of-life, work prospects and mobility of labour.

### **3.4 Skills Development Act (SDA)**

The SDA, Act 97 of 1998, has as its aim the expansion of the labour force's knowledge and competencies to improve productivity and employment. The main SDA purpose is "to provide for Learnerships that lead to recognised occupational qualifications; to provide for the financing of skills development by means of a levy-grant scheme and a National Skills Fund (NSF); to provide for and regulate employment services; and to provide for matters connected therewith" (SA 1998).

SDA aims and purposes were not altered by the SDA Amendment Act of 2011, rather, it amended the SDA of 1998, in order to:

- "define certain words or expressions and delete certain obsolete definitions;
- amend provisions relating to the establishment, amalgamation and dissolution of SETAs;
- provide for the incorporation of a subsector of one SETA into another SETA;
- provide for the composition of an Accounting Authority for each SETA;
- regulate the eligibility to become a member of an Accounting Authority;
- provide for a constitution for every SETA;
- regulate the conduct of a member of an Accounting Authority, or of a member of the staff of a SETA when engaging in business with the SETA;
- require members of Accounting Authorities to disclose any conflict of interest with the relevant SETA; and
- repeal or amend certain provisions which became obsolete, as a result of the transfer of the administration of the said Act to the Minister of Higher Education and Training; and
- provide for matters connected therewith".

(SDA Amendment Act 26 of 2011)

Furthermore, a framework is provided in the SDA (SA, 1998), to develop and implement strategies on national, sector and workplace levels. It is generally accepted that the Act is the pillar of skills development and has the following purposes, among others:

- to develop the SA workforce's skills;
- to provide opportunities to employees to acquire new skills;
- to motivate employers to create an active learning environment in the workplace, which includes WIL;
- to provide new entrants to the labour market with work experience opportunities.

The last two purposes of this Act relate to how universities should implement WIL at their institutions. The SDA supports employers to provide their workplaces for students, through WIL, to acquire exposure. WIL policies at universities highlight experiential learning sites should be approved by the university prior to student placement. Such approval ensures employers have the necessary resources to assist students achieve the required workplace experience outcomes.

This makes it imperative for universities to develop relationships with employers, as this will assist in WIL placement of students. In addition, the SDA encourages employers to assist newcomers, who are usually students, with access to the labour market through work experience. Such access is made available by engaging students in WIL, which ultimately makes opportunities available to students to develop the required skills needed for employment. The White Paper for Post-School Education and Training (SA DHET, 2013) additionally acknowledges how important it is for a partnership between HEIs and the industry.

### **3.5 White Paper for Post-School Education and Training SA**

The aim of the White Paper for Post School Education and Training (DHET, 2013) is to develop strategies that will assist the DHET to upgrade the functions education and training hold at post-school level. Students at post-school level,

particularly those graduating from universities, face the challenge of unemployment with employers complaining about the lack of required skills at the workplace. Consequently, however, students lack the practical aspects of work experience. Therefore, there is a need to integrate WIL as part of university qualifications and programme design, with students afforded the opportunity to acquire workplace experience and exposure.

The White Paper for Post-School Education and Training (DHET, 2013: 64) explains the DHET will introduce and promote occupational programmes, including considerable elements of practical learning in the workplace. Various sections in the White Paper for Post-School Education and Training (DHET 2013) address the WIL component at HEIs and these are discussed below.

### **3.5.1 Partnerships for WIL**

The White Paper for Post-School Education and Training (DHET, 2013: xiv) recognises the Benefit to universities from the relationships they build with employers, as they are part of education and training and are integral in contributing to develop the skills of students during their practical work experience. The advantage of such a collaboration is workplace-training prospects for students are increased, which is crucial where academic qualifications rely on WIL for completion. For example, in the OMT programme, a student cannot graduate when the WIL component is not completed. A qualification can only be awarded on completion of WIL at a suitable workplace; therefore, it is important for academic institutions to identify and collaborate with workplaces where students will be placed for WIL. Hence, universities who have not done so yet, need to develop policies to guide their implementation of WIL in their respective institutions.

University WIL policies acknowledge the need to establish and sustain formal partnerships with industry. Formal agreements are in place at some SA Universities, which recognise the role each WIL stakeholder (HEI, student and industry) should play in the relationship in ensuring continued collaboration as

partners. For example, one University's' policy highlights it administers a database of industry partners, as they are key stakeholders.

Nonetheless, these relationships are also in the form of industry advisory boards/committees in universities, where WIL is one of the standing items on the meetings' agenda. The advisory board is a committee which includes the staff members of a department and other internal stakeholders and external members (industry, government, businesses, and more) who are invited to be members by an academic department. Advisory board members advise the department and the institution on best practices for that discipline. They are all accountable for ensuring the university's offerings are of a high calibre and relevant. To connect board members, faculty, and students in achieving the university's objectives, an advisory board is essential (Price 2018: 1).

The role of the advisory board is often ignored. The influential impact of key advisory board members from industry, government departments and community partners can open doors that Benefit all WIL-related partners and components (Refae, Askari, and Alnaji 2016: 32). Therefore, it is important that departments offering OMT should engage with advisory boards in order to enhance the curriculum. Advisory boards also provide an opportunity for departments to create partnerships with industry, especially, on placing students.

### **3.5.2 Staff and placement of students**

The public sector has an important role to play in placing students for WIL and the government must set an example in placements, as outlined in the White Paper for Post-School Education and Training (DHET, 2013: 66). Openings must be created for apprentice-, learner- and internships at all levels of the public service: national, provincial and municipal, including agencies of the state, including the defence and police force, in state-owned enterprises (SOEs) as well as public educational institutions.

In addition, the Post-School Education and Training White Paper (DHET, 2013: xii) encourages a stronger partnership with employers, both at HE level and

colleges. These relationships will also assist in placing students for WIL, while those who have completed their qualifications will be placed for internships. Furthermore, industry provides students with opportunities of work experience through learnerships, which are WBL programmes that lead to a National Qualifications Framework (NQF) registered qualification.

Staff are encouraged to place students in industry in order that both student and academic staff may remain informed of industry developments. This collaboration thus Benefits academic institutions, since it can assist academic staff to stay up-to-date with new technologies offered by industry (DHET, 2013: xii). However, staff at academic institutions seem to not have fully explored the practise of placing a student in industry for the Benefit of keeping abreast with OMT field developments.

Several SA Universities have developed WIL policies that follow the White Paper guidelines for Post-School Education and Training. For example, WIL is included as a compulsory component of the qualification in the OMT diploma programme. Therefore, students cannot graduate until they have fulfilled the WIL requirement of the programme. In this case, students spend a maximum of between three to four months at a workplace, to fulfil the WIL component of their qualification. The period spent at a workplace depends on the structure of each university OMT programme. In all UoTs that offer the OMT programme, WIL has been integrated in the undergraduate curriculum and is structured, as students have to spend a minimum period of three months and a maximum period of six months. The time students spend at the workplace depends how each UoT has structured the WIL programme.

### **3.5.3 The role of universities**

The White Paper (DHET, 2013: 27) further highlights universities important roles, which are to:

- provide education to prepare people with advanced skills so they are ready for the job market;

- generate new knowledge, review existing knowledge and develop new ways of applying such knowledge, as well as authenticate such knowledge and standardising the curricula.

Universities need to equip students with skills that allow them to manage in the job market the important role WIL plays ensures this. WIL also plays a meaningful role in training students to develop attributes in professional, personal and social areas, which are necessary to engage and participate in social issues. Nevertheless, development of students with such capabilities can only be achieved when universities have a structured WIL programme, appropriate to the qualification for which they are enrolled (Dorasamy and Rampersad 2018: 36).

The important aim of universities at the post-school education and training level, is to ensure graduates are prepared for employment. Although the DHET is not responsible for training at workplaces, the policies and strategies the department has devised do, however, influence the type and quality of training obtainable at workplaces. Moreover, WIL should be at the centre of such training and all DHET partners ought to have the same understanding of the training they need to provide (DHET, 2013: 8). Hence, the collaboration and partnerships those Universities have with their industry partners.

With some universities working closely with government departments in student placement, it has encouraged some institutions to sign a Memorandum of Understanding (MoU) for student placements, allowing them to capitalise on relationships between HEIs and government departments. Such agreements assist universities in guaranteeing the number of students these departments can place during the WIL period.

Ultimately, the Post-School Education and Training White Paper (DHET, 2013: 75) offers an important platform allowing employers to understand how crucial it is to integrate education and training with workplace learning. As a result, when these partners work together it creates notable growth of WIL, allowing students to acquire the needed skills for their specific industries.

Identified through their policies, the role of universities is to provide an implementation framework for all WIL methods. In addition, academic institutions have to ensure high quality WIL practices and procedures. Therefore, universities need to ensure learning sites are appropriate for student placements.

#### **3.5.4 Engagement of Stakeholders in WIL curriculum**

As the White Paper highlighted (DHET, 2013: 64), on the one hand, students who complete their studies and leave universities and colleges are unable to find employment. Employers, on the other hand, complain of insufficient skills, which relates to inadequate practical work experience. The conclusion drawn is that WIL must be regarded as the central part of programme design and qualification. Therefore, when HEIs design academic programmes, they are encouraged to include WIL, as it can be the solution to students' unpreparedness in the workplace (DHET, 2013).

The HEQF (DHET 2007: 9) stipulates,

“Some qualifications will be designed to incorporate periods of required work that integrate with classroom study. Where Work Integrated Learning (WIL) is a structured part of a qualification the volume of learning allocated to WIL should be appropriate to the purpose of the qualification and to the cognitive demands of the learning outcome...”

In addition, the White Paper (DHET, 2013) echoes WIL will be included in the curriculum for some qualifications designed to integrate theory and practice.

It is further asserted in the White Paper (DHET, 2013: 64) that work placements are often unstructured and do not add to the qualification outcomes, instead taking “the form of compulsory work experience”. Nonetheless, it underscores the likelihood universities and SETAs could work collectively in restructuring the programmes. This would include that, for instance, work placement is developed into a more structured internship, while also including learnerships and apprenticeships, where appropriate.

Additionally, the design of university curricula must be achieved with employers and education and training providers in close consultation (DHET, 2013: 9). WIL policies at the universities capture the prescripts of the 2013 White Paper, as universities highlight the formal curriculum integration of a structured real-life experience through WIL and emphasise the university response to the broader community. In addition, WIL is not seen by universities as an add-on to the curriculum, instead, it is a fundamental part of the curriculum that integrates classroom theory and work practice.

The WIL component in the OMT programme is structured and compulsory; as it is credit-bearing, it also contributes to the diploma outcomes. Thus, learning at the workplace aligns with workplace experience. Curriculum design in universities is discussed with industry advisory committees/advisory boards, which is what the White Paper (DHET, 2013) advocates. The advisory committees/boards input is vital, as they will be the graduate's future employers and should participate in curriculum development. Industry participation is also included during visits to industry by academic staff during student engagement in the workplace. Mentors are interviewed during this monitoring period and their feedback contributes to the curriculum by drawing attention to areas for improvement in student performance.

The WIL logbook the student and employer complete also serves as another source of information, where industry mentors participate in curriculum development and/or enhancement of the OMT programme. Mentors are given a space in the logbook where they can include their comments regarding WIL outcomes and the programme.

However, the Post-school Education and Training White Paper recognises it may be challenging to guarantee all students will acquire an opportunity for WIL in workplaces. To address this challenge, the suggestion is for universities to consider using simulated workplace experiences (DHET, 2013: 9).

In some academic programmes, practical experience is done in institutional workshops, which is beneficial due to learning being co-ordinated and blended

with the curriculum. However, the White Paper (DHET, 2013) points out academic setting workshops cannot keep abreast of new technology available at actual workplaces. Therefore, it is an advantage to supplement classroom learning with an authentic workplace experience (DHET, 2013: 9). Such training, at an actual workplace, ensures students are exposed to skills other than those the University can equip them with, for example, soft skills. In this regard, the workplace exposes students to skills such as, dealing with customers, working under significant pressure, working in a team, and more.

More recently though, universities have experienced challenges in placing students with industry for WIL due to COVID-19 restrictions. Most industry partners were unable to place students, as businesses were obliged to work from home under the lockdown regulations of the various levels imposed by the government. Other Universities had to change or delay placement timeframes. For this reason, one University opted to implement a Project Based Learning method, as students could not be placed. Projects are a method to engage students in solving complicated, issues that are work-related, enabling them to transfer and develop knowledge and skills, gaining a better understand their discipline (CHE 2011: 18). WIL involves learning through real projects and the WIL Coordinator or mentor oversee these projects, with students assessed on experience accumulated during their WIL timeframe.

### **3.5.5 WIL and assessment**

The Post-School Education and Training White Paper (DHET, 2013: 73) advocates universities should conduct assessment and moderation in WIL. Moderation should be done externally, through reviews by peer institutions, as Universities issue academic certification through internal processes. According to the HEQSF (DHET, 2013: 51), HEIs are responsible for WIL placements in workplaces appropriate for programmes where WIL is credit bearing. The learning that takes place at these workplaces should be structured, supervised and assessed. However, the sub-framework does not explicitly explain how assessments should be conducted and who should manage WIL

assessments. This decision is left to individual academic institutions to assess WIL.

The White Paper (DHET, 2013: 73) highlights, “assessment for universities is institution-based and moderated through peer-reviewed external assessment systems. Certification takes place at institutional level”. Hence, WIL assessment at universities is guided by assessment principles that drive all assessment planning, which are; formative and summative, appropriate, fair, and valid, as well as authentic, transparent and consistent. In other words, learning ought to be confirmed as fitting to the qualification, while assessment should take place wherever the learning takes place, or where it is provided (CHE 2011).

Assessment of WIL at universities is managed by adhering to the individual university’s internal WIL policies, supported by other relevant policies, which generally include the Assessment policy and the policy on appointing examiners and moderators, in addition to its Teaching and Learning Policy, while also including any other policy that relates to assessment. Additionally, WIL assessment engages all stakeholders (students, industry mentors and the academic staff), with engagement of a moderator to participate in the WIL assessment and endeavour to ensure quality assurance in the WIL programme.

### **3.5.6 Quality Assurance**

The White Paper (DHET, 2013: 73) expresses, among the HEI functions, quality assurance is vital to ensure academic institutions have capacity to manage programme assessment and certification. Quality assurance is also emphasised by the CHE, which is the responsibility of the Higher Education Quality Committee (HEQC).

Among the crucial challenges faced by institutions is to ensure quality assurance focuses where it can have an effect, hence academic institutions need to certify their programmes are quality assured. The Post-School Education and Training White Paper (DHET, 2013: 72) advises the need for

education and training providers to be strategic in ensuring the education system does not suppress the creativity and capability of those providing education. Therefore, training providers should have professional capability in dealing with quality assurance at their institutions.

In addition, the Department of Labour (SETA: n.d.: 5) emphasises training provided for employees should be quality assured to ensure it is recognised by employers. Where possible, training should be according to set standards and within a national framework. Hence, it is important for HEIs to ensure WIL has been quality assured so students may be awarded their qualification on completion of their workplace period.

Universities have Quality Management Units that deal with assuring quality in programmes offered at these institutions. In the OMT programme, engaging stakeholders in the WIL process assures quality. In addition, universities have to quality assure the workplace by ensuring it offers the resources students need while they do their WIL. Moreover, students are mentored at their workplaces and mentors are involved in student assessment. The UoT WIL policies are not explicit on how WIL is quality assured. The policies highlight WIL undergoes the same quality procedures as other offered academic programmes, which align with other UoT policies.

### **3.6 The National Skills Accord (NSA 2011)**

The SA government has contributed immensely to skills development in the country. As part of this process, the government has committed to skills development by providing incentives to companies that provide training to their workforce through, for example, the system of the levy-grant (where a levy is paid by employers towards skills development). Upon paying the levy, organisations receive not only tax rebates for training unemployed youth but also credit for providing learnerships to students (DHET, 2011). The Benefit to students from HEIs from such initiatives is the offer of placement opportunities in industry, while also receiving stipends during their placement.

The NSA includes representatives of all business sectors, which are government, organised labour and business, including civil society. The Accord has eight commitments signatories agreed on and was signed as a symbol of agreement to the action and implementation of the commitments.

The purpose of the NSA (DHET, 2011) was to mobilise all participants to form a strong collaboration to provide skills training that would build a foundation to create new jobs by 2020 (DHET, 2011: 4)

According to the NSA (DHET, 2011), the second commitment is to “make internship and placement opportunities available within workplaces”. The commitment explains that the partners agree they will avail 12 000 spaces for WIL/internships, with 5 000 of those placement opportunities for third year University students who have WIL as a compulsory component to complete their qualifications.

In essence, Commitment Two assists universities that offer programmes with WIL as a compulsory component. A Diploma in OMT confirms this commitment, because in this qualification, WIL is part of the curriculum and students must fulfil the WIL requirement to graduate.

Emphasis on an increased level of training provision is also included in Commitment One. Moreover, NSA partners also agree to increase the training of scarce skills, through the training system provided at national level. The first commitment entails using existing public and private sector facilities to provide training for their enterprise needs (DHET 2011: 10).

Such an obligation is helpful for academic institutions as they experience challenges with WIL placement, while it also motivates government commitment to train more people. This commitment is in line with government’s regard for such training, which it considers a priority and its precise responsibility.

Additionally, Commitment Three of the NSA (DHET 2011: 7) agrees that government and business have to “set guidelines of ratios of trainees as well

as across the technical vocations, in order to improve the level of training”. The NSA postulates employers should have a guideline of the number of trainees targeted against the number of qualified employees, which ensures they have sufficient trainees in the pipeline. These numbers will assist in generating a skilled workforce in the country.

NSA partners commit to using their workplaces as a legitimate training place and students are trained properly. Moreover, partners pledge students will be mentored appropriately and not used as replacements for permanent staff (DHET 2011: 12).

Mentoring is an important aspect in WIL and as a result, partners need to understand their role when they mentor students placed at their workplaces. This is in line with Universities’ WIL policies, which state students must be provided with mentors at the workplace, with the role of mentors explained in WIL.

The NSA acknowledges the role the DHET must play to co-ordinate programmes relevant to skills development and training, as well as being instrumental in ensuring the country’s workforce has sufficient skills (DHET 2011: 12).

### **3.7 The New Growth Path (NGP)**

In the NGP (Department of Economic Development 2011), a framework was developed that addressed job creation as the focal point of the SA’s economy. It was necessary for the country to create appropriate jobs, reduce the imbalances and address poverty. To attend to these issues, there was a necessity to re-structure and re-build the economy through policies and through a NGP to reorganise the SA economy (Department of Economic Development 2011: 1). Therefore, to address the above challenges, the SA government committed to implementing changes that would identify areas able to assist in large-scale job creation. Business and government had to join forces and create relationships to address inadequacies and limitations of the

economy and collaborate to generate new, good job opportunities (Department of Economic Development 2011: 2).

The cornerstone of the NGP is the engagement of stakeholders on policies and their implementation at all levels (countrywide, regional and local). Such linkages can achieve reasonable and productive strategies agreed on by all partners (Department of Economic Development 2011: 6). In pursuit of growing the employment rate by five million by the year 2020, the NGP (Department of Economic Development 2011: 23) identified training of the youth for employment and as entrepreneurs. Nevertheless, training should also include placement of students for WIL, as this offers them a qualifying opportunity in gaining job knowledge and exposure. Moreover, workplace exposure assists in reducing unemployment as students will gain experience and be able to compete for jobs in the future.

Achievement of NGP goals centres on improving education and training, along with skills development, as these are a foundational pre-requisite of economic growth. For South Africans to be part of the economy, they need to be equipped with education and HEIs play a major part in meeting the country's development requirements. Moreover, the NGP needs an overhaul evaluation of training structures in addressing the shortcomings of technical and artisanal skills (Department of Economic Development 2011: 46).

As the NGP highlights, the focus should be on workplace training (WIL), specifically on-the-job training to improve skills (Department of Economic Development 2011: 47). The target was to do on-the-job training and refresher programmes for 10 percent of the workforce every year. At an Economic Development meeting on 18 November 2016, the Minister of Economic Development highlighted the ministry is attending to on-the-job training with business partners to confirm that there is active partnership between government and business. He emphasised the importance of on-the-job-training as part of education (Minister of Economic Development 2016).

Additionally, SETAs can play a role to facilitate and co-finance employee training and refresher-training programmes, allowing for 10 percent of the labour force to be trained on an annual basis (Department of Economic Development 2011: 47).

### **3.8 Sector Education and Training Authority (SETA)**

There are millions of people in SA who should acquire new skills. Section 9 (1) of the SDA of 1998 authorises the Minister of Labour to set up a SETA for any economic sector in the country. The establishment of SETAs was to manage the needs of skills development in particular sectors. The main purpose of a SETA is skills development and improvement within its sector, through identification of skills development needs and ensuring the maintenance of national standards. The SA economy was divided into 25 sectors at that time, with each owning a SETA (SDA, 1998).

In 2010, the DHET took over the SETA structure, with SETAs re-organised and re-structured several times, and the number reduced to 21 SETAs. The core function of the SETA is to enhance and upskill employed people and/or those who seek employment in a particular sector. SETAs also have to ensure they train people for skills required by both industry and communities, as it is invaluable to train for unwanted skills (Department of Labour n.d.: 5).

There have been concerns that although the SETA scope has been broad it has not yielded the required results. Hence, the White Paper (DHET, 2013: 58) recognises this realisation and offers a vision of a narrow scope, supporting the fostering of strong education and training connections and relationships with the arranging of workplace training. Furthermore, the White Paper (DHET, 2013) highlights the focus of those SETAs as follows:

- Engage with stakeholders in the workplace.
- Establish the needs of the workplace.
- Accelerate access to learning programmes identified.
- Ensure capacity of providers to deliver training.

The Post-School Education and Training White Paper explains the SETA focus as bridging the gap between work and education, with SETAs created to develop skills and increase workplace training. Support given to workplaces to improve education and training necessitated formation of SETAs. Furthermore, together with SETAs, the DHET must collaborate to determine the supply against the demand of skills in the country. The collaboration will assist to identify the skills gap and strategies to close such a shortfall (DHET, 2013: 61). As they are significant in skills development, SETAs are crucial institutions in the attempt to link learning and work. Hence, government uses the levy-grant system to fund SETAs through the NSF, to which employers pay levies, with these funds distributed to the SETAs (DHET, 2013: 56).

Academic institutions Benefit from the role of SETAs being intermediary links in combining education and the world of work. Furthermore, the SETAs' role is also to connect graduates with the workplace and the labour market. Education and training institutions work closely with SETAs to supply students who have graduated with careers in great demand and those with priority professions. The relationship of the SETAs, HEIs and employers can facilitate placement of these students in the labour market, with the assistance of relevant SETAs (NSDS III 2019: 10).

Furthermore, the White Paper elaborates on SETAs having to take responsibility in forging interactions between HEIs and employers. SETAs need to use their resources to motivate employers to provide WIL opportunities to students. In promoting such partnerships, SETAs need to establish offices in academic institutions to encourage working together and to facilitate workplace-learning prospects (DHET, 2013: 16).

Furthermore, the SETA indicates every employer should appoint a Skills Development Facilitator (SDF), responsible for communicating with the relevant SETA concerning matters relevant to skills development in an organisation. The establishment of the SDF position Benefits the academic institutions, due to WIL Coordinators having a point of contact in industry when

they need to place students for WIL. SETAs provide learnerships to students which, as with WIL, combine theory and practice, thus empowering a student who has completed a learnership as they will have skills of practical application together with theoretical application (Department of Labour SETA n.d.: 10).

In other universities, the Co-operative Education departments have established a very strong relationship with SETAs where, in the OMT programme, students Benefit from such relationships as they are placed for WIL by different SETAs. OMT graduates are also offered internship opportunities through various SETAs and once placed, receive stipends.

As an element of university courses WIL is, moreover, applied in both professional areas, as well as across many different disciplines. However, WIL assessment offers numerous challenges as it can be complex, with external parties and settings to the university being involved in the process. Furthermore, WIL assessment can result in difficulties in the alignment of learning activities with “what is or can be assessed by the university during placements” (Ajjawi 2019: 304).

This requires Universities to follow the prescripts set out by the policies discussed, in order to ensure students receive optimal Benefit from WIL placement.

### **3.9 Summary**

Over the last few years, the centrality of WIL in HEIs has been emphasised with the SA government introducing policies relevant to WIL. The Post-School Education and Training White Paper, NGP, NSA, and the NSDS III all indicate a more intense focus on professional and occupational education where workplace learning is a core and important component. Additionally, this type of education and training plays a significant role in economic development and job creation. Universities should, therefore, structure their programmes based on government policies to reinforce and encourage workplace-based learning (WBL) and experiential training (WIL). The next chapter examines the WIL curriculum and assessment in HEIs.

## CHAPTER 4

### CURRICULUM AND WIL ASSESSMENT IN HIGHER EDUCATION

*“...it is not the curriculum which shapes assessment, but assessment which shapes the curriculum and embodies the purposes of higher education”.*

(Brown and Knight 1994: 12, cited in Beets 2009)

#### 4.1 Introduction

Many universities are proud to deliver career-focussed programmes, finding it important and useful to expose students to an actual work environment through work placement that prepares students for the world of work and assist with practical experience (CHE, 2011: 6). In recognition of this, WIL was introduced as a component that will assist students to gain work exposure in industry.

Globally, HEIs are key to developing their nation, educating and equipping citizens with the required high-level skills for private and public sector employment. For these reasons, it is important that developed skills are at their optimum level, more so when it comes to scarce skills (Harmse and Goede 2012: 572). Considering the role of HEIs is to educate students for global citizenship, it is imperative they produce work-ready graduates (Trede 2012: 161). Graduate attributes relevant to WIL, among others, are: to function in any work environment and thrive; apply knowledge to solve problems; be able to work independently; and be creative and innovative; as well as develop creative and critical thinking; teamwork and communication; professionalism and leadership readiness; in addition to intercultural and ethical competency, and more (Ramnund-Mansingh and Reddy 2021: 208). These graduate attributes should be embedded into the WIL curriculum in preparing students for their careers and become “work-ready”, thus increasing their chances of employability. One method of doing this is through HEIs introducing WIL.

This chapter outlines the overview of the OMT programme. The chapter also examines the preparation of students for WIL. Assessment refers to the approaches intended to check what knowledge students possess and validate

whether they have met curriculum outcomes. It also explores WIL assessment and the stakeholders' role in the process of WIL assessment. An assessment practice evaluation of what is in place at the three universities under study is conducted and the role of quality assurance in WIL assessment examined. Lastly, theories relevant to the study are explored as they provide a theoretical perspective on how workplace learning transpires.

## **4.2 Overview of the Office Management and Technology (OMT) Programme**

The OMT programme provides administrative skills to students enabling performance in all sectors of the economy. Furthermore, students are provided with background knowledge of the concepts underlying many of the administrative tasks they will be required to perform (MUT OMT Handbook 2021: 1).

### **4.2.1 Office Management and Technology (OMT) curriculum structure**

Numerous academic courses are offered at SA universities, such as the OMT programme which offers students the chance of developing the attitudes and skills required for employment in an administrative environment. The structure of the programme includes studies in the fields of business administration, information administration, communication, and legal practice, along with human resource management, mercantile law and financial accounting. The course aims to produce graduates “who are a marketable product and [fully] capable of performing administrative office duties”, with professional administrative and communication skills (Mkhize 2017: 41).

WIL is included in the OMT programme as a compulsory component and part of the curriculum. In the case of OMT, which is a crucial element of this case study, the WIL module is offered at Level 3 (third year) and is a credit-bearing component. In other words, academic institutions may not award an OMT qualification unless a student has fulfilled all the requirements of the WIL module. The WIL period is determined separately by each university. At the universities under study, students engage in WIL for a minimum of three and

a maximum timeframe of four months. Students are placed at workplaces where they engage in administrative office duties.

### **4.3 Students' Experiences at the Workplace**

#### **4.3.1 WIL Preparation**

According to Aprile and Knight (2020: 870), WIL preparation before students are placed with industry, is crucial. While the success of WIL depends on students achieving the outcomes, their preparation should not only focus on pedagogical requirements. Equal attention needs to be given to administrative issues in preparing students. WIL Coordinators need to establish, maintain and nurture industry partner relationships, keep student records, and maintain student and mentor contact. Hence, OMT WIL Coordinators keep databases that provide detailed information of industry partners and student placements that can be easily accessed at any time WIL Coordinators have to ensure students are placed at safe places and address any ethical issues relevant to WIL. Placements that are poorly administered may lead to:

- i) “weakly or non-integrated disciplinary and practical learning;
- ii) unorganised experiences for students;
- iii) ill-prepared and poorly motivated students;
- iv) ill-prepared academic and mentors;
- v) ill-prepared workplaces;
- vi) uncooperative and indiscreetly utilitarian industry or community partners;
- vii) students' feeling stressful experiences of abandonment”

(Aprile and Knight 2020: 870).

The above suggests the need for better preparation before students are placed for WIL in workplaces (Smith 2012: 253).

Kiriri (2019: 260) argues WIL students become demotivated when not provided with the resources necessary to perform their tasks and duties at the workplace. Therefore, other than their curriculum and the type of work they will

perform in work-placement matching, it is also imperative for workplaces to be equipped with the tools necessary to perform.

At the three universities under study, since WIL is a compulsory component in the OMT programme and the programme does not have a governing body, the department's WIL Coordinators are responsible for WIL. Prior to engaging in respective workplaces, students attend a module that prepares them for the workplace. Typically, the WIL Coordinator, teaches the WIL module. The Directorate/Department of Co-operative Education plays a different role in each of the academic institutions. In some institutions, the Directorate/Department is responsible for placements, whilst in others, academic departments do their own placements.

Students are provided with logbooks, which include the outcomes, assessment criteria and assessment strategies. These are integrated and students have to achieve the set outcomes on completion of their work-placements. It is important the host organisations be prepared for the WIL student before placement. Industry supervisors have to understand the students' curricula and university expectations. The induction of students in their workplaces is vital for easy classroom to work-setting transition. The WIL Coordinator's role in preparing students is to match them with the relevant workplaces, prepare them prior to placements, ensure students understand the outcomes and what is expected from them and, lastly, brief the host supervisor on university expectations (Kiriri 2019: 260).

The basic processes involved in WIL assessment practices range from preparation to placement and completion.

#### **4.3.2 WIL Placement**

The completion of the WIL experience begins with the successful placement plan where students are placed within the work context. The first step in gaining appropriate workplace experience is an effective WIL placement plan. The plan should also identify workplaces suitable to OMT students. Quality placements are important for students as many "placements are token placements" and

not “quality placements”. It is critical for students to be exposed to experiences relevant to the OMT field and the workplace is educative and enhances their learning experiences (Samadi 2013: 35).

“Where the entire WIL component or any part of it takes the form of workplace-based learning, it is the responsibility of institutions that offer programmes requiring credits for such learning to place students into appropriate workplaces. Such workplace-based learning must be appropriately structured, properly supervised and assessed”

(SAQA 2020: 34)

As outlined by the temporary WIL COVID-19 Guidelines, the outcomes to be achieved through WIL and their workplace-based nature have to be considered, with the resulting different modality choice. Therefore, there is a preference for the use of PBL, PJBL and SL as opposed to work-directed theoretical learning (WDTL) during the pandemic.

In the OMT programme, the WIL Coordinator places students with industry, where students are engaged for a minimum of three and a maximum timeframe of four months. In the event where the student is unable to complete or be placed for WIL during this period, “off-time” is utilised for completion, for example, during holidays and weekends; this is further provided for in the updated, temporary SAQA WIL guidelines under COVID-19 (SAQA 2020). In one university under study, students were not able to practice their WIL in industry due to COVID-19 restrictions, which necessitated a “paradigm” shift in WIL placements. The institution engaged in PBL. Students work on projects virtually while other universities delayed their placements until COVID-19 restrictions were at lower levels.

The responsibility of student placement in industry for WIL is no longer a responsibility that rests with students, with the HEQSF (2013) stipulating this responsibility rests solely with the academic institution, where a crucial role is assigned to WIL Coordinators in student placement.

As highlighted by Henderson and Trede (2017: 70), collaboration of the WIL Coordinator, the industry mentor and the student is important in students' WIL placements. A collaborative approach suggests placement objectives have to be discussed with the students before they start with the WIL period. These discussions will assist students to understand their role and therefore, create their own framework for learning and how they will be assessed. The learning agreements students have with workplaces facilitate the alignment of outcomes, teaching and assessment. Eventually, the placement plan should be an agreement among the student, WIL Coordinator and the industry mentor.

Work role preparation includes disciplinary knowledge and technical skills as well as understanding how to work as part of a team, "communicate with others, learn tacit ways of working through observations and socializing into workplace cultures. Helping students develop a sense of professional identity and engage with issues of professionalism can enhance workplace-learning experiences. It strengthens a sense of purpose and focus to WIL" (Trede 2012: 159). The OMT WIL module does not concentrate only on the curriculum, but also includes soft skills students need to develop.

The placement of students' practice is at present hampered by COVID-19 lockdown restrictions, with alternatives suggested by a temporary WIL guideline update (SAQA, 2020). In addition, the visit creates an opportunity for students to report to their lecturers regarding their progress, to iron out any issues, and offer the lecturer an opportunity to provide clarity where students have difficulties. Currently, the monitoring of students who were placed is being done through virtual communication with the WIL Coordinator and, usually, other staff members who assist with WIL visits. With the easing of lockdown restrictions, some students were physically visited.

The learning experiences of students during their placements are an important part of their preparation prior to being employed (Horstmanshof and Moore 2016: 93) and employers have expectations of students regarding their abilities

and skills; they are expected to demonstrate the knowledge acquired during their studies.

### **4.3.3 Supervision**

In SA, the effectiveness of WIL depends on the contribution of mentors and WIL Coordinators. Communication between the WIL Coordinator and the work supervisor is important. Partnerships of industry supervisors and WIL Coordinators should be of cooperation and interaction by ensuring they work together more frequently (Cheung *et al.* 2018: 1261).

According to Elijido-Ten and Kloot (2015: 210), the industry perception regarding the part they play in the student's WIL relies on workplace mentors' common agreement that proper training and supervision are essential for WIL to occur. Supervisor access deals with student contact that should be maintained by the one supervising. Such contact typically has feedback on learning, support throughout the experience, and to establish whether outcomes were achieved as required, as its primary purpose (Smith 2021: 252).

The role of supervision differs tremendously between disciplines, impacted by the degree to which HEIs and workplace placement providers collaborate. In fields such as engineering, for example, health-related disciplines and education, the supervision of WIL is formalised, especially where a professional body regulates the field. Whereas in business, for example, OMT supervision is an arrangement between WIL partners and the university that has placed students (Smith, Ferns and Russell 2016: 199).

It is important that, prior to students engaging in their WIL placements, the WIL Coordinator prepares students on the outcomes they are expected to achieve at the workplace.

## **4.4 Alignment of Curriculum and WIL Assessment**

Universities have a long history of using teacher-centred methods in education. In the last three decades, however, they have recognised the importance of

adopting an approach to teaching and learning that is student-centred. Consequently, the design of a curriculum has to ensure an alignment between a curriculum and assessment. Sekulich (2019: 1) suggests the term “curriculum and assessment alignment mapping” and defines it as a process used to align curriculum content and assessment strategies. The mapping in the WIL curriculum and aligning it with the assessment strategies help the academic staff to identify gaps (if any), overlaps and strengths within the programme and inconsistencies in the curriculum. Such alignment provides an opportunity to relate the outcomes and the assessment criteria.

Assessment criteria clarify to students what is expected from them so that they demonstrate the achievement of the set learning outcomes. Assessors also know the factors to consider when taking decisions or judging the performance of students after assessment.

The literature surveyed proposes that the curriculum in HEIs should include WIL, as it prepares students to be future employees. WIL is thus generally described as a curriculum strategy where students spend time at professional sites relevant to their studies and their future careers: it is the infusion of classroom learning and workplace learning. As a result, it has become imperative for students to gain impeccable skills in vocationally orientated qualifications, hence the introduction of WIL by most universities globally. Even though placing students is a challenge for universities, it is important they build relationships with industry in order to implement WIL programmes successfully.

Ferns and Zegwaard (2014: 181) affirm the structure of curricula requires revisiting to ensure WIL assessment practices are accommodated, with qualification structures at present entailing numerous disconnected and isolated courses, “where disjointed assessments” cannot optimise the value which WIL feedback contributes in informing prospective curricula changes and development. Feedback received from WIL engagements is, therefore, not used to inform and enhance new developments in the curricula. In OMT,

departments use feedback from mentors, students and WIL Coordinators to enhance the WIL curriculum. The feedback is also used to enhance the OMT programme, as students need to develop the skills required by the industry.

Smith (2012: 251) alludes students should engage in activities that integrate theory and practical knowledge: which he refers to as “integrative learning”. Such learning develops students’ capacity to not merely apply knowledge, but also to make decisions from the theory they know, to understand the reasons why they make those decisions. Therefore, it is important to align and integrate teaching, learning and assessment. When the WIL curriculum is designed, such alignment has to reflect on the outcomes that students have to achieve.

The increased demand for graduate employment has necessitated HEIs closely examine their curriculum to ensure alignment with assessment activities. Such alignment helps universities to prepare students who will need to cope with workplace tasks, hence the necessity of introducing new approaches curriculum to teaching and learning. Therefore, the WIL curriculum for any programme at a HEI should include the programme learning outcomes. Further, since the OMT programme is office-based, it should assess communication, presentation, problem solving, and planning ability to retrieve information, among other skills, as these increase students’ employment opportunities. The CHE “Good Practice Guide for WIL” highlights “assessment should be aligned according to set [programme] outcomes”, with appropriate tasks at a suitable level, which is at third year level in OMT (CHE 2011: 41). It is imperative for curriculum developers to align outcomes to assessment activities.

For the WIL curriculum to attain the necessary outcomes and close the gap of learning between classroom and the workplace, an extension of WIL methods and other assessment strategies is needed. According to Patrick *et al.* (2008), infusing new models designed to align the university curriculum and industry needs can assist both parties, along with continuous communication on new trends and providing feedback among students, HEIs and employers agree

that curriculum developments improve the design and enhance the curriculum. The result of such collaboration will be constant quality advancement in the curriculum design of university programmes and WIL.

The WIL curriculum is regarded as a vigorous process, where different knowledge types are organised and variously used to supplement classroom situations. Although the connection of classroom teaching with professional practice is workplace learning, it can provide meaning and be educative, only when all elements that apply are associated to accomplish the outcomes intended by workplace learning in its totality. The curriculum design should recognise that classroom pedagogy is formal teaching; on the other hand, workplace pedagogy draws on the use of knowledge production by means of observation and practice (Scholtz 2020: 26). Hence, students should first acquire knowledge in the classroom setting and thereafter practice it in a work setting.

Ali (2018: 73) explains the plan to design an ideal curriculum involves use of a constructive alignment method. This approach originated from constructivism theory, centred on observation and the systematic study of how people learn. The theory further recommends learners construct their own meaning and understanding. To achieve the assessment results desired, clear communication of learning outcomes should be provided to students at the start of learning, as they share the responsibility of their individual learning. Hence, the UoTs under study prepare students by explaining outcomes in the WIL module classes.

Ajjawi *et al.* (2020: 305) allude there should be constructive alignment in the assessment activities of students. When assessments are aligned to the assessment criteria, it stimulates productive learning, students are knowledgeable regarding the outcomes of the learning; the link between outcomes and assessment activities provides students an opportunity to comprehend how assessment and feedback will be handled.

In support of constructive curriculum alignment and assessment, Fulcher *et al.* (2014: 4) argue the focus is usually placed on assessment methods instead of efficient pedagogy and the curriculum. Assessment, pedagogy and curriculum are inter-linked and should be all encompassing to “inculcate a culture of learning instead of a culture of assessment”. They advocate for an integration of assessment, pedagogy and curriculum as pillars of learning. Therefore, teaching, learning and assessment should be aligned.

According to Walton (2011: 569), the teacher does not drive the learning in constructive alignment; instead, the learning activities largely influence the quality of student learning. Learning is no longer teacher-centred as students create their own learning and understanding; the teacher facilitates the learning process. Consequently, alignment of the outcomes, learning activities, teaching methods, as well as assessment tasks is important.

Khuzwayo and Vahed (2021: 99) conducted a study at one of the country’s UoTs, regarding industry mentors in the engineering field. In their feedback, it was highlighted the institution has to share the curriculum with companies where students are placed, in order that employers may understand students’ contribution and the content and context students need to grasp during their training. The study highlighted academic institutions need to expose students to practical work prior to placing them with industry.

Nyanjom, Goh and Yang (2020: 6) also conducted a study on the perceptions of hospitality and tourism students on the effectiveness of assessments as part of their WIL internship programme. Their findings indicated students were dissatisfied with the commitment and interaction by industry mentors and they did not give expected attention to the assessment activities of students. There were doubts whether mentors have professional knowledge on the topics selected by students for assessment. Therefore, it is vital that industry mentors have access to the OMT curriculum so they understand the criteria used in WIL assessment. The curriculum knowledge will also assist industry supervisors to design what they expect from students.

Assessment is critical in students' learning as it creates a positive effect on teaching and learning activities. Villarroel *et al.* (2020: 39) explain that when assessments are not conducted properly, they might not be effective. Assessments cause students to engage their higher order thinking skills. The expectation of assessment has an influence on how students handle their studies, because when they know they will be assessed they are inclined to study more diligently. Assessment is indicated as the effective way of improving the quality of student achievement. WIL assessment in OMT has highlighted those areas where students have done well in industry placements, it has also identified areas for improvement, and this has assisted the UoTs under study to use such feedback to enhance the curriculum. The sections that follow will discuss assessment in the workplace.

#### **4.5 Assessment in the Workplace**

From an educational viewpoint, assessment is part of teaching and learning. Not only is assessment used to measure how much students know and what they are able to do, it also identifies students' knowledge gaps. Globally, HEIs have refocused on learning outcomes, which has prompted a significant innovation on curriculum changes and in reconsidering methods of teaching and learning. This refocus on changes in teaching and learning has transformed through discourse in programmes offered, focus on learning outcomes and in the development of attributes. Surprisingly, such transformation has indicated less impact on assessment either for students' certification or for learning purposes (Boud 2017: 1).

According to Ferns and Zegwaard (2014: 184), HEIs use assessment methods that are measurable, for example examinations, short-answer tests or multiple-choice questions, written essays, and so on. These assessment methods allow for the allocation of a mark or a grade. Unfortunately, these methods fail to acknowledge the learning and the assessment that occurs in a workplace. Learning outcomes such as teamwork, professional behaviour, communication skills, and so forth, are difficult to measure as a result it becomes difficult to

assess such characteristics. The challenge is to design assessments that align with performance-based outcomes and offer proof of such learning.

#### **4.5.1 The need for assessment in WIL**

In HE, the term assessment denotes the broad selection that lecturers/educators utilise as approaches or tools to assess, evaluate and test students' readiness academically, their learning development, achievement of skills or educational needs. Furthermore, assessment is one of the main pillars in HE. Hassam (2011: 327) defines assessment as the evaluation of student learning through "an assessment method which is a systematic way of measuring students' learning". Assessment is evaluating how a student comprehends what he/she has learned. It is a form of measuring how much has been understood from the learning that has occurred.

According to Boud (2017: 6-7), assessment has three main functions:

- i) It confirms the student performance; known as "summative assessment". Which is how HEIs judge how students perform and it is documented and validated as demonstrating what a student has achieved.
- ii) It assists students by providing them with information during their learning. The activities they do and the feedback they receive helps to shape their studies and this is referred to as "formative assessment".
- iii) Students can decide about their learning through assessments; hence building a capacity to judge themselves. With assessments, students are capable to be effective learners who eventually become a professional in society.

McNamara (2013: 191) highlights to develop professional competence, the inclusion of work placement and mentor feedback are important. The initial step in WIL for the assessment of professional competence is to establish those workplace performance aspects that assessment. The student has to discuss her/his placement objectives before placement, as she/he has to create a learning framework that will be assessed. A collaborative model of a

student, industry supervisor and WIL Coordinator ensures the student and the supervisor can discuss the learning outcomes in order to develop a plan on how to attain them.

While assessment is acknowledged for students' certification, sustainable assessment is for lifelong learning and students should be prepared to accept assessment of the learning activities throughout their lives. Students should be capable of performing tasks they have been assessed on, even in different settings and in diverse situations. In WIL students gain knowledge from the learning and from the assessment of activities they engage in at the workplace. In the OMT programme, the knowledge of performing the tasks by students while at work will sustain them in their professional careers (Boud 2000: 151).

Boud and Soler (2016: 7) and Boud (2000: 151) agree the idea of sustainable assessment was introduced to centre the need for all assessment practices to ensure students are prepared for the future challenges once they complete their current learning. Sustainable assessment gives students an opportunity to develop in their profession as they continue to learn and they are able to sustain what they have learnt currently and in the future.

