# The preparation of National Certificate vocational learners by work integrated learning for industry

by

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**RESEARCHER'S DECLARATION**

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**DECLARATION**

1. I understand what plagiarism is and am aware of the policy of the University of Pretoria regarding plagiarism.
2. I declare that the dissertation entitled **The preparation of National Certificate vocational learners by work integrated learning for industry** is my work and that the sources consulted have been fully acknowledged and referenced in accordance with departmental requirements.
3. I declare that this work has not been presented to any other university for assessment purposes.

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(MABUNDA A.)

## ETHICS STATEMENT

I, Alucia Mabunda, have obtained the applicable ethics approval for the research described in this work. I declare that I observed the ethical standards required in terms of the University of Pretoria's Code of Ethics for Researchers and the Policy Guidelines for Responsible Research'.

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- Registered title, and
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## Dedication and Acknowledgements

This dissertation is dedicated to the following people:

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## GLOSSARY OF TERMINOLOGY

| | |
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| CAPS | CURRICULUM AND ASSESSMENT POLICY STATEMENT |
| CET | COMMUNITY EDUCATION AND TRAINING |
| DHET | DEPARTMENT OF HIGHER EDUCATION AND TRAINING |
| DOE | DEPARTMENT OF EDUCATION |
| DOL | DEPARTMENT OF LABOUR |
| FET | FURTHER EDUCATION AND TRAINING |
| HEI | HIGHER EDUCATION INSTITUTIONS |
| NCV | NATIONAL CERTIFICATE VOCATIONAL |
| NQF | NATIONAL QUALIFICATIONS FRAMEWORK |
| PSET | POST SCHOOL EDUCATION AND TRAINING |
| SA | SOUTH AFRICA |
| SETA | SECTOR EDUCATION AND TRAINING AUTHORITIES |
| TVET | TECHNICAL VOCATIONAL EDUCATION AND TRAINING |
| WBE | WORK-BASED EDUCATION |
| WIL | WORK INTEGRATED LEARNING |
| WSE | WORK SELF EFFICACY |
| ISAT | INTEGRATED SUMMATIVE ASSESSMENT TASK |
| VET | VOCATIONAL EDUCATION AND TRAINING |

## 1. Abstract

This study was conducted at the TVET College X in Gauteng province. The main aim of the study was to establish the way in which national certificate vocational learners are prepared by work integrated learning for industry. Twenty participants were sampled qualitatively from Campus X. The unemployment and poverty rates are high in South Africa and are accompanied by income inequalities, hence the implementation of further education and training policies in an effort to reduce these high rates. Researchers concur that South Africa needs to invest in education and training in order to bring the country's human capital to a level that is consistent with sustainable economic development.

The establishment of a dual education system which integrates theory and practice is possible through the effective implementation of a curriculum that embraces work integrated learning. A high percentage of the learners at college X are exiting the national certificate vocational programme without either practical experience or exposure in industry. The study was based on the following research question, namely, *How are national certificate vocational learners prepared by work integrated learning for industry?*

The study findings, which emerged from the structured interviews which were conducted, revealed that lecturers are informed about what WIL is but not on how it should be implemented and, thus, they are generally not very enthusiastic about it. It would appear that they tend to see WIL as the obligation of the college management and WIL facilitators and, thus, are prepared to convey only what is in the curriculum. However, the curriculum does not include a variety of obligatory WIL exercises. While learners understand what WIL entails, they are concerned that the workplace placement component of their learning is not prioritised as this may later place them at a disadvantage when applying for attractive jobs in the labour market. Existing literature highlights the difficulties experienced in WIL implementation and the lack of implementation models, with this possibly being the reason why learners are not being viably prepared by WIL. A work integrated model for national certificate vocational institutions to better prepare learners for industry was developed based on the findings of the study.

**2. KEYWORDS**: National certificate vocational, work integrated learning, learners, further education and training.

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## 1.1. Introduction

This chapter introduces the concept of work integrated learning (WIL) within a South African college setting. In addition, the chapter explores how WIL is perceived and implemented and the subsequent benefits thereof (if any) in countries other than South Africa. Work integrated learning (WIL) is a worldwide phenomenon which has prompted the improvement of further education and training (FET) policies aimed at reducing unemployment and enhancing social and economic development (Powell & McGrath, 2014). However, it was not until the late 20th century that the phenomenon became increasingly common and resources were allotted to it (Jovanic, Fane & Andrew, 2018). WIL encompasses a myriad of experiences that engage students in the work environment (Ferns, Campbell, & Zegwaard, 2014). It may be defined as a component of a learning programme that focuses on an authentic, work-based setting (Moletsane & Moloi, 2015). As indicated by Jackson (2015), WIL is a practice that combines academic study with the learner's exposure to the world of work with the aim of preparing such a learner for work. Synonyms for WIL include work-based learning and cooperative education (Jackson, 2018). In light of the abovementioned definitions, it may be deduced that the integration of theory and practical work experience is central in defining WIL which is catered for in vocational education. In short, vocational education may be described as education that focuses on training learners to work in various fields in industry.