Hassan (2011: 328) warns that assessment should be thought of as something that involves student learning, creating confidence in themselves and their abilities and should not be deemed as only a "receipt" to their learning. Any assessment given to students should stimulate their learning as it will develop them and they will be confident in their acquired skills. Therefore, assessment needs to be performed regularly to determine whether the outcomes have been achieved as expected. Hence, students in OMT have logbooks where they document every task performed and the industry mentor has to confirm the performance of the task by signing on the logbook.

Ajjawi *et al.* (2020) contend that WIL assessment is reflective, rich and provides a student with more developmental learning, traditional assessment methods return a student to 'learner mode', where he/she is judged by others on competence; this contradicts the role a student assumes at a workplace. When

at a workplace, a student is a staff member and expected to take responsibility for being perceived as an employee. Moreover, traditional HE practices “fail to factor in the unique conceptual framework of the personal learning journey and unintended outcomes afforded by WIL” (Ferns and Zegwaard 2014: 181).

It is important to highlight that assessment needs to respond to the inconsistencies of the workplace learning. Since the work environment is unpredictable, vary in situations and authentic in nature, implies that assessments for students cannot be prescribed even if they are studying for the same programme. Different assessment strategies can be implemented to accommodate the diverse environments that students are placed in (Bilgin, Rowe and Clark 2017: 169). The authenticity of the environment requires that assessments are also authentic.

In OMT, students are placed at different workplaces, for example, government departments, law firms, manufacturing companies, and more. Although they are all exposed to the administration environment, their experience is different; therefore, their feedback on assessment will differ.

#### **4.5.2 The role of authentic assessment in WIL**

WIL is the integration of theory with work practice within a curriculum designed for a specific purpose (Kaider *et al.* 2017: 154). Having been at the centre of student development and their preparation for future careers for some time at HEIs, WIL engagements offer students the prospect of experiencing authentic work tasks and responsibilities, while they assume certain roles and expectations from the industry mentors. Conversely, to confirm learning has occurred, assessment practices have to reflect such experiences.

Authentic learning is defined by Jopp (2020: 942) as a positive pedagogic approach as it locates the student learning in the situation of future work. This type of learning provides students an opportunity to learn within an environment where they experience the application of real-world tasks. James and Cassidy (2018: 401) maintain the tasks given to students should contribute towards skills development and should attest that the acquired skills will mirror

the future professional career of students. Therefore, in WIL placements, mentors should assess students using authentic tasks to reproduce real work performance. This assists students when faced with similar real work challenges; they can draw from the experience of dealing with such problems.

According to Smith *et al.* (2016: 199), authenticity is the extent of how WIL placement offers a student the opportunity to practice professional work that is meaningful, with adequate levels of independence where she/he adds value to the host organisation. The importance of featuring the aspect of authenticity promotes the relationship of the curriculum and outcomes of the placement experiences of students.

Smith and Worsfold (2015: 25) clarify WBL should be authentic; authenticity should be at the core of learning, arguing that the WIL curricula is able to provide students with physical authenticity where they engage in “real work” but fail to offer intellectual authenticity where students can participate in more meaningful learning in their particular discipline. Therefore, the WIL curricula have to include an authentic setting where students learn “real work” and are exposed to situations where they can observe, cooperate and react to a specific context.

The WIL component in the OMT programme is structured such that students are hands-on in an office environment as they engage in administrative duties. Students learn and do the real work and Nyanjom *et al.* (2017: 4) refers to them as “learners and doers”. When OMT students are engaged in WIL, they perform administrative tasks that they will experience in their real work life.

When engaged in WIL, OMT students aspire to become good professionals, therefore, it is necessary that they master the technical skills and knowledge of their discipline. Koh (2017: 2) alludes that in authentic assessment, it is important to identify the required learning outcomes so that the assessment methods align with the set outcomes. Hence, there should be a close alignment between assessment tasks and learning outcomes as this places the focus on the development of students. Therefore, the aim of authentic assessment is to

integrate classroom learning and the workplace whereby students imitate the tasks performed by professionals in a particular field.

Villarroel *et al.* (2018: 841) suggest three components of authentic assessment:

- i) Realism – to associate knowledge with everyday life and work.
- ii) Contextualisation – when students can apply the knowledge learnt to think and analyse different situations they encounter in different context.
- iii) Problematisation – when students know that the acquired knowledge learned will be used to solve a problem or meet a required need.

The importance of authenticity in students' learning includes the real-world experiences (Smith 2012; Ajjawi *et al.* 2020; Koh 2017; Villarroel *et al.* 2020). There has been a change in basic assumptions from teaching students to students discovering their own learning. This has resulted in the introduction of assessment for learning with emphasis on knowledge application as opposed to rote learning or memorising. While engaged in WIL, students have the opportunity of solving real problems; thinking critically when taking decisions relevant to the work activities. Such learning has developed authentic assessment, which emphasises that assessment tasks should resemble real-life setting or professional application (Nyanjom, *et al.* 2020: 4).

Authentic assessments require students to perform tasks that show the real practices of a profession in an environment and context similar to that profession. Students engaged in WIL are placed in offices and they perform administrative activities that replicate knowledge and skills similar to that profession. In addition, authentic assessment should stimulate cognitive thinking for students. Students should develop skills to solve real problems, apply the learnt knowledge and make decisions which will develop their intellectual skills (Ajjawi *et al.* 2020: 34).

According to Ajjawi *et al.* (2020: 307), authentic assessment should inspire students' reflexivity; where students identify with the practices of the OMT

profession and develop self-identity. In assessment regarded as authentic, students alternate the roles of student and future professional, while shifting between the university and the world of work. These opportunities allow students to test whether they are able to fit in their professions, they understand the meaning of being successful in their chosen workplaces and develop an appreciation of what it means to be successful in their future careers.

Students should develop abilities to appraise their work performance quality. Any activities they engage in as part of assessment should facilitate being able to judge their own work quality and hence, that of others. By so doing, they will be able to critique themselves and, in that manner, control their learning. Additionally, evaluative judgement will assist students to recognise areas where they need to improve, monitor their own progress and know acceptable standards regarding their careers in their future profession (Ajjawi *et al.* 2020: 307).

The next section investigates the challenges of assessment in WIL.

#### **4.6 Challenges in WIL Assessment**

In SA, the CHE “Good Practice Guide for WIL” (CHE 2011: 41) emphasises it is imperative for curriculum developers to try and align the outcomes with activities used in assessment so students are competent in the set outcomes. WIL assessment is at the centre of students’ preparedness as it is the only way to determine whether students have reached the outcomes and are able to perform the tasks/duties given to them at the workplace.

Boud, Ajjawi and Tai (2020: 1) state:

“Assessment directs student attention to that which is most important, what is intended to be learned and what has been achieved. Poorly constructed assessments distort what is learned and do not acknowledge what has been achieved”.

Assessment is thus a process of collecting information with regard to student learning, using all resources available; with these informing the decisions on how students learn. Therefore, WIL should not only refer to theory and practice integration but should also be transformative, stimulate the creation of new knowledge, skills development and include student opinions. The curriculum content, assessment criteria and graduate attributes guide the WIL Coordinator in setting out/determining the outcomes that the student needs to achieve at the workplace, whereas the workplace mentor allocates tasks to be accomplished by the student. Assessments of both WIL and workplace mentor are usually taken as the final assessment. However, student input is not sought, as he/she does not participate in the assessment process (McNamara 2013: 194).

Pattalitan (2016: 695) explains that a change in assessment is needed - from assessment “of” to assessment “for” student learning. Assessment for learning is when teachers use assessment to scaffold learning and encourage student participation in their learning progress. Students are provided with constructive feedback due to assessment being developmental which assists students to gradually achieve the required learning outcomes.

Researchers consider assessment for learning as “formative assessment”. Sadler (1989: 120) states the term ‘formative’ is associated with “creating or sculpting something in order to achieve a preferred end result”. Thus, formative assessment is used to shape, mould or judge student performance to improve their competence, while providing students with feedback and advice on their continuous learning so they may develop and progress. Students should view formative assessment seriously, as it helps them understand those sections in learning that need their attention. Feedback is used to highlight areas where development and improvement are needed.

Where “summative assessment” is concerned, Pattalitan (2016: 695) describes it as assessment used to indicate proficiency “or that contributes to a student’s grade in a course, module, level or degree”. Furthermore, this type

of assessment is viewed as the end-result of learning, as it contributes to the final mark, grade or module and is used to indicate competence in learning. Summative differs from formative assessment because the former sums up or summarises the achievement position of a student, usually reporting at the end of student learning, with the purpose usually for certification.

Sadler (1989: 120) argues summative assessment does not immediately impact student teaching and learning, because the assessment results inform the student whether the required result has been achieved; which translates to a pass or fail. Furthermore, it can influence decisions that might have reflective significance for students and educational institutions. In addition, summative assessment informs academic institutions regarding their curriculum, reflecting areas that need review. Therefore, both informative and summative assessments are important, depending on the purpose and outcomes for the academic institutions.

However, formative and summative assessments are a challenge in the OMT programme for WIL Coordinators at universities, as well as for workplace mentors and students. The implementation of formative assessment while students are engaged at workplaces has its own problems, such as, for example, who will conduct such assessment? Is it the mentor or the university WIL Coordinator? Nevertheless, it remains a challenge for workplace mentors to conduct summative assessments. Normally summative assessments are conducted at the university and industry mentors are not involved in such assessments. For this reason, it is not feasible for mentors to participate in summative assessments of OMT students.

McNamara (2013: 184) argues it is problematic to assess the student's professional competence, due to it being impractical for academic staff to assess students at the workplace; given the number of students placed at different workplaces. Subsequently, the validity of the assessment might be compromised, such as when a student is required to articulate his/her own capabilities. However, should the mentor/mentor provide evidence, the

assessment may be unreliable. This concurs with Jones *et al.* (2009), who maintain for WIL to mature and develop, assessment practices should be the focal point. WIL should thus focus on assessment because this is how competence of outcomes is achieved.

According to Boud and Dochy (2010), assessment hugely influences student development and how they learn, because of it directing the student's higher learning future. Additionally, with the rapid change and advancement in technology, it is imperative assessment of WIL be explored. In line with this, student perceptions should also be examined, establishing in addition, whether set outcomes in logbooks are included in WIL assessment. Ferns and Zegwaard (2014: 179) assert that students do not work alone in a workplace; they are exposed to other people with different expectations. Therefore, it is imperative that outcomes should be explicitly outlined so that WIL stakeholders (student, mentor and lecturer) understand their roles in the assessment process.

In most cases, occupations exist where academic and mentors share assessment since both share common accreditation criteria, for example, in the social work and nursing professions. Professional bodies that have their own standards and criteria regulate these. Moreover, they contribute to university programme content and structure. Therefore, conceptual and practical skills have to be assessed by both academic and mentors in line with of the accrediting/professional bodies' standards (O'Toole 2007: 52).

Admittedly, in professions where there are no professional bodies, as is the case in OMT, assessment is left to the individual HEIs, more often becoming the responsibility of departments where WIL is a pre-requisite to qualifying. In line with this, there is a need for departments to investigate in what way students are assessed and the role of each of the three stakeholders (academic staff, mentors and students) in the WIL assessment, while also determining how they ensure assessment quality.

Graduates' transition to the world of work is not an easy progression, more so when corporate sector demands a set of relevant work skills from graduates (Rambe *et al*, 2015: 604). WIL is best suited to alleviate these challenges, being internationally renowned as an instrument for developing graduate attributes. The challenges WIL Coordinators face include "a lack of understanding of the underpinning theory of assessment design application" (Ferns and Zegwaard 2014: 181). The design of assessment that encapsulates student learning and skills development accurately and genuinely requires a reasonable understanding (Nixon *et al*. 2006, cited in Ferns and Zegwaard 2014: 181).

Among the other challenges of assessment, is the appropriate design of the instrument used for assessment. When improvement of a particular attribute is measured with the instrument, the person assessing the student should be confident it is assessing what it is planned to measure.

Cooper and Ord (2014: 15) assert it is their experience that using one form of assessment, namely a written assignment, to assess the practice of students disadvantages them; it does not tap into the depth of student learning and knowledge. However, it is crucial to test knowledge, instead of affirming being able "to apply that knowledge in a practice-based setting that reflects real-world scenarios". Moreover, assessment is performance-based in WIL and students are expected to demonstrate skills and knowledge in tasks applicable in their intended profession (Ajjawi *et al*. 2020).

While assessment is surrounded by controversy regarding academic standards and how it prepares students for employment, it is argued by Boud and Falchikov (2007: 3) it also provides incentives for students to study. McNamara (2013: 185) highlights assessment in WIL has been an ongoing challenge and it is important the appropriate assessment is determined that will be suitable for the three stakeholders; the mentor, an academic staff member and a student.

Monaco and Martin (2007) suggest academic staff should start with a learner-centred curriculum, which provides students with the direction of their learning, clarifies student behaviour expectations in addition to outlining rules and regulations, with ramifications when not followed. However, the curriculum does not provide a systematic guide for the student; instead, it specifies guidance, granting the student to self-determine their engagement for academic success.

Brown and Knight (1994, cited in Ferns and Zegwaard 2014: 179) attest, notwithstanding the reputation of assessment being at the “heart” of education, it is still the cause of displeasure and anguish among WIL stakeholders as there are no clear guidelines of how assessment should be conducted.

WIL assessment plays a crucial role and is the only means to determine whether students have accomplished the outcomes and can perform the mentor-assigned tasks/duties. Thus, in this way WIL fulfils its purpose of being the centre of student preparedness in students taking their place in the workforce and society.

Trede *et al.* (2015: 1003) explain that assessment of WIL is complicated due to student performance and not academic knowledge being assessed. Practice is how people do things, how they communicate and how they relate with colleagues while carrying out their professional roles. However, “the latest developments in theorising assessment in workplaces have shifted to where assessments now concentrate on assessing the multifaceted activities students engage in at the workplace, including professional thinking” (Trede *et al.* 2015: 1003). This is explained by the authors as essentially “different from assessing academic knowledge or technical skills”, due to the nature of WIL including learning that is authentic and interactive. Through the exposure to real-life situations and contending with these as part of practical situations students learn there are outcomes for their actions.

Research supports academic staff, students and workplace mentors perform assessment. Rainsbury, Hodges, Sutherland and Barrow (1998) studied an

education course that is a work-based co-operative. The authors used a method that incorporated academic staff, the students and the mentors - the three WIL stakeholders - in the assessment process. Therefore, the assessment process can be considered as “inclusive”. Rainsbury *et al.* (1998) in their research of these three collaborators formulated a “collaborative assessment model”. The model highlights what and how to assess, as well as who should assess.

- What to Assess?

Workplace assessment considers the capabilities a student will have to develop in the process of placement at a workstation and the project they will be given to complete while engaged at the workplace.

Rainsbury *et al.* (1998) posit that among the capabilities that should be assessed are intellectual, personal and interpersonal proficiencies. Hence, the development of a model that includes applying knowledge to business settings and incorporating personal competences with professional practice.

- How to Assess?

During the WIL period, while students are engaged at the workplace, Rainsbury *et al.* (1998) explain they are expected to display numerous capabilities, for example, problem solving, integration of theory into practice, and more. These competencies should be assessed and a grade awarded, then translated to a mark.

- Who Should Assess?

As Rainsbury *et al.* (1998) advocate, the “inclusive” assessment process should involve three assessors, which should be a collaboration between student, workplace mentor and academic supervisor. Each assessor ascertains his or her grade in four categories, which consist of the student project, as well as personal, interpersonal, and intellectual capabilities, with a conclusive grade negotiated and awarded to the student. A student has been included in the process of assessment, due to the importance of students

assessing their own performance. Self-assessment entails students developing their own assessment criteria that they apply to their work.

For WIL to be measured similar to on-campus learning, Jackson (2015: 353) maintains grading on assessment should be allocated. Student assessment should clearly define the type of skill, behaviour and performance expected; hence, the criteria should be clearly articulated. Therefore, aligning assessment to the learning outcomes to encourage self-reflection and feedback from students is important.

On the one hand, self-assessment is also proposed by Hodges, Eames and Coll (2014: 191) as a valuable contribution to learning, because it develops student capacity to self-assess work, as it enables the learner “to close the gap between the actual level of performance and the level of the required performance”. On the other hand, Joshi, Gupta and Singh (2015: 233) support the use of a portfolio, which can be compiled in two ways; either through self-assessment by the student or external assessment by the academic lecturer.

Joshi *et al.* (2015: 233) contend self-assessment will assist the learner to reflect on what has been learned and what still needs to be learned, which will help in achieving the set learning goals. Whereas the academic lecturer assesses the extent of learning, the portfolio can be used for both formative and summative assessment. While the former assists to provide feedback on progress, the latter identifies whether learning competencies and goals have been attained.

Contemporary literature (McNamara 2013; Ferrández-Berrueco, Kekale, and Devins 2016; Doss *et al.* 2021) clarify assessment in WIL has been an ongoing challenge and it is important to determine the assessment best suited to satisfy all stakeholders. McNamara (2013) indicates evidence from a combination of sources should be utilised to confirm appropriate assessment of professional competence.

In most assessment activities in WIL, the role of assessment is placed on the academic lecturer and the workplace mentor, since they dictate the mark that should be awarded to a student. The student has to fulfil his/her role by completing the tasks/assignments given and submitting a portfolio of evidence (PoE) or an assignment prepared during the time spent at a workplace.

A model Rainsbury *et al.* (2014) developed, addresses the triangulation of assessment, as it assists with reliability and validity, which are important attributes of the assessment process. This assessment model can be suitable for students due to it including them as role players in assessment and therefore, this model may be considered fair, appropriate and transparent.

McNamara (2013: 190) concurs with Rainsbury *et al.* (1998), stating evidence should be gathered regarding professional proficiency from students, workplace mentors and the university lecturer. An assessment model should be developed, formed by the three stakeholders collaborating to ensure inclusivity of a mix of sources. The model will ensure appropriate assessment of students' professional competence.

Subsequently, CHE (2011: 41) highlights the complexity of some modes of WIL assessment can be found in how evidence is collected by students for assessment. Students are required to use logbooks and/or PoEs to record skills developed and experience accumulated at the workplace. However, most forms are paper-based and ineffective in displaying how students have developed to master the complex activities in the workplace.

Raven (2017: 6) alludes to ongoing assessment being practical, providing the student with feedback as he/she progresses with WIL. Furthermore, ongoing assessment offers the mentor a return on time invested in mentoring the student. Additionally, the WIL Coordinator can receive feedback on student progress in the workplace.

Assessment should drive the learning process and conclude with feedback; it should not be merely an event in and of itself. In addition, assessment is a two-

way process for assessors and students, as opposed to being a haphazard and hazy process where assessors assign a final grade to the student without their input.

Furthermore, several purposes and stakeholders are served by WIL assessments. The educator is assured of learning while assessment offers students a means to “prompt and help articulate learning and skills”. In addition to creating products for industry partners, it can also, potentially, contribute to production. In other words, “each assessment must adapt to the particular learning outcomes and purposes of each WIL activity and what students gain from it” (Boud *et al.* 2020: 1).

For these reasons, it is important that WIL is properly assessed and assessments are valid and reliable. Assessors must understand the assessment process, how to implement the assessment policy, apply the assessment criteria and be objective when assessing student performance. Hence, in some academic programmes, for example the OMT Diploma, a qualification cannot be conferred when the WIL component has not been successfully accomplished. For this reason, academic institutions need to involve all relevant stakeholders in WIL assessment.

The next section provides an overview of the role of stakeholders in the WIL process.

#### **4.7 Stakeholders and Assessment in WIL**

Alignment of assessment to set programme outcomes, with appropriate tasks at a suitable level is emphasised by the CHE “Good Practice Guide for WIL” (CHE 2011: 41). Moreover, in order that students may be competent in the set outcomes, these should be aligned to assessment activities by curriculum developers.

Nevertheless, in professions where there are no professional regulating bodies, as is the case in OMT, assessment is left to the individual HEIs, particularly those departments that require WIL to graduate. In line with this,

there is a need for departments to look at how students are assessed and what role the three stakeholders (academic staff, mentors and students) play in the assessment of WIL, as well as how quality in assessments is ensured.

The following sub-sections examine WIL at HEIs, its impact and workings under HEIs on workplace mentor/supervisor, how WIL is applied in industry, and its effect on students.

#### **4.7.1 HEIs**

Existing WIL structures are shown to typically be located within the University Faculty that manages this type of experiential training. WIL policy advocates an integrated infrastructure composed of the specific HEI's WIL Coordinator, the academic departments within the relevant Faculty, and the Department of Co-operative Education. The aim of this co-operative structure, which involves a multi-faceted approach to co-ordination, is to serve the University, its students, and prospective employers.

Furthermore, WIL is provided guidelines through academic departments in relation to specific educational programmes, with regard to WIL monitoring and evaluation, in collaboration with the employers, according to set regulations.

A National Scoping study was conducted into WIL in Australia by Patrick *et al.* (2008), where the resulting report identified that universities face major challenges when they implement WIL, requiring universities to introduce new WIL assessment methods. Students have to reflect and be able to integrate theory and practice. The assessment method used will also depend on how the WIL stakeholders are committed to the WIL project, that is, the availability of the supervisor and the university staff member.

In another recent study on two Australian universities, Venville *et al.* (2021) examined these HEIs to formalise WIL feedback with nursing and allied health industry partners to create collaboration with WIL partners. The Australian Catholic University has a central unit that collected feedback from students.

Whereas, at Victoria University, individual disciplines are responsible for collecting their own feedback.

Although the industry was satisfied with the WIL feedback from both universities, a few areas for improvement were highlighted. Among those were that universities need to provide more official and strategic feedback instruments and standardised methods to be used. These formal processes would not only add to the existing knowledge, but also support the assessment management and competencies partnership and its analysis. Such collaboration provides a platform for a collaborative routine assessment of WIL programmes by all stakeholders. Certainly, student feedback from WIL placements in HEIs is not formalised by relevant departments, leaving it to individual departments to deal with such feedback in whatever way they devise. It is thus important WIL processes are formalised as WIL is used to enhance the curriculum of the programme.

Therefore, HEIs should acknowledge WIL as an internationally renowned instrument for developing graduate attributes and enhancing employability. Research has, nonetheless, shown numerous challenges associated with stakeholders in WIL. Ferns and Zegwaard (2014: 181) argue these challenges are exacerbated by WIL stakeholders not understanding the theory that underpins assessment design and application. The authors agree, "...even those well-rehearsed in assessment and learning theory struggle to apply assessment theory within the complex setting of WIL placements" (Ferns and Zegwaard 2014: 181).

In addition, academic staff responsible for WIL received feedback from students who have undergone WIL that highlight the challenges they face when assessed. It must be noted that, sometimes, some students are unable to meet submission deadlines for their portfolios, with their performance assessment mentor taking a long time to complete the relevant documentation.

For these reasons, Dorasamy and Rampersad (2018) expound that universities should conduct workshops specifically for first-time supervisors,

which could aid supervisors in developing skills related to student management in the workplace. The workshops can also provide an opportunity for academics to explain the policies associated with WIL, in order to clarify any misunderstanding to industry mentors, which should include the university's assessment policy.

There appears to be a lack of guidance with assessment and a frame of reference for mentors. Therefore, it is imperative that WIL Coordinators familiarise industry mentors with the assessment criteria and the expected student performance. In this way, the challenge of allocating higher scores to students than is warranted is avoided.

Trede *et al.* (2015: 1003) explain that assessment of WIL is complicated due to it being an assessment of student performance and not his/her academic knowledge. The practice is conceptualised by performing the tasks and the communication that occurs between people who are carrying out their professional roles. Hence, workplace assessment is different from assessing practical skills or academic knowledge.

McNamara (2013: 184) argues assessment of a student's professional competence as problematic, logistically, given the number of students placed, making it impractical for academic staff to assess students at the workplace. Kuriakose and Swart (2014: 2327) point out that more than one academic staff member, in most cases, assesses WIL especially where there are no existing assessment criteria. Problems encountered include that where no guidelines exist, consistency is compromised, questionable final score allocations are raised and subsequently, quality is not a priority.

Milne and Caldicott (2016: 175) highlight challenges with the growth of supervisor involvement in assessment of student performance during WIL. Among these challenges are: insufficient guidance and clarity where supervisor roles in assessment are concerned, university assessment being inadequate to capture skills applied in a work setting, the nature of good

practice for industry partner training and support being resource intensive, and students seldom carry out tasks on their own.

Admittedly, almost all South African universities are faced with a dilemma of elevated student numbers, with the ratio of student to lecturer very high, which creates a challenge when students have to be assessed. Academic staff experience an immense challenge to assess students where they are placed, due to universities not having the resources to perform this function. Not only is there a shortage of staff, there are also budget constraints for staff to travel, which creates a challenge with students placed all over the country.

In order for WIL to mature and develop, Jones *et al.* (2009) indicate that assessment practices should be its focal point. In other words, WIL should focus on assessment to achieve competence of outcomes, allowing WIL stakeholders to satisfy themselves that set outcomes have been achieved.

#### **4.7.2 Mentors**

Dorasamy and Rampersad (2018) support the findings by Jackson (2017: 11), who highlights the importance of providing training to supervisors on the assessment policy of the academic institution. Furthermore, the training assists mentors who might lack the required skills to effectively assess students at the workplace, which may be attributed to poor formal training in assessment. This is problematic in industry when mentors are required to assess students on their performance, posing a challenge as mentors are not trained as assessors and at times, some are unable to relate WIL outcomes to the assessment criteria.

Supervisors at work, who, in some organisations are not trained as assessors, assess students. According to Winchester-Seeto *et al.* (2016: 101), student supervision is the factor that reinforces the success of WIL. For this reason, mentors should understand their role as supervisors and as drivers of WIL training in the workplace. WIL stakeholders should, understand each person's role, with consensus on these roles, more so on the issue of assessment.

Jackson (2018) conducted a study on the conflict of performance evaluations between mentors and students, where findings indicated WIL students experienced disappointment, while those accountable for WIL curricula encountered problems. The disappointment and problems are attributed to the discrepancy between grades given by mentors and university academics lecturing WIL. The reasons for such disparity can be ascribed to a lack of guidance on assessment for supervisors and no formal training provided.

Additionally, there appears to be no direction with a frame of reference for mentors, which makes it imperative that WIL Coordinators familiarise industry mentors and students with the assessment policy and criteria of their institutions. This should eliminate the challenge of allocating higher scores to students than warranted. Jackson (2017: 11) emphasises the importance of providing training on the academic institution's assessment policy and practices to supervisors in the workplace. This training assists mentors who might lack the required skills to effectively assess students at the workplace, while such training also helps all stakeholders to form a common understanding of assessment practices.

As much as the role of WIL mentors is understood, mentors should also understand what assessment at the workplace entails. Boud and Dochy (2010) argues that assessment has a significant influence on student development and how they learn; it directs their future HE learning. When the rapid technology changes and advancements are also considered, an investigation of WIL assessment becomes imperative.

#### **4.7.3 Industry - Co-operative Education Partners**

The aim of the WIL programme is to “outline the work method, responsibilities and duties of all stakeholders involved in the process. In order to ensure that it is executed efficiently and effectively to set standards”, the programme should therefore meet several criteria (Johnson and Patrick 2016: 5). Firstly, the HEI WIL policy requirements must be met as set by Higher Education South Africa (HESA), the Higher Education Quality Committee (HEQC), the relevant

Industry Council and HEI. WIL policy has to, additionally; comply with various academic principles of education as per the HESA and HEQC regulations.

However, a crucial factor is that WIL must be “accepted, supported and approved” by prospective and existing employers, whereas the HEI is required to “provide the student with the necessary knowledge and experience for a qualification to be awarded” (Johnson and Patrick 2016: 5).

Where a professional governing body exists for a particular discipline in industry, administration of employer and student placement is centralised at the Co-operative Education department, while academic administration and instructional matters are decentralised to the respective departmental coordinators in the faculty. This “maintains the [alliance of the] various academic departments, while providing for coherent and independent quality control and standardisation of service to employers” (Johnson and Patrick 2016: 5).

Most occupations share assessment by academic and mentors, due to both having conventional accreditation criteria, such as in nursing and social work. However, professional bodies regulate these occupations, based on own standards and criteria and contribute to university programme content and structure. Consequently, conceptual and practical skills have to, therefore, be assessed in line with the standards of the accrediting/professional bodies by both academic and mentors (O’Toole 2007: 52). In the OMT programme, without a professional body, the challenge is that there are no standards attached to WIL assessments.

The responsibility for providing guidelines for WIL is typically that of the relevant University Faculty, the department that offers this learning method and the WIL educational department representative. Collaborating with employers was, nonetheless, found to be the responsibility of university departments that are also expected to approve employer facilities and WIL programmes. Employer liaison also falls to the WIL Coordinator/lecturer regarding learning needs, with methods to achieve this, ranging from on-site visits to advisory committee meeting outcomes. Moreover, the academic department is

responsible to initiate employer accreditation and its subsequent execution (Johnson and Patrick 2016: 6).

#### **4.7.4 Students**

Nonetheless, students, when supported by their mentors, can drive learning to a higher level for successful results. In addition, universities can engage with partners and draw up agreements, whereby students participate in work practices where they can add value to important industry issues. This can enhance their performance reflection, how they understand tasks and how they interpret work practices. The way students respond to such situations will verify how much they have learned to develop their skills and knowledge accordingly (Henderson and Trede 2017: 77).

Among the assessment challenges found is that the assessment instrument should be designed appropriately. Should the instrument be used to measure specific attribute improvement, the assessor should be confident that the instrument employed, assesses what it is intended to measure. Thus, the measurement tool devised for WIL assessments needs to be clear and specific, and it is essential for both the student and the assessor to understand the actual measuring instrument and exactly what the requirements are before engaging in the WIL process.

When using only one form of assessment to assess the practice of students, such as a written assignment, students are disadvantaged as this single, written assessment does not recognise the extent of student learning and knowledge (Cooper and Ord 2014: 15). Furthermore, while knowledge testing is crucial to student advancement, it differs when being able to put that knowledge into practice is verified in a setting that is practice-based and reflects “real-world scenarios”. Unfortunately, when students are assessed in WIL, knowledge testing mostly does not happen.

Contrary to this, McLean and White (2013: 107) contend that placing students for WIL is not an assurance they will receive experiential education. Students should be able to investigate, be creative, ask questions and experiment while

engaged at the workplace. The authors argue, “Current assessment strategies are often designed to validate rather than assess traditional pedagogical practices”. Hence, the WIL Coordinator has to ensure that the workplaces are authentic and relevant to the OMT discipline.

Subsequently, Purdie *et al.* (2013) argue the role of WIL is to enable students to switch from being a dependent learner to an independent professional practitioner. This switch allows the student to learn and master the learning on his/her own, while also creating an opportunity for the learner to create a professional understanding of the world of work.

As Henderson and Trede (2017: 76) highlight, students should be a key stakeholder of the collaboration in order that WIL may be effective. The authors propose a “governance framework”, where students are exposed to workplace processes and provided an opportunity to engage and discuss their learning. Students are introduced to various types of resources in the industry and acquire clarity regarding what is expected of them to achieve industry goals. The reflection on their experiences, while also understanding the insights of their exposure, should present evidence of achieving university learning outcomes. Students at HEIs are placed with industry by their institution; they do not have a voice in their WIL engagements.

Although controversy surrounds assessment with regard to academic standards and how students are prepared for employment through continuous assessment, Boud and Falchikov (2007: 3) maintain assessment provides added incentives for students to study. Students will apply themselves knowing they will be assessed against what they have learned, with some students becoming motivated when they know their learning will be tested, especially when it is known there will be feedback on their performance.

Boud and Falchikov (2007: 3) indicate student learning is severely impacted by assessment as it focuses on what is imperative, motivating students to further their careers. Assessment aids students in knowing what they can and cannot succeed in doing. For most students, it shapes confidence for their

future work, and for others, it shows their inadequacy and undermines their confidence in what they can do in future. Therefore, “WIL is based on the same principles that should guide all assessment planning, namely; assessments should be appropriate, fair, formative, as well as summative, valid, authentic, and consistent”. Moreover, student learning suitable for the qualification should be assessed wherever appropriate (CHE 2011: 41).

Assessment in WIL has been an ongoing challenge, as McNamara (2013: 185) explains, which confirms its importance in determining the most appropriate assessment that will satisfy all stakeholders.

In a study on WIL conducted at a UoT, Hlube (2018: 51) determined when students are exposed to all the learning cycle stages, outlined in Kolb’s 1984 theory they are, nonetheless, positively affected. These comprise:

- concrete experience (CE) (learning by doing or having experiences),
- reflective observation (RO) (reviewing the experience),
- abstract conceptualisation (AC) (learning from the experience) and
- active experimentation (AE) (trailing what has been learned).

The fundamental WIL experience at a university is the curricula that assist students to make the best of their learning at the workplace. When students can contemplate what they have learned and are able to transfer their knowledge to new circumstances that is when the Benefit of WIL is gained. Therefore, it is important to note not all WIL stakeholders are actively collaborating to produce a curriculum to prepare students at a workplace.

There is, however, a necessity for a paradigm shift in WIL assessment methods and stakeholders need to understand their role when students are assessed. Furthermore, while employers contribute to WIL assessment, there are nonetheless challenges experienced in quality assurance.

WIL is a learning programme structured through an agreement or a contract. There should thus be a written formal agreement that stipulates how learning will be conducted, the types of resources available in the learning process and

what will be learnt. Moreover, a strategy has to be developed on how evidence of the learning will be produced and assessment managed; hence, quality assurance should play a huge role in WIL.

#### **4.8 Evaluation of WIL Assessment Practices**

This case study evaluates assessment practices of WIL in university programmes offering OMT, with specific reference to three SA universities.

Recent research on the topic of WIL was found to examine far ranging aspects and elements, for instance, assessment alignment with the needs of WIL and authentic assessment (Ajjawi *et. al.* 2020); or the challenges that arise “when assessing student workplace performance during WIL” (Jackson 2018). While these studies highlight the necessity and difficulties in, as Jackson (2018: 555) explains: “combining positivist and constructivist assessments, where mentors make evaluative judgements on performance yet students are also agents in their own assessment”, actual WIL assessment practices are not their focus.

Smith *et al.* (2016: 197) assert WIL is an important strategy to develop graduates for job readiness, to eventually contribute to the country’s economy, which confirm the reasons for the inclusion of WIL in the curriculum. WIL assists students to secure temporary and, sometimes, permanent employment, as they are exposed to internal vacant positions in the organisations where they are placed. The experience they accumulate helps them compete for available job opportunities. In one university under study, on an annual basis, a few students are able to secure contracts or/and contract employment from the WIL partners where they are placed.

WIL assessment practice differs in the three universities under study. Students are typically provided with logbooks in which they document their experiences. Furthermore, a logbook serves as a record for the mentor to report on student performance, while it is also used for assessment. The mentor scores the student on an evaluation sheet, with either Rates (1-5) or Percentages (0-100), with regard to their performance of assigned activities. There is no assurance that the allocated rate or percentage equals to the performance of the activity.

In addition, supervisors give an average percentage mark, which does not exactly allocate a specific mark relevant to the student's performance.

Students are encouraged to reflect on their experiences in the logbooks, as well as in their presentations done after WIL. Students are assigned a work-based project to work on while they are engaged in WIL and present their findings on completion of their WIL. The skills learnt during WIL engagement contribute to the student's overall ability to gain meaningful employment, become economically self-sustaining, and contribute to the country's socio-economic development.

In line with the above, student perceptions need to also be investigated; their voice is important in the WIL assessment process. Ferns and Zegwaard (2014: 179) assert that students are exposed to other people with different expectations and outcomes because they do not work alone in a workplace. This creates a challenge when students are being assessed, as the evaluation will depend on supervisor expectations. Hence, the emphasis should be on the assessment criteria students should adhere to.

However, employers have experienced several challenges during the global COVID-19 pandemic. These included various sectors of the economy being closed and re-opened under lockdown level regulations, resulting in the discontinuing or postponement of students WIL at employers where they had or would have been placed for completion of the required WIL. Furthermore, the document highlights that numerous "employers have had to close their doors, while others are operating at a reduced capacity and several have become casualties of the lockdown through closure. The net result is that fewer employers and WBL opportunities are available, and less time is available to complete the WBL required" (SAQA 2020: 5, 6).

An updated temporary WIL guideline document was developed to assist with various COVID-related challenges, wherein it is suggested by SAQA (2020: 5, 6) that "lost time and/or time that will be lost need to be made up in such a way

that the graduation of students and their registration with professional bodies are not delayed”.

Further to this, COVID-19 occupational health and safety (OHS) regulations imply

“...a decrease in the number of employees, staff and students allowed at the premises of employers. The mentoring, supervision, monitoring and assessment of students in the workplace by both employers and university staff are thus compromised with travel restrictions further exacerbating the challenge”.

In response, the WIL COVID-19 guidelines suggest considering alternative means/methods to monitor, mentor and for assessment should thus be considered.

In one university under study, once WIL is completed, the student submits the Logbook as evidence of WIL performance. Students are given a project, which they present in a class setting. The presentation is allocated a mark, while an average mark is taken from the mentor/supervisor score, with the WIL Coordinator-providing feedback during student presentations. Both marks are added and then submitted to the examination department for inclusion in a student’s academic profile.

In the case where a student has failed to obtain a pass mark at this HEI, he/she has to respond to the assessor remarks, for example, make corrections as recommended by the assessor (who is a mentor and/or a WIL Coordinator), depending who submitted the recommendation/s. After this, the student has to re-submit the Logbook and/or schedule a time for another presentation.

Subsequently, in another university from which the research drew for this case study, the department has re-curriculated the OMT programme and a new programme was introduced, yet it falls in the same Classification of Educational Subject Matter (CESM) category. This means WIL is still offered in the new programme and students engage for a period of four months at third year level.

Students compile PoEs while they are engaged in WIL to collect evidence at the workplace and include the Logbook where students record their experiences, with the WIL Coordinator responsible for marking the assessment. A portion of WIL is embedded into a third-year subject. The mark allocated to the subject is a combination of the PoE, the logbook and a percentage from the subject, from which an average mark is allocated.

At the other university under study, WIL assessment consists of an assignment students submit to the WIL Coordinator on completion of their WIL timeframe. The assignment contributes 40 percent of the final mark and the mark from a Logbook contributes 60 percent to the final mark for WIL. From the above summation of WIL assessment practices at the researched universities, it is evident that a huge inconsistency in WIL assessment exists, specifically in departments that offer a diploma in OMT. The main problem involves no existing framework or guidelines on how WIL be assessed.

This necessitates a change in thinking in WIL assessment methods and stakeholders need to understand their role when students are assessed. McNamara (2013: 190) recommends a collaborative model in assessment as evidence of students' performance has to be gathered from different sources. She suggests that an assessment plan be discussed between the WIL Coordinator, the student and the industry supervisor. Furthermore, while employers contribute to WIL assessment, there are nonetheless challenges experienced in quality assurance.

WIL is a learning programme structured through an agreement or a contract among the industry mentor, WIL Coordinator and the student, therefore there should be a written formal agreement that stipulates how learning will be conducted, the types of resources available in the learning process and what will be learnt. A strategy has to be developed on how evidence of the learning will be produced and how assessment will be managed; hence, quality assurance should play a huge role in WIL. The WIL Coordinator has to play a huge role to identify the workplace, set learning outcomes and the assessment

criteria. All stakeholders need to understand their role in the assessment of WIL.

Most HEIs have included WIL with timeframes ranging from a relatively short few weeks or months, as for the OMT programme, where it is required, students submit a report of their experiences of workplace learning. Work-based experience is credited as part of the curriculum and industry mentor feedback enables university staff to identify gaps in the curriculum. In addition, mentors recognise disparities in students against workplace practices, with the collaboration of universities and industry mentors assisting to enhance curriculum design (Shivoro, Shalyefu and Kadhila 2017: 125). With the universities and industry working together, the WIL curriculum is enhanced.

Zegwaard and Rowe (2019: 328) address the issue of scaffolding WIL and/or the curriculum to create a structure and learning that has a meaning to the student. The model suggested involves the integration of WIL across all years of study, as opposed to offering WIL over a timeframe of, for instance, one year, which is usually at the end of the programme. Spreading WIL over the entire course will introduce students to their career early and gradually build them up to practices that are more complicated.

In addition, Zegwaard and Rowe (2019: 328) propose pre-WIL professional preparation for students prior to student engagement in industry, as well as post-WIL debriefing. This can be a session where students share ideas with other students after completing their WIL in industry, reflect on their experiences and develop their skills; such activities help shape their professional identity. The post-WIL debriefing is normally practised at UoTs, where students present their experiences after WIL placements in the presence of fellow students, while this also provides an opportunity for WIL Coordinators to receive verbal feedback from students.

Admittedly, WIL is a learning programme structured through an agreement or a contract between a student, a university and an industry partner. There should, however, be a written agreement that stipulates how learning will be

conducted, what will be learnt, and the type of resources available in the learning process. A strategy has to be developed on how evidence of learning will be produced, along with the manner in which assessment will be managed. In other words, all parties need to understand their roles in the assessment process and what is expected of them (Lester and Costley 2010: 564).

According to Venville *et al.* (2021: 18), industry partners experience challenges when collaborating with universities and when participating in WIL, including the following:

- time spent with students,
- lack of knowledge by industry mentors regarding WIL teaching and learning procedures,
- differences in outcome expectations,
- lack of understanding the advantages of WIL for the industry,
- lack of universities responding to the industry needs and concerns relating to WIL.

In addressing the above challenges, the WIL Coordinator is responsible for liaising with industry to clarify any issues in the placement of students' process.

Overall, WIL is discipline-specific and structured for diplomas/degrees where the vocational orientation is strong. According to Sutherland and Symmons (2013: 295), "the WIL model has long been part of teacher training, nurse education, and like courses". In all UoTs under study, a WIL experience is part of the curriculum for students enrolled in the OMT programme. However, as UoTs offer a very broad set of disciplines in the humanities and social science, most degrees and diplomas did not have a WIL component.

#### **4.8.1 WIL and COVID-19**

Guidelines that universities should follow where WIL is concerned, in the context of the COVID-19 pandemic and national lockdown commitments and regulations, "in a sense, represent a social contract to ensure that meaningful WIL can take place during this period, albeit in additional new, creative and

innovative ways” (SAQA 2020: 12). A range of role-players were involved in consultation in the HE-sector to develop the COVID-19 guidelines for WIL, particularly the USAf World of Work Strategy Group, the CHE, the DHET, and HEIs, under the leadership of Universities of SA (USAf, formerly Higher Education SA).

Regardless of the various forms WIL may take, outlined by the HEQSF as part of SAQA, the updated guidelines in the context of COVID-19 (SAQA 2020) are interim measures to deal with the ongoing challenges and not as the future norm. They assist in:

- simulated learning (SL),
- work-directed theoretical learning (WDTL),
- problem-based learning (PBL),
- project-based learning (PJBL) and
- workplace-based learning (WBL).

(SAQA 2020: 12). Selecting suitable forms of WIL, as outlined in the HEQSF, is determined by:

- the nature and purpose of the qualification type,
- programme objectives and outcomes,
- the NQF level at which the WIL component is pegged,
- institutional capacity to provide WIL opportunities, and
- The structures and systems in place within professional settings and sites of practice to support student learning

(HEQSF 2013).

With regard to assessment practices, SAQA (2020: 13) states in the temporary “Guidelines for WIL” under COVID-19 that assessment of student reports/assignments “can be adjusted to the WIL modality selected and accordingly assessed”, as illustrated in the below examples:

**Table 4.1: SAQA WIL Assessment practice modality dependent examples**

Video-clips (as individual and/or group assignments)	Constructive criticism on possible solutions provided to a problem statement(s)/ scenario
Reflective journals	Patchwork texts
Role-plays	Presentations
Case studies	Focus group discussions
Seminars/workshops	Debriefing sessions
Games	e-Portfolios of evidence (e-PoEs)

Source: SAQA (2020)

The modalities referred to in the SAQA COVID-19 general WIL guidelines remain “subject to the approval of the relevant professional bodies and employers”. The required outcomes can also be achieved through these modalities, for instance, through SL, WDTL, PBL and PJBL (SAQA 2020: 12).

Other examples suggested by the COVID-19 SAQA WIL guidelines could be to identify actual work-based problems to solve, in collaboration with employers, as these could address any problems employers presently experience, which may be significant to certain programmes. Furthermore, use could be made of an on-, or off-campus work environment simulation, where possible, as an assessment method.

Moreover, the guidelines suggest that on-campus WIL could be applied

“... by using the university as a work environment – e.g., using lecture rooms as classrooms after hours and over weekends for educating students to assist schools with extra classes and catching up on work lost, events/functions hosted by the university, using employers for guest lectures and seminars/workshops, etc.” (SAQA 2020: 13-14).

This can be achieved during WIL timetabled periods for assessment, where possible, while employers could also assist with assessment, corresponding to the circulated complexity and NQF levels.

The basic processes involved in WIL assessment practices range from preparation to placement and completion. WIL assessment is a challenging aspect in the OMT programme and WIL should be quality assured through the processes that are available in universities. One of the procedures of quality assurance is the moderation of assessment underpinned by the policies at universities.

#### **4.9 Quality Assurance in WIL**

##### **4.9.1 Quality assurance in university curricula**

Quality assurance in universities involves monitoring of discipline curricula to ensure delivery of quality education. The need for quality assurance in education comes from many sectors including DHET, as the department has to ensure that HEIs are accountable for public funds; universities in fulfilling their visions and missions, professional bodies who need to set and assure standards for students graduating for their qualifications. Therefore, universities can explore different aspects when measuring quality for their programmes (Winchester-Seeto 2019: 4). Typically, the Quality Management Directorate/Department (QMD) in universities is required to facilitate quality assurance, development, support and monitoring of curricula. QMD's mandate is to advise departments on curriculum renewal processes, which includes the aspect of quality assurance.

As WIL is part of the OMT programme, it is important that it be moderated as part of quality assurance, as institutions have moderation policies that guide academic staff in moderating other modules. The challenge is that the policies are not definite with WIL moderation and how quality is assured in the assessment of WIL.

In South African UoTs, WIL is moderated according to the institutions' moderation policies, which, however, do not explicitly outline the process or the procedure on how WIL is moderated. This makes it difficult to understand how WIL is quality assured. It is important to establish how WIL is moderated as a work-based practical subject and how quality is assured. At universities,

exit level subjects are moderated externally. Students registered for a diploma in OMT study WIL and the subject is studied at third year level. The implication is, therefore, that WIL should be externally moderated as a third-year subject.

Teaching and learning quality assurance has been a topic of concern and interest for some time. For universities, assurance of learning is thus an important matter, with WIL experiences substantially contributing to showing the developing capabilities of students (Smith *et al.* 2010: 418). It is thus important that the quality assurance of WIL be addressed to safeguard the quality of higher learning programmes offered to students.

For this reason, quality assurance in all assessment is vital. According to Ferns and Zegwaard (2014: 181), students are exposed to different people in the workplace and these people have different expectations and outcomes, which pose a challenge in assessing WIL. These discrepancies in assessment affect the quality of WIL.

The White Paper (SA DoE 2013) calls attention to the importance of quality assurance in institutions of learning, explaining that assessment should be institution-based, while moderation should be done through peer-reviewed, external assessment systems. Hence, quality assurance, among other things, should examine the capability of institutions to administer the assessment and certification. The White Paper acknowledges other programmes have quality assurance bodies that assess the quality of learner examinations or of students who participate in external assessments (SA DoE 2013).

WIL should be audited according to the qualification purpose, = cognitive learning outcome conditions and assessment criteria as set out in the applicable level descriptors (DHET 2007).

Forbes (2005: 52) expounds that NQF reliability is attained through auditing and evaluation of quality learning provided by learning institutions. The author states: "Quality assurance in programme delivery embodies growth and development on an ongoing cycle and quality should be regarded as a process

of transformation in executing, accountability and practising excellence in teaching and learning”.

Smith *et al.* (2010) pose the question regarding who should undertake the assessment of students in the workplace. Should the student, the employer or a HE staff member do WIL assessment? These authors caution that should the employer be assessing, issues of equity as well as the standard of assessment and quality assurance should be considered. Should students assess their own ability, this could influence the results, in addition to the validity and reliability of the assessment being questioned.

According to Sadler (2014: 274), quality assurance rules are to ensure students who graduate satisfy the minimum requirements of requisite skills and knowledge in various programmes and professions. The repayment from dedication to quality assurance in HE can culminate in meaningful investment in improving procedures to ensure their uniformity in HE. Quality assurance assists with consistency in practices and the implementation thereof, which highlights the importance of standardising WIL procedures, in order to facilitate the communication process between stakeholders, ensuring a positive outcome for the student, the lecturer/supervisor (WIL Coordinator) and mentor/supervisor.

Cheung *et al.* (2017: 1261) echo the sentiments that the validity of work-based assessments have been doubted, due to an increasing indication confirming that performance scores are subject to reliability. Hence, student evaluations do not always reveal the assessor’s real judgements of the student performance and supervisors too often complete assessments haphazardly.

The above findings echo those of a study conducted by Cooper and Ord (2014: 3) on assessment of students engaged in WIL, where they noted the “discrepancies between the quality of work many students produced while on work-placement and the educational grades the students received for their written work related to the placement modules”. On investigation, the assessment routine was found to be slightly narrow. It focused completely on

academic written activities, while incomplete formal feedback was offered by the programme on skills that are practice-based. This type of narrow assessment regime where academic writing is prioritised, poses challenges when students are being assessed during and/or after the WIL period, while compromising the quality of the assessment.

Cheung *et al.* (2017: 1261) affirm that the validity of work-based assessments does not reflect the assessor's correct judgements of the learner. Therefore, this has created reasons for the validity of assessments being questioned. The suggestion of addressing the quality issues in assessments is to encourage interaction between the student and the mentor, by ensuring they regularly work together, with the guidance of the WIL Coordinator.

#### **4.10 Theories on WIL Assessment**

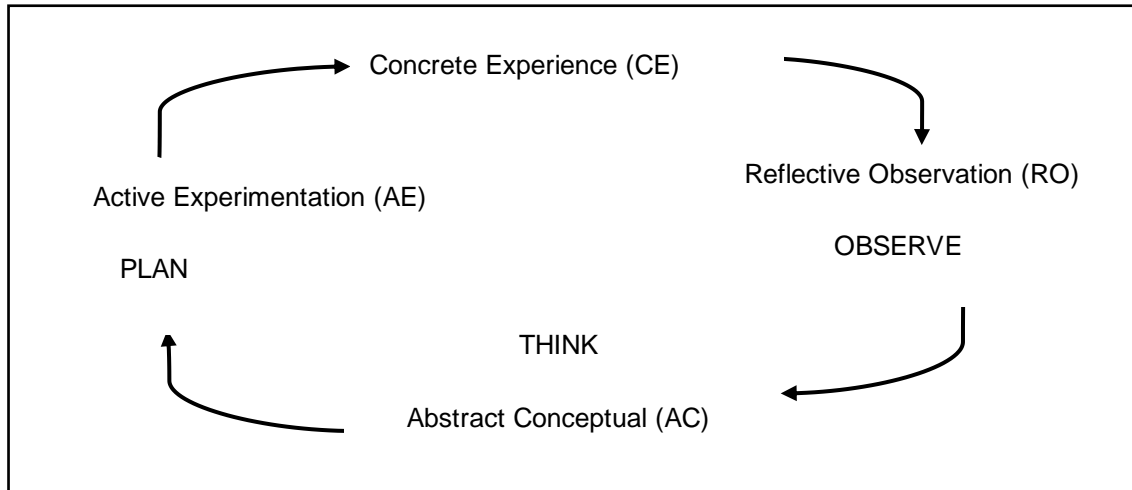
Traditional HE practices “fail to factor in the unique structure of the personal learning journey and unintended outcomes afforded by WIL” (Fern and Zegwaard 2014: 181). Furthermore, to accommodate WIL assessment practices, curricula structures require rethinking. Existing programme structures are frequently “a series of disconnected and discrete subjects where disjointed assessments fail to optimize the value of feedback to inform future progress and development”.

However, WIL is described as “a highly variable construct where student outcomes depend on the provided learning support”, with assessment reflecting the individual nature of WIL and its sociocultural dependencies (Fern and Zegwaard 2014: 181). Therefore, Kolb's experiential training theory is analysed, having been found appropriate for this case study, in addition to Vygotsky's Zone of Proximity Development (ZPD) theory.

The following sub-sections further aim to show a relationship between the two theories, as both advocate for similar processes.

#### 4.10.1 Kolb's Experiential Learning Theory

WIL is founded in experiential learning theory. Kolb's theory (Figure 4.1) describes the learning cycle that students move through on a continuous basis, with the cycle illustrated as follows:



**Figure 4.1:** Kolb's Experiential Learning Theory

*Source: Adapted from Healey and Jenkins (2000: 187)*

In his theory, Kolb asserts a student learns by “creating knowledge through the transformation of experience”. Therefore, learning is a holistic, continuous process where students build on their existing knowledge to accumulate more knowledge. Kolb's theory prescribes students be given an opportunity to combine the theory aspect of learning with the practical aspect, which augments the learning process, while confirming the importance of experiential activities, such as fieldwork and laboratory sessions (Kolb 1984).

Students in the field of office management go through the curriculum where they are exposed to the outcomes of an office administrator. They have prior knowledge on workplace processes and how offices work. Therefore, students have concrete experiences (CE) through what they have learned in their coursework, while the WIL placement assists them to observe and reflect on their exposure (RO). By so doing, they can form abstract concepts and generalisations (AC) they will attempt in future workplace challenges/occurrences (AE), which will translate into life-long experience.

Observations of experiential training by Kolb re-assert student uniqueness lies in the workplace learning experience. Student development is a result of what they know or learned from earlier experiences and they carry this knowledge to each learning environment encountered in their engagements.

Kolb's theory created an integrated model of experiential learning that produced connections between the workplace, student development and education. Therefore, as a learning environment, the workplace enhances and supplements classroom education, fostering personal development by means of opportunities that are significant and career-development (Kolb 1984).

Admittedly, Miettinen (2000: 62) agrees Kolb presented "" working definition of learning as a process whereby knowledge is created through the transformation of experience". Furthermore, Kolb's experiential learning theory is fundamentally based on a description of learning being a cycle: experience is transformed into concepts; these concepts are used as models for new experiences.

Eames and Cates (2011: 45) postulate that the distinctive feature of the Kolb model is that it puts the learner/student at the centre of a learning process. Students learning cycle is continually recurring, allowing them to find sense across their education and workplace environment, and they reflect on their experiences even during post-placement. WIL affords individual students an opportunity to gain experience. However, it is up to the individual to heed the call of learning, in addition to the role the individual has to play in his/her own learning.

Hence, the experience and reflection of WIL offers students an opportunity to formulate abstractions and generalisations they can test in similar future experiences. Kolb's model is instrumental in explaining the integration of classroom and the workplace. In addition, although learning can be reinforced by placing students through more than one placement in a programme, assessment tools should be designed to accommodate this learning process. Exposure to multiple workplace environments can enhance skills learnt at

different companies from different mentors, incorrect perceptions or attitudes developed in one working environment can be successfully corrected in another, more practice in problem solving in real working situations.

Using Kolb's theory of experiential learning provides assessors with a valuable approach in assessing prior knowledge and establishing whether learners were able to acquire any further knowledge while engaged in WIL. The assessor will have to examine whether the student can demonstrate the attainment of any new knowledge from the learning cycle, as illustrated in Kolb's model (Figure 4.1).

Learning happens in a structured classroom situation. When students are engaged in a workplace and they have to reflect on their "experience", learning cannot be ensured without guidance provided, as experience on its own may not make sense. A structured environment can assist in the provision of feedback on performance and if students have achieved the intended outcomes. However, mentors provide feedback on learning, not on outcomes, and immediate feedback is ideal, as it assists the learner to adjust, correct and then prepare for further learning. Moreover, students need to reflect on their learning in a way that generates feedback from a mentor or an assessor. For this reason, it becomes difficult when student assessments are conducted at the end of placements, as mentors are unable to modify student performance while learning is in progress (Trumbull and Lash 2013: 4).

According to Ültanir (2012: 190), constructivism is an "epistemology, a learning or meaning-making theory that offers an explanation of the nature of knowledge and how human beings learn". It is suggested by Constructivists that learning outcomes, methods of teaching and assessment should be aligned. Constructivism is learner-centred as it acknowledges that the academic lecturer, as a facilitator of learning, has to allow the students to do the work. Furthermore, an assessment should also consider the informal learning that has occurred in the work practice setup and not only formal learning within an education setting.

The CHE Teaching and Learning Resource No 1 (CHE 2004: 8), is a national guideline on teaching and learning, which describes a constructivist approach as one where students are “innovative thinkers and emphasizes that meaning is created by the student, through the student’s learning activities”. Although constructivism deals with learning that is student-centred, the question remains how this knowledge construction is achieved for WIL assessment in workplace contexts that are fluid while also disposed to changing business environment variations. Nevertheless, it is important for good practice assessment principles of validity, reliability, fairness and transparency are also applied in workplace-learning environments.

The core of the constructivist theory is that students must be able to transform complex information and use it in other similar situations. From there on, learning is planned into a process of constructing instead of receiving information from another person. In OMT, students can be given tasks that is aimed at stimulating their thinking. Hence, to solve problems and make decisions, students need to develop critical thinking skills. Constructivism emphasises students as thinkers instead of being passive recipients of knowledge (Muhajirah 2020: 37).

The experiential training view resonates with constructivism, which perceives learners construct their own meaning through teacher formulated learning activities, so they may achieve the learning outcomes desired (Bada 2015: 67). The learner interprets what is being taught based on previous experience and personal views. From personal interpretation, the learner has to reflect on the new acquired knowledge, which form the basis of understanding of what has been taught. Constructivism exposes the learner to knowledge creation and acquisition, as he/she has to reflect on the new acquired knowledge (Brau 2018: 3)

According to Maseko (2018: 1316), Dewey (1938) was one of the first educational theorists and believed “people learn by doing”, while he also stressed the “notion that genuine education is achieved through experience”.

Dewey's theory additionally highlighted "the importance of any chosen career encompassing critical and scholarly engagement with the key issues of public life that link professional and vocational competence".

Kolb (1984, cited in Maseko 2018: 1316) showed experiential learning (WIL) "is a dialectic and cyclical process consisting of four stages: experience, observation and reflection, abstract reconceptualization, and experimentation".

Maseko (2018: 1316) explains, "While experience is the foundation for learning, learning cannot take place without reflection. In the same manner, while reflection is essential to the process, it must be integrally linked with action". Furthermore, Schön (1983, cited in Maseko 2018: 1316) acknowledges "the importance of reflection and reflective practice in the education of professionals". Reflective theory, by implication, thus operates in the experiential learning cycle context (Figure 4.1).

Stated differently, Schön prioritised practice, after which theory and practice should be integrated, with thought, and lastly, action incorporated. However, this has been disputed, not only challenging Kolb's (1984) theoretical foundation of the experiential learning cycle, but also the reflective practitioner model by Schön (1983).

The challenge, as explained by Maseko (2018: 1316) is based on people not automatically learning through experience and general reflection. Maseko finds this is specifically correct, "when they do not think critically about their learning or do not take responsibility for its creation. Such learning should not be seen as the only approach to gain information about the workplace and to link technical knowledge with workplace application for it to be effective".

In OMT, constructivism is how students have acquired the skills and knowledge to perform work activities. Students construct meaning from what they have been taught from the module of WIL in a classroom setting. That knowledge is transferred to the workplace where they use the already acquired knowledge.

They will constantly update their existing knowledge on learning new skills at the workplace.

#### **4.10.2 Vygotsky “Zone of Proximal Development” Theory**

Vygotsky (1978) founded the “zone of proximal development” theory, with its concept that individually, each person has the potential for learning. The theory considers that the construction of knowledge is enhanced through a “novice-expert” relationship. This is where the expert (workplace mentor) offers guidance and support to the learner, who can be a university student. “Learning happens in additions” and as learners master each step in an activity, they move to the next step, with the support of a mentor. Thereafter, the support is slowly reduced as the learner becomes more competent, able to stand-alone and perform the activities without a mentor’s help.

According to Harland (2003: 266), the starting point proposed by Vygotsky is the existing learner skills and knowledge, which brings experience to the learning setting and can solve problems by applying existing knowledge to engage in the given tasks. By so doing, new knowledge is formed and new skills developed which empowers learners and enables them to solve future challenges.

Nonetheless, whatever teaching strategy a university teacher might have, individual students will construct their own meaning; created on an interface between preceding knowledge and present learning experiences. Moreover, Torrane and Pryor (1998) stress that Vygotsky’s theory highlights the importance of academic personnel not only having to assess what a learner has achieved but also what a learner can achieve. The collaboration of the learner, the academic staff member and the mentor should be regarded as part of the assessment process, with assessment, therefore, fundamental to learning. Moreover, instead of treating assessment as an end of learning process stand-alone item, it should be incorporated as part of the entire learning process.

According to Pattalitan (2016: 695), Vygotsky came up with an idea of dynamic assessment, defining it as “the act of finding out what a student is able to do independently as well as what can be done with adult guidance”. This form of assessment allows the workplace mentor to assist a student as part of evaluating how the student is learning and able to identify progress and areas where a student might need guidance.

Therefore, dynamic assessment assists mentors to gain valued insights on how students understand their learning. The participation of students in the assessment process is important due to it not only allowing mentors to impart knowledge but also inculcating a set of capabilities and skills students can use in their future for life-long learning.

Dynamic assessment is regarded as a procedure that considers the outcomes of the mediation. Through the intervention process, the assessor teaches the learner how to better accomplish tasks. The end result is the difference between what a learner knew before testing (pre-learning) and what he/she knows after the assessment (post-learning) (Yildirim 2008: 303). The supervisor has to ensure dynamic assessments are conducted from time-to-time, allowing learner progress to be evaluated and monitored. A lack of dynamic assessment will contribute to learner frustration, as progress in work performance is not known. Dynamic assessments are similar to formative assessment with both continuously used in teaching and learning.

The above theories form the basis for WIL stakeholders to understand student learning while engaged in workplaces. Furthermore, it is imperative mentors comprehend WIL outcomes, as it provides clarity on the role played in student learning. The initial involvement of WIL role-players is the policy that governs WIL at universities.

Hodges *et al.* (2014: 196), moreover, postulate in a HE setting, an outcomes-based approach is used for learning. For this reason, institutions should be cautious where students learn through their experiences in the workplace, due to these experiences having to link with the outcomes students are expected

to achieve. Should this not be achieved, learning will be disjointed with no connection between what students know and what they can do. There will thus be a lack of alignment in what they learn.

WIL emphasises theoretical and practical learning integration in the workplace. Ultimately though, WIL facilitates professional proficiency development and student ability to achieve competency (McNamara 2013). Therefore, it is imperative for student assessment to be a pivotal point in WIL, since it determines their professional capabilities. As a result, Brock and Cameron (1999: 252) emphasise that experiences provide students with opportunities to relate their academic learning to the “real world” and therefore, appreciate that experience even more. Students have a chance to reflect on what they have learnt in the workplace. This reflection will be embedded in future tasks students will perform in their future careers.

According to Hammond and Gibbons (2005: 8), in a workplace scenario, scaffolding refers to mentors who should provide temporary support structures during WIL to assist learners. The provision of assistance will enable students to develop new concepts, abilities and understanding of their roles in the workplace. As learners develop these skills and capabilities, mentors need to withdraw that support to allow students to work on their own and gain independence. Therefore, the learning process is facilitated by a “scaffolding structure”, and the interval evaluations of the process specifies when portions of the structure can be disassembled, changed around or moved somewhere else. The responsibility of the mentor is to monitor and evaluate students in this learning process.

The learner premises the scaffolding on the concept of handing over (by the mentor) and taking over. The support offered should constantly be only “just enough” and “just in time”. Consequently, as students become proficient to do more they are, gradually, also in charge of their learning. The mentor will change, alter, restructure or demolish the scaffold where necessary (Walqui 2006: 165).

Admittedly, Wood, Bruner and Ross (1976: 90) confirm that, in scaffolding, the expert (mentor) enables the novice (students) to perform the tasks that he/she is able to achieve. In the process, the mentor controls those elements beyond the novice's capabilities, which permits the learner to concentrate on those activities within her/his range of competence. Eventually, in the process of being assisted, a learner will develop and achieve the competence of performing those tasks.

From the above, it is evident a relationship exists between the experiential learning theory proposed by Kolb and Vygotsky's ZPD theory. Both put the student at the centre of her/his learning. In Kolb's theory, students are able to learn through the four-stage cycle to integrate their classroom learning and the workplace. They also reflect on their learning and they find meaning throughout their educational and work environment (Eames and Cates 2011: 46).

The ZPD theory affirms learners should be provided with assistance and guidance until they can stand on their own: eventually learners are able to perform the activities without assistance. Through this process of learning, a greater level of learning is achieved, assisted by a "More Knowledgeable Other" (mentor) and supervisors provide support structures to students in work placements (Brau 2018: 2).

As Walqui (2006: 163) explains, scaffolding happens within the ZPD, where the mentor to achieve set outcomes supports the learner. Scaffolding is an interaction between a learner and his/her mentor and should be collaborative, as the result has to be an achievement of both parties. When OMT students are engaged in WIL, their supervisors start by teaching them less complicated tasks and scaffold to more complicated tasks. Eventually, based on the students' progress, they are left to do the tasks on their own with less supervision.

It is thus evident a change in thinking in WIL assessment practices is needed. To acquire validity and reliability in assessing WIL, the traditional assessment methods require re-evaluation. The shift in assessment practices has been

towards a constructivist paradigm, which views that assessment practices should recognise learning “is a process that takes place gradually” (Hodges *et al.* 2014). Hence, students have to make sense of what they have learned and need reasonable time to digest their learning.

#### **4.11 Summary**

WIL in universities provides students in OMT with work experience during their placements, which is a compulsory component. Students must fulfil the requirements of WIL to qualify for the OMT qualification. Before placement, WIL Coordinators have to plan and provide guidance to the WIL process and provide an understanding of their role in the workplace from the outset (Patrick *et al.* 2008). Students should be placed in environments that are authentic, in other words, where they will gain experience applicable to their OMT careers.

Assessment in WIL continues to be an important aspect considering that it evaluates student performance in the workplace. The critical aspect during their placement is the assessment of their learning in the workplace because this is how universities are able to confirm that the intended outcomes have been achieved or not.

Universities have an obligation to certify that all WIL stakeholders are engaged in student assessments. In WIL, the partnership of stakeholders is important. For WIL to be effective, it needs the effective collaboration of employers, university staff, the co-operative units of universities, professional bodies (where applicable) and other relevant bodies. In addition, it is imperative that stakeholders are equipped with universities’ assessment practices and procedures to enable relevant feedback.

Moreover, for WIL assessments to be valid and reliable, WIL assessments need to be quality assured. Hence, the moderation of assessments in HEIs forms part of quality assurance.

This chapter discussed the OMT curriculum structure, student preparation for WIL placement. The significance in allocating supervisors for students during

the WIL experience. The alignment of curriculum and assessment were discussed, along with the need for assessment while students are engaged in WIL. Research has highlighted numerous challenges in WIL assessment that were discussed, as well as the collaboration, including, the role of stakeholders in the assessment of WIL. The chapter also highlighted the importance of quality assurance in WIL assessment. Further to this, theories relevant to WIL were discussed, as they explain how students learn when classroom learning is integrated to a workplace. The research methodology adopted in this study will be discussed in the next chapter.

## **CHAPTER 5**

### **RESEARCH METHODOLOGY**

*“Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically”*  
(Kothari, 2004:8)

#### **5.1 Introduction**

The study methodology is presented in this chapter, with Al Kilani and Kobziev (2016: 1) explaining the methodology has the important purpose of providing clarity with regard to the methods or process type the researcher will use, and to address the research problems with a discussion. Consequently, the methodology is a vital component to the research as it clarifies the required steps to attain the research objectives. Research methodology, although categorised in different ways, typically makes use of qualitative and quantitative approaches. This chapter discusses the applied research methods.

The study objective aimed to evaluate whether existing assessment practices in the OMT programme at the three universities under study are consistent with the WIL outcomes and to discover whether the assessment practices contribute to the enhancement of the curriculum. The chapter will examine and discuss the following sub-headings, which are, research design, population, sample, and data collection, as well as the analysis, the research instrument used and validity and reliability.

#### **5.2 Research Design**

Malhorta (2015: 84) defines research design as “a framework or blueprint for conducting the research. It gives details of the procedures necessary for obtaining the information required to identify or solve research problems”. In this study a qualitative and quantitative methodology was used. Since the researcher wanted to explain what had already happened and needed to analyse the information and draw conclusions, this study used descriptive survey research (Akthtar 2016). According to Nassaji (2015: 129) descriptive

research describes a phenomenon and its characteristics and it involves “what rather than how or why something has happened” as it describes the behaviours, events and situations. Descriptive research may be conducted using a case study, an observation or surveys and it grants researchers scope for deeper analysis. Furthermore, descriptive research focuses on a single part of a broader topic (Rholetter 2020: 3).

A case study was used in the study. Creswell (2014: 90) defines a case study as “a qualitative approach where the researcher investigates a real-life, existing practice (a case) or multiple existing systems (cases)”. A researcher collects information using a range of data collection techniques.

Shuttleworth (2008: 1) states a case study is an examination of persons, events, policies, institutions or other systems that are studied holistically not as individuals. It is described as an extensive study of a particular situation and is employed to constrict a broad research field into a single researchable topic. In addition, it also examines prevailing everyday situations and presents the basis in applying ideas. Relevant to this, the researcher focused on three South African Universities in a case study, as it would have been cumbersome to conduct a study that would include all universities, having isolated a small study group (three universities) as the study focus. Two universities are based in KZN and one in the Eastern Cape. These universities are part of those offering WIL as a compulsory component in OMT and assessment is done across all.

### **5.3 Qualitative and Quantitative Research Paradigms**

#### **5.3.1 Qualitative research**

According to Malhotra (2015: 121), the qualitative research method contains text, images, audio or video data. It is an unstructured, investigative research methodology that studies complicated phenomena that are difficult to interpret with the quantitative research (Ahmad *et al.* 2019: 2829). A qualitative research method is used to acquire a qualitative comprehension of the fundamental research reasons and motivations. It helps researchers figure out research

participants instead of fitting their responses into categories that are predetermined with minimal space to qualify their choices (Creswell 2014: 234). A common qualitative research aim is to obtain the initial perceptiveness into research problems. Sometimes, quantitative research is used to supplement these preliminary insights in confirming the qualitative results. Qualitative research may be adequate to make decisions in certain situations and may also suffice when focus groups or in-depth interviews feedback is consistent (Hair *et al.* 2013: 76).

Data were collected using open-ended questions from semi-structured interviews. The results were analysed to present a better understanding of the findings.

### **5.3.2 Quantitative research**

Malhorta (2015: 121) states quantitative research uses “formal questions and predetermined response options in questionnaires administered to large numbers of respondents”. Its methods are frequently used with research designs, such as descriptive and causal, however, exploratory designs also sometimes feature. Quantitative researchers must be able to interpret numerical data obtained from organised and validated data-collection instruments into meaningful narrative information, ultimately telling a compelling story that is supported by data. Quantitative research quantifies the data and generalise the results from the sample to the population of interest (Stumpfegger 2017: 2).

In the study, a questionnaire was used to collect data from students and WIL Coordinators.

### **5.4 Population**

A population is “an identifiable group of elements (for example; people, products, organisations) of interest to the researcher and pertinent to the information problem” (Hair *et al.* 2013: 137). It also denotes what the researcher wishes to investigate, whether it is an entire group of people, events, or elements, about which the researcher wants to make suggestions.

Sekaran and Bougie (2011: 262) describe an element as a single member of the population. The element/unit of analysis for this study are students registered for a diploma in OMT at three South African Universities. In this study, the total population is the number of students who registered and completed their WIL component in 2019 and 2020 (those who were placed late in 2019 and had to complete in 2020) at the three universities in three faculties; Faculty of Management Sciences (university A), Faculty of Engineering (university B) and Faculty of Natural Sciences (university C). There are 4 500 students from University A, 6 800 students from University B and 3 000 from University C. The total population of this study is 14 300.

### **5.5 Sampling Methods**

Two types of sampling methods are used, which are probability and non-probability sampling, where probability sampling is when units in a population have knowledge of being selected as sample subjects (Sekaran and Bougie 2011: 270). The population elements in non-probability sampling, do not have any chance for to be selected as sample subjects. In this sampling, confidently generalised findings cannot be applied to the population (Sekaran and Bougie 2011: 270).

The researcher considered the multicultural aspect of each university, for the purpose of this research study, in view of staff and students that comprise Africans, Indians, Coloured and Whites, while also allowing for the demographics of each institution. Furthermore, students from SADC (Southern African Development Community) countries and non-SADC countries were included in the study. The researcher additionally allowed for technical and financial restraints, as is impossible to cover all universities. Therefore, students were selected from the OMT department from each university, due to a lack of consistent assessment practices and poor policy implementation in this field. To reflect the diverse population of each university, the researcher considered all nationalities for this study.

The population was quite large, for this reason it was not possible to involve a large number of people when conducting the study, which was why a sample had to be chosen. Sample size denotes the number of elements the study will take account of (Malhotra 2015: 274).

### **5.5.1 Sample**

A sample, as Sekaran and Bougie (2011: 263) explain, is “a subset of the population and comprises some members selected from a population”. This means only some elements of the population constitute a sample. Simply stated, a sample is a population subgroup or subset that refers to the number of elements the study will focus on.

Taking the large number of elements involved in this study into account, the researcher selected students engaged in WIL from three South African universities, mentors/supervisors in the workplace and WIL Coordinators from three universities; two from universities in KZN and one from a university in the Eastern Cape, to produce more reliable results. For this study, universities considered had students registered for the OMT diploma who had already completed the WIL component in their third year of study (including those attending evening classes) and were full-time students. Mentors/supervisors are those who mentor or supervise students while they were engaged in companies for WIL.

**Table 5.1** Sample size for quantitative method

<b>INSTITUTION</b>	<b>FACULTY</b>	<b>POPULATION SIZE</b>	<b>SAMPLING WEIGHT</b>	<b>SAMPLE SIZE</b>
University A	Management Sciences	4500	31%	111
University B	Accounting and Informatics	6800	48%	172
University C	Economic and Management Sciences	3000	21%	75
<b>TOTAL POPULATION</b>		<b>14300</b>	<b>100% (2.5%)</b>	<b>358</b>

Table 5.1 indicates how was the sample size of 358 respondents, that was selected for the quantitative study, achieved. The total population is the number of students registered at the three universities in three faculties. There were 4500 students from University A, 6800 students from University B and 3000 from University C. Hence, the total population of this study was **14300**, the research divided 14 300 by 2.5% to get the required sample size of **358** students.

According to Shorten and Moorley (2014: 32), when a sample size is selected, the researcher should predict in advance that sample size should be enough to give sufficient “power” to his/her study. For the qualitative study, three WIL Coordinators, one from each university under study and twenty-five mentors/supervisors from industry were interviewed. The mentors/supervisors’ interviews investigated their role in WIL and their assessment practices when assessing students for WIL.

Marshall, Cardon, Poddar and Fontenot (2013: 20) suggest a sample size of 15-30 should be considered in interviews for case studies, as too many interviews can be counter-productive and may lead to data saturation. Boddy (2013: 427) describes data saturation as when data collection reaches a point where no new information is obtained or new themes developed from the

completed interviews. Data saturation can be used by a researcher as validation of using a certain sample size in qualitative research (Boddy (2013: 427).

## **5.6 Data Collection Methods**

Data were collected by various means, including the review of literature relevant to the study topic, through a questionnaire and interviews. The research aims and objectives were used to develop the questions participants had to respond to through completing a questionnaire and semi-structured interviews. Furthermore, WIL policies from the three universities under study, as well as government documents relevant to WIL, were used as secondary data.

### **5.6.1 Student Questionnaires**

Data from students were collected using a questionnaire, with a self-administered questionnaire utilised in this study. According to Sekaran and Bougie (2011: 197), a self-administered questionnaire necessitates participants answer the questions themselves. It also Benefits the researcher, as responses are collected within a short time and it is less expensive to administer the questionnaire to a large number of people.

The researcher requested a list of students from the WIL Coordinators, showing those who have completed their WIL period. Due to the COVID-19 restrictions, one university could not place all students for WIL, instead engaging the Project-Based-Learning (PBL) modality as opposed to physically placing students with industry. The services of a research assistant were used to distribute and collect the student questionnaire, from those students who were able to attend campus and personally complete the questionnaires. Furthermore, the study also used an internet data collection method, in particular Google forms, for those students not on campuses. Hsu and Wang (2017: 64) support the use of Google forms as a valuable tool to collect and analyse data.

The student lists provided contact details, for example, e-mail addresses and cell-phone numbers, allowing a link to be sent via e-mail and WhatsApp to off-campus students who had completed their WIL programme. The Benefits of using these electronic platforms include it being cost-effective to administer, the questionnaire can be sent to many respondents, and delivery is fast, while it is also convenient, as respondents can complete it at any time suitable to them. However, the downfall of using the internet is it requires respondents to be computer literate, have access to an online facility and must also be willing to complete the questionnaire (Sekaran and Bougie (2011:197).

### **5.6.2 Questionnaire for WIL Coordinators**

The questionnaire, together with a covering letter, were sent through e-mail to WIL Coordinators of the three universities under study. The letter of consent was also attached to the questionnaire, which solicited their consent to participate in the study.

### **5.6.3 Interviews**

In this study, semi-structured interviews were used as data collection instrument for the qualitative component. Semi-structured interviews are described by Queiro's, Faria and Almeida (2017: 377) as an evaluation method designed to acquire and assess responses from the interviews. The interviewee is required to respond about his/her experiences and/or intended hypothetical circumstances. Semi-structured interviews normally offer a high rate of response, with the interviewer present, should there be a need to explain the questions in avoiding respondents misunderstanding.

Industry supervisors/mentors who supervised students from the three universities under study were interviewed and questions asked included their role, experience in mentoring students, placement of students for WIL, and support provided to students, as well as assessment of students during their WIL placement, and the importance of WIL in the OMT programme.

Concerns expressed in the literature with regard to telephones used for qualitative interviews are, according to Drabble *et al.* (2016: 3), mostly related

to potential harm to the empirical data richness and quality when gathered by telephone as opposed to interviews done face-to-face. Some of the most frequently expressed reservations regarding telephone interviews include challenges in developing rapport, not being able to react to visual signals, as well as potential contextual data loss. However, Drabble *et al.* (2016: 3) contend, in addition to convenience advantages, remaining anonymous and enhanced respondent privacy, are some advantages of conducting telephonic qualitative interviews.

Vogl (2013: 135) argues, in comparison to an in-person interview, telephone interviews are cost effective, require less time and no travelling is involved. Additionally, participants in remote geographical areas can be reached by a telephone as can those in possibly unsafe areas with access to a telephone.

Irvine (2011: 204) is supported by Vogl (2013) in that, as research projects are less funded, it appears possible telephone interviews will be considered a practical and worthwhile option to collect qualitative data. Opdenakker (2006: 5) states the disadvantages of using a telephone are a reduction of social cues, because the interviewer cannot read the body language when unable to see the interviewee, therefore, this added element cannot be used as extra information source.

Data were collected during the period when COVID-19 was prevalent. This made it difficult for the researcher to secure face-to-face interviews with all thirty industry mentors, as the country had shut-down and no-one was allowed to leave home. The lockdown prevented mentors access to their workplaces, hence were at home and thus impossible to secure appointments for interviews. Omary, Panettieri and Scotto (2020: 2747) echo the challenges faced by researchers during the COVID-19 period as frustrating, stating researchers felt unproductive and were unable to make discoveries, since they were homebound and not active in research. In addition, travelling to students' workplaces to conduct face-to-face interviews with industry mentors was impossible. Lupton (2021: 1) postulates doing research during the spread of

COVID-19 meant researchers had to use other methods to collect data because of isolation procedures around the world.

To mitigate the above challenge, the researcher opted for online platforms, which also proved to be a challenge, as it required interviewees to be connected, either through Wi-Fi or have data to connect to the internet. Hence, the last option was to use the telephone to interview the participants. A database of mentors with contact details was sourced from WIL Coordinators and the information used to contact them via telephone. Twenty industry mentors were interviewed by telephone and five mentors were interviewed using an online platform, which was MS Teams. A total of twenty-five industry mentors were interviewed.

In a study conducted by Archibald *et al.* (2019: 4) on using online platforms to collect qualitative data, respondents highlighted the advantages using Zoom which is almost similar to MS Teams. Among the advantages, on the one hand, is the convenience of reaching participants who are geographically distant, while another advantage identified by participants is saving on travel costs as they can connect from home.

On the other hand, the drawbacks of using online platforms include possible connectivity problems, where participants are unable to be interviewed. Furthermore, technical challenges create additional difficulties, for example, microphones not functioning properly and obsolete hardware (Archibald *et al.* 2019: 5).

Both telephone and online interviews were conducted with mentors/supervisors who mentored students during their WIL in KZN and Mthatha (the latter is where students from the Eastern Cape University were placed). The interview questions used were appropriate for this study as open-ended questions were asked so respondents were able to give their different, personal opinions.

## **5.7 Construction of the Student Questionnaire**

The instrument used to solicit data from students in this study was a questionnaire, which contained pre-coded questions structured such that it is easy for respondents to answer. The questionnaire was designed properly, thus allowing respondents to answer the questions confidently; it aimed to produce data suitable for analysis. The researcher reviewed published work in the field of OMT and with her experience and knowledge in the field, developed a questionnaire, submitted to an expert in the area of study for checking purposes. Google forms was used to create an electronic questionnaire and was e-mailed to participants. A covering letter, which set out the study purpose, the Benefits of participating, consent of participant, and voluntary participation, as well as maintenance of confidentiality and secrecy, was attached. Contact details were also provided for the supervisor, the Institutional Research Ethics Administrator and the researcher.

Questions in the study were prepared considering the research objectives and literature review findings. The type of questions entailed tick-box, open-ended and Likert scale questions. The questionnaire comprised five sections, in reference to those students engaged with during their WIL placement. Questions asked covered the following:

- WIL Preparation
- Placement
- Mentorship
- Assessment
- WIL Student experience

A questionnaire draft was discussed with the supervisor, who commented with suggestions to improve the instrument. Thereafter, it was submitted to a statistician for contribution so the data obtained from the questionnaire would be appropriate for analyses with SPSS. Once corrected and substantiated, the final questionnaire was disseminated (through e-mail/WhatsApp) to students who had completed their WIL.

## **5.8 Pilot Testing**

Junyong (2017: 2) describes the pilot study as the first step of the entire research procedure; it is often small in size and assists in planning and modifying the main study. The pilot testing is a reflection of all the main study processes and assists in analyses of the study feasibility and validity. The pilot testing also detected any problem areas that required correction before the questionnaire was sent to respondents.

The questionnaire was pretested with students who had completed their WIL period and were assessed prior to distribution. Ten students from one university, who were not part of the main study, were asked to answer the questions and commented on their clarity and appropriateness. Pretesting was, therefore, used to ensure questionnaire clarity, readability and coherence of questions. The feedback from pretesting was incorporated and amendments were discussed with the supervisor who also made comments, following which the final version of the questionnaire was developed.

Fraser *et al.* (2018: 261) describe pilot testing as a strategy to reduce the risk of failure in a bigger project. A pilot study offers an advance indication regarding potential areas the main research project could fail, research procedures not followed, or overcomplicated proposed methods or instruments that may be inappropriate for the research project.

## **5.9 Reliability and Validity**

Reliability indicates “the extent to which a scale produces consistent results if repeated measurements are made” (Malhorta 2015: 226). Furthermore, reliability refers to when the extent of study results is reliable over time and where, under a similar methodology, the research instrument is considered reliable when the results are replicable.

Validity is when the researcher examines whether the research truly measures what it intended to measure or how factual the research results are. The measuring instrument(s) need to measure what it sets out to measure, enabling the research to produce results that are useful. The validity of the

analyses results is ensured through use of a validated measuring instrument (Sürücü and Maslakçi 2020: 2697).

In keeping with the above, this research relied on various research methods to address the issue of validity and reliability. The idea of using various methods is they enable more confidence in the researcher regarding a result, should different methods or sources be employed and lead to the same results (Sekaran and Bougie 2011: 385). Validity was ensured through pretesting the questionnaire. Ten students from one university were selected for pretesting, who were part of the sample population but not the main study. Secondary data such as WIL policies and assessment practices were used to ensure validity and reliability. Interviews were conducted by the researcher to ensure accurate information was supplied by the participants. The researcher further engaged with a variety of sources and techniques in performing the research, as per the section on measuring instruments and sampling methods.

#### **5.10 Coding of Data**

According to Stuckey (2015: 7), coding is the process to group data with the same meaning in order to cluster the related sections, facilitating easier analyses and interpretation. Maguire and Delahunt (2017: 3355) assert coding decreases masses of data into smaller amounts that have meaning. Different methods are used to code, with these determined by the research questions and viewpoint of the researcher. Creswell (2014: 184) contends coding divides the text into small parts to allow the researcher to allocate labels to each unit and cluster the codes into themes. Furthermore, Linneberg and Korsgaard (2019: 260) likewise postulate coding is the process to identify portions of data and label these with a code that can be either a term or a phrase. Coding assists the researcher to convert raw data into usable data.

Codes are described by Clarke and Braun (2017: 297) as smaller analysis components that summarise interesting data characteristics related to the research questions. Codes are instrumental in forming themes. In the study, transcription of the semi-structured interviews used different font colours to

capture responses using MS Word. From the coloured responses, the researcher was able to code the data and develop themes for use in the study.

### **5.11 Thematic Analysis**

To collect qualitative data, the study conducted semi-structured interviews with 25 industry mentors through open-ended questions, with responses analysed using thematic analysis. Braun and Clarke (2006: 79) define thematic analysis as “a method for identifying, analysing and reporting patterns (themes) within data”. Thematic analysis aims to detect and classify themes to interpret data and provide meaning to the reader. The emphasis of themes should be to interpret data and not to explain it. According to Castleberry and Nolen (2018: 809), themes depict the relevance of data gathered through research questions and used to combine relevant codes to show what is being interpreted by the data.

Thematic analysis, as Ibrahim (2012: 40) states, assists researchers in determining relationships between ideas and comparing these with the duplicated data. Thematic analysis is valuable to any study that wants to use interpretations. Furthermore, Kiger and Varpio (2020: 2) point out thematic analysis is an approach used by qualitative researchers to analyse data. The advantage of using thematic analysis is its flexibility and used in a variety of study designs, study questions and any sample size.

In this study, responses gathered from the semi-structured interviews are explored for common elements and then labelled into themes. Ten themes were categorised for the study as follows:

- Theme One: Monitoring of Students
- Theme Two: Placement of students
- Theme Three: Sufficiency of WIL Period
- Theme Four: Meetings with mentors
- Theme Five: Presentation during induction
- Theme Six: Student’s Logbook

- Theme Seven: Evaluation of Performance
- Theme Eight: Responsibility to Allocate a Mark
- Theme Nine: Feedback on Performance
- Theme Ten: Inclusion of WIL in the OMT programme

### **5.12 Analysis of Data**

On completion of collecting and coding data, the researcher had to analyse the data. The quantitative data were obtained from surveys with closed-ended questions, which were analysed using the Statistical Package for Social Sciences (SPSS) version 27.0. SPSS is used in academia and business settings and thus far, it is the statistical software package mostly used to analyse quantitative data in social sciences (Arkkelin 2014: 2).

### **5.13 Data Processing and Analysis**

Both qualitative and quantitative approaches were used to process and analyse study data. Qualitative data were collected with semi-structured interviews, while a questionnaire was used to collect quantitative data.

### **5.14 Triangulation**

In the past, research had to rigorously follow a quantitative or qualitative technique. However, current research practices show researchers are becoming more confident in a combination of methodologies. Carter *et al.* (2014: 545) explain triangulation is the switch to a more complex study design, with numerous data sources and analysis that result in divergent opinions and findings. With qualitative and quantitative approaches both utilised, triangulation was used to ensure valid results in this study.

In addition, through confirming a claim using two or more independent metrics, triangulation aims to enhance certainty of the findings. “The results of two or more rigorous methodologies together offer a more complete picture of the outcomes than either strategy could do on its own” (Heale and Forbes 2013: 98).

Wilson (2014: 74) adds triangulation was initially performed to improve the reliability of research findings. Triangulation now expands the extent, depth, and consistency of scientific processes, opposed to serving as a method for validating outcomes and processes. Triangulation is a technique applicable in both quantitative and qualitative research.

### **5.15 Ethical Considerations**

Permission was sought from the three universities and in companies where students were placed for WIL to conduct the study. The questionnaires which were completed by participants from the universities and the structured interview schedules were taken to relevant units by the researcher and research assistants on days of data collection. Before participants could sign consent to participate, the researcher explained the purpose of the research as well as its main aspects including possible results of the study. Participants were informed that they would not benefit from the study and there were no incentives for participating in the study. The consent forms included a request for permission to audio-tape mentors/supervisors during the interviews.

Participants were also notified about the interview procedure and that probing questions may be asked to further investigate their responses. What was important was the information that participating in the study was voluntary and it was allowed for study subjects to withdraw their participation at any time during the study and there would be no negative consequences on their part.

### **5.16 Summary**

Chapter Five presented a discussion of the methodology used, covering topics ranging from the research design, sampling and questionnaire design to the research method, as well as reliability and validity, data collection, along with sampling and data analysis methods. Further to this, the research instruments used for data collection, namely the questionnaire and semi-structured interviews, were also described.

Qualitative data were analysed by the researcher using themes, while quantitative data analysis used SPSS version 27.0. Chapter six, the next chapter, presents the analysis and findings of results.

## **CHAPTER SIX**

### **RESEARCH FINDINGS AND ANALYSIS**

#### **6.1 Introduction**

The preceding chapter outlined the methodology used in this study, with a detailed analysis of the qualitative and quantitative research approaches adopted. Both methods were regarded as appropriate for this study as it involved the collection, interpretation and analysis of both data types.

In this chapter the results are presented along with a discussion of the questionnaire and interview findings. The primary data collection tool was the questionnaire with response data analysed through SPSS version 27.0. For the quantitative data results from the descriptive statistics will be presented as figures, graphs, and cross tabulations. Using inferential techniques includes correlations and values obtained from chi square tests, with p-values used for interpretation (Bhandari 2016). The reporting of a result using a traditional approach means a statement of statistical significance is needed. A test statistic generates a p-value, which when  $p < 0.05$ , reflects a significant result.

#### **6.2 Study Sample**

The questionnaire was dispatched to three WIL coordinators based at the three universities and 358 students, with 319 responses returned, producing a response rate of 89 percent. Mentors were engaged through a semi-structured interview. The primary data collection tool used to collect data was a questionnaire. Both quantitative and qualitative data were compared, including literature and theoretical support, where possible.

Response data were analysed with SPSS version 27.0, with results presented for descriptive statistics as figures, including graphs and cross tabulations. included the use of Correlations and Chi-square test values were among the inferential techniques used; interpreted with the use of p-values.

Data was also collected through semi-structured interviews with twenty mentors, from the target population of thirty.

The results are presented with student responses highlighted in section 1, WIL coordinator responses presented in section 2 and mentor responses presented in section 3.

### 6.3 Research Instrument

The data collection instrument comprised of 56 items. The research instrument showed a nominal or an ordinal measurement level. The questionnaire comprised five themes, as detailed below:

- WIL Preparation
- Placement
- Mentorship
- Assessment
- WIL Experience

### 6.4 Reliability Statistics

Reliability and validity are acknowledged as the two most important aspects of precision. To compute reliability several measurements are taken on the same subjects. For a newly developed construct, an acceptable Cronbach's alpha reliability coefficient is considered to measure 0.60 or higher.

Table 6.1 shows the Cronbach's alpha score for Q5.

**Table 6.1: Cronbach's Alpha**

	Section	Number of Items	Cronbach's Alpha
B	Satisfaction	4	0.712
C	Evaluation	5	0.739
D	Support	6	0.811
All variables		15	0.888

The recommended Cronbach's alpha value was exceeded in reliability scores for all sections. Therefore, an acceptable, consistent degree of scoring is indicated for these research sections.

## 6.5 Factor Analysis

As a statistical technique, factor analysis has data reduction as its main goal. Typically, factor analysis is used where a researcher wishes, through survey research, to represent a set of questions that have only a few hypothetical factors. An example would be a national political opinion survey, where participants respond to three separate questions, reflecting challenges encountered at local, provincial and national levels. On its own, a single question would not adequately measure respondent attitudes towards policy, nonetheless, they may jointly offer a better measure of the attitude. To establish whether the same thing is measured by the three measures factor analysis can be used. Should this be the case, a combination will generate a new variable, a factor score variable with each respondent awarded a score.

Factor techniques apply to various situations, such as a researcher wanting to determine whether the skillset a decathlete requires varies as much as the 10 events, or whether success depends on a small number of core skills. While belief in the existence of factors is not needed in performing a factor analysis, in practice these factors are, however, as a rule, interpreted, provided with names, and referred to as real.

Preceding the matrix table/s is a summarised table that illustrates the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test results. The below KMO and Bartlett's Test table (Table 6.2) show the suitability of data for structure detection as indicated by the two tests. The KMO is a statistic indicating the variables' variance proportion potentially resulting from underlying factors. It is acknowledged that high values close to 1.0 are a general indication of the usefulness of factor analysis with the data. Nevertheless, should the value be less than 0.50, the factor analysis results will probably not be very useful.

The use of Bartlett's test of sphericity puts the hypothesis to the test, which states the correlation and identity matrix are the same, thus indicating unrelated variables; which are not suitable for structure detection. Where

values are less than 0.05 of the significance level, it indicates a factor analysis may be useful (Silva, Sabino, Lanuza, Adina, Villaverde, and Pena, 2014).

Factor analysis is only done for the Likert-scaled items. There were, however, certain components that were divided into components that are finer, which the below rotated component matrix explains.

**Table 6.2: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.910
Bartlett's Test of Sphericity	Approx. Chi-Square	1735.654
	df	105
	Sig.	0.000

All conditions are satisfied for factor analysis. In other words, a greater than 0.500 KMO value and a value of less than 0.05 for the Bartlett's Test of Sphericity sig. value.

**Table 6.3: Rotated Component Matrix**

Rotated Component Matrix	Component		
	B	C	D
I was happy with my WIL training	0.500	0.289	0.517
WIL was considered a valuable period in my studies	0.352	0.369	0.410
It is necessary for WIL to have a fixed curriculum	0.057	0.087	0.695
It is necessary for the WIL component to be compulsory in the OMT Diploma	0.125	0.068	0.794
I was happy with how WIL was assessed	0.305	0.633	0.222
I was happy with my WIL evaluation score given by my work mentor	0.108	0.528	0.527
The period I spent in industry during placement was enough	0.100	0.754	0.018
I was happy with my overall WIL experience	0.379	0.538	0.462
WIL placement assisted me to develop office administration skills	0.125	0.580	0.069
I was given guidance by the company where I was placed	0.609	-0.061	0.524
The WIL lecturer provided sufficient guidance during the WIL preparedness classes	0.543	0.427	0.101
During my WIL placement I was able to practice the theory I learnt in class	0.771	0.195	0.041
I was given hands-on experience by my work mentors	0.746	0.151	0.164
The WIL experience met my expectations	0.598	0.495	0.163
My WIL mentor gave me enough support	0.459	0.242	0.446

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

The main goal of the statistical technique of factor analysis is data reduction. Typically, factor analysis is used in survey research, when several questions with a small number of hypothetical factors is represented. Table 6.3 on Page 135 refers to:-

The extraction method used was Principal component analysis, while Varimax with Kaiser Normalization was the rotation method. This rotation method is orthogonal, which minimises the number of variables with high loadings on each factor. Not only does it simplify factor interpretation of the factors, factor analysis or loading shows where inter-correlations are found among variables.

Where question items loaded similarly, measurement is implied along a similar factor. Examining the content of items that loaded at or above 0.5 effectively measured along the various components, with the higher or highest loading used where items cross-loaded at greater than this value.

Variables that made up Q5 loaded along three components or sub-themes. Thus, within the section, different trends were identified by the respondents. The splits within the section are colour-coded. The sub-sections are referred to as:

- A. Satisfaction
- B. Evaluation
- C. Support

## **6.6 Interpretation and Discussion of Results**

### **6.6.1 Student responses**

This section presents the quantitative data analysis and interpretation, including a discussion of the study findings. Data were coded and analysed by means of Microsoft Excel and SPSS. Figures and tables are used to present the results.

**Table 6.4: Province of registration**

	Frequency	Percent
KwaZulu-Natal	272	85.3
Eastern Cape	46	14.4
Other	1	0.3
Total	319	100.0

Table 6.4 indicates the province in which respondents were based during their studies. The results indicated that 85.3 percent respondents were based in KZN. Two universities under study are based in KZN and one is in the Eastern Cape. It was also noted placement of many students was in the public sector, with other sectors placing less students.

### **6.6.2 Section A: WIL Preparation**

This section aimed to establish whether students were adequately prepared prior to starting their WIL experience.

Students need to be prepared prior to WIL placements. The student is in a better position to understand her/his own practice situation with the assistance of a coordinator who has to provide guidance.

Prior to WIL engagement, student preparation for placement is designed to confirm students do not become disoriented in a professional environment. It is considered important to equip students with skills and abilities that will help them at the workplace. Students in HEIs regard WIL placements as more helpful than any other type of practical experience, in terms of developing their abilities for effective future performance in the workplaces (Rayner and Papakonstantinou 2015).

**Figure 6.1: Institution of registration**

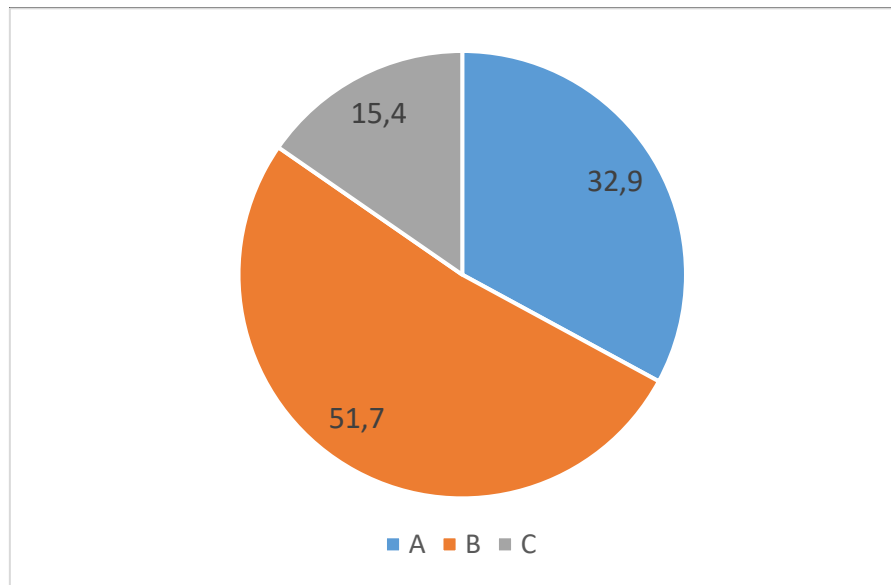


Figure 6.1 shows at which institutions respondents were registered. The results revealed that 51.7 percent of the respondents were registered at university B, with a third (32.9 percent) registered at university A and the remaining 15.4 percent were registered at university C. The distribution of university B was higher, because more students were registered for WIL compared to the other two universities. All respondents indicated attendance of WIL preparedness classes.

The findings are consistent with the views of Rampersad (2018: 89), in that the curriculum should “demand that students engage in deeper learning as they further develop skills and abilities learnt in theory”, which they will take into the world of work. Guidelines outlining placement expectations, should be provided by the institutions, with an induction programme for students. Induction considers that when students are provided with opportunities to integrate theoretical knowledge with practice, they will be better prepared for their professions. WIL programmes can be considered successful when students are integrated into the world of work, allowing them to meaningfully contribute to development contexts.

The findings are also consistent with the ideas of Gamage (2022: 1262), who explains that most academics concur that preparing students for WIL at the educational and psychological level is important, as they will encounter different situations at the workplace.

**Figure 6.2: Number of lessons attended**

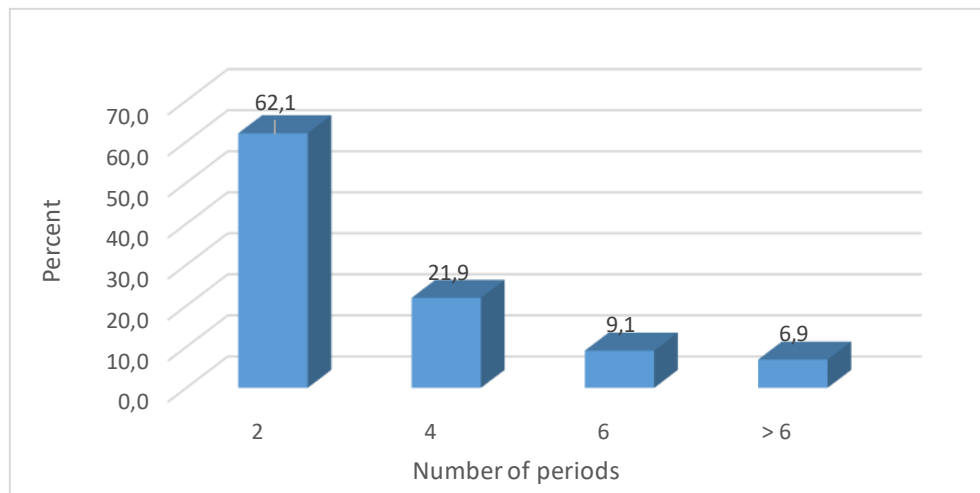


Figure 6.2 indicates the number of WIL periods attended by respondents on a weekly basis. The results showed that 62.1 percent indicated they attended at least two contact periods a week. Approximately a fifth of the respondents (21.9 percent) attended four lessons, with smaller numbers attending more than four weekly contact periods.

Batholmeus and Pop (2019: 27) agree that lack of sufficient preparation for WIL is one of the issues that affects students' capacity to learn from and be transformed by workplaces throughout their WIL journey.

The findings correspond with the views of Schoor and Erwee (2009: 87), who state that students should be provided with information sessions and a WIL period every week, for the month before placement in the WIL environment to ensure they understand what is expected of them and of the industry.

**Figure 6.3: Topics covered in the WIL preparedness sessions**

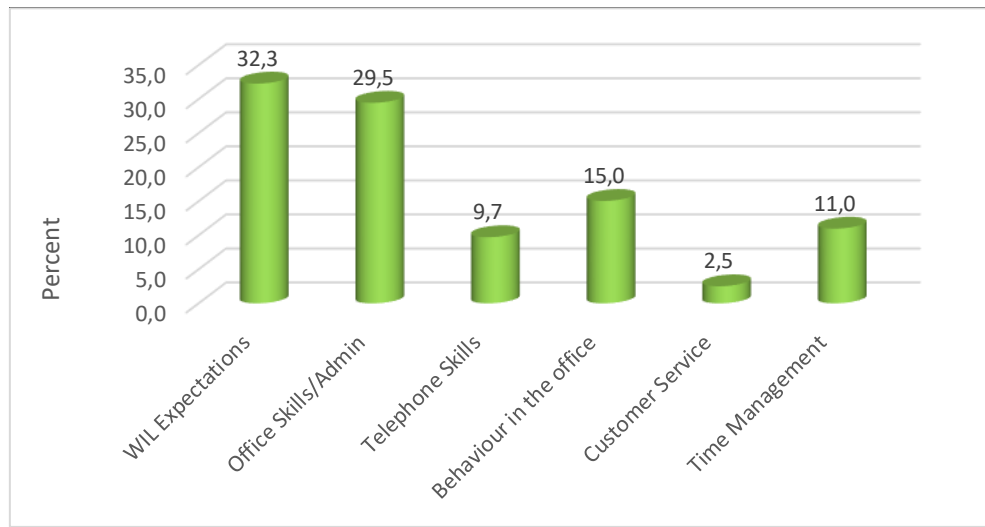


Table 6.3 revealed results of respondents when asked to explain what was covered in the WIL preparedness sessions. The results indicated that 32.3 percent respondents indicated the expectation of WIL as the topic most covered. Office skills and administration skills of 29.5 percent respondents were also covered, with behaviour in the office (15 percent) the next common indicator.

Bates (2003, cited in Rampersad (2018: 90) indicates the educational institution is responsible, from day one into the profession, for socialising the student. Students are provided with opportunities through the curriculum to apply their learning, while also encouraging autonomous learning to achieve “basic competence and confidence to make independent decisions”. There is the implicit demand in the curriculum for students to “engage in deeper learning as they further develop skills and abilities learnt in theoretical courses, and then confront them with the reality of taking responsibility in the world of work”. The findings are consistent with the view by Bates (2003), in that the WIL preparedness programme offered by the institution is of utmost importance to prepare the student in readiness for the world of work.

**Table 6.5: Sufficiency of WIL preparedness sessions**

	Frequency	Percent
Yes	247	77.4
No	72	22.6
Total	319	100.0

Table 6.5 indicates sufficiency of WIL preparedness sessions. The results showed that 77.4 percent respondents indicated that they were satisfied with the topics covered in the preparedness sessions. Waryszak (1999) states equal importance is afforded to values, personality traits and personal characteristics as for skills sought by employers. The student hoping for a successful placement should, therefore, acquire and develop representative community and society values, along with those values in the profession they have chosen, as well as of the workplace and, their sense of self. Consideration for both personal and professional attributes will assist in their easy transition into the workplace. Therefore, students must be satisfied they are sufficiently prepared to enter the workplace.

**Figure 6.4: Responsible staff member for WIL preparedness sessions**

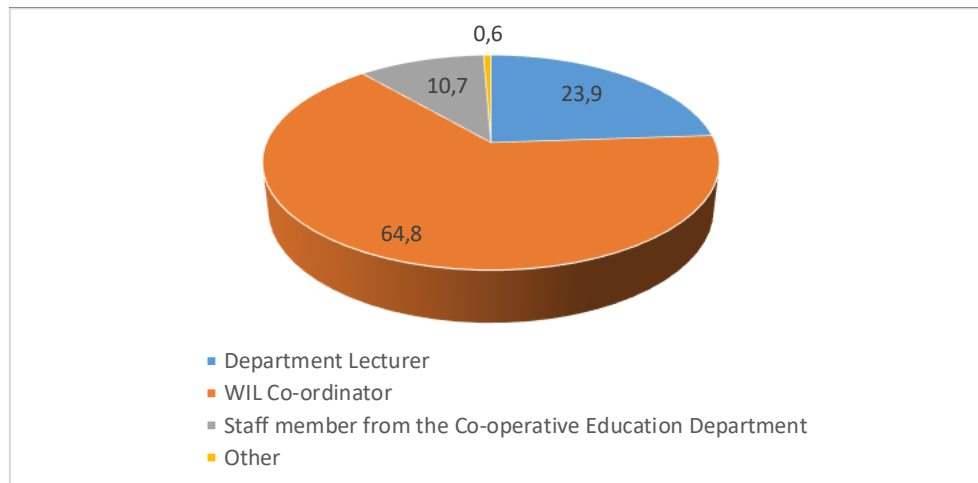


Figure 6.4 indicates who was responsible for the WIL preparedness sessions at the university. The results highlighted that 64.8 percent indicated the WIL co-ordinator as the person responsible. Furthermore, 23.9 percent of respondents indicated a department lecturer was responsible.

The results are in line with assertions by Bates, Bates and Bates (2007), who believe the WIL coordinator is responsible for socialising students into the profession from the first day and ensuring the University is responsible for the students becoming competent. Choy and Delahaye (2009: 5, cited in Rampersad 2018) further assert the WIL co-ordinator must be sufficiently knowledgeable to initiate discussions with senior management of the placement organisation. Each WIL coordinator must be sufficiently trained, with an understanding how organizational needs will be served through the awards and course content.

**Table 6.6: Provision of a Logbook**

	Frequency	Percent
Yes	311	97.5
No	8	2.5
Total	319	100.0

Table 6.6 indicates whether respondents were provided with a logbook when they were placed for WIL. A total of 97.5 respondents indicated they were provided with the logsheets/logbooks, which contained the learning outcomes, with instructions and space to log the duties they performed on a daily basis. Those who were not physically placed in industry because of COVID-19 restrictions, were provided with projects to work on. Respondents were also furnished with study guides that included all WIL module information. Providing students with a logbook further encourages them to detect work tasks associated with intended learning outcomes and fully engage in these.

Torabi *et al.* (2013: 83) agree with the findings that a logbook improves the learning experience by recording what the student has done and requires the student to reflect on what she/he has accomplished. In essence, the logbook is more than merely a record of what the student has accomplished; it is comparable to a portfolio, because students have to collect evidence on the tasks they have performed. As a result of student evaluations included in the logbook, it may also assist students to generate new competencies, attitudes, and intellectual ideas. Mentors use logbooks to evaluate student performance and ensure learning outcomes are achieved.

**Figure 6.5: Other materials provided**

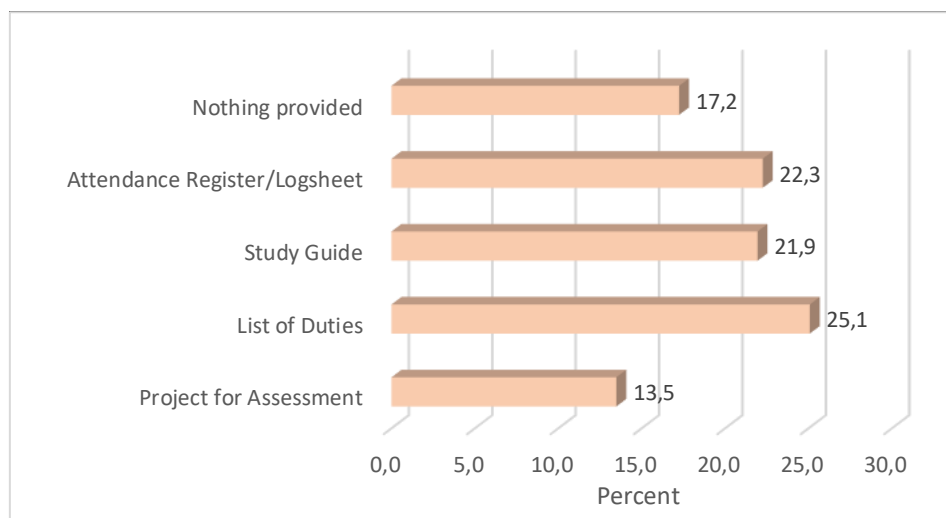


Figure 6.5 sought to establish what other materials were provided to respondents. Participants mentioned that they were provided with different materials during their WIL, for example, attendance registers, study guides, etc.

Du Plessis (2010: 215) confirm that students should be provided with all materials when they are engaged in WIL. Lindstaedt, Ley, Scheir and Ulbrich (2008: 47) are of the view that students should be provided with necessary materials/tools to gain effective results at the workplace.

**Table 6.7: Outcomes of the WIL programme**

	Frequency	Percent
Yes	287	90.0
No	32	10.0
Total	319	100.0

Figure 6.7 indicates whether respondents were informed about WIL outcomes during their WIL classes. The results from the study revealed that 90 percent of participants indicated that they were informed on the outcomes of the WIL programme.

Student preparation and induction before placement commences are important in ensuring student learning “is not compromised by the trauma of being ill-prepared for what they experience in placement”. It is important students note, as they will be embarking in an unfamiliar environment, they should be prepared for the WIL experience and armed with all the necessary information (Smith and Worsfold 2015: 26).

A primary objective of many WIL programmes is to ensure graduates are more "work-ready". With various talents and abilities that make them more immediately marketable, work-ready students will more easily transition from university to professional practice or employment. Furthermore, these students will also have the information, skills, and experience needed for the workplace. Both students and employers will undoubtedly gain from such a transformation. It is not surprising to learn from prior studies that university is seen as a crucial part of tertiary students' career preparation (Smith and Worsfold 2015: 27).

### **6.6.3 Section B: Placement**

WIL placement empowers students in experiencing the context of their future work, while developing basic professional skills that impact their employability in a positive way.

**Figure 6.6: Type of placement company**

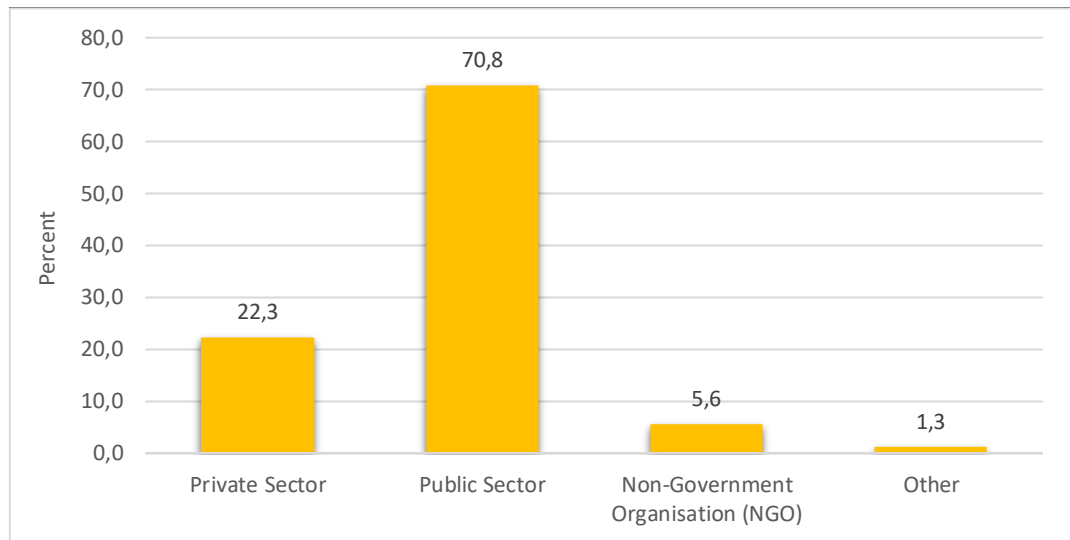


Table 6.6 shows the type of company respondents were placed at. The results indicated that 70.8 percent were placed in the public sector, with a further 22.3 percent placed in the private sector. There were significantly fewer respondents in other types of companies. A small number of students were placed at government institutions and other companies.

The results concur with Smith et al. (2016: 198) when they assert the design of WIL placements enables the integration of theory and work practices. Nonetheless, great variation is found among placement experiences in terms of their quality, educational value, and psychological and educational impacts due to students, in many cases, being implemented in the field - in actual businesses.

**Figure 6.7: Person responsible for placement**

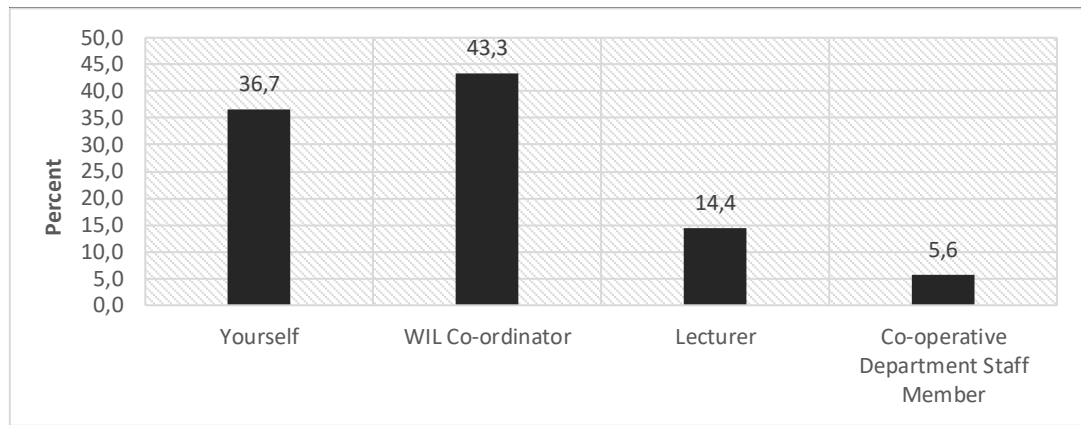


Figure 6.7 indicates the person responsible for placing respondents for WIL. The results revealed 43.3 percent of the respondents indicated they were placed by the WIL co-ordinator and 36.7 percent were self-placed.

The results are in line with HEQSF (CHE 2013: 16) which denotes: “where the entire WIL component or any part of it takes the form of workplace-based learning, it is the responsibility of institutions that offer programmes requiring credits for such learning to assist in the placement of students into appropriate workplaces”. WIL coordinators are responsible for WIL in HEIs; hence they have a responsibility to place students.

**Figure 6.8: Additional skills developed during training**

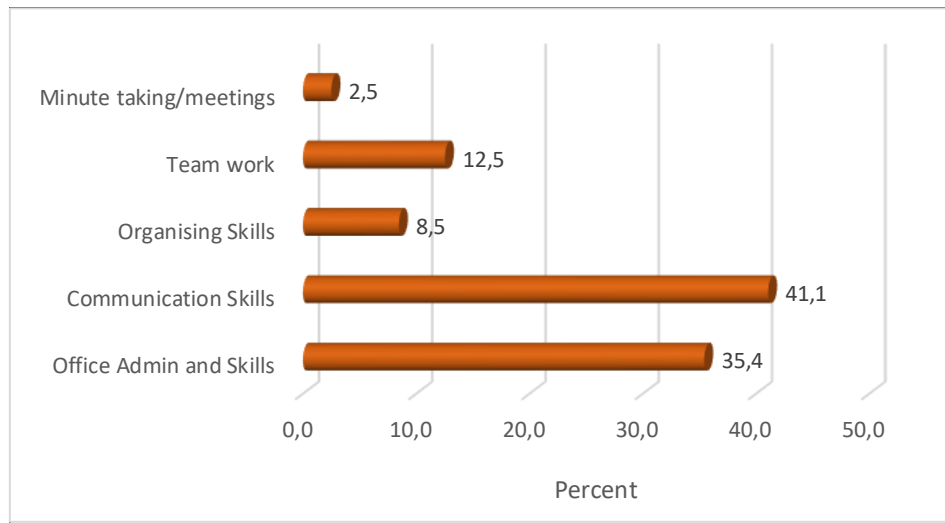


Figure 6.8 indicates additional skills developed during the training. The two most common skills identified by 41,1 percent respondents were communication and a further 35.5 percent identified office administration skills. The respondents identified work ethics, time management, computer skills, and office behaviour, as well as project management and office protocols.

Doyle (2021) is of the opinion office assistants, secretaries, and office managers all require administrative skills, which include those relevant to managing a business or keeping an office orderly. Administrative professionals provide the support necessary, whether serving customers or selling products, so businesses may thrive in attainment of their primary goals. The findings are consistent with Rampersad (2018: 95), in whose view professionalism, as well as skills in good communication, critical thinking and problem-solving are a few of the essential competencies needed to enable students to survive in the workplace.

Employers frequently claim present day new graduates lack the necessary abilities to deal with the demands of modern organizations and even fundamental work skills. Employers indicate students have to develop the following skills: problem-solving, business understanding, IT management, and communication, along with teamwork abilities. In addition, critical thinking,

attention to detail, and writing fluency are also important in developing students at the workplace (Khampirat, Pop and Bandaranaike 2019: 127).

**Table 6.8: Duration of placement**

	<b>Frequency</b>	<b>Percent</b>
Three months	269	84.3
Six months	19	6.0
One year	7	2.2
More than one year	3	0.9
Other	21	6.6
Total	319	100.0

Table 6.8 indicates the duration of the placement at the workplace. Respondents were asked to specify the duration of the placement; 84.3 percent of respondents indicated the most prevalent period was three months.

The results are in line with Atkinson (2016: 3), who expresses the view that “placements, which can include fieldwork, internships, etc. immerse students into a workplace for a period of time. Some placements are integrated into the curriculum and form part of the formal assessment; others are informal arrangements, but potentially a requirement of the course”. The length of placements can be for a duration of between six to 12 months, either semester-based or vacation placements of two to three months, or of shorter duration, comprising one to three weeks experiences.

Student concerns regarding the short duration of placement is justified, and highlight the necessity for sustained amounts of time in such placements, to further develop and reinforce skills acquired on the training, as well as to apply higher level learning.

**Table 6.9: Sufficiency of Training**

	Frequency	Percent
Yes	155	48,6
No	164	51,4
Total	319	100,0

Respondents were asked if the period allocated for WIL training in Table 6.8 was sufficient. The results indicated that 48.6 percent believed the duration of WIL training was sufficient and a further 51.4 percent believed the period was insufficient.

Of the respondents who indicated “No”, 80.5 percent suggested a 6-month placement timeframe would be more suitable.

The findings support those of Atkinson (2016) that placements engage students for a period at a workplace. Not only are placements for various durations, but they can also either be a course requirement or optional; such as where a particular academic programme may have a minimum 120-hour work period requirement.

The WIL policy of the Independent Institute of Education (2022 amended) allows for the length of work experience to be determined by the qualifications and might range from days to weeks to months. The duration of the work placement is decided by the time required for the student to perform specified activities and be evaluated against predetermined outcomes. Depending on the nature of the programme, the hours can usually be accrued in a full-time holiday or part-time weekend or weekday placement. There are also some instances where work placement may not interfere with student class attendance.

### 6.6.4 Section C: Mentorship

This section reports on the support provided to students and the relationship between the mentor and the mentee.

**Figure 6.9: Mentorship during WIL placement**

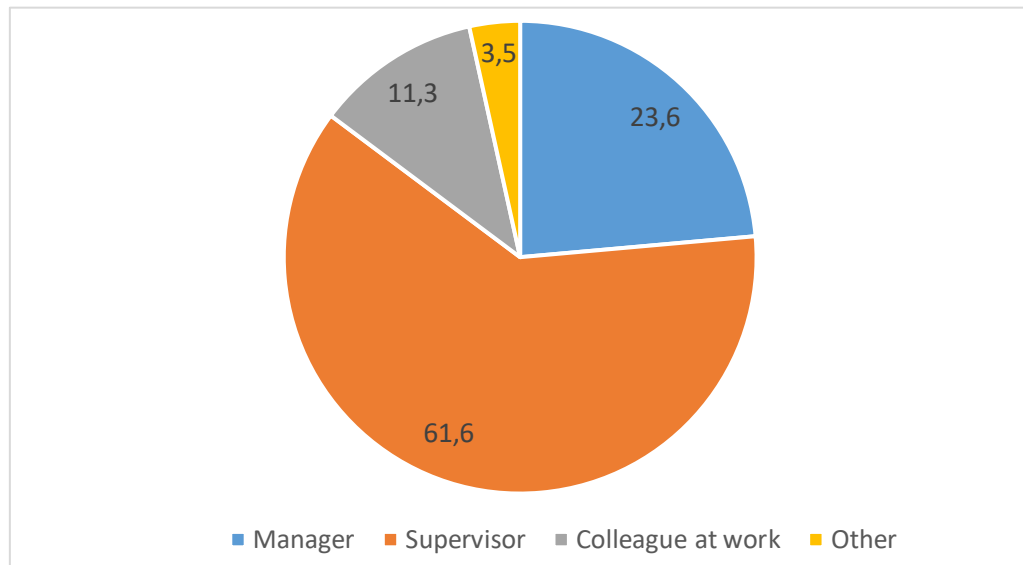


Figure 6.9 indicates the person who mentored respondents during the WIL placement. Most respondents, 61.6 percent, identified their supervisor as the mentor and the person in charge of them during the placement period. A further 23.6 percent identified their line manager as the person in charge.

The findings are consistent with Samuel (2022), who indicates having a mentor is an effective way for students to gain clarity on their career goals and create actionable plans to achieve those goals. It is also a tool to increase self-awareness, illuminating strengths and areas for development, as well as increasing self-confidence, which supports professional and personal growth.

Hudson (2016) asserts that having a dedicated mentor relationship can be a career defining relationship as students navigate towards their chosen careers. Whether skill building and application or simply a sounding board when making important decisions, mentorship provides a competitive advantage to students for many years to come.

**Table 6.10: Relationship with mentor**

	<b>Frequency</b>	<b>Percent</b>
Excellent	188	58.9
Good	113	35.4
Fair	17	5.3
Poor	1	0.3
Total	319	100.0

Table 6.10 provides a summary of respondents' rating of the relationship with their mentor/supervisor. The results showed that 58.9 percent of the respondents indicated an excellent relationship with their mentor/supervisor.

Ambrosetti and Dekkers (2010: 49) indicate the various roles that can be assumed by a mentor are versatile, with the following identified as amongst these:

Mentoring entails both interpersonal and procedural elements. For example, the mentor may provide guidance, protection, and support to the mentee, but he or she may also provide opportunities for the mentee to perform tasks to attain goals; and

Mentor responsibilities are situational: that is, the mentor performs specific duties in specific circumstances. For example, if a trainee has performed a task, the mentor will act as an evaluator rather than a colleague. Mentors provide guidance to the students and it is important that they develop a good relationship with their mentees.

**Table 6.11: WIL Coordinator/University visits**

	<b>Frequency</b>	<b>Percent</b>
Yes	151	47.3
No	168	52.7
Total	319	100.0

Table 6.11 indicates whether respondents were visited by their WIL Coordinator/university staff member during their placement.

The results showed that 52.7 percent were not visited by either a WIL Coordinator or a staff member from a university during their WIL placements. There was no real difference in respondent numbers of those who had been visited compared to those who had not been visited.

This supports findings by Assan (2014: 305) who recommends more visits by WIL Coordinators should be arranged when students are engaged in WIL. The author further suggests the frequency of workplace visitations by coordinators should be increased and universities should emphasise the issue of WIL visits to ensure students are visited whilst at the workplace.

Additionally, in a study conducted by Dwesini (2017: 2), the findings reported students who criticised the university for only having one visit per semester with greater collaboration between the university and the industry suggested. To prevent such challenges, Dwesini (2017) recommends the institution maintain frequent communication, not just with mentors but also with students.

**Table 6.12: Securing permanent employment after WIL**

	<b>Frequency</b>	<b>Percent</b>
Yes	48	15.0
No	271	85.0
Total	319	100.0

Table 6.12 indicates whether respondents were able to secure permanent employment after they completed WIL. The results highlighted that 85 percent respondents indicated not having been successful in securing permanent employment.

Londt (2022) postulates students who are exposed to WIL are likely to be employed. The Benefit to learners from WIL practices is their ability to integrate new knowledge and skills by practically applying these in an environment that is controlled. Students in the workplace also receive exposure to the correct soft-skills blend needed in readiness for work. Students who acquire these skills have a better chance to be employed.

Dwesini (2019: 2) states employability skills development is needed for new graduates to succeed in the workplace; this development is often regarded as supported by WIL. Therefore, the WIL partnership between the university and industry is an opportunity for both stakeholders to establish close links for recruitment purposes.

### 6.6.5 Section D: Assessment

This question investigates assessment of students during their WIL placement.

**Table 6.13: Explanation of logbook during WIL preparedness session**

	Frequency	Percent
Yes	293	91.8
No	26	8.2
Total	319	100.0

Table 6.13 sought to establish whether the contents of the Logbook were explained to the respondents. The results indicated that a majority of 91.8 percent respondents indicated that the contents of the logbook had been explained to them.

A logbook is used to guide and orientate students when they have been placed for WIL. It can include the guidelines designed to enhance student learning at any stage of the WIL programme. Use of a logbook facilitates student-mentor communication by providing feedback on the achievement of outcomes set in the logbook. There are other roles for a logbook, namely: serving as a study guide (structure), used to document student learning, as an assessment tool, or for WIL assessment and/or evaluation (Torabi *et al.* 2013: 81).

Fatemeh and Alavinia (2012: 1184) stated the development of logbooks follows the requirements of any course's core curriculum, which is consistent with the current study findings. Based on the outcomes, the students record their professional experiences in the logbooks; this encourages immediate and continuous interaction between WIL Coordinators and students. Properly completed and managed logbooks provide continuous and objective assessment, offer feedback for learning activity assessment, validate the procedural experience at advanced training levels, and involve training supervisors on how student assessment should be conducted against the assessment criteria indicated in the logbook.

**Table 6.14: WIL Evaluation to be completed by mentor**

	<b>Frequency</b>	<b>Percent</b>
Yes	308	96.9
No	10	3.1
Total	318	100.0

Table 6.14 indicates whether the logbook contained an evaluation that required completion by the mentor. The results revealed that 96.9 percent respondents indicated that the logbook did contain a form to be completed by the mentor.

The results affirm the views of Koch (2010: 721) that the WIL programme is compulsory in the majority of academic qualifications within most UoTs in SA. In order to reflect on student exposure within the industry, the author highlights “a wide range of assignments, portfolios, logbooks, and any other formats” are required to be presented for assessment to the WIL coordinator.

Logbook assessments improve the learning experience by recording what the student has done and asking the student to reflect on what she/he has accomplished. In essence, the logbook is more than a mere record of what the student has accomplished. It is comparable to a portfolio. The logbook could generate new abilities, attitudes, and thinking concepts because of student comments reflected in logbooks.

**Table 6.15: Mark allocation**

	<b>Frequency</b>	<b>Percent</b>
Yes	276	89.9
No	31	10.1
Total	307	100.0

Table 6.15 sought to determine whether a mark was allocated to the evaluation in Table 6.14 on page 154. The results showed that 89.9 percent indicated that a mark was associated with the evaluation.

WIL evaluation is considered essential in determining whether students are exposed to, and receive, a high-quality, contextualised learning experience relevant to their programme of study (Marlow, Saunders and Mather 2021). Literature further states opportunities for students to provide feedback regarding educational experiences are a necessity, with monitoring, review and improvement activities by the institution informed by student feedback (TESQA 2015).

**Table 6.16: Discussion after mark evaluation**

	<b>Frequency</b>	<b>Percent</b>
Yes	148	48.2
No	159	51.8
Total	307	100.0

Table 6.16 illustrates whether a discussion of the mark took place after the evaluation. The results indicated that 48.2 percent of respondents who revealed that the mark had been discussed with them; whilst 51.8 percent indicated it had not been discussed with them.

WIL experiences are invariably accredited and assessed when fully integrated into the curriculum, where specific academic disciplines and university faculties and departments are responsible for these processes (Atkinson 2016). After each assessment, the universities' teaching and learning policies indicate the time required for students to receive feedback.

**Table 6.17: Type of assessment**

	<b>Frequency</b>	<b>Percent</b>
Examination	70	21.9
Assignments	184	57.7
Projects	59	18.5
Other	6	1.9

Table 6.17 reflects the type of assessment the academic department undertook after WIL training. The were 57.7 percent of respondents who revealed that the most common assessments were assignments. A further 21.9 percent of respondents indicated that examinations were also used for assessment.

The findings concur with Ferns and Zegwaard (2014: 182), who postulate the assessment instrument must assess the desired learning outcomes in order to assess student abilities. The assessor must be certain an assessment tool measures what is intended when developed to track the growth of a certain student attribute.

Schoor and Erwee (2009: 90) are of the view the exams, written essays and multiple-choice questions all provide measurable assessment results. The individualised learning that takes place in a WIL environment is not acknowledged, even where these instances permit assigning a "grade", with accountability and compliance needs satisfied by default. The specific outcomes of a WIL learning experience include qualities such as ethical and professional conduct, teamwork, as well as communication in a work-based setting. The type of assessment conducted with students should be able to assess these skills.

Bosco and Ferns (2014: 285) believe while the types of tasks differ at the workplace, depending on student discipline, WIL tasks all require reflection and consciously linking theory and practical applications. Examples of WIL assessments include: simulations, virtual simulations, case studies, and

roleplays, along with portfolios, reflective diaries, PBL, project work, industry partner mentoring, as well as job-related presentations, and capstone themes.

**Table 6.18: Person who conducted assessment**

	Frequency	Percent
WIL Co-ordinator	249	78.1
Lecturer in the Department	66	20.7
Other	4	1.3
Total	319	100.0

Table 6.18 shows who conducted the assessment. It was indicated by 78.1 percent of respondents that the assessor was the WIL co-ordinator.

The above findings echo those of Jackson *et al.* (2020: 2) who determined, WIL typically works with industry partners to build and evaluate students' professional talents. Work performance evaluation forms completed by the mentor are normally included in work placement programmes. Long-standing agreements exist in many areas where the host organization evaluates the work product of the students (Ferns and Zegwaard 2014: 183).

**Table 6.19: Assessment by the department**

	Frequency	Percent
Examination	8	2.5
Assignments	115	36.3
Written Tests	6	1.9
Presentations	148	46.7
Projects	33	10.4
Other	7	2.2
Total	317	100.0

Table 6.19 reveals how assessments were conducted by the department. The results showed that 46.7 percent of respondents indicated they were assessed through presentations; however, assignments were viewed by 36.3 percent of respondents as another strategy to assess respondents.

There is a need to rethink standard assessment techniques where design, administration, and validation are concerned to include assessment procedures for WIL education. The main idea of WIL is information application in an environment that is practice-based, where the one assessed demonstrates intellectual prowess through teamwork, problem-solving, and professional conduct in a real-world situation (Ferns and Zegwaard 2014: 181).

When assessing reports of WIL, the quality of the final practical work output should be assessed, not the task itself. WIL, sometimes known as "learning-by-doing," is practical work. When assessment is tied to it, the importance of WIL increases assisting students to treat this type of work more seriously as well as critically. It is vital students understand WIL deals with the procedures and abilities required to successfully complete tasks. Hence, Schoor and Erwee (2009: 90) assert the optimal technique of evaluation may be an approach that is performance-based, which includes portfolio assessment to evaluate student performance (in terms of both methods and results) in addition to what has been learnt from the placement by the student.

Ferns and Zegwaard (2014: 185) share a similar view with Schoor and Erwee (2009) that the evidence-based portfolio is an increasingly popular tool for assessing student workplace learning. A well-established evaluation approach is the portfolio, which aims to document student development and promote self-reflection on strengths and learning gaps. The portfolio concept has developed an entirely new meaning as a result of technical advancements that have transformed the traditional portfolio, which is paper-based, into an ePortfolio, now presented on an electronic platform. Students can add a variety of innovative forms of evidence to their ePortfolios to demonstrate their skills and competencies.

**Table 6.20: Number of assessments**

	<b>Frequency</b>	<b>Percent</b>
1	125	39.4
2	111	35.0
3	56	17.7
> 3	25	7.9
Total	317	100.0

Table 6.20 reflects the number of assessments students had during the year. The results indicate that 74.4 percent of respondents indicated they had two assessments at most.

The findings are consistent with Ferns and Zegwaard (2014: 180) who clarify there are obstacles to adopting real evaluation profiles as representative of WIL and its performance-based emphasis in a conventional university setting. The majority of the time, content is divided into disconnected areas with stringent assessment regulations that impose restrictions on innovative methods for demonstrating student results.

**Table 6.21: Assessments covered outcomes**

	Frequency	Percent
Yes	301	95.0
No	16	5.0
Total	317	100.0

Table 6.21 shows whether assessments covered the outcomes of WIL. Results showed that 95 percent of respondents indicated that the assessments had been in line with the outcomes.

The findings support the views of Smith (2014: 211) that “the creation of WIL curricula is motivated by a desire to make certain kinds of opportunities available to students and to develop in them particular kinds of intended learning outcomes”. Two methods; placements in work/professional settings that are genuine, along with high-authenticity simulations can assist students to achieve the learning outcomes.

**Table 6.22: Assessor of WIL in OMT**

	Frequency	Percent
WIL Co-ordinators	220	69.2
Co-operative Education Department staff member	33	10.4
Lecturers in the Department	61	19.2
Other	4	1.3
Total	318	100.0

Table 6.22 indicates who should assess students for WIL in the OMT diploma. The results showed 69.2 percent of respondents who identified the WIL co-ordinator as the primary assessor.

Dwesini (2015: 2) is of the view academic WIL coordinators can interpret both the theoretical and the practical, putting them in a better position to assess. As a result, curriculum evaluation should consider both knowledge supplier and student perspectives, as they are also experts in theory and practice.

The findings concur with the views of Henderson and Trede (2017: 74) that a shared collaborative approach to WBL is essential. To advance relevant learning experiences and the appropriate participation by students and other stakeholders to ensure the necessary learning objectives are met, collaboration between the institution, industry, and students is necessary.

**Table 6.23: Fairness of the assessment**

	<b>Frequency</b>	<b>Percent</b>
Yes	289	90.9
No	29	9.1
Total	318	100.0

Table 6.23 reveals the fairness of the assessment mentioned in Table 6.19. A significant 90.9 percent of respondents indicated that the assessment methods associated with the evaluation were fair.

The findings are consistent with the ideas of Henderson and Trede (2017) who explain assessment of WBL cannot be limited by subtle differences; rather, it must take the range of methods into account students can use to exhibit the learning outcomes.

**Table 6.24: Mark allocation**

	<b>Frequency</b>	<b>Percent</b>
Yes	273	85.8
No	45	14.2
Total	318	100.0

Table 6.24 indicates the mark allocation for WIL assessment. The results indicated that 85.8 percent of respondents indicated they had been allocated a mark than those who had not.

The evaluation of the student learning experience on work placement is, however, “typically more complex than evaluation of a standard university unit” (von Treuer *et al.* 2011). Workplace learning situations differ considerably from classroom-based learning: the university often has minimal control over the learning environment; learning situations are often variable; and they may be brief.

The above is consistent with findings of Ferns and Zegwaard (2014), who are of the view exams, written essays, and short-answer or multiple-choice tests are examples of assignments that yield measurable evaluation results. While these demonstrations make it possible to provide a "grade" and, deal with accountability and compliance needs by default, they neglect to acknowledge the personalised learning that takes place in a WIL setting. Specific outcomes from a WIL learning experience include traits such as ethical behaviour, professional conduct, teamwork, and communication in a work-based setting, which is challenging to assess at the workplace and allocate a mark.

### **6.6.6 Question 5: WIL Experience**

The section that follows analyses the scoring patterns of the respondents per variable per section.

The results are first presented using summarised percentages for the variables that constitute each section. Three sub-themes were identified and are analysed below, with results then further analysed according to the importance of the statements.

To determine whether the scoring patterns per statement were significantly different per option, a chi square goodness-of-fit test was done. The null hypothesis claims similar numbers of respondents scored across each option for each statement (one statement at a time). The alternate states there is a significant difference between the low and high frequency levels.

The highlighted sig. values (p-values) are less than 0.05 (the level of significance), which implies the distributions were not similar. That is, the differences between the way respondents scored (Hardly ever, Seldom, Sometimes, Often, Almost always) were significant.

This section deals with the experiences and perceptions of students with WIL and discusses the results from Question 5 sub-sections, namely Satisfaction, Evaluation and Support.

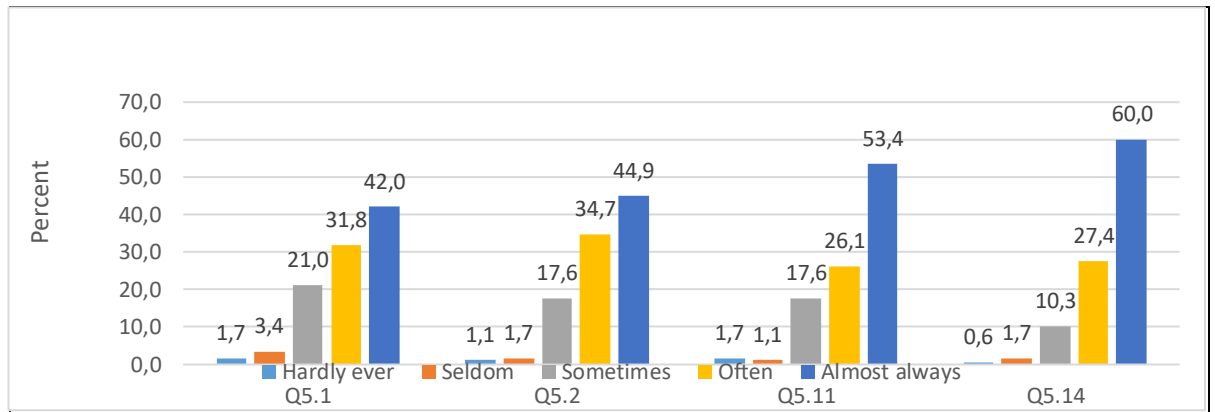
The results are shown in Tables 6.25 (Satisfaction); 6.26 Evaluation and 6.27 (Support).

### 6.6.6.1 Sub-section one: Satisfaction

Table 6.25 summarises the scoring patterns.

**Table 6.25: Scoring patterns summary: Satisfaction**

		Hardly ever		Seldom		Sometimes		Often		Almost always		Chi Square p-value
		Co unt	Row N %	C o u nt	Row N %	Co unt	Row N %	C o u nt	Row N %	C o u nt	Row N %	
I was happy with my WIL training	Q5.1	3	1.7%	6	3.4%	37	21.0%	56	31.8%	74	42.0%	< 0.001
WIL was considered a valuable period in my studies	Q5.2	2	1.1%	3	1.7%	31	17.6%	61	34.7%	79	44.9%	< 0.001
It is necessary for WIL to have a fixed curriculum	Q5.11	3	1.7%	2	1.1%	31	17.6%	46	26.1%	94	53.4%	< 0.001
It is necessary for the WIL component to be compulsory in the OMT Diploma	Q5.14	1	0.6%	3	1.7%	18	10.3%	48	27.4%	105	60.0%	< 0.001



**Figure 6.10: Respondent experiences and perceptions of WIL**

Figure 6.10 shows the observed patterns as follows:

- Some statements indicate (significantly) higher levels of occurrence (often and almost always) while other levels are lower, but remain greater than lower frequency levels;
- No statements show higher levels of lower frequencies (hardly ever and seldom);
- The significance of the differences is assessed and tabled.

An increasing tendency of higher frequency is noted. Respondents seem satisfied WIL should have a fixed and compulsory component in the curriculum, where the level of agreement on average is 82 percent.

Respondents indicated significant satisfaction with their WIL experience and viewed the period spent in industry as valuable. The experience contributed to respondents developing office administration skills, which are important in the OMT discipline.

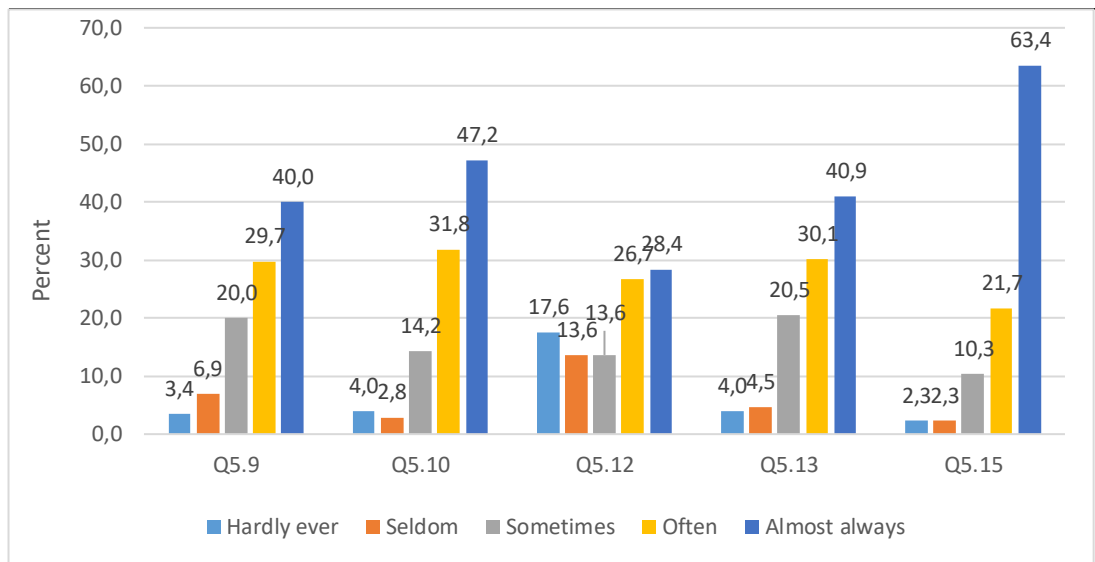
The first is slightly lower than the rest, possibly due to students being unhappy with where they were placed. Though the respondents indicated they had excellent relationship with their supervisor, the environment may not have been conducive for respondents to enjoy their training.

### 6.6.6.2 Sub-section two: Evaluation

The evaluation of performance and/or assessment of WIL by the respondents' mentor is dealt with in this section.

**Table 6.26: Scoring patterns: Evaluation**

		Hardly ever		Seldom		Sometimes		Often		Almost always		Chi Square p-value
		Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	
I was happy with how WIL was assessed	Q5.9	6	3.4 %	12	6.9 %	35	20.0 %	52	29.7 %	70	40.0%	< 0.001
I was happy with my WIL evaluation score given by my work mentor	Q5.10	7	4.0 %	5	2.8 %	25	14.2 %	56	31.8 %	83	47.2%	< 0.001
The period I spent in industry during placement was enough	Q5.12	31	17.6 %	24	13.6 %	24	13.6 %	47	26.7 %	50	28.4%	0.001
I was happy with my overall WIL experience	Q5.13	7	4.0 %	8	4.5 %	36	20.5 %	53	30.1 %	72	40.9%	< 0.001
WIL placement assisted me to develop office administration skills	Q5.15	4	2.3 %	4	2.3 %	18	10.3 %	38	21.7 %	111	63.4%	< 0.001



**Figure 6.11: WIL evaluation of performance and/or assessment by respondents' mentor**

The patterns observed are:-

- Some statements show higher levels of occurrence (always almost and often) whereas other levels are lower, however, they remain greater than lower frequency levels;
- No statements showed higher levels of lower frequencies (hardly ever and seldom);
- The significance of the differences is tested and tabled.

An increasing tendency of higher frequency on the right is noted since most respondents had selected almost always. A significant number of respondents seemed happy the WIL experience assisted them to develop office administration skills that are important in the OMT discipline. There are statements with higher levels of lower frequencies. Respondents seemed unsatisfied with the way WIL was assessed and the evaluation score allocated by the mentor. The results also showed respondents were unhappy with the overall WIL experience.

The findings are consistent with the views of McNamara (2013: 17) that workplace performance can be evaluated using observations, collected instances of how jobs were performed, and other simulation techniques. WIL

assessment is typically holistic, focusing on the growth of the student's self-understanding level, efficiency in the workplace, and awareness of career options, as opposed to the attainment of specific knowledge or skills, because the learnable moments that will present are difficult to predict during the experience.

The findings support MacNamara (2017) who asserts the learner is given priority in all common WIL assessment forms, including “learning plans, reflective diaries, reports, student presentations, classroom discussions, oral questioning, portfolios, supervisor's assessment, and career plans”. Utilising observations, carefully selected examples of how tasks were carried out, and other modelling techniques, workplace performance can be assessed. Since predicting the learnable moments that will arise during the experience are challenging to predict, WIL assessment is typically holistic, focusing on student growth of self-understanding, efficacy in the workplace, and career option awareness, instead of specific knowledge or skills attainment.

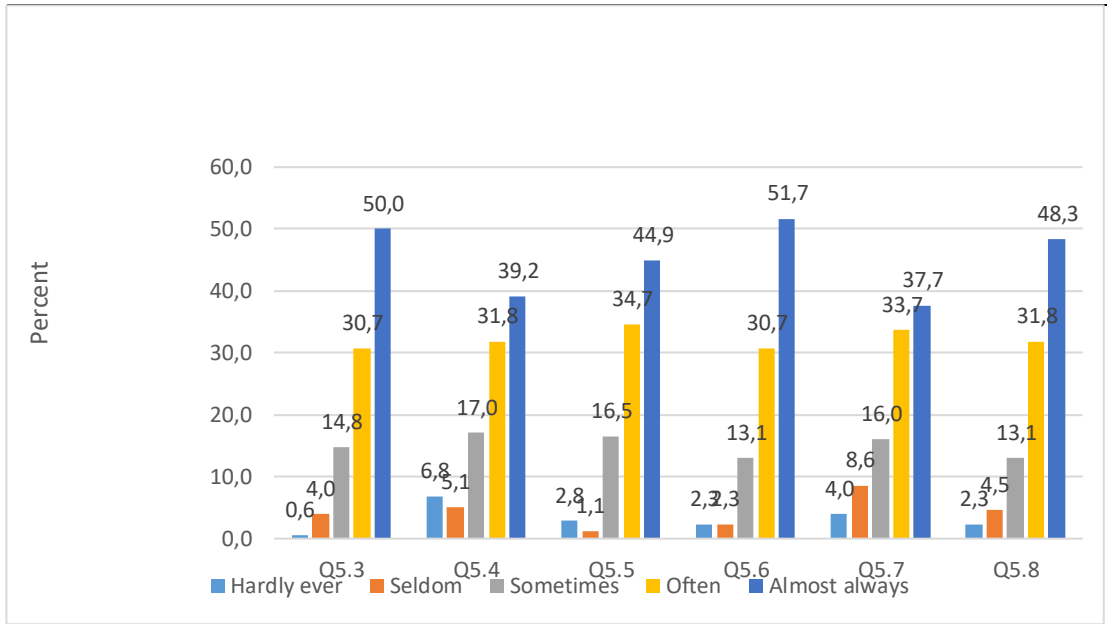
#### **6.6.6.3 Sub- section three: Support**

This section deals with the support of respondents provided by WIL industry mentors during the WIL experience.

Table 6.27 on page 172 summarises the scoring patterns.

**Table 6.27: Scoring patterns: Support**

		Hardly ever		Seldom		Sometimes		Often		Almost always		Chi Square p-value
		Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	
I was given guidance by the company where I was placed	Q5.3	1	0.6%	7	4.0%	26	14.8%	54	30.7%	88	50.0%	< 0.001
The WIL lecturer provided sufficient guidance during the WIL preparedness classes	Q5.4	12	6.8%	9	5.1%	30	17.0%	56	31.8%	69	39.2%	< 0.001
During my WIL placement I was able to practice the theory I learnt in class	Q5.5	5	2.8%	2	1.1%	29	16.5%	61	34.7%	79	44.9%	< 0.001
I was given hands-on experience by my work mentors	Q5.6	4	2.3%	4	2.3%	23	13.1%	54	30.7%	91	51.7%	< 0.001
The WIL experience met my expectations	Q5.7	7	4.0%	15	8.6%	28	16.0%	59	33.7%	66	37.7%	< 0.001
My WIL mentor gave me enough support	Q5.8	4	2.3%	8	4.5%	23	13.1%	56	31.8%	85	48.3%	< 0.001



**Figure 6.12: Support provided By WIL industry mentors during WIL experience**

The following patterns are observed:

- There are similar and high levels of higher occurrence for all statements.
- There is also a similar but lower level of sometimes for all statements.
- This indicates consistent level of thinking and scoring for this sub-theme.

The results showed a significant number of respondents indicated they were happy with the support provided by the mentor at the workplace through hands-on experience. Respondents highlighted they were afforded opportunities to put the theory into practice they learned in class. The results showed there were also respondents who were sometimes neither happy nor unhappy with the support they received.

The findings are consistent with the views of Govender, Prakashchandra and Mohapi (2021: 25) that due to set curricula, which provide students the knowledge, abilities, and attitudes necessary to succeed in the workplace, the WIL component also promotes the growth of working and professional partnerships with industry partners. Students must be prepared for the

workforce, and graduates must have the ability to apply the universally learned knowledge and skills to real-world situations through the process of mentoring.

### **6.6.7 Cross-tabulations**

To determine whether a statistically significant relationship exists between the variables (rows vs columns), a Cross-tabulation test of independence was performed.

The null hypothesis states no association exists between the two variables, while the alternate hypothesis indicates an association.

Table 6.28 on Page 175 summarises the cross-tabulation test results for: I was happy with my WIL training \* What assessments did the academic Department undertake once your training was over?

**Table 6.28: Cross-tabulation test results – happy with training**

			What assessments did the academic Department undertake once your training was over? Please list them				Total
			Examination	Assignments	Projects	Other	
I was happy with my WIL training	Hardly ever	Count	3	5	0	2	10
		% within What assessments did the academic Department undertake once your training was over? Please list them	4.3%	2.7%	0.0%	33.3%	3.1%
	Seldom	Count	5	10	0	1	16
		% within What assessments did the academic Department undertake once your training was over? Please list them	7.1%	5.4%	0.0%	16.7%	5.0%
	Sometimes	Count	14	54	8	1	77
		% within What assessments did the academic Department undertake once your training was over? Please list them	20.0%	29.3%	13.6%	16.7%	24.1%
	Often	Count	13	54	18	1	86
		% within What assessments did the academic Department undertake once your training was over? Please list them	18.6%	29.3%	30.5%	16.7%	27.0%
	Almost always	Count	35	61	33	1	130
		% within What assessments did the academic Department undertake once your training was over? Please list them	50.0%	33.2%	55.9%	16.7%	40.8%
Total	Count	70	184	59	6	319	
	% within What assessments did the academic Department undertake once your training was over? Please list them	100.0%	100.0%	100.0%	100.0%	100.0%	

There were similar numbers of respondents who indicated examinations and assignments were used (average = 65 percent), with 86 percent indicating projects were used ( $p < 0.001$ ), who were more often happy with their WIL training. The results revealed that 33 percent of the respondents indicated other assessment methods were used.

The cross-tabulation test results are tabled in Table 6.29 for: WIL was considered a valuable period in my studies \* Did the assessments cover the outcomes of WIL?

**Table 6.29: Cross-tabulation test results – WIL considered valuable**

			Did the assessments cover the outcomes of WIL?		Total
			Yes	No	
WIL was considered a valuable period in my studies	Hardly ever	Count	6	3	9
		% within Did the assessments cover the outcomes of WIL?	2.0%	18.8%	2.8%
	Seldom	Count	10	1	11
		% within Did the assessments cover the outcomes of WIL?	3.3%	6.3%	3.5%
	Sometimes	Count	54	6	60
		% within Did the assessments cover the outcomes of WIL?	17.9%	37.5%	18.9%
	Often	Count	97	3	100
		% within Did the assessments cover the outcomes of WIL?	32.2%	18.8%	31.5%
	Almost always	Count	134	3	137
		% within Did the assessments cover the outcomes of WIL?	44.5%	18.8%	43.2%
Total		Count	301	16	317
		% within Did the assessments cover the outcomes of WIL?	100.0%	100.0%	100.0%

Of those who responded yes to the assessments covering the outcomes of WIL, there was a significant number of respondents who considered WIL as being valuable in their studies (76.7 percent).

### 6.6.8 Correlations

Inferential techniques used included correlations and values obtained from chi square tests, with p-values used for interpretation (Bhandari 2016), with bivariate correlation also performed on the (ordinal) data. The results are found in the appendix (Appendix VII).

The following patterns are indicated by the results:

Positive values reveal a relationship that is directly proportional between the variables, while an inverse relationship is indicated by a negative value. All significant relationships are indicated by a \* or \*\*.

There is a directly proportional relationship between the below variables:

- The correlation value between “I was happy with my WIL training” and “I was happy with my WIL evaluation score given by my work mentor” is 0.448. This is a directly related proportionality. Respondents indicated the greater the level of happiness with WIL training, the happier respondents would be with their scores, and vice versa.
- The correlation value between “WIL was considered a valuable period in my studies” and “My WIL mentor gave me enough support” is 0.452. The p-value (0.000) is significant, due to it being less than the level of significance (0.05)
- The correlation between “WIL placement assisted me to develop office administration skills” and “I was happy with my overall experience”, is 0.537. Respondents indicated an advantage in skills development.
- “It is necessary for the WIL component to be compulsory in the OMT diploma” and “I was happy with how WIL was assessed” is 0.387. This shows an important correlation between the variables.
- “During my WIL placement I was able to practice the theory I learnt in class” and “I was given hands-on experience by my mentor” is 0.387. This is a directly related proportionality. Respondents indicate the greater the level of practising the theory learnt, the greater the experience obtained and vice versa.
- The correlation between “The WIL experience met my expectation” and “I was happy with how WIL was assessed” is 0.508. This is a directly related proportionality. Respondents indicate the expectation gained in WIL met their expectations and are happy how WIL is assessed.
- The correlation value between “It is necessary for WIL to have a fixed curriculum” and “The period I spent in industry was enough” is 0.262. The p-value (0.000) is significant being less than the level of significance (0.05)

The null hypothesis states there is no relationship between “I was happy with my WIL training” and “I was happy with my WIL evaluation score given by my

work mentor". The p-value (0.000) is significant as it is less than the significance level (0.05).

The above correlations indicate the respective variables are associated with one another; as one increases the other will increase as well.

## **6.7 Summary of findings from students' quantitative data**

### **6.7.1 Section A: Wil Preparedness**

Respondents prepared for their WIL placements by attending classes that equipped them for the workplace experience. The classes assisted students to be prepared with administrative skills, for example, WIL expectations, office skills, time management, and project management, as well as office administrative skills. There is a gap in preparedness classes, reflected by 39 percent of the respondents that indicated they did not attend these classes.

The relationship respondents had with their mentors was good, as was the percentage of the relationship of mentors and respondents. Nonetheless, respondents highlighted inconsistencies in material provided prior to WIL placements.

### **6.7.2 Section B: Placement**

Universities have a mandate of placing all students registered for WIL in a particular programme as per the HEQSF statement. Although coordinators were able to place students, there was a significant percentage that were self-placed. Furthermore, the duration of WIL placements was regarded as insufficient by respondents, who did not believe three months was sufficient to achieve sufficient skills. A suggestion to increase the placement to a period of six months was highlighted by the respondents.

Respondents indicated they were not successful in securing permanent employment. One of the advantages of WIL is the exposure students receive when they engage in WIL, which creates opportunities for contract or permanent employment.

### **6.7.3 Section C: Mentorship**

The respondents reported no significant difference in numbers of those who were visited compared to those who were not. WIL visits are important as they provide valuable feedback to coordinators on students' progress. The results raise concern, since almost all respondents were placed but a significant percentage was not visited.

Respondents indicated they were provided with a study guide and a logbook, however, 17.2 percent of the respondents mentioned they were not provided with any material.

### **6.7.4 Section D: Assessment**

Most respondents mentioned the logbook contents were discussed with them and the logbook also contained an evaluation form to be completed by the mentor. It is important for mentors to understand what is required in the logbook and not to sign without checking whether the learning outcomes are achieved during WIL placements.

Respondents indicated a mark was allocated to the evaluation by the mentor. The mark was a balance of responses between those who discussed and those who did not discuss the mark with the respondents. This indicates a gap in the allocation of a WIL assessment mark.

Respondents indicated they were assessed by the WIL coordinator, with the common types of assessment assignments and presentations, while respondents had at most two assessments, which covered the set learning outcomes. The respondents suggested the person who should assess WIL was the WIL coordinator, in addition to indicating they were allocated a mark on their assessments. The results showed a significant number of respondents indicated the assessment methods used were fair.

Graduates can become "work ready" through WIL, which improves their skills and employability. However, for this to happen, there must be an ideal interaction between the university, the students, and the external stakeholders.

This is obviously not the case, since student responses highlighted gaps in students' theoretical and practical training. Any potential advantages of WIL may be minimised by the lack of collaboration between business and academia, should the institution fail to address business demands and does not consult business experts on curriculum development, as was the case in this study. This emphasises the necessity for all stakeholders' interdependence in a collective and cooperative collaboration.

## **6.8 Interpretation and Discussion of Results**

### **WIL Coordinator responses**

The WIL Coordinator provides effective coordination of the WIL programme in an academic department, considered as the link between the university, students and industry supervisors. The role of the coordinator includes the support, coordination and administration of all WIL-related activities with the students enrolled in a particular programme.

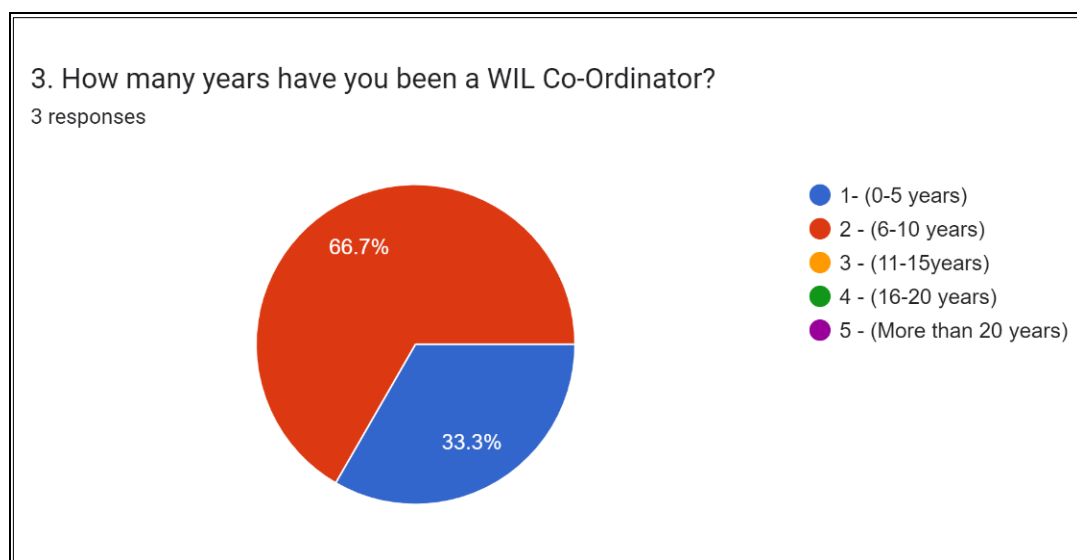
Coordinators for WIL are employed by universities, and amongst their responsibilities are: negotiating, coordinating, and managing learning opportunities with employers, supporting students and employers throughout the WIL programme, and resolving any issues that may arise.

The discussion in this section presents the analysis of four questionnaire sections, comprised of: WIL experience, student placements, assessment, and WIL policies. The results were analysed using descriptive analysis, as there were only three respondents.

## 6.8.1 Section A: Coordinator Experience and Qualifications

### 6.8.1.1 WIL Coordinator Experience

Respondents were requested to show the duration of their employment by the university.



**Figure 6.13: WIL coordinators' experience**

Respondents were asked to indicate their qualifications.

**Table 6.30: WIL Coordinators' qualifications**

	Frequency	Percent
Masters	3	100,0

The questions asked that respondents indicate the length of time they were employed by the university, what their highest qualification was and the number of years they had been employed as WIL Coordinator.

All respondents were suitably qualified with a Master's degree. One respondent indicated she/he has been employed by the university for three years, and the other two responded they had been employed for a period of 3-6 years, and involved in coordinating WIL during this time. The results suggested two respondents had been employed for a reasonable period of time, while one respondent is new in her/his position. Respondents' years of experience help contextualise the years of experience connected to their

knowledge and in this case, being employed in this position between 3-6 years is sufficient to ensure the coordinator is experienced and has been well trained to ensure the smooth transition of students to industry.

Von Treuer, Keele, and Sturre (2012) are of the opinion WIL coordinators must be prepared to offer WIL to students. It is important for coordinators to be equipped with the following skills: good interpersonal communication, dispute resolution abilities, and advanced negotiation skills. WIL coordinators must also have knowledge and abilities in management, ethics, and entrepreneurship in order to provide successful WIL programmes.

WIL coordinators must first carefully define the intended learning outcomes of the work experience to help students integrate theory and practice, thus ensuring alignment with credible workplaces and activities for student placement. This is crucial to confirm the feasibility of combining student workplace practice with theory connected to student discipline, and entails defining outcomes that are overarching, flexible, and educational, which maintain the academic course integrity and structured work experience.

## 6.8.2 Section B: Student Placements

### 6.8.2.1 Student Placements

**Table 6.31: Responsibility of student placements.**

	Frequency	Percent
Yes	3	100,0

Table 6.31 sought to establish if respondents were responsible for students' placements. Respondents all respondents confirmed that they were responsible. The findings are consistent with Patrick *et al.* (2008: 14), in whose view effective WIL placement programmes and supportable relationships that are ongoing depend on thorough preparation. The WIL Coordinator should prepare adequately and ensure appropriate preparation for student supervision and mentoring even before placing students at the workplace.

The findings are consistent with the HEQSF (DHET 2013), which states: "It is the responsibility of institutions, which offer programs requiring WIL credits to place students into WIL programs". The WIL coordinator, on behalf of the university, is responsible for placing students.

Choy and Delahaye (2009, cited in Rampersad 2018: 124) identify the management of WIL as one of the important principles the coordinator has to perform to prepare for students' WIL placements. The WIL co-ordinator must:

- ensure the university is able to allocate time and resources to WIL that are realistic for delivery of a quality product. Mutual Benefits will be ensured by its ability to establish, maintain and sustain a trusting relationship with industry, as along with genuine commitment;
- ensure the WIL programme is customised for the partnering industry;
- establish lines of effective communication between students and employers, which will ensure quality feedback is provided to both parties;
- facilitate student learning outcomes in collaboration with the requirements by the workplace; and

- monitor employer performance by overseeing the employer complies with for accreditation requirements as a training facility.

The principles highlighted above are very important in building relationships and engaging with industry to design and facilitate WIL.

There is an obligation for academics and the university to provide appropriate learning conditions. Since WIL focuses on learning outcomes, an academic approach is needed for the placement. This encompasses an emphasis on learning, making use of academic assignments, developing learning experiences and selection of organizations according to learning opportunities. Linking WIL with theory strengthens the programme and learning outcomes are maximised.

First-time supervisors should be provided with workshops by universities and academics. These workshops assist skills development for supervisors to provide students with 'non-directive' direction, while they also provide supervisors the opportunity to network and develop peer support contacts.

#### **6.8.2.2 Student placement and support received**

Question 6 highlighted how students found placements and what support they received on placements. Two respondents highlighted the university found placement and they were further assisted by the Co-operative Education Department in student placement. One respondent indicated external companies contacted the university for students to be placed with them. All respondents confirmed students were provided with support when placed in industry. Respondents further indicated students were supported by WIL Coordinators visits to where they were placed, with access to the WIL Coordinator during placements through telephone calls, e-mails and MS Teams meeting when students encountered problems that needed discussion with coordinators.

The CHE, responsible for the HEQSF, within the NQF, for which the South African Qualifications Authority (SAQA) is responsible, deals with the importance of WIL placement as follows:

“Some qualifications will be designed to integrate theory and practice through the incorporation of work-integrated learning (WIL) into the curriculum. WIL is characteristic of vocational and professionally-oriented qualifications, and may be incorporated into programmes at all levels of the HEQSF. In the HEQSF, WIL may take various forms including simulated learning, work-directed theoretical learning, problem-based learning, project-based learning and workplace-based learning. The selection of appropriate forms of work-integrated learning depends on the nature and purpose of the qualification type, programme objectives and outcomes, the NQF level at which the WIL component is pegged, institutional capacity to provide WIL opportunities, and the structures and systems that are in place within professional settings and sites of practice to support student learning. Where WIL is a structured part of a qualification the volume of learning allocated to WIL should be appropriate to the purpose of the qualification and to the cognitive demands of the learning outcome and assessment criteria contained in the appropriate level descriptors. Where the entire WIL component or any part of it takes the form of workplace-based learning, it is the responsibility of institutions that offer programmes requiring credits for such learning to place students into appropriate workplaces. Such workplace-based learning must be appropriately structured, properly supervised and assessed” (CHE 2011).

The above is consistent with all WIL placement literature and indicates since WIL is a structured part of the OMT qualification, the coordinator has a responsibility to place students into appropriate workplaces.

The responses are also consistent with Ferns and Zegwaard (2014: 181), who argue the preparation, guidance and support of students throughout their WIL placement should be provided, with students venturing into a new learning environment.

#### **6.8.2.3 Induction of students**

The respondents were asked whether students were inducted at the workplace, which all respondents agreed took place prior to students starting their WIL experience in industry.

Pacios (2013: 101) is of the view inducting students at the workplace is important, as it assists students in gaining awareness regarding the expectations of the organization or institution, helping them find their place within it. Furthermore, induction includes informing trainees with regard to the company, such as its laws and values, structure, and their placement within it; working hours and breaks; the tasks they will be completing, who has been assigned as their supervisor, and so on. A good induction programme accelerates the learning of students and encourages meaningful contributions to the organization.

The results are consistent with Smith and Worsfold (2015: 14) who state in order to prevent the challenge of student learning being hampered by being unprepared for what they experience in placement, proper preparation and induction of students are crucial prior to starting their placement.

#### **6.8.2.4 WIL preparedness sessions**

Questions 9 to 12 assessed time spent on preparedness classes, the outcomes and material provided. All respondents indicated students attended two periods per week. During these sessions students were well informed regarding WIL outcomes, with the necessary information and documents shared with students, requiring them to reflect on the industry exposure. Such material included building effective working relationships, to communicate well, to network, and be able to work in teams, as well as to manage conflict and be

culturally sensitive. Further discussion included the importance of the logbook and portfolio development.

The WIL curriculum is created to provide opportunities for students to experience the work-world before they graduate; develop or obtain skills relevant to their profession and attributes they will use in future and lastly, apply the knowledge and skills gained.

The importance of WIL preparedness before students start their placement ensure students Benefit the employer from the start of their training period. Preparedness classes are designed to equip students with office administration skills, thus ensuring “they are not lost in a professional environment” (Dwesini 2017: 2).

The results are consistent with Batholmeus and Pop (2019: 28), who contend as students find WIL placements in various workplaces with varying levels of support and mentorship, being prepared for WIL while at university through training in various skills, is essential. Universities need to encourage students to attend such classes, because these classes equip them with skills to engage in the workplace.

Henderson and Trede (2017: 70) state the research on employability and assertions related to students' general attributes show broad agreement with regard to academic programmes learning outcomes. These might include, among others, professional and ethical conduct, teamwork and communication, self-management, and the use of certain knowledge domains, since they relate to the student's specialty. This is consistent with the views of Smith (2014: 211) that the motivation for WIL curricula development is a desire to provide certain kinds of opportunities to students and develop particular types of intended learning outcomes.

All respondents confirmed students were provided with support when placed in industry. Respondents further indicated students were supported by visits at their place of work, they also had access to the WIL Coordinator during

placements through telephone calls, e-mails and MS Teams meeting when students encountered problems that needed discussion with coordinators.

To sustain an effective WIL system, Wessels (2005: 51) contends academic staff members must keep track of student progress in relation to the pre-established learning objectives of the programme. When issues or deviations occur, the coordinator should step in and take corrective action. Personal visits are preferred, however, phone calls and received reports can also be used in this circumstance.

The responses are also consistent with Ferns and Zegwaard (2014: 181), who argue student preparation, guidance and support throughout their WIL placement should be provided, because students venture into a new learning environment. They therefore rely on the WIL coordinator to provide such guidance during their first time in a different environment.

WACE (2015, cited in Rampersad 2018: 90) is of the view students must be prepared to enter the workplace with adequate soft skills. The author expounds the following skills are important, since these are what employers look for in students:

- “Professionalism or work ethic
- Oral and written communication
- Teamwork and collaboration skills
- Critical-thinking skills
- Problem-solving skills
- Self-discipline
- Time management
- Grooming
- The ability to work well with others
- Coping with diversity
- Adaptability to an unfamiliar environment”

#### **6.8.2.5 Monitoring of students**

The respondents were asked whether students were monitored during their placements. All three respondents mentioned students were monitored through site visits during their WIL placements. Ongoing monitoring by the WIL coordinator includes tracking student learning while engaged with WIL, which assists in devising real-time strategies to deal with 'at-risk' students. The WIL Coordinator has to manage what is happening to students when they are engaged in work placements.

Schoor and Erwee (2009: 89) are of the view to provide an effective WIL system, coordinators must monitor student progress in relation to pre-defined programme learning outcomes. When difficulties or changes occur, the coordinator should step in and take remedial action. Personal visits to students' workplaces are preferred, however, telephone conversations and reports by students can also be used to inform coordinators of their progress.

The findings are consistent with Winchester-Seeto *et al.* (2016: 101), who confirm students feel more comfortable communicating with someone from the university than discussing their issues with industry supervisors. The authors further allude to industry supervisors relying on coordinators to provide support where industry supervisors are unable to provide assistance.

### 6.8.3 Section C: Assessment

#### 6.8.3.1 Assessor for WIL

**Table 6.32: Person responsible for WIL assessment**

	Frequency	Percent
WIL Co-ordinator	3	66.7
WIL Co-ordinator or Industry/Mentor	1	33.3
Total	3	100

Table 6.32 respondents were asked who was responsible for the assessment of WIL. All three respondents confirmed the WIL Coordinator is responsible for WIL assessment. In one case it was, however, reported that the mentor also was responsible to assess WIL. The mentor may have given a mark in the logbook for the assessment tasks included in the student logbook.

In the WIL process, assessment is a key factor in WIL success or failure. Successful learning and its critical reflection are essential to the WIL learning process.

Jackson (2018: 557) is of the view professional competence is the WIL assessment focus. Student performance examples are used to measure competence, defined as "what students are theoretically capable of doing, and this capacity is judged by the performance of what they actually do in various circumstances at the workplace". Assessment should include attitudes, student comprehension, and professional judgment that support their practice performance, in addition to competence. WIL assessment is centred on three areas: work-world experience; skills development or improvement; and implementation of academic content in work situations. Students should be able to put what they have learnt in the classroom into practice.

The findings are consistent with the views of Ferns and Zegwaard (2014: 180), who indicate student assessment should be a collaboration of the three partners, the student, industry and academic institution (represented by the WIL Coordinator). External partners usually contribute to student assessment

by designing the assessment, process such assessment and provide feedback on student performance at the workplace.

Ajjawi *et al.* (2020: 305) opine a key characteristic in WIL experience is participation in authentic tasks. Nevertheless, realistic assignments on their own are insufficient to promote successful learning; assessment practices must also reflect the authenticity of the tasks performed. Adding conventional university assessment methods such as examinations and essays could potentially conflict with the more rich and complicated learning in a WIL setting. Additional issues arise when ensuring the assessment is genuine. Furthermore, effective WIL assessment depends on strong collaborations of industry, university and the student, who should be stakeholders in the WIL assessment process.

The findings are consistent with the idea of McNamara (2013: 188), who proposes incorporation of professional competence in the WIL summative assessment, as this will ensure learning outcomes and assessment alignment and providing students with performance feedback. WIL generally uses various instruments to measure learning theory, critical reflection, and career management, which includes reflective journals and student presentations. However, because they rely on the student providing proof of learning that are not always validated by a source that is objective, these assessment techniques are of limited use where professional competence assessment is concerned.

#### **6.8.3.2 Timing of assessment**

The question of the assessment timing was put to the respondents.

- one respondent indicated the assessment was conducted during student' placement
- two respondents confirmed the assessment was conducted after the WIL period.

### 6.8.3.3 Type of assessment

A question was asked from respondents on the type of assessment conducted in WIL. The respondents gave diverse responses:

- One respondent mentioned presentations and a project as the type of assessment conducted.
- Two respondents mentioned the PoE as the type of assessment for WIL. This means one respondent conducted two forms of assessments.

As the literature review highlighted, due to disturbances caused by the pandemic, other universities used the PBL modality. Projects were used during COVID-19 when students could not be placed, while other institutions implemented PBL as a modality recommended by Universities South Africa (UNISAf 2020: 5).

Boud *et al.* (2020: 3) are of the view student engagement in the assessment should result in monitoring and appraising their own learning and work quality. WIL should include various assessments, contingent on the WIL experience nature and duration, as well as the overall assessment weighting within the entire assessment events collection. It is thus inappropriate to be too prescriptive where WIL assessment design is concerned.

The findings are consistent with the views of Scholtz (2020: 28) that a student, in collaboration with the mentor, may agree on the tasks and responsibilities that can provide evidence, in order to build a portfolio. The PoE is an assessment method preferred by many supervisors, because it reflects on the competencies the student has acquired.

According to Schoor and Erwee (2009: 90), supervisors are also involved in student assessment. Consequently, arrangements must be made with them to have appropriate employees as mentors assigned to students. Mentors, as assessors, will require clear instructions regarding their engagement and duties in the entire assessment process.

McNamara (2013: 190) is of the opinion professional competency evidence should be acquired from a variety of sources, including the student, the mentor, and the coordinator. To assure professional competence is appropriately assessed, there is a need to establish a collaborative model for assessing WIL that draws on evidence from a variety of sources. A collaborative model-recommended assessment plan would incorporate an individually negotiated placement plan by the coordinator, student, and supervisor; a student portfolio or journal containing student declarations of capability and direct evidence of work completed in the placement; as well as the supervisor's report. The WIL coordinator would verify student placement, evaluate the PoE, in addition to moderating the supervisor's assessment.

#### **6.8.3.4 Number of assessments during the year**

The number of assessments were considered for a WIL placement.

- Two respondents indicated one assessment was conducted during the year.
- One respondent mentioned three assessments were conducted during the year and the other two respondents conducted one assessment respectively.

This means the number of assessments vary amongst the universities. The findings are consistent with Jackson (2018: 558), who highlights the different strategies WIL assessment could use, for example, learning journals, PoEs and co-ordinated reflection, instead of using one assessment. The author continues to explain students can also be assessed by using self-assessment.

#### **6.8.3.5 Marks allocation**

This question assessed the mark allocation.

- One respondent explained the mark allocation as indicated in Table 6.34 below

The respondent indicated the marks were divided into three criteria:

- orientation report
- logbook
- Portfolio of evidence (PoE)

**Table 6.33: Respondent One Mark Allocation**

Orientation Report	10%
Logbook	60%
Portfolio of Evidence	30%
TOTAL	100%

It is important to note respondent one highlighted the results for the final mark were given to students as either a PASS (P) or FAIL (F). The respondent also mentioned no mark was allocated for WIL, instead students' marks reflected a pass (P) or fail (F).

The second respondent provided the following as mark allocation for WIL.

**Table 6.34: Respondent Two Mark Allocation**

Portfolio of Evidence and Logbook	60%
Presentation	40%
TOTAL	100%

The second respondent indicated students were allocated marks as shown in Table 6.35 above. The following criteria were used:

- Portfolio of evidence and logbook
- Presentation

The second university used a percentage as a final mark for WIL assessment. It is important to note that the results from two respondents indicated assessments vary across universities, while mark allocation is also different.

The findings are consistent with Yorke and Vidovich (2014: 234), who are of the view the individual assessment task results are frequently expressed as a

percentage mark in academic modules. However, in the WIL context, where results are more frequently expressed as a binary pass/fail or positioned in stratified bands of achievement using single letter grades (such as A, B, or C), or descriptive phrases (such as "pass" or "distinction"), the awarding of numerical percentages is less usual.

Jackson (2018: 559) is of the opinion a mix of students' self-evaluation and mentor assessment is good for WIL. Students can reflect on their performance and create a portfolio of their demonstrated abilities. Jackson (2018) also highlights supervisor input, in addition to advising the use of learning outcomes and competency scales for assessment criteria, as one example of their input. Industry involvement in creating authentic assessment criteria would most likely result in assessments more closely matched with what should and might be assessed in students who are based in the workplace. Students also negotiate their targeted learning goals with their mentor and WIL coordinator, enhancing stakeholder understanding of assessment criteria.

#### **6.8.3.6 WIL assessment moderation**

The respondents were asked whether WIL was moderated.

- The two respondents indicated the assessments were moderated at their institutions.
- One respondent indicated WIL was not moderated. Where WIL is not moderated as for other modules in the academic programme, it means it is not quality assured.

Moderation is described as the verification of agreement on student achievement and the marks allocated to a student – which is a quality assurance role. WIL should be moderated, because moderation is used to ensure student assessment quality. Moderation has as its main purpose the promotion of fair and consistent student assessments (Bloxham, Hughes, and Adie 2016: 642).

The findings are consistent with the views of Campbell *et al.* (2019: 10) that it is necessary for quality assurance to be supported by internal processes, thus ensuring curriculum mapping and student achievement change and improvement. The universities' policies need to support WIL moderation as it will ensure it is quality assured.

Henderson and Trede (2017: 69) are of the opinion traditional methods of moderation, for example, marking guides and rubrics need to have meaning to industry mentors and students. All assessment stakeholders should understand the university moderation processes as it is part of assessment.

The results are consistent with Richardson *et al.* (2013) who state assessment moderation is an important aspect, considering supervisors in different environments may assess differently. Although integration in the workplace and participation in daily professional activities has been demonstrated to build a variety of skills, it does not "follow that everyday job experiences are favourable to adapting or transferring workplace learning to other conditions and situations, hence assessments have to be moderated.

#### **6.8.3.7 Capturing of final marks**

The respondents were asked when the final mark was captured in the university system.

- One respondent indicated the mark was captured in the system during the year.
- two respondents mentioned the mark was entered in the system in November/December.
- one respondent further indicated marks were entered at the beginning of the year. There are inconsistencies in capturing of marks at different universities. Those who capture their marks in November/December and at the beginning of the year. create a challenge for students who want to pursue further studies, as their academic records are incomplete when the WIL mark is not recorded on time. At the end of year, it is required all final marks should be available to students.

#### **6.8.3.8 WIL feedback**

The respondents were probed on the type of feedback students received on the WIL assessment.

- One respondent specified students did not receive feedback, since they did their WIL closer to the end of the year and the university closed while most students were still engaged in placements.
- one respondent highlighted students received feedback from the assessor immediately after their presentations.

The findings are consistent with the ideas of Venville *et al.* (2021: 21) who support that feedback allows students the opportunity to gain more information on how they should prepare themselves when they continue to engage in their placements. The feedback they receive will form a foundation for further learning enabling them to implement corrective measures to their previous performance through feedback provided to them by mentors.

The findings are also consistent with the views of Ferns and Zegwaard (2014: 181), who explain the importance of thorough and constructive feedback from mentors is regarded as an important component when evaluating the outcomes

Richardson *et al.* (2013) believe many skills required by professionals are intuitive. Organizations use a variety of feedback approaches through structures such as training, shadowing, mentoring, coaching, and direct and indirect assistance to inform trainees of their performance.

#### **6.8.3.9 Feedback to enhance the curriculum**

Venville, Lynch and Santhanam (2018:17) assert WIL can provide the opportunity to students to reinforce the professional learning traditionally acquired in university learning contexts, while generic workplace skills are simultaneously developed. Hence, students frequently report WBL environments are critical to student development as effective practitioners in their chosen fields.

The respondents were asked how they used student feedback to develop the curriculum.

- Two respondents confirmed they used feedback in curriculum development through discussions with host companies.
- One respondent highlighted feedback is shared with respective lecturers and;
- One respondent mentioned feedback is used to update the curriculum of the module he/she teaches.

The results are consistent with the views of Nicola-Richmond, Tai and Dawson (2022: 3), who argue feedback at work can take many different forms, from casual remarks from co-workers to formal performance reviews. The findings concur with Bilgin *et al.* (2017: 169), who state effective feedback is a fundamental component of WIL and an essential part of assessment, which allows students, to explain their career choices and achieve a variety of additional goals, among others.

#### **6.8.4 Section D: WIL Policies**

##### **6.8.4.1 WIL policy**

The WIL policy provides a framework for the implementation of WIL into relevant programmes offered at HEIs. The policy aims to govern all processes and procedures used in the planning, negotiation, and implementation of WIL.

The respondents were asked whether their institutions had a WIL policy, only two of the three respondents indicated their institutions had a WIL policy.

The findings are consistent with Henderson and Trede (2017: 71), who confirm university and industry policies need to acknowledge WIL opportunities. Where necessary, engagement agreements, such as a MoU, should also be included with these policies.

The findings also concur with Brown (2010: 508), who argues the creation of a shared institutional viewpoint on WIL, which can subsequently be supported through policy and coordinated practice, is a crucial first step in successful WIL

implementation. Strong, strategic leadership from the university hierarchy is required to support WIL Coordinators who are WIL champions in universities.

#### **6.8.4.2 WIL assessment policy**

The respondents were asked whether their institutions had a WIL assessment policy, with only one of the three respondents who agreed there was a WIL assessment policy.

Yorke and Vidovich (2014: 234) are of the view the combination of student outcomes from WIL and non-WIL assessment tasks should be handled so that WIL activities are not overstated. Institutional quality and assessment policies must be attentive to this risk, and a closer alignment of these activities may be beneficial. For example, organizations frequently create a separate policy to help promote new activities, however, incorporating WIL in current policies may yield greater Benefits.

#### **6.8.4.3 Guidelines in WIL assessment policy**

The respondents were asked whether guidelines were included in the WIL assessment policy, to which two respondents indicated negatively, while one respondent's results indicated the inclusion of guidelines on the WIL assessment policy.

The findings are consistent with the views of Brown (2010: 509), who states for universities to structure, support, and evaluate WIL experiences, as well as build curricula, collaborative approaches are necessary. While the widespread adoption of WIL in the HE sector shows an understanding of its numerous advantages, various universities are each reacting to the WIL agenda's problems in a unique way. The creation of an institution-wide viewpoint on WIL, subsequently supported through policy and guidelines, can be argued as a crucial first step for successful WIL component implementation in the curricula. These policies need to include industry mentors as part of the WIL stakeholders.

The findings echo the views of McNamara (2013: 189), in explaining the institutions may provide guidance on what student assessment should entail, for example, a university policy requirement might stipulate mentors should undergo training before they assess students. Such policy will include guidelines on how assessment should be practised.

#### **6.8.4.4 Improvement of WIL assessment in OMT programmes**

Respondents were asked their view on how WIL assessment could be improved in the OMT programme. While one respondent highlighted WIL mentors should be part of the assessment process, another mentioned WIL should be assessed by the university on a continuous assessment basis. This respondent further highlighted the contribution of external partners was an advantage for, students, staff and academic institutions. The other respondent suggested the WIL period should be extended to six months in order to allow sufficient time to assess students. Furthermore, the respondent emphasised all lecturers should be involved in WIL assessment, as student numbers are extensive and it can become tedious for one WIL Coordinator to assess all students.

The findings are consistent with Jackson (2018: 556) who confirms assessment has to involve both students and mentors – facilitated by academic WIL Coordinators, as it is deemed ideal when all stakeholders collaborate in WIL assessment.

### **6.9 Summary of findings from WIL Coordinators quantitative data**

This section presents a discussion of results from WIL Coordinators. The discussion will address four sections of the questionnaire comprised of: WIL Coordinators experience and qualifications, student placements, assessment, and WIL policies.

#### **6.9.1 WIL Coordinators' experience**

The qualifications and experience of respondents were considered sufficient as they were able to manage the WIL component at their institutions.

### **6.9.2 Student Placement**

Results from the WIL Coordinators indicated universities had done well in placing students and were assisted by the Co-operative Department together with those in the industry who contact universities for WIL student placements opportunities. However, while most students are able to secure placements, universities continue to experience a problem of being unable to place all students during the same period, due to increasing enrolment figures.

The results showed WIL Coordinators provided students with WIL materials in the form of study guides and logbooks prior to starting their WIL experience. Students are also supported during WIL visits, with guidance provided in terms of assessment preparations. Appropriate preparation can improve students' placement experiences, both mentally and educationally. The results indicated inconsistencies when compared with data from students, who indicated a lesser percentage of students who were visited.

### **6.9.3 Assessment**

Although there is a variety of assessment strategies that can be used, the results identified universities used either the PoE, presentations and/or projects. It is important to note two universities had a specific approach in allocating marks (Table 6.34 and Table 6.35). While other universities allocate marks to assessments, one merely gave an indication of pass or fail.

The results indicated WIL Coordinators are responsible for assessment, nonetheless, only one indicated industry mentors also participate in the assessment of students. This indicates the role of mentors in the assessment process is not discussed with them, hence they are not part of assessment.

The responses, furthermore, highlighted the number of assessments given to students varied among universities, indicating that one coordinator had one assessment and two had two assessments, respectively during the year. It is important to note the implication is that students are assessed by WIL Coordinators on completion of their WIL placements. There were no assessments conducted during the attendance of WIL classes. Therefore,

students only do summative assessments and do not engage in formative assessments. In addition, assessment strategies used are not consistent, for example, one university conducts presentations, while others require students to submit PoEs or a university does both.

With regards to entering the WIL mark in the university system, the implication is students are unable to receive a full academic record as there will be a missing mark. Furthermore, as marks are received the following year, the problem arises how the coordinator deals with students who failed the WIL module. In addition, when marks are entered the following year, it jeopardises the chances of students who want to pursue further studies, as their academic records are incomplete when the WIL mark is outstanding.

Quality assurance is an important area, because universities need to provide quality programmes.

#### **6.9.4 WIL Policies**

Policies are a blueprint of any organisation, including academic institutions, which must have policies relevant to WIL. These policies provide guidelines for the WIL programme and explain how assessment should be conducted. Responses highlighted other universities did not have WIL assessment policies and there were no guidelines on how WIL is assessed. The conclusion is WIL assessment is included in the teaching and learning policy, as is the case in other universities. No WIL policy was found explicitly for WIL assessment, as institutions tend to include WIL with a general teaching and learning assessment policy.

#### **6.10 Data from Qualitative Analysis - Mentor responses**

The interviews were conducted with 20 mentors telephonically due to COVID-19. Of the 20 respondents, five were interviewed using MS Teams; an online platform. At the beginning of each interview the purpose of the interview was explained to the participants and their consent sought. Upon receiving the consent, the interview was started and interviewees informed that notes of

their responses will be taken. Interviews on MS Teams were recorded. All responses were transcribed.

In analysing qualitative data, the researcher categorised the responses collected from the interviews into themes for accurate interpretation and discussion of the findings (Maguire and Delahunt 2017: 3353). The study findings are presented with support from literature, where possible, while also categorised and discussed under the following research themes:

### **6.11 Research Themes**

- Theme One: Monitoring of Students
- Theme Two: Students' Placement
- Theme Three: Sufficiency of WIL Period
- Theme Four: Meetings with mentors
- Theme Five: Induction Period
- Theme Six: Expectation of Training Period
- Theme Seven: Evaluation of Performance
- Theme Eight: Assessment and Mark Allocation
- Theme Nine: Feedback on Performance
- Theme Ten: Inclusion of WIL in the OMT programme

In this section, the results collected through semi-structured interviews from 20 respondents who were mentors/industry supervisors where students were placed for WIL are presented. The companies targeted are situated around the provinces of KZN and the Eastern Cape. The participant responses from the interviews were analysed and the findings are reported.

#### **6.11.1 The Research Instrument**

The semi-structured interview schedule was arranged into five sections namely; role of mentor, placement, student support/guidance, and assessment, as well as OMT programme, with a total of 21 questions, which were coded, while themes were formed as indicated above.

## **6.11.2 Discussion of Themes and Findings**

### **Theme One: Monitoring of students**

Theme one sought to determine the supervisor/mentors' role during the WIL period and the period of supervision. The respondents indicated their role had been to monitor and coach students during their WIL placements, others shared the role of monitoring/coaching students with supervisors from other departments where students were placed.

One participant highlighted, "... For the past three years I have coached 18 students. I take six students per year but under normal circumstances, I sometimes take more if other departments are willing to assist".

Another participant indicated, "My role is to monitor them and expose them to the work environment, groom them on becoming young professionals. Train them on the operations of the department in terms of duties of the department".

It is important to note a small number of supervisors did not individually monitor and/or coach students, where placements were instead done in other departments. Hence, the role of mentorship was shared with other departments, as one participant explained: "Monitoring is shared with other colleagues from other departments where the students are placed. I provide a liaison role between the mentor and the university WIL Coordinator".

The results above support the opinions of different authors that mentors provide context learning to WIL students. Smith-Ruig (2014: 771) explains the process of mentoring allows students to understand and learn about real-life situations in the workplace. The mentor provides information that helps students to envision their profession through workplace exposure.

The results are also in accord with a study conducted by Singh and Mohamed (2013: 1385), where they found mentors contributed significantly to WIL skills development of students in a post-graduate programme. The students were able to work in collaboration with their mentors to accumulate skills to bridge the gap in connecting theory and practice. Mentors have to provide a

supportive role and share their knowledge, skills and experiences to develop the younger employees to reach their potential.

### **Theme Two: Student Placement**

The study desired to determine how students were placed within organisations. The respondents indicated most students were placed through the university and a small number found their own placements. From the responses received, it appeared universities were able to place the majority students, as they are mandated to place students. The new framework from HEQSF (DHET 2013: 11) states universities are responsible to find placements for students. Therefore, a strong collaboration is required between industry and universities to create opportunities for student placements. Universities are also encouraged to devise creative methods so that more opportunities are available for student placements.

The findings correspond with the ideas of several authors that WIL is a placement activity, whereby students are placed at a workplace for a particular period (Dean, Eady and Yanamandram 2020: 2). These findings also concur with a study conducted by Jackson *et al.* (2017:46), where it was recommended a “placement proposal” can be provided to potential industry hosts in order to structure the focus of student placements.

The findings are consistent with a study conducted by Martin *et al.* (2019: 234), where mentors agreed universities should have a pre-placement plan prior to students being placed.

### **Theme Three: Sufficiency of WIL Period**

According to the interview responses, a small number of respondents identified four months as sufficient for OMT students to be placed for WIL in the industry, while, others recommended a period of six months as sufficient.

One respondent highlighted “... the period is not enough because there is a variety of programmes in my unit that they need to learn and they do not get the opportunity to learn everything just the minimum of what the unit does”.

These responses confirm the views by Atkinson (2016: 4) that placements can vary in length, ranging from six months to one year or semester-based and holiday placements of two to three months duration, to shorter experiences that can be less than a month.

The findings are consistent with the views of Dean *et al.* (2020: 3), where the authors are of the opinion WIL placement is an activity where students should spend extended periods of time in the industry. The time they spend should be either at the end or closer to the end of their academic programme.

In a study conducted by Rayner and Papakonstantinou (2015: 14) to investigate the perspectives of students after completing six months of their WIL programme the authors established students felt the placement could improve should the programme be longer and they were given a longer timeframe in which to learn and work on the given project.

#### **Theme Four: Meetings with mentors**

The theme required mentors to explain how students were supported during their WIL placements. Almost all respondents highlighted support was provided to students through weekly meetings. In these meetings, mentors perused the student logbooks in addition to having discussions with students regarding their performances. A smaller number of respondents explained providing support to students was a challenge, because students were not always at the workplace because of COVID-19 restrictions, as they were working from home. Mentors held online meetings that were sometimes not productive because of connectivity challenges. Further to this they claimed WIL is a hands-on-experience, as a result it was problematic to support students when they are not close to them for supervision. Therefore, mentors relied on student entries in their logbooks to confirm they were progressing with administrative activities given to them.

Mentors play a very important role as they provide support to students when they integrate into the workplace. Wang, Gill and Lee (2022: 2) are of the view supervisors have to provide support, particularly on student performance and

share their knowledge to fast-track the development of student skills at the workplace. Mentors are required to meet the demand for WIL placements of students by universities.

The findings are consistent with a study conducted by Fleming and Pretti (2019: 5), who found students agreed they were provided with sufficient support by their supervisors during WIL placements.

The results above are also in agreement with the findings from a study by du Plessis (2019: 21), where the author found workplace supervision is imperative in supporting students. Such support ensures WIL outcomes are achieved.

#### **Theme Five: Induction period**

In response to the question on student induction prior to WIL training, the majority responded students are inducted prior to starting their WIL, while a small percentage did not provide any induction to students. The majority mentors responded they offered a brief presentation for students, where both student and the organisation's expectations were explained.

One participant responded as follows:

“I schedule a meeting with the student or students; if there are many. Then I do a brief presentation of the organisation policies, obviously, the important policies that affect the student. The expectations of WIL are discussed but normally students are not able to voice out their expectations on their first day of talking to them”.

The results obtained are consistent with Smith and Worsfold (2015:26), who postulate WIL preparedness and induction of students prior to commencing at the workplace are important, as it ensures student learning is not compromised by the shock of being ill-prepared for what they encounter at the workplace. The findings are, furthermore, aligned with recommendations by Dean and Sykes (2021: 14) that WIL coordinators and industry supervisors have to consider providing sufficient time early in the placement to discuss and outline

student activities. Mentors have to identify other employees who can help and support in the absence of a dedicated supervisor.

The findings are also in line with a study by Martin *et al.* (2019: 233), where the authors found supervisors identified student support an important factor in achieving WIL expectations at the workplace. WIL supervisors emphasised their availability and access to students to provide support and mentoring where needed.

The results additionally resonate with the opinion of Kiriri (2019: 259) that students need to have access to the supervisor during their WIL placement. The interaction between student and supervisor strengthens emotional support for the student.

#### **Theme Six: Expectation of training period**

The theme required mentors to explain how the WIL outcomes and expectations were discussed with the student. The majority responses highlighted outcomes were discussed with students using the logbook from their respective universities. A session was dedicated to the discussion of outcomes during student induction, when the mentor went through the logbook with the student. Respondents highlighted it was important outcomes were explained to students, as they form the basis of WIL placements. While a few respondents outlined the outcomes of the WIL programme were discussed with the student via e-mail, as students could not start their WIL placements on the appointment date, the start date had to be delayed due to COVID-19 restrictions.

The findings in this study are coherent with the views of Smith (2014: 211), where the authors established the WIL curricula are motivated by a desire to create certain types of opportunities offered to students and to develop their intended learning outcomes. The results above are also consistent with the views of Henderson and Trede (2017: 68), who are of the opinion students need to engage in adequate preparation and knowledge of skills prior to

placement for WIL to be effective. Students have to understand the learning outcomes they need to achieve before they engage in WIL placement.

The above findings are in accord with those by Khampirat (2021: 111391), who argues learning outcomes are deemed an important foundation for evaluating the efficiency of professional development by HEI institutions through learning experience, as they are used as critical criteria for programme accreditation.

The above results are consistent with the opinions of Matsoso and Benedict (2020: 98) that the WIL learning outcomes should be clearly communicated, enhance student performance with learning in their specific discipline and develop the skills appropriate to their specific profession.

### **Theme Seven: Evaluation of Performance**

The study determined whether mentors are responsible for the assessment of students while engaged at the workplace. The results indicated a small number of respondents were responsible for the evaluation of students. Most respondents explained they did not assess students but instead evaluated their performance against the set outcomes. Other respondents indicated they were not responsible to assess students and felt the WIL Coordinator or the university should be responsible for student assessment on completion of the WIL placement.

One respondent highlighted “.... I think I should assess students as they work with me and I expose them to the required office duties. It is important to assess their performance against the required standards”. Whereas, another respondent mentioned that “... Since I am not a teacher or lecturer, I don't think I'm capable to assess students”.

Ferns and Zegwaard (2014: 483) argue the mentor is in a better place to evaluate students at work than staff from the university, which is consistent with the current study findings. The mentor is able to observe the student at work performing required activities over a period, whereas the university staff conduct the assessment after the WIL performance, and the student can

improvise situations when aware an assessment will be conducted (Ferns and Zegwaard 2014: 483-484).

The results also echo those of a study conducted by Reddan (2013: 229) where students were assessed by their mentors. Student performance was graded and a specific grade allocated on completion of assessments. A preference was indicated by students to be graded by their industry supervisors and felt a great sense of achievement.

The findings are in accord with McNamara (2013: 189), who is of the view the industry supervisor is another resource for student assessment. Supervisors work closely with students and should, therefore, be included in their assessment.

#### **Theme Eight: Assessment and mark allocation**

The study sought to determine the importance of mentors to provide a mark after assessing the students at the workplace. The results revealed the majority respondents felt it was not the responsibility of mentors to provide a mark to students. Respondents emphasised it is not their role to provide student marks, and felt the responsibility of allocating marks should rest with the university, since academics are trained in assessment. Furthermore, the results indicated a majority respondents highlighted the allocation of marks should be left to the WIL coordinator or the university and not industry mentors. The respondents emphasised academic institutions are responsible for marks, with workplace mentors having to evaluate student performance while engaged in WIL, because they are not experts in assessment. Only a few felt it was important to provide a mark for students to improve their performance, knowing they did not do well when assessed.

The above results correspond with the views of Jackson (2018: 560) that the failure of WIL coordinators to guide mentors in effectively assessing WIL students may increase grade discrepancies. The author adds academic departments offering WIL frequently believe = industry mentors are both conversant with the required expectations of student performance as well as

having a framework against which to assess them. It is unclear whether it is possible to ensure each supervisor has a similar understanding of what they are assessing and the standards required. Universities invest significant resources in developing partnerships with employers, yet, contribute little in ensuring these employers are equipped and confident in their role as mentors. Workplace mentors may not be suitable to assess students as the lack of assessing skills may increase inaccuracies in allocating grades/marks to student assessments.

The findings are in accord with the ideas of Ferns and Zegwaard (2014: 182), who explain the mentor will commonly complete a job performance review as part of a work placement programme. However, there are instances of programmes where mentor assessments of student work performance are excluded from the final student score.

#### **Theme Nine: Feedback on performance**

Participants had to respond regarding how they provided feedback to a student on his /her work performance while engaged in WIL. The results indicated almost all respondents provided verbal feedback through one-on-one meetings with students. There were far fewer responses indicating the use of written communication, comprised of e-mails, notes on the logbook and complementary notes.

The findings resonate with Ferns and Zegwaard (2014: 183), who are of the view that support and feedback to students during WIL enhance their learning experience as they learn from an environment that is authentic and relevant to their practice or discipline.

The above findings align with the views of Peach, Ruinard and Web (2014: 248) that mentor feedback is an important aspect in student learning during WIL. Providing feedback to students closes the gap of what they have learnt and still have to learn. Students are able to identify their strengths and areas where they require improvement.

The findings concur with Atkinson (2016: 15) whose opinion is that supervisors are greatly involved in providing feedback, since they have the required expertise and are appropriately positioned to encourage students in their performance.

### **Theme Ten: Inclusion of WIL in the OMT programme**

The theme assessed the contribution of WIL in the OMT programme. The results indicated all respondents thought WIL was an important component and important to be included in OMT. Furthermore, the results indicated WIL contributed to the experience of students and should be included in the programme. One respondent commented "... WIL trains students on what to expect in the real working world so they are prepared and have experience on how to deal with challenges they may be faced with".

Respondents agreed WIL increases the chances of employability for students as they are hands-on and marketable in the work environment. Mentors explained WIL makes students more employable as most companies do not have time and resources to train new recruits.

One participant responded saying "... the student should be taught what to expect in the real working world so they should be prepared and have experience on how to deal with challenges they may face at work, so WIL equips them to do that". While participants agreed on the WIL contribution, they also highlighted universities need to enhance the curriculum by including soft skills in the programme, as these are industry requirements.

The results are consistent with findings from a study conducted by Rambe *et al.* (2015: 603) that WIL has contributed meaningfully to the OMT programme and has served as an important channel through which students can learn professional skills and work ethics.

Respondents' results echo the viewpoints of Jackson and Wilton (2016: 270) that WIL is important, because it focuses on enhancing students' professionalism and knowledge in their discipline, understanding of the

required skills and performance of specialised job roles. The findings also concur with du Pre' (2013: 103) on the contribution of the OMT programme. The author postulates there are initiatives that involve WIL students enrolled in office management programmes. The students contribute by way of secretarial and administrative assistance to the police services and correctional service centres. When students are placed at these workplaces it allows hard-pressed police services staff relief from their desks enabling them to concentrate on crime prevention and offer community protection.

### **6.11.3 Summary of qualitative data findings from interviews**

This discussion utilised thematic analysis of the qualitative data from the interview process. Data were analysed by finding trends and the frequency of particular concepts or terms in respondent comments and the literature review. Each data point was then categorised into more manageable sub-categories and connected to a larger topic.

The questions selected for this qualitative format of data gathering required data answers to provide more thorough and rich data to aid the study. The questions pertaining to the qualitative discussion involved the following themes:

- Theme One: Monitoring of Students
- Theme Two: Students' Placement
- Theme Three: Sufficiency of WIL Period
- Theme Four: Meetings with mentors
- Theme Five: Induction Period
- Theme Six: Expectation of Training Period
- Theme Seven: Evaluation of Performance
- Theme Eight: Assessment and Mark Allocation
- Theme Nine: Feedback on Performance
- Theme Ten: Inclusion of WIL in the OMT programme

Mentors indicated they saw their role as evaluators rather than assessors. It was noted the majority mentors regard themselves as evaluators, with assessment seen as the university's responsibility. However, it is important to highlight some mentors felt they were not responsible for any assessment of students, hence they were uncomfortable to allocate a mark to student assessments. It is also imperative to observe mentors are stakeholders in students' WIL placements; they are responsible for training, mentoring and monitoring student progress, it is thus important they partake in their assessments. This can be attributed to the lack of information for mentors.

WIL Coordinators are instrumental in ensuring mentors are equipped, by providing necessary resources to the mentors in order to handle the WIL component at their workplaces. Since there are no documents with guidelines, mentors only rely on the logbook students use to log their daily/weekly duties. For this reason, mentors are not fully equipped to train WIL students in the workplace. The universities' WIL policy specifies the roles and responsibilities of a student, university and industry mentors. Therefore, these roles should be discussed with stakeholders responsible for their performance, as they should be aware of what is expected of them.

Formative and summative assessments are required by universities' assessment policies, as part of assessment activities. Formative assessment continuously provides students with feedback while learning, and is frequently described as "assessment for learning". It is evident formative assessment is not formalised, as mentors do give students feedback on their performance but such performance is not assessed. The assumption is a student is given a task, he/she does it and, thereafter, the mentor checks and identifies areas where improvement should be effected. There is no formal assessment done on how a student has handled the task. Mentors are evidently not responsible for summative assessment, since they felt it is the university's responsibility to allocate a mark to student assessments.

As mentioned above, due to lack of understanding on how to assess, mentors provide face-to-face feedback to students. Feedback is essential in formative assessment, because it tells students how they performed while working on assigned activities. To ensure learning has significance for students, feedback must be provided to them as soon as feasible, on a continuous basis, so they are able to implement corrections. Students should reflect on the feedback given. Since WIL coordinators are based in universities, it is not feasible for them to assess students while at workplaces. Therefore, as mentors continue to interact with students while at workplaces, they should conduct formative assessments.

The results revealed the timeframe allocated for WIL placement is insufficient. Mentors usually rotate students within departments so they are exposed to different functions in the OMT discipline. Mentors felt it was, at times, challenging to monitor students, because they were dispersed in different sections/departments within the company. For this reason, mentors thought the period allocated to WIL is very short, with students not fully capacitated. The current WIL period disadvantages students, since they are unable to complete their training as they, sometimes, finish their workplace experience before moving to another section/department for additional exposure.

The responses from mentors indicated the role of mentoring had to be shared with other supervisors because of student rotation. The situation usually creates instability for students as they become unsettled and it takes time for them to familiarise themselves with the new environment.

### **6.12 Triangulation**

To create a thorough understanding of a phenomenon, triangulation in qualitative research refers to the utilisation of different methods or data sources. Triangulation has also been seen as a qualitative research technique for testing validity, by bringing together data from many sources (Carter *et al.*2014. 545).

Quantitative data were collected from 351 student questionnaires, while 20 semi-structured interviews were conducted with mentors, with a questionnaire also administered to three WIL Co-ordinators. Quantitative and qualitative data could be included in one study as a data collection technique.

The semi-structured interview only included open-ended questions, whereas the questionnaires included closed-ended and open-ended questions. Selected findings for some of the major study topics are triangulated using both instruments (interviews and the questionnaire) along with scholarly sources. To show the triangulation analysis used in this study, summarised below, the main study sections were used.

The sections below were applied in this study, and used for triangulation below:

- Section One: WIL Preparation
- Section Two: Students' Placements
- Section Three: Mentorship
- Section Four: Assessment
- Section Five: WIL Policies

### **612.1 Section one: WIL Preparation**

Section one consisted of the preparations that students underwent before they started their WIL placements.

The data from the student questionnaire indicated an average number of respondents attended the WIL preparedness classes, which were allocated two contact periods per week. The majority of respondents indicated they were provided with a logbook and a study guide as material to use during WIL placements. Respondents confirmed they were informed about the outcomes of WIL.

The data from the WIL Coordinator questionnaire confirmed students attended preparedness classes and during these classes, students were informed of the learning outcomes to be achieved while they were engaged in WIL.

### **6.12.2 Section two: WIL Placement**

The results from the student questionnaire indicated the period of WIL placement was inadequate and some respondents suggested the period be extended to six months. Respondents identified additional skills developed during the training, for example, communication, computer and office administrative skills.

The findings are consistent with the views of Batholmeus and Pop (2019: 28) who state students in the WIL programme acquire general skills, such as communication and critical thinking, which are necessary in every workplace.

The data from WIL Coordinators showed students were placed in companies through assistance of the Co-operative Education Department and companies also contacted the universities offering to place students within their companies.

The data from mentors confirmed the period allocated for WIL placement was insufficient and had to be extended to, at least, six months. The respondents highlighted, due to mentors rotating students within other departments at the workplace, the period of WIL should be extended.

The data from the interviews indicated students were inducted prior to starting their WIL experience and outcomes were discussed before WIL engagement.

### **6.12.3 Section three: Mentorship**

The data from the questionnaire for students indicated the majority respondents identified the supervisor as their mentor during placement. The respondents indicated they had between excellent and good relationships with mentors.

The data from WIL Coordinators indicated students were provided with support through visits to the workplace where students were placed and problem areas were attended to during these visits. Nonetheless, responses from students indicated most students were not visited during their WIL training.

The data from the interviews indicated the participants mentored and coached students and the role was shared with other supervisors from other departments, where students in other companies were placed on a rotational basis.

#### **6.12.4 Section four: Assessment**

The data from students' questionnaire indicated that the majority of respondents revealed that assessments were conducted by the department lecturer and the coordinator. The findings concur with the views of von Treuer *et al.* (2011), who state the evaluation of the student learning experience on work placement is, however, typically more complex than evaluation of a standard university module. Workplace learning situations are quite different from classroom-based learning: the university often has little control over the learning environment, which is the workplace.

The data from mentors indicated they felt they were not responsible for assessing students and therefore, did not have to allocate marks to student assessments, seeing themselves instead as evaluators. The findings are consistent with the idea of Atkinson (2016) that the responsibility of assessment processes usually rests with specific academic disciplines that offer the programmes.

Ferns and Zegwaard (2014: 184) contend mentors may be hesitant to engage in the assessment of student skills, because they believe it will compromise their connection with the student. A typical issue raised by industry supervisors is the time and resources required to support and guide students throughout their work placement. Allocating time and energy to the assessment process puts additional strain on the mentor, making it critical to have effective and efficient performance assessments that are not time-consuming for the supervisor to complete.

The data from coordinators indicated students who were not provided with feedback on their assessment because of the assessment timing. The findings echo those of Ferns and Zegwaard (2014: 184), who are of the view feedback

is a valuable element in student participation in the assessment process, as it influences student behaviour and the ability to reflect on what they have learned. Feedback allows students to engage corrective measures in their performance.

#### **6.12.5 Section five: WIL Policies**

The data from coordinators indicated there were WIL policies, however, there was no policy specific to WIL assessment. The data from mentors indicated the only document they discussed with students was the logbook provided to students by the university.

The findings are consistent with the ideas of Ferns and Zegwaard (2014: 182) that the current landscape of HE includes policies that specify expected quality standards and the specific documentation needed to prove the criteria are satisfied.

#### **6.13 Summary**

The findings from both quantitative and qualitative methods of data collection were discussed in this chapter. Results revealed that most respondents indicated that the programme does cover and contain WIL material. However, respondents indicated finding employment has been a difficult task, despite having been taken through WIL training. The WIL Coordinator results showed students attend two periods per week of WIL preparedness classes.

Assessments are conducted and feedback provided to students with feedback also used to enhance the OMT curriculum. However, respondents showed not all their institutions have policies specific to WIL assessment, hence there were no guidelines on how WIL should be assessed.

This chapter presented an analysis of the quantitative and qualitative data collected, including a discussion of the study findings. Data collected from students were coded and analysed using Microsoft Excel and SPSS, with results presented in the form of figures and tables.

The next and final chapter offers the conclusion and recommendations from the study.

## **CHAPTER SEVEN**

### **CONCLUSION AND RECOMMENDATIONS**

*“..... recommendations may include study design, methods, sample size, and quality issues necessary to adequately power a future study”.*

Wright, Brand, Dunn, and Spindler, (2007)

#### **7.1 Introduction**

The chapter has as its main aim to offer conclusions and recommendations for the study. Chapter 6 described the study findings founded on the analysis and interpretation of collected data from the sample of industry mentors, students and WIL Coordinators from three universities under study. Data were collected from a sample of students, university WIL Coordinators through self-administered questionnaires and semi-structured interviews with mentors. The study endeavoured to investigate the WIL assessment practices in programmes offering OMT at three South African universities. This chapter provides a summary of the complete study and findings, in relation to the research objectives set out. Final conclusions and recommendations are also addressed for future research. In addition, a framework to strengthen the capacity of partners involved in the WIL assessment process at universities is proposed to assist in the understanding of WIL assessment strategies and processes. The framework will help clarify the role of each stakeholder in WIL assessment.

#### **7.2 Aim of the study**

The study aim was to evaluate whether current assessment practices, in the OMT programme at the three universities under study, are consistent with the WIL outcomes and to discover whether the assessment practices contribute to curriculum enhancement. The outcome of this study will enhance the assessment practices of WIL in the OMT domain in HE.

### **7.3 Objectives of the study**

- To examine WIL policies at the identified universities.
- To assess whether the learning outcomes and assessments are coherent to achieve the set institutions' WIL goals.
- To assess the role of various WIL stakeholders in the assessment process.
- To appraise the assessment practices in place and how they are quality assured.
- Develop a Framework for strengthening the capacity of all partners involved in WIL assessment at universities.
- To provide recommendations to improve and strengthen the WIL programme.

### **7.4 Summary of research study**

The summary of findings from both the questionnaire and interview instruments are provided below.

The study sought to evaluate whether the assessment practices are consistent with the WIL outcomes and to discover whether the assessment practices contribute to the enhancement of the OMT curriculum. The SA HE system encompasses universities (including research-intensive universities), comprehensive universities, UoTs and TVET colleges. Many universities pride themselves on delivering career-focussed programmes, finding it important and useful to prepare students for the world of work and to assist them with practical experience, by exposing students to the actual work environment through work placement.

To achieve this, SA has introduced a number of government policies over the last few years that emphasise WIL centrality. The NGP, the NSA, the NSDS III and the White Paper for Post-School Education and Training, all "reflect a growing emphasis on workplace learning as a core and essential component of vocational and occupation education". Furthermore, the NSA highlights its eight commitments on training and development, with amongst these, making internship and placement opportunities available within workplaces.

The Accord also includes the commitment of providing internships for third year students at universities, who need work placements as part of their qualifications, in addition to providing work exposure in a work environment. In recognition of this, WIL was introduced as a component that will assist students to gain this work exposure in industry.

## **7.5 Summary of Primary Findings**

This section will address the research questions of the study.

### **7.5.1 Research question 1: How are WIL policies/procedures at the three universities under study in-line with those of the DoE?**

The results from WIL Coordinators indicated inconsistencies in unpacking the WIL policies in line with their WIL programmes. Universities have to develop these policies in order to align with the HEQSF (2013), as this document denotes

“... some qualifications will be designed to integrate theory and practice through the incorporation of WIL into the curriculum. WIL is characteristic of vocational and professionally-oriented qualifications, and may be incorporated into programmes at all levels of the HEQSF. The selection of appropriate forms of WIL depends on the nature and purpose of the qualification type, programme objectives and outcomes, the HEQSF level at which the WIL component is pegged, institutional capacity to provide WIL opportunities, and the structures and systems that are in place within professional settings and sites of practice to support student learning”.

The three universities under study have included WIL in the OMT programmes as per HEQSF prescript. Students are placed at suitable workplaces and supervised while on placements. The WIL component is compulsory and students can only graduate after completion of WIL, hence it is credit-bearing. This means it is critical there are policies that include guidelines on WIL practice and more specifically, how it should be assessed.

### **7.5.2 Research question 2: Are the institutions' learning outcomes coherent with WIL goals at the three institutions?**

The outcomes of WIL is to integrate the student's prior knowledge and understandings acquired through various teaching and learning modalities with work practices; which is integrating theory and practice. Students' learning, good preparation of content, skills, and understanding of learning outcomes facilitates efficient student engagement.

The outcomes of WIL are coherent with the WIL goals at the three institutions under study. The WIL policies at the three universities highlight that the WIL goals are to develop competencies of students through the integration and application of knowledge, skills and values in an authentic environment. WIL integrates academic study with work-based learning activities. Furthermore, among the goals is the inclusion of a formal credit bearing compulsory WIL programme offered by institutions. An additional goal is to ensure the implementation of the highest standard of WIL programmes which will produce marketable graduates.

The mentors highlighted the goals of WIL and learning outcomes are discussed with WIL Coordinators prior to placing students with industry. From the interviews with mentors, it is evident WIL outcomes are discussed with students at the beginning of their WIL placement; specifically, during the induction phase. There are sessions dedicated to the explanation of outcomes using student logbooks. Where students were not physically at workplaces, due to COVID-19 restrictions, outcomes were discussed via e-mails or virtual meetings. Therefore, the WIL goals and learning outcomes are coherent, with industry mentors ensuring students achieve the set outcomes through monitoring and assessing/evaluating students during their workplace experience.

### **7.5.3 Research question 3: What is the role of mentors/supervisors, WIL Coordinators and students in assessment?**

The results from the interviews indicated the role of mentors in assessment is that of evaluators instead of assessors. It was noted the majority mentors regard themselves as evaluators, since assessment is seen as the responsibility of the university. However, it is important to highlight some mentors felt they were not responsible for any assessment of students. It is also imperative to observe mentors are stakeholders in student WIL placements.

### **7.5.4 Research question 4: What are the assessment practices in place for WIL at the three institutions?**

The assessment practices for WIL are that during the WIL placement, mentors assess students according to the set outcomes while engaged at the workplace. Students are then assessed by a WIL Coordinator/university staff member after they complete their WIL experience. Assessment is in the form of student presentations, while other students are assessed through PoEs. Usually, students record their daily tasks in logbooks or build portfolios to present their experience and the skills they have developed. Most of these assessments used during WIL are paper-based and insufficient in exhibiting students' mastery of complicated activities. The logbook also forms part of the assessment, as students and mentors use it to evaluate/assess student performance (CHE 2011: 43).

During student presentations a mark is allocated by the WIL Coordinator. Thereafter, the rating or mark in the logbook is combined with the presentation mark, with an average mark calculated as the final mark. The feeling of mentors is the assessing and mark allocation responsibility should rest with the university, because academics are trained in assessment. Only a few agreed it was important for mentors to provide a mark for students to improve their performance when they knew they did not do well when assessed.

The disparities in WIL assessment practices between the three universities were emphasised in the results. The WIL Coordinator is in charge of conducting WIL assessments, and only one respondent mentioned the industry mentor is also involved. This suggests mentors are not taken into account when students are assessed.

Additionally, there are discrepancies concerning the timeframe for the assessments. Some universities conduct assessment during the year, while others assess students at the end of the WIL experience.

Results highlighted the inconsistencies in WIL assessment practices among the three universities. The assessment policies prescribe assessment practices should include formative and summative assessments. Formative assessment is often defined as assessment for learning, because it provides feedback to students on a continuous basis during their learning. Feedback is key in formative assessment, as it offers students an evaluation of their performance during the learning process. Hence, it is vital for students to receive feedback as early as possible, so that learning can have meaning for them. Formative assessment has posed a challenge for WIL, since coordinators are located at universities, they cannot assess students while at workplaces.

The results highlighted mentors are not assessing students, instead they evaluate their performance. The assumption is they might not feel confident to assess, as they do not have skills on how to assess. Furthermore, they are not fully equipped on how to use the logbook as mentors, they merely pen their signatures without understanding its purpose. Therefore, the assessment collaboration of stakeholders is emphasised because it will assist to unpack the role of each participant.

#### **7.5.5 Research question 5: How is quality of the assessment assured?**

Quality assurance is articulated in the White Paper for Post-School Education and Training as an important function of HEIs, in order to ensure that academic institutions have capacity to manage assessments in programmes and

certification. The CHE, through HEQC, also emphasises quality assurance in academic institutions. The White Paper for Post-School Education and Training advises training providers should have professional competence in dealing with quality assurance at their institutions (DoE 2013). In addition, HEIs house the Quality Management Units, mandated to ensure programmes offered at these institutions are quality assured.

Responses from the WIL Coordinators indicated that at the universities under study; WIL is moderated in only one university with WIL assessments not moderated in the other two, therefore, the assessments are not quality assured; an important aspect when assessing students. The assessment policies of the three universities prescribe all exit level subjects/modules should be moderated by an external moderator, however, the universities' WIL policies are not explicit on how WIL is quality assured.

The absence of quality assurance in assessment at HEIs compromises assessment quality, specifically WIL assessment at universities. Since WIL is undertaken at third year level, which is an exit level, it is important WIL is moderated to ensure quality assurance, according to the university policy. Though not all universities have developed formal structures to ensure WIL is moderated, it is imperative WIL moderation is in place.

#### **7.5.6 Research question 6: What are students' perceptions/experiences with WIL?**

Responses from students indicated they were happy with the WIL programme, even though they were unable to secure employment through the WIL programme, they were satisfied with how they were assessed by the coordinator. However, inconsistency in the period of offering WIL was found, with students revealing they would rather have a period of six months training, as this will sufficiently prepare them for the world of work.

Students also highlighted WIL Coordinators have to increase the number of visits to workplaces, as some students were not visited where they were placed. WIL visitations are important, because they provide a platform for

students to liaise with the coordinator and are able to discuss important issues relevant to WIL. The responsibility of student placements rests with universities as per the HESQF, a reasonable percentage of students endeavoured to find placements on their own and some with the assistance of lecturers in their respective departments. Due to the high number of enrolments in universities, placements become a challenge for WIL coordinators.

Students indicated marks were allocated inconsistently for their WIL assessments. Further to this, the assessment methods used by universities varied, indicating discrepancies in how students were assessed. Other universities used traditional assessment methods, for example, examination and written tests, which are not appropriate for WIL assessment.

Marks were also provided to students at various times on the academic calendar. Some students revealed they received their marks during the year, others were able to see marks on the system (student portal) as these were captured in November/December and at the start of the following year. For this reason, marks were not discussed with students in order to evaluate their performance against the mark allocated to their assessment.

Students highlighted they were happy with WIL preparedness classes as these assisted in ensuring they were ready to start their training. The attendance of classes equipped them with the skills required at the workplace and they were also able to develop administrative skills during their workplace training.

#### **7.5.7 Research question 7: How does WIL contribute to the OMT programme?**

Results indicated WIL contributed to the OMT programme by exposing students to the workplace, thereby enhancing their office administration skills. WIL also trains students in the “real world” as they prepare for their future careers. The inclusion of WIL in the diploma contributes to the potential employability of students as they gain experience relevant to their discipline.

An advantage of WIL is that students are hands-on in the work environment and receive relevant training while being mentored by supervisors. Universities have to emphasise the importance of graduate attributes and these should be included in the curriculum. Graduate attributes can be included in the WIL curriculum since it creates an opportunity to train students for the world of work.

WIL offers a work environment where theoretical knowledge can be applied; an understanding of the quickly changing nature of the workplace; the opportunity to develop important generic skills such as teamwork, interpersonal, and communication skills; short-term financial advantages; and improved employment prospects; as well as the opportunity to develop career strategies; and the opportunity to work in a different culture.

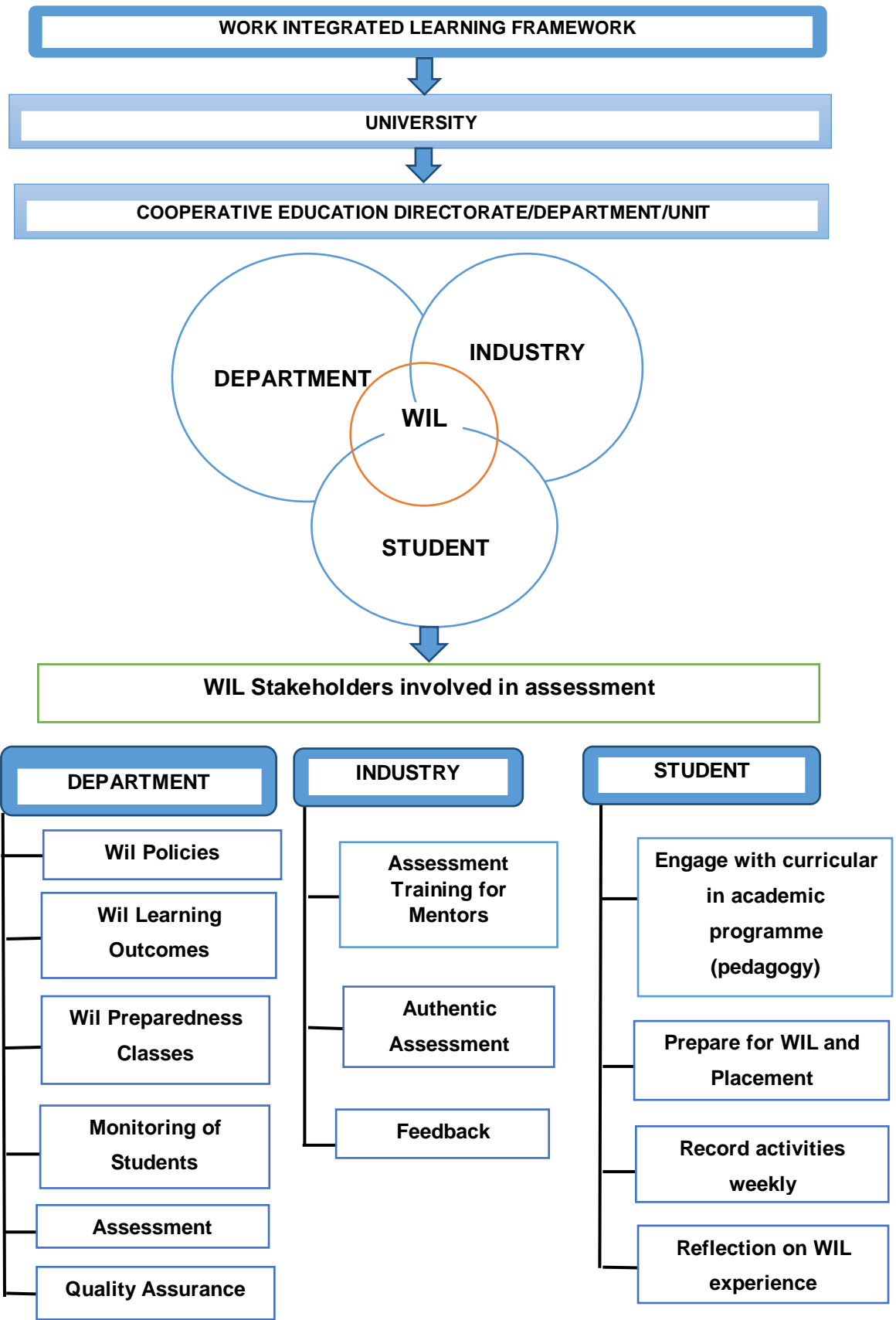
#### **7.5.8 Framework to strengthen partner capacity in WIL assessment for UoT OMT qualification**

The partnership of industry, university and students has been identified as important in the co-design of assessments for workplace relevance, offering feedback to students that is professional, real-world, and enabling access to quality role modelling and mentoring (Della Tamin *et al.* 2018). In the view of Mcrae and Johnstone (2016: 340), as the global WIL landscape is ever-developing, it will be important for the proposed framework to be continuously challenged and revised in line with the changes that will evolve. In light of this, this study proposes the following WIL Framework, which will strengthen the capacity of all WIL partners involved in assessment (Figure 7.1).

It is essential for the universities, industry partners, and students to work together. The centre of the WIL programme revolves around this partnership, while the benefit of WIL is reduced in the absence of this cooperation.

**Figure 7.1: Proposed WIL Assessment Stakeholder Framework**

FRAMEWORK TO STRENGTHEN PARTNER CAPACITY IN WIL ASSESSMENT AT UNIVERSITIES



### **7.5.8.1. Description of the Proposed Framework**

**WIL Policies:** Universities must create structures accompanied by policies that support WIL. These should also include actions required to interact with students and mentors in enhancing collaborative governance of WIL. Industry also needs to create their own policies to provide guidelines to employees in training students for WIL. Supervisors have to create opportunities for students to engage and participate in the workplace. The establishment of a shared vocabulary, mutual respect, and trust among the university, business community, and students is made possible through collaboration guided by policies, which will provide an avenue to ensure learning objectives are met. The policies will also provide guidelines on how WIL will be assessed at universities.

**The Co-operative Education Directorate** plays a critical role in ensuring the university structures are in place for industry to engage in WIL. In addition, the directorate should be instrumental in assisting industry on how to prepare the workplace for WIL students.

**Quality Assurance:** In HE, quality assurance is important and should not be performed on an ad-hoc basis. Quality assurance of WIL needs to be formalised as for any other module. Since WIL is offered at third year level, which is an exit level and all modules at this level are externally moderated, WIL needs to also be moderated. Universities have to include the moderation of WIL in their policies to ensure it is quality assured.

### **7.5.8.2 WIL Coordinators**

- **Learning Outcomes**

In general, the University evaluates the success of its learning and teaching initiatives using a variety of outcome metrics. The university will be assisted by the inclusion of collaborative governance in the framework, to rely on results as a feedback mechanism in assessing how well structures and processes are working.

These measurements consider feedback from both internal and external stakeholders, such as student opinions regarding their WIL experiences, WIL Coordinators' opinions with regard to how well WIL initiatives are supported, along with industry feedback on student performance and university support.

Ultimately, it is the responsibility of the departments, through WIL coordinators, to devise learning outcomes that should be achieved by OMT students at the workplace. There is significant agreement, from literature, regarding the critical role learning outcomes play in ensuring students receive relevant training at the workplace. However, assessing these learning outcomes does not match the methods used by traditional assessments, for example, tests, examinations. Workplace learning assesses and practice performance, along with capacities, and employability skills, rather than academic success; assessing these skills is important, since they are included in the WIL learning outcomes.

- **WIL Preparedness classes**

WIL Coordinators are responsible for preparedness classes, which should be compulsory for all students registered for the WIL module. Academic departments should design a curriculum for the WIL module and thereafter, the WIL Coordinator will establish the learning outcomes. When students are deployed in the workplace, an inclusive stakeholder approach must be used. The student, WIL Coordinator, in consultation with the mentor, should specify how these outcomes will be attained. The communication among the stakeholders will clarify the assessment criteria and what assessment strategies to use in WIL assessments.

- **Student Monitoring**

WIL Coordinators are responsible for monitoring students during their work placements. It is important students should reflect on their learning while engaged in WIL. Monitoring also ensures WIL Coordinators obtain an early understanding of problems the student may be encountering. Furthermore, monitoring should also be performed by industry mentors. Students are placed

for WIL so they may learn by doing in a work environment; therefore, it is imperative industry mentors provide assistance for a conducive learning space to be provided.

Monitoring and evaluating are considered as key actions in WIL placement. To track student learning and engagement, as well as develop timely measures for dealing with "at-risk" students, coordinators and employers must continuously monitor the students. Since professional learning mostly occurs at workplaces, joint monitoring and evaluation of student performance while engaged in WIL is crucial. A university must concentrate on the proper methods for accurately monitoring students based on their work performance.

**Monthly monitoring:** A monthly virtual class meeting should be held. The meeting will give the WIL Coordinator an opportunity to update her/himself regarding the progress of the students, and further address any challenges the student faces during their placement and encourage the sharing of their ideas and experiences.

**A physical visit** should take place to every work placement. This will assist the WIL Coordinator to gauge the integration of work and theory and whether the employer has met the outcomes of WIL. The WIL Coordinator can also, with the student's work supervisor, observe the student(s) in action and assess their performance of administrative duties. The coordinator can also iron out any challenges the student and supervisor may have.

### **7.5.8.3 Mentors**

Finding various strategies to include mentors in the assessment process is a growing focus in partnership with stakeholders in assessment, which incorporates input from the student, mentor, and the WIL Coordinator. Students' ability to make sense of their experiences depends on assessment, which elevates the learning process from the application of particular information and abilities to the comprehension and use of professional judgment. The university is responsible for WIL assessments as per the University policy.

- **WIL Assessment**

- Mentors must provide an authentic work environment. It is important to create tasks that accurately reflect the standards and intellectual demands real experts and professionals in the field face. Authentic assessments should, therefore, be provided by mentors during WIL placements. The goal of authentic assessment is to offer students sufficient possibilities to work in real-world settings, in order to expand their knowledge, critical thinking skills, and professional competence. Mentors have to assess the students and should not only be evaluators. Assessing students during their WIL placements, which is formative assessment, will identify problem areas and enhance administrative skills students need to improve in areas where they are lacking. It is also important to align the authentic assessment tasks with the set learning outcomes.
- Summative evaluation should be provided to students by the WIL Coordinator in the form of a reflective report, submitted by students at the end of their training. Reflection on the skills acquired and put to use throughout the process, problems encountered and managed, and experiences and learning related to professional ideology and career management must all be included in this report. The mentor can then assess this in the form of qualitative comments. The evaluation of skills mastery, areas for improvement, potential developmental pathways, and alignment with professional standards, as well as personalities and attitudes in their approach to this specific outcome, would be ensured by a corresponding marking rubric.
- Students should compile a PoE. The outcomes and evaluation criteria should serve as foundation for the student's professional competence. Both the student and the mentor should present supporting documentation used to determine professional competence.
- Universities use integrated assessment; combine both formative and summative assessments for the final mark allocation of WIL and decide on the weighting of the assessment marks.

- Universities need to move away from allocating a pass/fail result in WIL and instead, move towards using marks as a standard grading format.

The inclusion of both students and mentors in the assessment process is ideal and should be facilitated by WIL Coordinators, in fact, the partnership, may support the WIL quality assessment principles, which call for regular feedback from all parties, the use of both formative and summative assessment and the inclusion of critical reflection.

- **Feedback**

Feedback is a timeous work placement activity and is significant to the growth of the professional career of a student. Providing students with timely feedback is a fundamental principle the WIL programme should uphold. In order to facilitate effective learning in professional settings, feedback is essential in encouraging students to feel a strong connection to the learning process. Therefore, mentors need to provide timeous feedback to students to encourage continuous learning.

- **Assessment Training for Mentors**

Mentors have to coach, mentor and supervise students. This means it is important they are trained to facilitate learning through the outcomes set for WIL. For WIL to be successful, WIL Coordinators should collaborate with mentors to ensure workplace staff members are informed accordingly and provided the support they need to support student learning within the context of their work role. The university has to provide training in assessment to enable student assessment by mentors.

#### **7.5.8.4 Students**

Students who are registered for OMT engage in WIL at third year level. WIL is credit-bearing and compulsory, with students not graduating when they do not fulfil its requirements of spending a stipulated period at the workplace. It is important students attend preparedness classes in readiness for the

workplace. WIL coordinators have to ensure they place students in an authentic work environment.

A logbook is an important document for students and mentors when they are engaged in WIL, since this is where students record the administrative activities they perform on a weekly basis. In a logbook there must be a section on assessment by the mentor, which allows students to know how they have performed on a particular task. This assessment will also provide students with feedback, affording them the opportunity for remedial assistance, when they have not done well in a particular section of the assessment or did not perform well in a specific task.

Reflection on WIL by students is important, because it allows them to understand the workplace and what is required from them. Students can submit reflective reports as part of summative assessment (see role of mentors above).

## **7.6 Recommendations**

Based on the above findings, the study has the following recommendations.

- More attention should be provided in strengthening the inclusion of stakeholders in WIL, with these the students, industry and WIL coordinators. The university staff conducts the assessment after the WIL performance, whereas, mentors are responsible for assessing students during the WIL experience. Therefore, mentor training should be provided so they understand the importance of assessing students, being in a better position to assess the performance of students during placements. In addition, it is important to clarify between evaluation and assessment, as other mentors regard their role to be evaluators as opposed to assessors. For this reason, some were unwilling to allocate a mark for student assessments, as they feel not competent to do so.
- It is crucial assessment practices are explicitly explained to students by their mentors. Hence, the partnership of the university, student and industry

is crucial to ensure students receive appropriate experience. A lack of participation by mentors in the student's performance assessment process at the workplace is a challenge to universities. Hence, the importance of the stakeholders, which include departments, students and host organisations, in developing assessment criteria and strategies for assessment.

- Assessment training for mentors is crucial as this will capacitate them. WIL Coordinators should drive this process, since they are in a better position to identify companies instrumental in placing students.
- WIL policies at universities should explicitly explain how WIL assessment should be conducted. As it is, WIL is included with other modules that are content based and it is important to clarify how WIL should be assessed in terms of formative and summative assessments. Furthermore, an assessment strategy for WIL needs to be revisited as there are inconsistencies. Universities need to decide on the type/s of assessments to be used for there to be uniformity on how WIL assessment is structured.
- The timeframe for WIL is also a concern, with only three months spent in industry. However, students do not experience this as a challenge, while it was evident from the mentors' responses that three to four months is insufficient for students to gain valuable exposure. A recommendation is to extend the WIL period to six months, considered reasonable for host organisations.
- Partnerships between academia and industry will be advantageous to the university in many ways. Students can explore the obvious effects of training and employment opportunities. Universities also have the significant advantage of being able to predict the industry needs for new processes, products, and services. Long-term university collaboration will benefit industry with a potentially higher annual graduate recruitment rate, which strengthens their reputation in the education market. Students have

the opportunity to learn of current issues, career perspectives, and job training in industry.

- The responses highlighted a huge gap in quality assurance; WIL is not moderated in other universities, which is a critical shortfall in quality teaching and learning. As indicated, WIL is an exit level module and it should be moderated similar to other modules at the same level.
- The Quality Assurance Directorate/Department should assist departments to devise WIL assessment policies that will include guidelines on how WIL should be assessed. Alternatively, where there is a Policy Development unit, assistance should be provided to the Teaching and Learning unit to develop this policy.
- A WIL stakeholder assessment framework needs to be developed. The framework will identify roles of stakeholders in assessment.
- WIL Coordinators did not provide policies with guidelines on how to implement WIL. Furthermore, assessment policies (including teaching and learning policies) were not discussed with mentors prior to placing students. Policies are a guide on how to perform at the workplace; it is important mentors have knowledge on WIL policies for effective student placement.
- Students should be provided with information sessions and a WIL period every week before placements, so they are prepared for WIL workplace training.
- A majority responses highlighted the overwhelming support provided to students during placements. Such a gesture indicates the WIL Coordinators have built a good relationship with industry mentors and understand the importance of providing support to students. It is recommended these partnerships should be encouraged, as they are important in student placements.

- Mentors encouraged universities to keep WIL in the OMT programme, as it creates chances of employability and provides students with the experience of learning and working in an office environment. WIL in OMT helps students understand their career and they develop professional skills relevant to their discipline.

### **7.7 Recommendation for further research**

- In this study, a case study was conducted at three South African universities only. Further studies can be conducted at other universities, including TVET Colleges.
- Additional studies can be undertaken to explore the relationship of industry supervisors/mentors with the students.
- Further studies can be conducted on the involvement of industry mentors in assessing WIL students.

### **7.8 Contribution to the body of knowledge**

- The study's findings contribute to the literature of assessment in WIL.
- The study has contributed to the development of a stakeholder framework in WIL assessment. The proposed framework will strengthen the assessment processes at universities offering OMT qualifications including TVET Colleges and will be a guide for industry. The framework will also restructure the process of WIL assessment.
- The study has created an awareness of each stakeholder involved in WIL assessment, thus clarifying the WIL assessment strategies that can be adopted.

### **7.9 Limitation of the study**

Data collection was very time-consuming and challenging because it was done during the COVID-19 restrictions. Data collection prior to the pandemic was easier, becoming difficult during the pandemic as participants had to abide by quarantine restrictions and other government health practices applied by local

government. Isolation measures imposed by government rules necessitated researchers use other means of collecting data, for example, online platforms, to avoid in-person interactions.

The study was, however, conducted on only three SA universities that offer OMT. Further studies can, therefore, be conducted amongst all South African universities that offer WIL in their programmes.

### **7.10 Conclusion**

The purpose of the study was to determine whether the assessment practices are in line with the WIL outcomes and to provide guidance on the improvement for OMT in the curriculum. Universities (including those with a focus on research), UoTs, and TVET colleges are all included in the SA HE system and institutions take great satisfaction in offering career-focused curricula. As a result, they believe it is crucial and valuable to help students prepare for the workforce and provide them hands-on experience by placing them in real-world workplace settings. A number of government programmes that emphasise the importance of WIL have been introduced in SA during the last few years in order to attain this goal.

To provide students meaningful and advanced real-life/work learning experiences in the OMT discipline, the university depends on host organisations to be partners in the educational process. The vital role of mentoring the student is carried out by the mentor. The process of mentoring involves passing on knowledge, skills, experience, and professional behaviour to the student (protégé/mentee), who works under the direction and supervision of a skilled practitioner or professional. The objective is to maximise the student's potential and promote personal development. The mentor should help the mentee identify their strengths and limitations, strengthen their current skills and learn more about their chosen profession.

## REFERENCES

- African Union (AU). 2007. *Strategy to Revitalize Technical and Vocational Education and Training (TVET) in Africa*. Department of Human Resource Science and Technology: African Union (AU). Available: <https://www.africa-union.org> (Accessed 12 June 2019).
- Ahmad, S., Wasim, S., Irfan, S., Gogoi, S., Srivastava, A. and Farheen, Z. 2019. Qualitative vs. Quantitative Research. *Evid. Based Med. Health*. 6(43) Oct. 28, 2019.
- Ajjawi, R., Tai, J., Le Huu Nghia, T., Boud, D., Johnson, L. & Patrick, C-J. 2020. Aligning assessment with the needs of work-integrated learning: the challenges of authentic assessment in a complex context, *Assessment & Evaluation in Higher Education*, 45(2): 304-316.
- Al Kilani M, Kobziev V. An overview of research methodology in information system (IS). *Open Access Library Journal*. 2016 Nov 2;3(11):1-9.
- Alhassan, M., Aigbavboa, C. O. and Atepor, L. 2016. A Framework for Higher Education and Industry Linkage in the Ghanaian Built Environment. *5<sup>th</sup> Applied Research Conference in Africa (ARCA)*, 25-27 August 2016, Cape Coast, Ghana. 599-610.
- Ali, L. 2018. The Design of Curriculum, Assessment and Evaluation in Higher Education with Constructive Alignment. *Journal of Education and e-Learning Research*, 5(2): 72-78.
- Ambrosetti, A., & Dekkers, J. 2010. The Interconnectedness of the Roles of Mentors and Mentees in Pre-service Teacher Education Mentoring Relationships. *Australian Journal of Teacher Education*, 35(6).
- Aprile, K. T. and Knight, B. A., 2020. The WIL to learn: Students' perspectives on the impact of work-integrated learning placements on their professional readiness. *Higher Education Research & Development*, 9(5): 869-882.
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G. and Lawless, M. 2019. Using Zoom Videoconferencing for Qualitative Data Collection: Perceptions and Experiences of Researchers and Participants. *International Journal of Qualitative Methods*, 18: 1-8
- Arkkelin, D. 2014. Using SPSS to *Understand Research and Data Analysis*. *Psychology Curricular Materials*, 1.
- Aroge, S. T. 2012. Employee's Training and Development for Optimum Productivity: The Role of Industrial Training Fund (ITF), Nigeria. *Developing Country Studies*, 2(3). Available: <https://www.iiste.org> (Accessed 20 July 2021).

Assan, T.E.B., 2014. Work integrated learning (WIL): A phenomenographic study of student-teachers' experiences. *Mediterranean journal of social sciences*, 5(7), p.300.

Atkinson, G. 2016, Work-based learning and work-integrated learning fostering engagement with employers, *Australia: National Centre for Vocational Education Research NCVER, Adelaide* Available: <http://pandora.nla.gov.au/pan/34352/20030513-0000/www.clt.uts.edu.au/ATN.grad.cap.project.index.html> and [https://www.ncver.edu.au/\\_\\_data/assets/pdf\\_file/0017/60281/Work-based-learning.pdf](https://www.ncver.edu.au/__data/assets/pdf_file/0017/60281/Work-based-learning.pdf) (Accessed 20 August 2021).

Awonuga, O. O. 2010. Quality Assurance issues in work integrated learning through open and distance education in Nigeria. In the proceedings of the 6<sup>th</sup> Pan Commonwealth Forum on Open Learning (PCF6), 24-28 November 2010 at Le-Meridien, India.

Bada, S.O. and Olusegun, S., 2015. Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education*, 5(6), pp.66-70.

Bates, A., Bates, M. and Bates, L., 2007. Preparing students for the professional workplace: who has responsibility for what?. *Asia-Pacific Journal of Cooperative Education*, 8(2), pp.121-129.

Bates, M., 2003. The assessment of work integrated learning: Symptoms of personal change. *Journal of Criminal Justice Education*, 14(2), pp.303-326.

Bhandari, P. 2022. Inferential Statistics: An Easy Introduction & *Examples*. Available: <https://www.scribbr.com/statistics/inferential-statistics/> (Accessed 20 July 2022).

Bilal, M. N. M. and Ummah, M. A. C. S. 2016. A Case Study on the Impact of Internship Training in Finding Successful Job Placements: With Special Reference to South Eastern University of Sri Lanka. 3<sup>rd</sup> *International HR Conference*, University of Sri Jayewardenepu, 8 October 2016, 52-64.

Bilgin, A.A., Rowe, A.D. and Clark, L., 2017. Academic Workload Implications of Assessing Student Learning in Work-Integrated Learning. *Asia-Pacific Journal of Cooperative Education*, 18(2), pp.167-183.

Blom, R. (ed) 2014. The Southern African Society for Co-operative Education: *The African Journal for Work-Based Learning: towards a policy framework for work-integrated learning*: 2(1), May 2014.

Bloxham, S, Hughes, C and Adie, L. 2016. What's the point of moderation? A discussion of the purposes achieved through contemporary moderation practices, *Assessment & Evaluation in Higher Education*, 41(4), 638-653,

- Boddy, C. R., 2016 Sample size for qualitative research. *Qualitative Market Research: An International Journal*, 19(4), 2016, 426-432.
- Bohloko, G. M. 2016. Redefining Work Integrated Learning in Universities of Technology. *South African Journal of Higher Education*, 26(2): 268-281.
- Bosco, A.M. and Ferns, S., 2014. Embedding of Authentic Assessment in Work-Integrated Learning Curriculum. *Asia-Pacific Journal of Cooperative Education*, 15(4), pp.281-290.
- Boud, D. 2000. Sustainable Assessment: Rethinking assessment for the learning society, *Studies in Continuing Education*, 22(2): 151-167.
- Boud, D. 2017. Standards-based assessment for an era of increasing transparency. In Carless, D., Bridges, S. M., Chan, C. Ka Yek and Glofcheski, R. (ed), *Scaling up assessment for learning in higher education*, Springer, Singapore, 19-31.
- Boud, D. and Associates. 2010. *Assessment 2020: Seven propositions for assessment reform in higher education*. Sydney: Australian Learning and Teaching Council.
- Boud, D. and Dochy, F., 2010. Assessment 2020. Seven propositions for assessment reform in higher education.
- Boud, D. and Falchikov, N. 2007. *Rethinking Assessment in Higher Education: Learning for the longer term*. Routledge, New York
- Boud, D. and Soler, R., 2016. Sustainable assessment revisited. *Assessment & Evaluation in Higher Education*, 41(3), pp.400-413.
- Boud, D., Ajjawi, R. & Tai, J. 2020. Assessing work-integrated learning programs: a guide to effective assessment design. *Centre for Research in Assessment and Digital Learning*. Available: <http://acen.edu.au/assessing-work-integrated-learning-programs-a-guide-to-effective-assessment-design/> (Accessed 20 July 2021).
- Brau, B. 2018. Constructivism. In R. Kimmons, *The Students' Guide to Learning Design and Research*. EdTech Books. Available: <https://edtechbooks.org/studentguide/constructivism> (Accessed 16 June 2021).
- Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), pp.77-101.
- Brock, K. L. and Cameron, B. J. 1999. *Enlivening Political Science Courses with Kolb's Learning Preference Model*. Available: <https://www.apsanet.org> (Accessed 20 February 2021)

Brown, N., 2010. WIL[ling] to share: an institutional conversation to guide policy and practice in work-integrated learning. *Higher Education Research & Development*, 29(5), 507-518.

Brown, S. and Knight, P., 1994. *Assessing learners in higher education*. Psychology Press.

Campbell, M., Russell, L., McAllister, L., Smith, L., Tunny, R., Thomson, K. and Barrett, M., 2019. A framework to support assurance of institution-wide quality in work integrated learning. *Australian Collaborative Education Network*.

Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J. and Neville, A., 2014. Methods & meanings: The use of triangulation in qualitative research. In *Oncology Nursing Forum* (Vol. 41, pp. 545-547).

Castleberry, A. and Nolen, A. 2018. Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10, 807-815.

Cedercreutz, K. and Cates, C. 2010. *Peer Review: Washington*, 12(4), (Fall 2010): 20-23.

Cheung, W. J., Dukek, N. L., Wood, T. J. and Frank, J. R. 2017. Supervisor-trainee continuity and the quality of work-based assessments. *Medical Education*, 51: 1260-1268

Chiwese, M., Motsi, E. and Edziwa, X. 2011. Organisation, Quality and Challenges in the B.Ed. Technical Education Degree. Industrial Attachment Course, University of Zimbabwe. *Zimbabwe Journal of Educational Research*, 23(3): 276-301

Choy, Sarojni, and Brian Delahaye. "Partnerships between universities and workplaces: some challenges for work-integrated learning." *Studies in Continuing Education* 33, no. 2 (2011): 157-172.

Clarke, V. and Braun, V. 2017. Thematic analysis, *The Journal of Positive Psychology*, 12(3), 297-298, DOI: 10.1080/17439760.2016.1262613.

Cooper, L., Orrell, J. and Bowden, M., 2010. *Work integrated learning: A guide to effective practice*. Routledge.

Cooper, S. and Ord, J. 2014. Developing 'know how': a participatory approach to assessment of placement learning, *Journal of Vocational Education & Training*, 66(4): 518-536.

Council on Higher Education (CHE). 2011. Work-integrated learning: good practice guide. *HE Monitor No. 12*, August. Pretoria.

Creswell, J. W., 2014. *Qualitative, quantitative and mixed methods approaches*. Sage Publications, California.

Creswell, J.W., 2009. Research designs: Qualitative, quantitative, and mixed methods approaches. *California: Sage*.

Dadid, S., Kralj, A., Kay, C. and DeVeau, C. 2009. "A lodging internship competency model: Enhancing educational outcomes through work integrated learning." *Journal of Hospitality & Tourism Education* 21, no. 4 (2009): 16-24.

Dean, B., Eady, M. J., & Yanamandram, V. 2020. Editorial 17.4: Advancing Non-placement Work-integrated Learning Across the Degree. *Journal of University Teaching & Learning Practice*, 17(4): 1.

Dean, B.A. and Sykes, C., 2021. How students learn on placement: Transitioning placement practices in work-integrated learning. *Vocations and Learning*, 14(1), pp.147-164.

Dell, S. 2018. Work-integrated learning – Challenging the ivory tower. *University World News*, 24 August 2018.

Della Tamin, M., Du Plooy, D. M., Von Solms, S. and Meyer, J., 2018. A proposed modular work integrated learning framework for South Africa. *IEEE Access*, 7, 2559-2566.

Dewey, J. (1938). *Experience and education*. New York, NY: The Macmillan Company.

Dorasamy, N. and Rampersad, R. eds., 2018. *Critical perspectives on work-integrated learning in higher education institutions*. Cambridge Scholars Publishing.

Doss, T. P., Allett, N. F., Woods, G. J., Poursharif, G. and Knight, G. L. 2021. Effective measures of tailored learning support for Engineering Work-Based Learners in HE: A Case study. *Higher Education Pedagogies*, 6(1), 66–78.

Doyle, A. 2021. *Important Administrative Skills that Employers Value*. Available: <http://www.thebalancemoney.com/administrative-skills-list-2062350> (Accessed 20 September 2022).

Drabble, L., Trocki, K. F., Salcedo, B., Walker, P. C. and Korcha, R. A., 2016. Conducting qualitative interviews by telephone: Lessons learned from a study of alcohol use among sexual minority and heterosexual women. *Qualitative Social Work*, 15(1), 118-133.

Du Plessis, E., 2010. Students' experiences of work-integrated learning in teacher education. *Progressio*, 32(1), pp.206-221.

du Plessis, J. 2019. Stakeholders' viewpoints on work-integrated learning practices in radiography training in South Africa: Towards improvement of practice. *Radiography*, 25 (2019), 16-23.

du Pre', R. 2006. The Philosophy of a University of Technology in South Africa; An Introduction. *Kagisano*, No. 5, Summer 2006.

du Pre', R. 2013. Hitting the ground running: Work-Integrated Learning and Skills Development in South Africa. *International Business and Economics Discussion Papers*. Vol. 1.

Dwesini, N.F., 2015. Assessing learners' preparedness for work-integrated learning (WIL) at Walter Sisulu University, South Africa. *African Journal of Hospitality, Tourism and Leisure*, 4(2), pp.1-2.

Dwesini, N.F., 2017. The role of work integrated learning (WIL) in enhancing employability skills: Graduate perspectives. *African Journal of Hospitality, Tourism and Leisure*, 6(2), pp.1-9.

Dwesini, N.F., 2019. Causes and prevention of high employee turnover within the hospitality industry: A literature review. *African Journal of Hospitality, Tourism and Leisure*, 8(3), pp.1-15.

Eames, C. and Cates, C. 2011. Theories of Learning in Cooperative and Work-Integrated Education. *International Handbook for Cooperative & Work-Integrated Learning*, 2<sup>nd</sup> ed. pp. 41-32.

Elijido-Ten, E. and Kloot, L., 2015. Experiential learning in accounting work-integrated learning: a three-way partnership. *Education+ Training*, 57(2), pp.204-218.

Erwee, C.C. and Van Schoor, J.H., 2009. The implementation of work-integrated learning in the Marketing programme at the Central Univeristy of Technology, Free State, Free State.

Fatemeh, K., and Alavinia, S. M. 2012. Students' perception about logbooks: Advantages, limitation and recommendation-A qualitative study. *J Pak Med Assoc.*, 2012 Nov 1; 62: 1184-6.

Fengu, M. 2020. University students in a panic as UJ phases out course. *City Press*, 3 February 2020.

Ferns, S. and Zegwaard, K. E. 2014. Critical assessment issues in work-integrated learning. *Asia-Pacific Journal of Cooperative Education, Special Issue*, 15(3), 179-188.

Ferrández-Berruenco, R., Kekale, T. & Devins, D. 2016, A framework for work-based learning: basic pillars and the interactions between them, *Higher Education, Skills and Work-Based Learning*, 6(1): 35–54.

Fleming, J. and Pretti, T.J., 2019. The impact of work-integrated learning students on workplace dynamics. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 25, p.100209.

Forbes, B. E. 2005. Thinking and Doing Education and Training Anew. *SAQA Bulletin*, 6(2): 49-66.

- Fraser, J., Fahlman, D., Arscott, J. and Guillot, I. 2018. Pilot Testing for Feasibility in a Study of Student Retention and Attrition in Online Undergraduate Programs. *International Review of Research in Open and Distributed Learning*, 19(1),
- Freudenberg, B., Brimble, M. and Vyvyan V. 2010. The Penny Drops: Can Work Integrated Learning Improve Students' Learning? *E-Journal of Business Education & Scholarship of Teaching*, 4(1): 42-61.
- Freudenberg, B., Brimble, M., Cameron, C. and English, D.M., 2011. Professionalising accounting education—the WIL experience. *Journal of Cooperative Education and Internships*, 45(1), pp.80-92.
- Gellerstedt, M., Johansson, K. and Winman, T. 2015. Work Integrated Learning: A Marriage Between Academia and Working Life. *Journal on Systemics, Cybernetics and Informatics* Available: <https://www.semanticscholar.org/paper/> (Accessed 10 July 2019).
- Govender, C.M. and Wait, M., 2017. Work integrated learning Benefits for student career prospects—mixed mode analysis. *South African Journal of Higher Education*, 31(5), pp.49-64.
- Govender, D., Prakaschandra, D. R. and Mohapi, M. J., 2021. Student preparedness for work-integrated learning in biomedical technology: student perspective. *The Journal of Medical Laboratory Science and Technology of South Africa*, 3(2), pp.65-71.
- Grawitzky, R., 2007. *Setas - A Vehicle for the Skills Revolution*.
- Gribble, C., Blackmore, J. and Rahimi, M. 2015. Challenges to providing work integrated learning to international business students at Australian universities, *Higher education, skills and work-based learning*, 5(4): 401-416.
- Gumbe, S. M., Sivotwa, T. D. and Mupambireyi, F. P. 2012. Students' Perspectives of the Industrial Attachment Programme: A study of University of Zimbabwe Faculty of Commerce Students (2010-2011). *International Journal of Physics and Social Sciences*.
- Hair, J. F., Celsi, M. W., Oritinau, D. J. and Bush, R. P. 2013. *Essentials of Marketing Research*. New York: McGraw-Hill Irwin.
- Hammond, J. and Gibbons, P. 2005. Putting scaffolding to work: The contribution of scaffolding in articulating ESL education. *Prospect*, 20(1): 6-30.
- Harland, T. 2003. Vygotsky's Zone of Proximal Development and Problem-based Learning: Linking a theoretical concept with practice through action research. *Teaching in Higher Education*, 8(2): 263-272.
- Harmse, A. and Goede, R. 2012. Critical Thinking Perspectives on Work Integrated Learning in Information Systems Education. *International Journal of*

*Social, Behavioral, Educational, Economic, Business and Industrial Engineering*. 6(4): 572-576.

Hassan, O. A. B. 2011. Learning theories and assessment methodologies – an engineering educational perspective. *European Journal of Engineering Education*, 36(4): 327-339.

Heale, R. and Forbes, D., 2013. Understanding triangulation in research. *Evidence-based nursing*, 16(4), pp.98-98.

Healey, M. and Jenkins, A. 2000. Kolb's Experiential Learning Theory and Its Application in Geography in Higher Education, *Journal of Geography*, 99(5): 185-195.

Henderson, A. and Trede, F. 2017. Strengthening attainment of student learning outcomes during work-integrated learning: A collaborative governance framework across academia, industry and students. *Asia-Pacific Journal of Cooperative Education*, 18(1): 73-80

HEQSF. (2013). The Higher Education Qualifications Sub-Framework –as Revised. Vol. 578. No. 36721

Hodges, D., Eames, C. and Coll, R. K. 2014. Theoretical perspectives on assessment in cooperative education placements. *Asia-Pacific Journal of Cooperative Education, Special Issue*, 15(3): 189-207.

Horstmanshof, L. and Moore, K. 2016. Understanding the needs of all the stakeholders: Issues of training and preparation for health work students and their clinical educators. *Asia-Pacific Journal of Cooperative Education*, 17(2): 93-100.

Hsu, H. Y. and Wang, S. K., 2017. Using Google Forms to collect and analyse data. *Science Scope*, 40(8), 64.

Hudson, P. 2016. Forming the mentor-mentee relationship. *Mentoring & tutoring: partnership in learning*, 24(1), 30-43.

Ibrahim, A. M. 2012. Thematic Analysis: A Critical Review of its Process and Evaluation. *West East Journal of Social Sciences*, 1(1), 39-47.

Ibrahim, H. I. Zulkafli, A. H., Shah, K. A. M. and Amran, A. 2017. Building Self-Esteem through Work Integrated Learning. *International Journal of Learning and Teaching*, 3(1): 73-77.

Independent Institute of Education, (2022, amended). *Work Integrated Learning Policy*, No. IIE006.

*Integrated learning in higher education institutions*. Cambridge Scholars Publishing.

Irvine, A., 2011. Duration, dominance and depth in telephone and face-to-face interviews: A comparative exploration. *International Journal of Qualitative Methods*, 10(3), pp.202-220.

Jackson, D. 2013. The contribution of work-integrated learning to undergraduate employability skills outcomes. *Asia-Pacific Journal of Cooperative Education*, 2013, 14(2), 99-115.

Jackson, D. 2017. Developing pre-professional identity in undergraduates through work-integrated learning. *Higher Education*, 74(5): 833-853.

Jackson, D. 2018. Challenges and strategies for assessing student workplace performance during work-integrated learning. *Assessment & Evaluation in Higher Education*, 43(4), 555-570.

Jackson, D. and Wilton, N. 2016. Developing career management competencies among undergraduates and the role of work-integrated learning, *Teaching in Higher Education*, 21:3, 266-286.

Jackson, D. and Wilton, N., 2016. Developing career management competencies among undergraduates and the role of work-integrated learning. *Teaching in Higher Education*, 21(3), pp.266-286.

Jackson, D., Riebe, L., Meek, S., Ogilvie, M., Kuilboer, A., Murphy, L., Collins, N., Lynch, K. and Brock, M., 2020. Using an industry-aligned capabilities framework to effectively assess student performance in non-accredited work-integrated learning contexts. *Teaching in Higher Education*, pp.1-20.

Jackson, D., Rowbottom, D., Ferns, S. and McLaren, D. 2017. Employer understanding of Work-Integrated Learning and the challenges of engaging in work placement opportunities. *Studies in Continuing Education*, 39(1): 35-51.

Jackson, N. 2006. Work Integrated Learning in the UK: an Overview. World Association for Cooperative Education International Symposium Work Integrated Learning 16-18 November 2006: *Work Integrated Learning for Sustainable Futures*.

Jancauskas, E., Atchison, M., Murphy, G., and Rose P. 1999. *Unleashing the potential of work-integrated learning through professionally trained academic and industry supervisors*. Available: [http://www.waceinc.org/pdf/Erin\\_Jancauskas\\_6\\_14\\_00.pdf](http://www.waceinc.org/pdf/Erin_Jancauskas_6_14_00.pdf) (Accessed 11 February 2020).

Johnson, L. and Patrick, C-J. 2016. Vaal University of Technology (VUT). *Work Integrated Learning: Policies, Procedures and Guidelines*, 1-24. 2016 Edition.

Jones, M., Coiacetto, E., Jackson, J., Coote, M., Steele, W., Budge, T. and Gall, S., 2009. Generating academic standards and assessment practices in work-integrated learning: A case study from urban and regional planning. *International Journal of Work-Integrated Learning*, 10(3), p.203.

- Jopp, R., 2020. A case study of a technology enhanced learning initiative that supports authentic assessment. *Teaching in Higher Education*, 25(8), pp.942-958.
- Joshi, M. K., Gupta, P. and Singh, T. 2015. Portfolio-based Learning and Assessment. *Indian Pediatrics*, Vol. 52, March 2015.
- Junyong, J., 2017. Introduction of a pilot study. *Korean journal of anesthesiology*, 70(6), pp.601-605.
- Kaider, F., Hains-Wesson, R. and Young, K. 2017. Practical typology of authentic work-integrated learning activities and assessments. *Asia-Pacific Journal of Cooperative Education, special issue*, 18(2): 153-165.
- Khampirat, B., 2021. The impact of work-integrated learning and learning strategies on engineering students' learning outcomes in Thailand: A multiple mediation model of learning experiences and psychological factors. *IEEE Access*, 9, pp.111390-111406.
- Khampirat, B., Pop, C. and Bandaranaike, S., 2019. The effectiveness of work-integrated learning in developing student work skills: A case study of Thailand. *International Journal of Work-Integrated Learning*, 20, 126-146.
- Khuzwayo, B.P. and Vahed, S., 2021. An Evaluation of Wil Training For Durban University of Technology Civil Engineering–Employer And Student Experience: Lessons For The New Programme. *South African Journal of Higher Education*, 35(5), pp.78-102.
- Kiger, M. E. and Varpio, L. 2020. Thematic analysis of qualitative data: AMEE Guide No. 131, *Medical Teacher*, DOI: 10.1080/0142159X.2020.1755030.
- Kiplagat, H., Khamasi, J. W. and Karej, R. 2016. Students' Experience of Industrial Attachment: A Case of a Public University. *Journal of African Studies in Educational Management and Leadership*. 7(1): 82-97.
- Kiplagat, H., Wanjiku, J. K., and Karej, R. 2013. Navigating the Maze: Finding Placement for Industrial Attachment. *African Journal of Education, Science and Technology*, 1(3): 106-110.
- Kiriri, P.N., 2019. An Assessment of the Quality of a Work-Integrated Learning Internship Program in Kenya. *International Journal of Work-Integrated Learning*, 20(3), pp.257-271.
- Koh, K.H., 2017. Authentic assessment. In *Oxford research encyclopedia of education*.
- Kolb, D. A., 1984. *Experience as the source of learning and development*. Upper Saddle River: Prentice Hall.
- Kothari, C.R., 2004. Research methodology.

Kramer, M. and Usher, A. 2011. *Work Integrated Learning and Career-Ready Students: Examining the Evidence*. Toronto: Higher Education Strategy Associates.

Kuriakose, R. B. and Swart, A. J. 2014. Work integrated learning at a university of technology: assessment and management. *IEEE Frontiers in Education Conference*.

Leong, R. and Kavanagh, M. 2013. A work-integrated learning (WIL) framework to develop graduate skills and attributes in an Australian university's accounting program. *Asia-Pacific Journal of Co-operative Education*, 14(1): 1-14.

Lester, S. & Costley, C. 2010. Work-based learning at higher education level: value, practice and critique, *Studies in Higher Education*, 35(5): 561-575.

Lewis, M., Holtzhausen, N. and Taylor, S. 2010. The dilemma of Work-Integrated Learning (WIL) in South African higher education – the case of Town and Regional Planning at the University of Johannesburg. *Peer reviewed and revised 2010*.

Lindstaedt, S.N., Ley, T., Scheir, P. and Ulbrich, A., 2008. Applying scruffy methods to enable work-integrated learning. *Upgrade: The European Journal of the Informatics Professional*, 9(3), pp.44-50.

Londt, C. 2022. *Work Integrated Learning*. Available: <https://www.businessessentials.co.za/2018/07/12/work-integrated-learning/> (Accessed: 21 June 2022).

Lopokoiyit, M. C., Amurle, G. S. and Gakure, R. W. 2013. Strengthening Industry-University Linkages Through Public-Private Partnerships in Capacity Building. *US-China Education Review October 2013*, 3(10): 761-771.

Lupton, Deborah, Doing Fieldwork in a Pandemic (July 5, 2021). Available at SSRN: <https://ssrn.com/abstract=4228791>

MacLean, J. S. and White, B. J. 2013. Assessing Rigor in Experiential Education: A Working Model from Partners in the Parks. *Journal of the National Collegiate Honors Council*.

Maguire, M. and Delahunt, B. 2017. Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars. *All Ireland Journal of Teaching and Learning in Higher Education (AISHE-J)*, Number 3 (Autumn 2017), 3351.

Makhathini, T. P. 2016. Work integrated learning competencies: Industrial supervisors' perspectives. *Perspectives in Education 2016* 34(3): 56-71.

Malhotra N. K. 2015. *Essentials of Marketing Research procedures*. Harlow: Pearson.

Marlow, A., Saunders, C. and Mather, C., 2021. Evaluating work-integrated learning. In *Advances in Research, Theory and Practice in Work-Integrated Learning* (pp. 121-130). Routledge.

Marshall, B., Cardon, P., Poddar, A. and Fontenot, R., 2013. Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of computer information systems*, 54(1), pp.11-22.

Martin, A. J., Rees, M., Fleming, J., Zegwaard, K. E. and Vaughan, K. 2019. Work-integrated learning gone full circle: How prior work placement experiences influenced mentors. *International Journal of Work Integrated Learning*, 20(3): 229-242.

Maseko, L. A. 2018. A review of work-integrated learning in South African mining engineering universities. *The Journal of the South African Institute of Mining and Metallurgy*, 118: 1315-1323. Available: <http://dx.doi.org/10.17159/2411-9717/2018/v118n12a10> (Accessed 15 June 2020).

Matamande, W., Nyikahadzoi, E., Taderera, E. and Mandimika, E. 2013. An investigation of the effectiveness of work-related learning. A case of the industrial attachment program offered by the faculty of commerce, University of Zimbabwe. *Journal of Instructional Pedagogies*.

Matsoso, M. L. and Benedict, O. H. 2020. Work-integrated learning: a powerful connecting tool between classroom and industry. *International Journal Education Economics and Development*, 11(1): 94-112

McLennan, B. and Keating, S., 2008, June. Work-integrated learning (WIL) in Australian universities: The challenges of mainstreaming WIL. In *ALTC NAGCAS National Symposium* (pp. 2-14).

McNamara, J. 2013. The challenge of assessing professional competence in work integrated learning, *Assessment & Evaluation in Higher Education*, 38(2): 183-197.

Mcrae, N., and Johnstone, N. 2016. The development of a proposed global work-integrated learning framework. *Asia-Pacific Journal of Cooperative Education, Special Issue*, 2016, 17(4), 337-348.

Miettinen, R. 2000. The concept of experiential learning and John Dewey's theory of reflective thought and action, *International Journal of Lifelong Education*, 19(1): 54-72.

Milne, L. and Caldicott, J. 2016. Student performance on WIL placements: Does remuneration matter: *Asia-Pacific Journal of Cooperative Education*, 17(2), 175-187.

Minister of Economic Development, 2016. New Growth Path: response to questions by Minister of Economic Development, 8 November 2016, Parliamentary Monitoring Group.

Mkhize, T.O., 2017. *Learning opportunities offered to office management and technology students during work integrated learning and the implications for the curriculum* (Doctoral dissertation).

Monaco, M. and Martin, M. 2007. The Millennial Student: A New Generation of Learners. *Athletic Training Education Journal*,2 (Apr–June) 2, 42-46.

Muhajirah, M. 2020. Basic of Learning Theory: (Behaviorism, Cognitivism, Constructivism, and Humanism). *International Journal of Asian Education*, 1(1): 37-42, doi:[10.46966/ijae.v1i1.23](https://doi.org/10.46966/ijae.v1i1.23).

Nassaji, H., 2015. Qualitative and descriptive research: Data type versus data analysis. *Language teaching research*, 19(2), pp.129-132.

Ndlovu, T. P. and Mofokeng, N. E. M., 2018. The value of workplace learning in attaining discipline-specific skills for ecotourism employment. *African Journal of Hospitality, Tourism and Leisure*, 7(4): 1-13.

Nicola-Richmond, K., Tai, J. and Dawson, P., 2022. Students' feedback literacy in workplace integrated learning: How prepared are they? *Innovations in Education and Teaching International*, 1-11.

Nixon, I., Smith, K., Stafford, R., & Camm, S. 2006. *Work-based learning: Illuminating the higher education landscape*. Final Report. The Higher Education Academy.

Nyanjom, J., Goh, E. and Yang, E.C.L., 2020. Integrating authentic assessment tasks in work integrated learning hospitality internships. *Journal of Vocational Education & Training*, pp.1-23.

O'Toole, K. 2007. Assessment in Experiential Learning: The case of a public policy internship. *Education Research and Perspectives*. 34(2): 51-62.

Omary, M.B., Eswaraka, J., Kimball, S.D., Moghe, P.V., Panettieri, R.A. and Scotto, K.W., 2020. The COVID-19 pandemic and research shutdown: staying safe and productive. *The Journal of clinical investigation*, 130(6), pp.2745-2748.

Opdenakker, R., 2006, September. Advantages and disadvantages of four interview techniques in qualitative research. In *Forum qualitative sozialforschung/forum: Qualitative social research* (Vol. 7, No. 4).

Pacios, A. R. 2013. Assessment of the practicum by students from the perspective of the induction process. *Journal of Education for Library and Information Science*, pp.191-204.

Patrick, C-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., and Pretto, G. 2008. *The WIL (Work Integrated Learning] report: A national scoping study* [Australian Learning and Teaching Council (ALTC) Final report]. Brisbane: Queensland University of Technology. Available: <https://www.altc.edu.au> and <https://www.acen.edu.au>

Pattalitan, Jr, A. P. 2016. The Implications of Learning Theories to Assessment and Instructional Scaffolding Techniques. *American Journal of Educational Research*, 4(9): 695-700.

Peach, D. and Gamble, N. 2011. Scoping Work-Integrated Learning Purposes, Practices and Issues: *Developing Learning Professionals, Professional and Practice-based Learning* 7, (169-186). Springer, Dordrecht.

Peach, D., Ruinard, E. and Webb, F. 2014. Feedback on student performance in the workplace: The role of mentors. *Asia - Pacific Journal of Cooperative Education*, 15(3), 241-252.

Price, N. 2018. Responsibilities for a University Advisory Board. <https://www.boardeffect.com/blog/responsibilities-for-a-university-advisory-board/>

Purdie, F., Ward, L., McAdie, T., King, N. and Drysdale, M. 2013. Are work-integrated learning (WIL) students better equipped psychologically for work post-graduation than their non-work-integrated learning peers? Some initial findings from a UK university. *Asia-Pacific Journal of Cooperative Education*, 14(2): 117-125

Queirós, A., Faria, D. and Almeida, F., 2017. Strengths and limitations of qualitative and quantitative research methods. *European journal of education studies*.

Rainsbury, E., Hodges, D., Sutherland, J. and Barrow, M. 1998. Academic, Employer and Student Collaborative Assessment in a Work-based Cooperative Education Course, *Assessment & Evaluation in Higher Education*, 23(3): 313-324.

Rambe, P., Khoza, N. G. and Meda, L. 2015. Influence of work integrated learning on student preparedness for the work environment: a case study of Office Management and Technology students at the Central University of Technology. *27<sup>th</sup> Annual Conference, SAIMS, proceedings*

Ramlan, S. A., Faudzi, N. M., Isa, S. S. M, Haron, N. A. and Saod, A. H. M. 2017. An Evaluation of Satisfaction on Industrial Training among Electrical Engineering Students. *Journal of Business Management and Economic Studies*, 2(2), 2017.

Ramnund-Mansingh, A. and Reddy, N. 2021. South African specific complexities in aligning graduate attributes to employability. *The Journal of Teaching and Learning for Graduate Employability.*, 12(2), 206-221.

Rampersad, R. (ed) 2018. *Student Preparedness for Work Integrated Learning*. Cambridge Scholars Publishing.

Rayner, G. and Papakonstantinou. T. 2015. Student perceptions of their workplace preparedness: Making work-integrated learning more effective, *Asia-Pacific Journal of Cooperative Education*, 2015, 16(1): 13-24.

Reddan, G. 2013. To grade or not to grade: Student perceptions of the effects of grading a course in work-integrated learning. *Asia-Pacific Journal of Cooperative Education*, 14(4): 223-232.

Refae, G. A. E., Askari, M. Y. and Alnaji, L., 2016. Does the industry advisory board enhance education quality? *International Journal of Economics and Business Research*, 12(1), 32-43.

Reinhard, K. 2006. The German Berufsakademie Work-Integrated Learning Programme: A Potential Higher Education Model for West and East. *Asia-Pacific Journal of Cooperative Education*, 7(1): 16-21.

Reinhard, K., Townsend, R., Pop, C. A. and Pogrzeba. 2016. A comparative study of cooperative education and work-integrated learning in Germany, South Africa and Namibia. *Asia-Pacific Journal of Cooperative Education*, 17(3): 249-263.

Rholetter, K.L., 2020. A Causal-Comparative Study on the Efficacy of Intelligent Tutoring Systems on Middle-Grade Math Achievement.

Sadler, D. R., 1989. Formative assessment and the design of instructional systems. *Instructional science*, 18(2): 119-144.

Samadi, F. R. 2013. Assessing the impact of work integrated learning and its practices on the education of engineering technicians and technologists in relation to the Higher Education Qualification Sub-Framework (HEQSF) document in South Africa. PhD Thesis, Department of Mathematics, Science and Technology Education, University of South Africa.

Samuel, T. 2022. *Why Every Student Should Have a Mentor*. <https://www.getenpoint.com/post/why-every-student-should-have-a-mentor>

Scholtz, D. 2020. Assessing workplace-based learning. *International Journal of Work-Integrated Learning*, 21(1): 25-35.

Schön, D.A., 1984. *The reflective practitioner: How professionals think in action* (Vol. 5126). Basic books.

Sekaran, U. and Bougie, R., 2011. *Research Methods For Business*. United Kingdom: A.

Sekulich, K.M., 2019. Curriculum and assessment alignment mapping. *Lutheran Education*, 155(2), pp.33-39.

- Shivoro, R., Shalyefu, R. and Kadhila, N. 2017. Embedding graduate employability attributes in management sciences curricula: A case of two Namibian universities. *Journal of Teaching and Learning for Graduate Employability*, 8(1): 123–136.
- Shorten, A. and Moorley, C., 2014. Selecting the sample. *Evidence-based nursing*, 17(2), pp.32-33.
- Shuttleworth, M., 2008. Case study research design.
- Silva, D.L., Sabino, L.D., Lanuza, D.M., Adina, E.M., Villaverde, B.S. and Pena, E.G., 2014. Silva's management competency theory: a factor-item analytic approach utilizing oblique rotation direct oblimin method under Kaiser-Bartlett's test of sphericity. In *Proceedings of the World Congress on Engineering and Computer Science 2014 Vol. I WCECS 2014, San Francisco, CA, October 22 (Vol. 24)*.
- Singh, P. and Mahomed, C. C. 2013. The Value of Mentoring to Develop Student Teachers' Work Integrated Learning Skills, *International Business & Economics Research Journal*, November 2013, 12(11): 1373-1388
- Smith, C. 2012. Evaluating the quality of work-integrated learning curricula: A comprehensive framework. *Higher Education Research and Development* 31(2): 1-18
- Smith, C., Ferns, S. and Russell, L., 2016. Designing Work-Integrated Learning Placements That Improve Student Employability: Six Facets of the Curriculum That Matter. *Asia-Pacific Journal of Cooperative Education*, 17(2): 197-211.
- Smith, D. and Worsfold, K. 2015. Unpacking the learning–work nexus: 'priming' as lever for high-quality learning outcomes in work-integrated learning curricula, *Studies in Higher Education*, 40(1): 22-42.
- Smith, J. E. and Smith, R. 2010. Work integrated learning: an industry partners' perspective. In *Proceedings of Australian Vocational Education and Training Research Association (AVETRA)*.
- Smith, J. E., Meijer, G. and Kielly-Coleman, N. 2010. Assurance of learning: the role of work integrated learning and industry partners. *Work Integrated Learning: Responding to Challenges*, Australian Collaborative Education Network (ACEN) Incorporated, Curtin University of Technology, Perth, WA, pp 409-419.
- Smith-Ruig, T. 2014. Exploring the links between mentoring and work-integrated learning. *Higher Education Research & Development*, 2014, 33(4): 769-782.
- South Africa: Department of Economic Development. 2011. New Growth Path (NGP) National Skills Accord (NSA)

South Africa: Department of Education (DoE). 2007. Higher Education Qualifications Framework (Government Notice No. 928), Government Gazette (No. 30353), 5 October 2007.

South Africa: Department of Higher Education and Training (DHET) 2011. National Skills Development Strategy (NSDS) III. 2011-2013

South Africa: Department of Higher Education and Training (DHET). 2013. The Higher Education Qualifications Sub-Framework (HEQSF) – as Revised, 578(36721).

South African Qualifications Authority (SAQA). 2020. COVID-19 WIL Guidelines.

Statistics SA (StatsSA). 2021. *Quarterly Labour Force Survey (QLFS) – Q1:2021. 1 June 2021*. Department: Statistics South Africa. Available: <https://www.statssa.gov.za/publications/P0211/Media%20release%20QLFS%20Q1%202021.pdf>.

Sürücü, L. and Maslakçı, A., 2020. Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, 8(3), 2694-2726.

Sutherland, K. and Symmons, M. 2013. Issues and challenges in broad multidisciplinary WIL. *Asia-Pacific Journal of Cooperative Education*, 2013, 14(4), 295-304.

Torabi, K., Bazrafkan, L., Sepehri, S. and Hashemi, M., 2013. The effect of logbook as a study guide in dentistry training. *Journal of Advances in Medical Education & Professionalism*, 1(3), 81-84.

Torrane, H. and Pryor, J. 1998. *Investigating Formative Assessment. Teaching, Learning and Assessment in the classroom*, McGraw Hill House, Philadelphia

Trede, F. 2012. Role of work-integrated learning in developing professionalism and professional identity. *Asia-Pacific Journal of Cooperative Education*, 13(3): 159-167.

Trede, F., Mischo-Kelling, M., Gasser, E. M. and Pulcini, S. 2015. Assessment experiences in the workplace: a comparative study between clinical educators' and their students' perceptions, *Assessment & Evaluation in Higher Education*, 40(7): 1002-1016,

Trumbull, E. and Lash, A. 2013. Understanding formative assessment: Insights from learning theory and measurement theory. San Francisco: WestEd.

Ugwoke, E. O., Ezeji, H. A., Edeh, N. A. and Etonyeaku, E. A. C. 2016. Effective Implementation of TVET – Industry Partnership for Employability of

Graduates through Work Integrated Learning in Nigerian Universities. *Canadian Center of Science and Education*. 8(3): 307-315.

Ugwuanyi, C. F. and Ezema, J. U., 2010. Challenges of students' industrial work experience scheme (SIWES) in library and information science in the ICT environment. *Library philosophy and practice*, 2010, pp.1-6.

Ültanir, E. 2012. An Epistemological Glance at The Constructivist Approach: Constructivist Learning In Dewey, Piaget, And Montessori. *International Journal of Instruction*. 5(2): 1308-1470

Universities Australia 2015. *National Work Integrated Learning Strategy*, Universities Australia, Canberra.

Usman, A. S and Tasmin, R. 2015. Entrepreneurial Skills Development Strategies through the Mandatory Students' Industrial Work Experience Scheme in Nigeria. *4<sup>th</sup> World Congress on Technical and Vocational Education and Training (WoCTVET)*, 5<sup>th</sup>-6<sup>th</sup> November 2014, Malaysia.

Van Niekerk, J. 2016. An industry-responsive model of professional practice for industrial design: a work-integrated learning case study at a local University of Technology. MTEch, Department of Design, Cape Peninsula University of Technology.

Venville, A., Kosteki, T., Lynch, B., Santhanham, E and Whitty, A. 2021. Formalizing feedback in work-integrated learning partnerships: Opportunities for collaboration. *International Journal of Work-Integrated Learning (IJWIL)*, 22(1):17-23.

Villarroel, V., Bloxham, S., Bruna, D., Bruna, C. and Herrera-Seda, C. 2018. Authentic assessment: creating a blueprint for course design. *Assessment & Evaluation in Higher Education*, 43(5): 840-854.

Villarroel, V., Boud, D., Bloxham, S., Bruna, D. and Bruna, C. 2020. Using principles of authentic assessment to redesign written examinations and tests. *Innovations in Education and Teaching International*, 57(1): 38-49.

Vlok, A. 2010. *Keeping WIL alive in South African Higher Education*. Workshop presentation. WACE Conference, Hong Kong, January 2010.

Von Treuer, K., Keele, S. and Sturre, V., 2012, November. What Makes Staff (and Universities) Ready, WIL-ing and Able? In *Collaborative Education: Investing in the Future—Proceedings of the 2012 ACEN National Conference* (pp. 296-301). Springvale: Australian Collaborative Education Network. Available: [http://acen.edu.au/2012conference/wp-content/uploads/2012/11/123\\_What-Makes-Staff.pdf](http://acen.edu.au/2012conference/wp-content/uploads/2012/11/123_What-Makes-Staff.pdf) (Accessed).

Von Treuer, K., Sturre, V., Keele, S., & McLeod, J. 2011. An integrated model for the evaluation of work placements. *Asia Pacific Journal of Cooperative Education*, 12(3), 195-204.

Vygotsky, L. S. 1978. Interaction Between Learning and Development. 1978. In Gauvain & Cole (Eds). *Readings on the Development of Children*. New York: Scientific American Books, 34-40.

Wait, M. and Govender, C. M. 2016. Multi-Stakeholder Work Integrated Learning Model for Higher Education – a Transdisciplinary Approach. *South African Journal of Higher Education*, 30 (2), 279-293.

Walqui, A. 2006. Scaffolding Instruction for English Language Learners: A Conceptual Framework, *International Journal of Bilingual Education and Bilingualism*, 9(2): 159-180.

Walton J. A living theory approach to teaching in higher education. *Educational Action Research*. 2011 Dec 1;19(4):567-78.

Wang, J., Gill, C. and Lee, K-H. (2022) Effective mentoring in a work-integrated learning (WIL) program, *Journal of Teaching and Travel & Tourism*, 1-19

Waryszak, R.Z., 1999. Students' expectations from their cooperative education placements in the hospitality industry: An international perspective. *Education+ Training*.

Wilson, V., 2014. Research methods: triangulation. *Evidence based library and information practice*, 9(1), 74-75.

Winchester-Seeto, T., Rowe, A. and Mackaway, J. 2016. Sharing the load: Understanding the roles of academics and host supervisors in work-integrated learning. *Asia-Pacific Journal of Cooperative Education*, 17(2): 101-118.

Wood, D., Bruner, J. S and Ross, G. 1976. The Role of Tutoring in Problem Solving. *Journal of Psychol, Psychiat.*, September: 89-100

Wright, R.W., Brand, R.A., Dunn, W. and Spindler, K.P., 2007. How to write a systematic review. *Clinical Orthopaedics and Related Research (1976-2007)*, 455, pp.23-29.

Yildirim, A. G. O. 2008. Vygotsky's Sociocultural Theory and Dynamic Assessment In Language Learning. *Anadolu University Journal of Social Sciences*. 8(1): 301-308.

Yorke, J. O. N. and Vidovich, L., 2014. Quality Policy and the Role of Assessment in Work-Integrated Learning. *Asia-Pacific Journal of Cooperative Education*, 15(3), 225-239.

Zegwaard, K. E. and Coll, R. K. 2011. Exploring some current issues or Cooperative Education. *Journal of Cooperative Education and internships*, 45(2), 8-15. Reprinted in 2012, *Experience* 2(2), 16-23

Zegwaard, K. E. and Rowe, A. D. 2019. Research-informed curriculum and advancing innovative practices in work-integrated learning. *International Journal of Work-Integrated Learning, Special Issue*, 20(4): 323-334.

## **APPENDIX I: GATEKEEPERS' LETTERS**



Directorate for Research and Postgraduate Support  
Durban University of Technology  
Tromso Annex, Steve Biko Campus  
P.O. Box 1334, Durban 4000  
Tel.: 031-3732570/7  
Fax: 031-3732948

5<sup>th</sup> January 2021  
Mrs Nomsa P Majiya  
c/o Department of Public Management  
Faculty of Management Sciences  
Durban University of Technology

Dear Mrs Majiya

**PERMISSION TO CONDUCT RESEARCH AT THE DUT**

Your email correspondence in respect of the above refers. I am pleased to inform you that the Institutional Research and Innovation Committee (IRIC) has granted **Full Permission** for you to conduct your research "An evaluation of assessment Practices of Work Integrated Learning (WIL) In Programmes offering Office Management and Technology (OMT): A case study of three South African Universities" at the Durban University of Technology.

The DUT may impose any other condition it deems appropriate in the circumstances having regard to nature and extent of access to and use of information requested.

We would be grateful if a summary of your key research findings would be submitted to the IRIC on completion of your studies.

Kindest regards.  
Yours sincerely

A handwritten signature in black ink, appearing to read 'L. Liganiso'.

DR LINDA ZIKHONA LINGANISO  
DIRECTOR: RESEARCH AND POSTGRADUATE SUPPORT DIRECTORATE

**DIVISION OF ACADEMIC AFFAIRS AND RESEARCH  
DIRECTORATE: RESEARCH & INNOVATION**

**Nelson Mandela Drive**

*Mthatha Campus*  
Private Bag X1  
MTHATHA 5117  
South Africa  
Tel: +27 47 502 2947/2647  
Fax: +27 47 502 2185

email: [wakpan@wsu.ac.za](mailto:wakpan@wsu.ac.za)

**Buffalo City**

*Potsdam Campus*  
EAST LONDON 5201  
South Africa  
Tel: +27 43 708 5444/5232  
Fax: +27 43 708 5458

---

1<sup>st</sup> February 2021

Mrs PN Majiya  
Durban University of Technology  
Department of Education  
Durban

**Principal Investigator/s/Researcher:**  
Pridesworth Nomusa Majiya (MTech: Education)

**Co-Investigator/s/Supervisor/s:**  
Prof Renitha Rampersad (DPhil)

Dear Ms Majiya

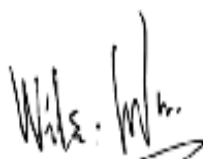
**Re: Gatekeepers Permission letter to Conduct research at WSU**

**Ethical Clearance Number:** IREC 062/18  
**Institution:** Durban University of Technology

A Gatekeeper Letter is hereby granted for the study: *'An evaluation of assessment practices of work integrated Learning (WIL) in programmes offering Office Management and Technology (OMT): A Case study of three South African Universities'* provided that copies of your completed study will be submitted to the Campus Rector of the campus in which the study will be conducted and the Directorate of Research and Innovation.

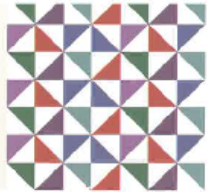
All Data pertaining to Walter Sisulu University will be treated confidentially and you are required to abide by ethical principles at all times. It is your responsibility to seek consent from participants.

regards

  
Prof W-Akpan

## APPENDIX II: ETHICS CLEARANCE:

Durban University of Technology



Institutional Research Ethics Committee  
Research and Practice Support Directorate  
1st Floor, Sanyal Centre  
Gate 1, Simon Biko Campus  
Durban University of Technology  
P O Box 1334, Durban, South Africa: 4001  
Tel: 031 279 2375  
Email: [irec@dut.ac.za](mailto:irec@dut.ac.za)  
[www.dut.ac.za/ethics/ethics-forms\\_publications](http://www.dut.ac.za/ethics/ethics-forms_publications)  
[www.dut.ac.za](http://www.dut.ac.za)

16 February 2021

Mrs P N Majiya  
P O Box 553  
Winklespruit  
4145

Dear Mrs Majiya

**An evaluation of assessment practices of Work Integrated Learning (WIL) In Programmes offering Office Management and Technology (OMT): A case study of three South African Universities. Ethical Clearance Number IREC 062/18**

The Institutional Research Ethics Committee acknowledges receipt of your final data collection tool for review.

We are pleased to inform you that the data collection tool has been approved. Kindly ensure that participants used for the pilot study are not part of the main study.

In addition, the IREC acknowledges receipt of your gatekeeper permission letters.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely,

Professor J K Adam  
Chairperson: IREC



## APPENDIX III: Letter of Consent



**Full Title of the Study: An investigation of assessment practices of Work Integrated Learning (WIL) in Programmes offering Office Management and Technology (OMT): A case study of three South African Universities".**

**Names of Researcher/s: Pridesworth Nomusa Majiya**

**Statement of Agreement to Participate in the Research Study:**

- I hereby confirm that I have been informed by the researcher, P N Majiya about the nature, conduct, Benefits and risks of this study - Research Ethics Clearance Number: IREC 062/18,
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

**Full Name of Participant    Date    Time    Signature**

\_\_\_\_\_  
I, P N Majiya (name of researcher) herewith confirm that the above participant has been fully

informed about the nature, conduct and risks of the above study

\_\_\_\_\_ Pridesworth Nomusa Majiya

**Full Name of Researcher**    **Date:**28/11/2022    **Signature**



\_\_\_\_\_ **Full Name of Witness (If applicable)**    **Date**

**Signature:**

\_\_\_\_\_ **Full Name of Legal Guardian (If applicable)**    **Date**

**Signature:**

.....**Please note the following:**

Research details must be provided in a clear, simple and culturally appropriate manner and prospective participants should be helped to arrive at an informed decision by use of appropriate language (grade 10 level- use Flesch Reading Ease Scores on Microsoft Word), selecting of a non-threatening environment for interaction and the availability of peer counselling (Department of Health, 2004).

If the potential participant is unable to read/illiterate, then a right thumb print is required and an impartial witness, who is literate and knows the participant e.g. parent, sibling, friend, pastor, etc. should verify in writing, duly signed that informed verbal consent was obtained (Department of Health, 2004).

If anyone makes a mistake completing this document e.g. a wrong date or spelling mistake, a new document has to be completed. The incomplete original document has to be kept in the participant's file and not thrown away, and copies thereof must be issued to the participant.

**References:**

Department of Health: 2004. *Ethics in Health Research: Principles, Structures and Processes*

<http://www.doh.gov.za/docs/factsheets/guidelines/ethnics/>

Department of Health. 2006. *South African Good Clinical Practice Guidelines*. 2nd Ed. Available at: [http://www.nhrec.org.za/?page\\_id=14](http://www.nhrec.org.za/?page_id=14)

## APPENDIX IV: STUDENTS' QUESTIONNAIRE

Dear Respondent

I am a PhD student at Durban University of Technology. I am appealing to you to participate in my research study titled "**An investigation of assessment practices of Work Integrated Learning (WIL) in Programmes offering Office Management and Technology (OMT): A case study of three South African Universities**".

The reason for this study is that there is less clarity on the criteria of WIL assessment and the guidelines that academics should follow to ensure consistent quality of assessment. In most cases, WIL is assessed by more than one academic staff member which compromises consistency and, subsequently quality. In industry, mentors are required to assess students on their performance. This poses a challenge as some mentors are not trained as assessors and at times they are unable to relate the outcomes of WIL to the assessment criteria.

The study will evaluate whether the assessment practices are consistent with the WIL outcomes and to discover whether the assessment practices contribute to the enhancement of the Office Management and Technology (OMT) curriculum. This study will also strengthen the capacity of all partners involved in WIL at Universities of Technology offering the OMT programme.

The study will contribute to the development and enhancement of the curriculum of the OMT diploma. The academic departments will be in a better position to produce graduates who have undergone WIL and are fully capable to perform at their best as their skills would have been properly assessed.

You will not be remunerated for participating in the study and no costs will be involved in the study. Kindly note that your confidentiality will be maintained as the information and findings will be handled with the strictest confidence. No names will be used in the study.

Persons to be contacted in the event of any problems or queries: Prof R. Rampersad (Supervisor) - 031 373 6876, the researcher 076 174 1192 or the Institutional Research Ethics Administrator on 031 373 2375

Thank you

P N Majiya

# QUESTIONNAIRE FOR STUDENTS: ASSESSMENT IN WORK INTEGRATED LEARNING (WIL)

The questions are relevant to the assessment of WIL in the Diploma of Office Management and Technology.

Kindly mark with X on the appropriate number in the shaded area.

## 1. SECTION A: WIL PREPARATION

1.1 Which university are you registered with?

Durban University of Technology

1

Mangosuthu University of Technology

2

Walter Sisulu University

3

1.2 Did you attend classes on WIL Preparedness?

Yes

1

No

2

1.3 If your answer is "Yes" to the above question, how many periods did you attend per week?

2 periods

1

4 periods

2

6 periods

3

More than 6 periods

4

1.4 Explain what was covered in the WIL Preparedness sessions

-----  
-----  
-----  
-----  
-----  
-----

1.5 In your opinion, was what you covered in the WIL Preparedness sessions sufficient?

Yes

1

No

2

1.6 Who was responsible for WIL Preparedness classes? Mark with an X

Department Lecturer

1

WILCo-ordinator

2

Staff member from the Co-operative Education Department

3

Other: Specify

4

1.7 Were you provided with a Logbook for WIL?

Yes

1

No

2

1.8 What other material were you provided with for WIL?

.....  
.....  
.....

1.9 During your WIL classes, were you informed about the outcomes of WIL?

Yes

1

No

2

## 2. SECTION B: PLACEMENT

2.1 Kindly specify the type of company you were placed at.

Private Sector

1

Public Sector

2

Non-Government Organisation (NGO)

3

Other: Kindly Specify

4

2.2 Kindly specify the province where you were placed?

KwaZulu Natal

1

Eastern Cape

2

Other: Specify

3

2.3 Who was responsible for your replacement?

Yourself

1

WIL Coordinator

2

Lecturer

3

Co-operative Department Staff Member

4

2.4 Please list any additional skills that you developed during your training

-----  
-----  
-----  
-----

2.5 Please specify the duration of your placement.

Three months

1

Six months

2

One year

3

More than one year

4

Other

5

2.6 Do you believe that the period you mentioned in Q2.5 was sufficient?

Yes

1

No

2

2.7 If your answer was 'No' in Q2.6, what do you think would be a sufficient timeframe for WIL?

### 3. SECTION C: MENTORSHIP

3.1 Who was your mentor during your WIL placement?

Manager

1

Supervisor

2

Colleague at work

3

Other: Specify

4

3.2 How was your work relationship with your mentor?

Excellent

1

Good

2

Fair

3

Poor

4

3.3 Were you visited by your WIL Coordinator/university staff member during your placement?

Yes

1

No

2

3.4 Were you able to secure permanent employment after you completed your WIL?

Yes

1

No

2

### 4. SECTION D: ASSESSMENT

4.1 Were the contents of the Logbook explained to you?

Yes

1

No

2

4.2 Did your logbook contain an evaluation that required completion by your mentor?

Yes

1

No

4.3 If yes, was a mark allocated to this evaluation?

Yes

No

4.4 Was the mark discussed with you after the evaluation?

Yes

No

4.5 What assessments did the academic Department undertake once your training was over? Please list them.

.....  
.....  
.....  
.....  
.....

4.6 Who in the department assessed you in WIL?

WIL Coordinator

Lecturer in the Department

Other: Specify

4.7 How were you assessed for WIL by the Department?

Examination

Assignments

Written Tests

Presentations

Projects

Other: Specify

4.8 If you were given a different assessment from the above-mentioned, kindly list below.

-----  
-----  
4.9 How many assessments in WIL did you have during the year?

One assessment

1

Two assessments

2

Three assessments

3

More than three assessments

4

4.10 Did the assessments cover the outcomes of WIL?

Yes

1

No

2

4.11 If your answer is "No" in Q4.10, kindly explain what the WIL assessments covered.

-----  
-----  
-----  
-----

4.12 In your opinion, who should assess students for WIL in the OMT diploma?

WIL Coordinators

1

Co-operative Education Department staff member

2

Lecturers in the Department

3

Other: Specify

4

4.13 Do you feel that the assessment type/s you mentioned in 4.7 was/were fair when you were assessed?

Yes

1

No

2

4.14 If your answer is "No" in 4.13, kindly elaborate why the type of assessment was not fair.



5.8 My WIL mentor gave me enough support	0	1	2	3	4
5.9 I was happy with how WIL was assessed	0	1	2	3	4
5.10 I was happy with my WIL evaluation score given by my work mentor	0	1	2	3	4
5.11 It is necessary for WIL to have a fixed curriculum	0	1	2	3	4
5.12 The period I spent in industry during placement was enough	0	1	2	3	4
5.13 I was happy with my overall WIL experience	0	1	2	3	4
5.14 It is necessary for the WIL component to be compulsory in the OMT Diploma	0	1	2	3	4
5.15 WIL placement assisted me to develop office administration skills	0	1	2	3	4

This is the end of the questionnaire. Thank you for your participation.

## APPENDIX V: QUESTIONNAIRE FOR WIL CO-ORDINATORS

Dear Respondent

I am a PhD student at Durban University of Technology. I am appealing to you to participate in my research study titled "**An investigation of assessment practices of Work Integrated Learning (WIL) in Programmes offering Office Management and Technology (OMT): A case study of three South African Universities**".

The reason for this study is that there is less clarity on the criteria of WIL assessment and the guidelines that academics should follow to ensure consistent quality of assessment. In most cases, WIL is assessed by more than one academic staff member which compromises consistency and, subsequently quality. In industry, mentors are required to assess students on their performance. This poses a challenge as some mentors are not trained as assessors and at times, they are unable to relate the outcomes of WIL to the assessment criteria.

The study will evaluate whether the assessment practices are consistent with the WIL outcomes and to discover whether the assessment practices contribute to the enhancement of the Office Management and Technology (OMT) curriculum. This study will also strengthen the capacity of all partners involved in WIL at Universities of Technology offering the OMT programme.

The study will contribute to the development and enhancement of the curriculum of the OMT diploma. The academic departments will be in a better position to produce graduates who have undergone WIL and are fully capable to perform at their best as their skills would have been properly assessed.

You will not be remunerated for participating in the study and no costs will be involved in the study. Kindly note that your confidentiality will be maintained as the information and findings will be handled with the strictest confidence. No names will be used in the study.

Persons to be contacted in the event of any problems or queries: Prof R. Rampersad (Supervisor) - 031 373 6876, the researcher 076 174 1192 or the Institutional Research Ethics Administrator on 031 373 2375

Thank you

P N Majiya

## QUESTIONNAIRE FOR WIL CO-ORDINATORS

- Thank you for taking time to answer the questions in this questionnaire.
- The questionnaire is for a PhD study titled: An evaluation of assessment practices of Work Integrated Learning in Programmes offering Office Management and Technology (OMT): A case study of three South African Universities.
- It will take you less than 20 minutes to complete the questionnaire.
- Mark the relevant box with a (X) and, where applicable, furnish brief responses.

### SECTION A: WIL CO-ORDINATOR'S EXPERIENCE

1. How long have you been employed by the University/University of Technology?

0-3 years	1
3-6 years	2
6-10 years	3
More than 10 years	4

2. What is your highest qualification?

Doctorate	1
Masters	2
Honours	3
Degree	4
Diploma	5
Matric/NSC	6

3. How many years have you been a WIL Co-ordinator?

0-5 years	1
6-10 years	2
11-15years	3

16-20 years	4
More than 20 years	5

**SECTION B: STUDENTS' PLACEMENTS**

4. Are you responsible for placing students for WIL?

Yes	1
No	2

5. How do the students find their placements?

University finds them placements	1
Students place themselves	2
External companies contact the university	3
Co-operative Department	4
Other: Specify	5

6. Is there support for students during placement?

Yes	1
No	2

6.1 If your answer is "Yes" in question 6. Explain how students are supported.

.....

.....

.....

.....

7. Are students inducted at the workplace before starting with their placement?

Yes	1
No	2

8. Do students attend classes on WIL Preparedness?

Yes	1
No	2

9. How many periods per week do students attend on WIL Preparedness classes?

2 periods	1
4 periods	2
6 periods	3
More than 6 periods	4

10. In the WIL Preparedness classes, are students informed about the outcomes of WIL?

Yes	1
No	2

10.1 If the answer is "No" in question 10; state the reasons why students are not informed about the outcomes.

.....

.....

.....

.....

.....

11. What type of material is given to students who are undergoing WIL?

Study Guide	1
Logbook	2
Other: Specify	3

12. Are students monitored during their WIL placements?

Yes	1
No	2

## SECTION C: ASSESSMENT

13. Who is responsible for assessing students for WIL?

WIL Co-ordinator	1
Industry Mentor	2
All Lecturers	3
Co-operative Education Department	4
Other: Specify	5

14. When is the assessment conducted?

During students' placement	1
After WIL period	2
Other: Specify	3

15. What type of assessment does your institution use when assessing WIL?

Examination	1
Assignments	2
Written Tests	3
Presentations	4
Projects	5
Other: Specify	6

16. How many WIL assessments are conducted during the year?

One assessment	1
Two assessments	2
Three assessments	3
More than three assessments	4

17. How are marks allocated for the assessment/s?

-----  
-----  
-----  
-----  
-----

18. Are the assessments of WIL moderated?

Yes	1
No	2

19. When is the final mark captured in the university mark system?

During the year	1
In November/December	2
At the beginning of the following year	3

20. How do students receive feedback on their WIL assessment?

-----  
-----  
-----  
-----

21. How do you use students' feedback in curriculum development? Kindly explain

-----  
-----  
-----

**SECTION D: WIL POLICIES**

22. Does your institution have a Work Integrated Learning policy?

Yes	1
No	2

23. Does your institution have a Work Integrated Learning policy?

Yes	1
No	2

24. Are there guidelines for WIL assessment in this policy?

Yes	1
No	2

25. Do you have any suggestions on how WIL can be better assessed for the OMT programme?

.....

.....

.....

.....

This is the end of the questionnaire. Thank you for participating in the survey.

## **APPENDIX VI: MENTOR INTERVIEW SCHEDULE OF QUESTIONS**

### **BACKGROUND**

My name is Nomsa Majiya. I am a PhD student at Durban University of Technology. I am appealing to you to participate in my research study titled **"An investigation of assessment practices of Work Integrated Learning (WIL) in Programmes offering Office Management and Technology (OMT): A case study of three South African Universities"**.

The reason for conducting this study, is the insufficient clarity on the criteria of WIL assessment and the guidelines academics should follow to ensure consistent quality of assessment. In most cases, WIL is assessed by more than one academic staff member, which compromises consistency and, subsequently, quality. In industry, mentors are required to assess students on their performance. This poses a challenge, as some mentors are unable to relate the outcomes of WIL to the assessment criteria.

The purpose of the research is to evaluate whether the WIL assessment practices are consistent with WIL outcomes and to discover whether the assessment practices contribute to the enhancement of the OMT curriculum.

Your responses to the questions below will be used for this research only and will remain confidential. Names will not be used and you will remain anonymous.

### **INTERVIEW QUESTIONS**

#### **SECTION A: ROLE OF MENTOR**

1. Please specify your role during a student's WIL placement.
2. How long has your company been involved with the respective University in placing students for WIL?
3. How many students have you mentored for the past three years?
4. Who is responsible for mentoring students in your organisation?

#### **SECTION B: PLACEMENT**

5. How were students placed in your organisation? Was it through the university or students who found the placement themselves?
6. What is the period of WIL placement of students?
7. In your opinion, is this period enough for students to spend at a workplace? If no, why?

8. What do you think should be the correct period for WIL placements?

**SECTION C: STUDENT SUPPORT/GUIDANCE**

9. How is a student inducted prior to starting WIL training?
10. Were the outcomes of the WIL programme discussed with you before the WIL training period?
11. In your organisation, how are the WIL programme outcomes and expectations discussed with the student?
12. According to your view, does the Logbook cover all aspects required for assessment?
13. How often are you required to report the student's experience and performance in the Logbook?

**SECTION D: WIL ASSESSMENT**

14. Are you responsible for the assessment of students? If you do not assess students, kindly specify the person responsible for assessment of WIL in your organisation.
15. Why do you think you should be assessing students for WIL? Please explain.
16. Do you think it is important for you to give a mark when you have assessed a student? Please explain why you should allocate a mark to a student's assessment.
17. How do you provide feedback to a student on his/her work performance while engaged in WIL?

**SECTION E: OMT PROGRAMME**

20. Do you think WIL is an important component in the Office Management and Technology diploma? Kindly elaborate.
21. How do you think WIL improves students' chances of employability? Kindly explain.

End of the questions. Thank you for your time, responses and for participating in the study.

## APPENDIX VII: CHI-SQUARE TEST

Chi-Square	Chi-Square
Which university are you registered with?	55,989
Did you attend classes on WIL Preparedness?	124,455
If your answer is "Yes" to the above question, how many periods did you attend per week?	65,136
Explain what was covered in the WIL Preparedness sessions	98,364
In your opinion, was what you covered in the WIL Preparedness sessions sufficient?	61,455
Who was responsible for WIL Preparedness classes?	131,08
Were you provided with a Logbook for WIL?	149,114
What other material were you provided with for WIL?	27,58
During your WIL classes, were you informed about the outcomes of WIL?	111,364
Kindly specify the type of company you were placed at	171,409
Kindly specify the province where you were placed?	131,273
Who was responsible for your replacement?	65,545
Please list any additional skills that you developed during your training	150,932
Please specify the duration of your placement	411,557
Do you believe that the period you mentioned in Q2.5 was sufficient?	1,114
If your answer was 'No' in Q2.7, what do you think would be a sufficient timeframe for WIL?	56,297
Who was your mentor during your WIL placement?	118,28
How was your work relationship with your mentor?	78,83
Were you visited by your WIL Co-ordinator/university staff member during your placement?	11
Were you able to secure permanent employment after you completed your WIL?	84,568
Were the contents of the Logbook explained to you?	121,114
Did your logbook contain an evaluation that required completion by your mentor?	144,463
If yes, was a mark allocated to this evaluation?	87,451
Was the mark discussed with you after the evaluation?	0,051
What assessments did the academic Department undertake once your training was over? Please list them	86,818
Who in the department assessed you in WIL?	156,148
How were you assessed for WIL by the Department?	135,172
How many assessments in WIL did you have during the year?	35,885
Did the assessments cover the outcomes of WIL?	122,506
In your opinion, who should assess students for WIL in the OMT diploma?	106,714
Do you feel that the assessment type/s you mentioned in was/were fair when you were assessed?	104,143
Were you allocated a mark for your WIL assessment?	58,291
I was happy with my WIL training	108,83
WIL was considered a valuable period in my studies	134,682
It is necessary for WIL to have a fixed curriculum	162,807
It is necessary for the WIL component to be compulsory in the OMT Diploma	215,371
I was happy with how WIL was assessed	82,4
I was happy with my WIL evaluation score given by my work mentor	128,659
The period I spent in industry during placement was enough	17,807
I was happy with my overall WIL experience	91,102
WIL placement assisted me to develop office administration skills	228,457

I was given guidance by the company where I was placed	147,466
The WIL lecturer provided sufficient guidance during the WIL preparedness classes	80,307
During my WIL placement I was able to practice the theory I learnt in class	131,727
I was given hands-on experience by my work mentors	158,034
The WIL experience met my expectations	79,143
My WIL mentor gave me enough support	135,648

## APPENDIX VIII

Rotated Component Matrix<sup>a</sup>

	Component		
	1	2	3
I was happy with my WIL training	0,500	0,289	0,517
WIL was considered a valuable period in my studies	0,352	0,369	0,410
It is necessary for WIL to have a fixed curriculum	0,057	0,087	0,695
It is necessary for the WIL component to be compulsory in the OMT Diploma	0,125	0,068	0,794
I was happy with how WIL was assessed	0,305	0,633	0,222
I was happy with my WIL evaluation score given by my work mentor	0,108	0,528	0,527
The period I spent in industry during placement was enough	0,100	0,754	0,018
I was happy with my overall WIL experience	0,379	0,538	0,462
WIL placement assisted me to develop office administration skills	0,125	0,580	0,069
I was given guidance by the company where I was placed	0,609	- 0,061	0,524
The WIL lecturer provided sufficient guidance during the WIL preparedness classes	0,543	0,427	0,101
During my WIL placement I was able to practice the theory I learnt in class	0,771	0,195	0,041
I was given hands-on experience by my work mentors	0,746	0,151	0,164
The WIL experience met my expectations	0,598	0,495	0,163
My WIL mentor gave me enough support	0,459	0,242	0,446

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

## APPENDIX X: Statistician Certificate

**Gill Hendry** B.Sc. (Hons), M.Sc. (Wits), PhD (UKZN)

Mathematical and Statistical Services

Cell: 083 300 9896

Email: gillhendrystats@gmail.com

24 November 2022

Re: Assistance with data analysis

Please be advised that I assisted Pridesworth Nomusa Majiya (Student number 19909521), who is currently studying for a PhD: Management Sciences at DUT, with the statistical analysis of her data.

Yours sincerely

*Dr Gill Hendry*

**Private Consulting Statistician**

## APPENDIX XI: Editor's Certificate

**Helen Richter**  
Advanced Editing, Proofreading  
& Copywriting  
[feetjieding@gmail.com](mailto:feetjieding@gmail.com)  
+27 729538169

5 December 2022  
To whom it may concern

---

### CERTIFICATE OF EDITING & AUTHENTICATION

---

I have proofread and language edited the PhD thesis titled:  
**“An evaluation of assessment practices of Work Integrated Learning (WIL)  
in Programmes offering Office Management and Technology (OMT):  
A case study of three South African Universities”**

by

**Pridesworth Nomusa Majiya**

To the best of my knowledge, the work is free of spelling, grammar, structural and stylistic errors and the contents are certified as the author's own work.  
With thanks.

---

H. S. Richter

## APPENDIX XII: TURNITIN REPORT

An evaluation of assessment practices of Work Integrated Learning (WIL) in Programmes offering Office Management and Technology (OMT): A case study of three South African Universities

### ORIGINALITY REPORT

**16%**

SIMILARITY INDEX

**15%**

INTERNET SOURCES

**4%**

PUBLICATIONS

**6%**

STUDENT PAPERS

### PRIMARY SOURCES

<b>1</b>	<b>hdl.handle.net</b> Internet Source	<b>1 %</b>
<b>2</b>	<b>www.scielo.org.za</b> Internet Source	<b>1 %</b>
<b>3</b>	<b>www.mobt3ath.com</b> Internet Source	<b>1 %</b>
<b>4</b>	<b>www.usaf.ac.za</b> Internet Source	<b>&lt;1 %</b>
<b>5</b>	<b>sasce.net</b> Internet Source	<b>&lt;1 %</b>
<b>6</b>	<b>mobt3ath.com</b> Internet Source	<b>&lt;1 %</b>
<b>7</b>	<b>vital.seals.ac.za:8080</b> Internet Source	<b>&lt;1 %</b>
<b>8</b>	<b>Submitted to Mancosa</b> Student Paper	<b>&lt;1 %</b>