Several countries in Europe have introduced and successfully implemented vocational education and training. Switzerland has the strongest dual Vocational Education and Training (VET) System in the world with learners spending 60 to 80 percent of their time learning under work contracts in workplaces (Renold et al., 2018) with the country focusing specifically on training curriculum implementation and work contracts for apprentices with their curriculum content clearly defined. Renold et al. (2018) ascribe Switzerland's high-quality VET to its ability to link education to employment. Switzerland

is followed closely by Austria, Germany and Denmark which are also characterised by strong youth labour markets. It may be argued that since the aim of vocational education is to prepare learners for industry and/or the work environment, it is imperative that a strong link exist between vocational education institutions and companies.

The below figure depicts Switzerland's scores for the curriculum design phase, curriculum application and curriculum updating.

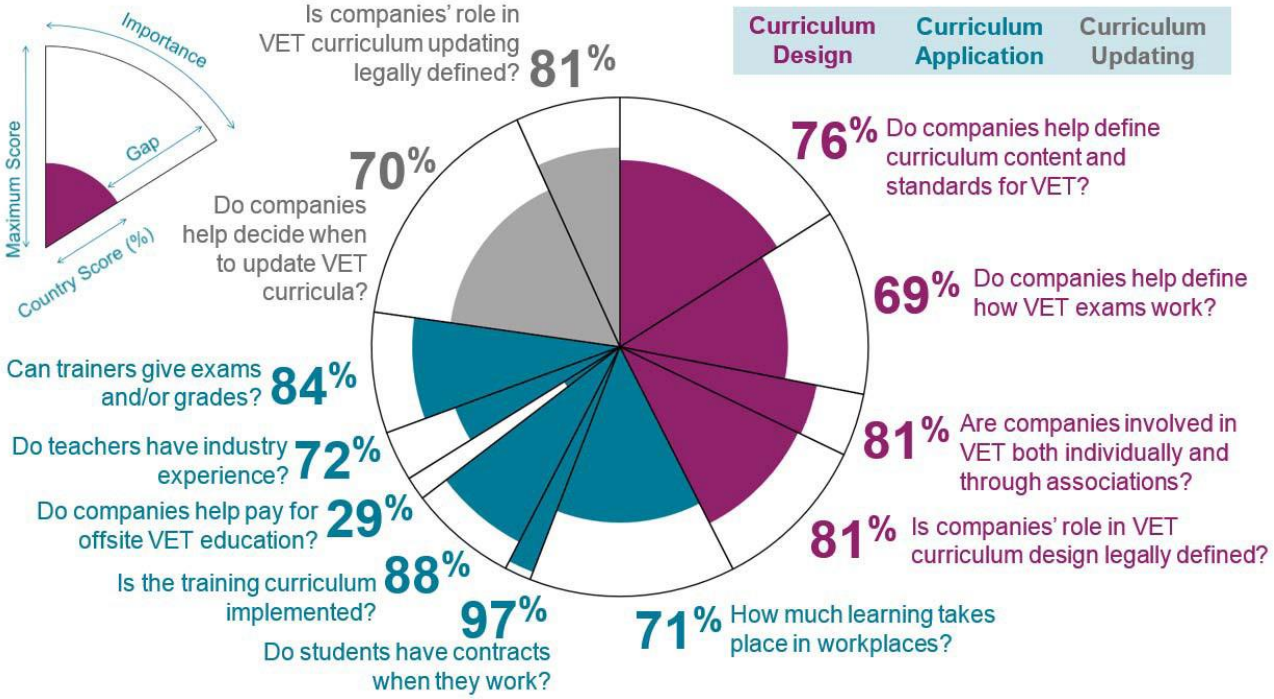


*Figure 1.1: The features of the Swiss system.* Source: (Renold et al., 2018)

It is clear from Figure 1.1 that Switzerland prioritises all phases of the curriculum implementation for VET education and, moreover, that learners spend much of their time in workplaces in order to gain practical skills. The three WIL stakeholders; namely, vocational institutions, businesses and learners are all involved in the process and there is a strong commitment on all their parts to the WIL process (Jovanovic, Fane & Andrew, 2018). This is critical for the success of WIL. Companies are involved from the first stage when the curriculum is designed to the last stage when the curriculum is updated. This in turn helps to create a pool of the relevant skills needed by industry, thus enabling Swiss

industry to remain competitive and eventually also leading to the absorption of new recruits. Duncan (2016) reports on an occasion where he witnessed learners in Switzerland, who had just completed grade 9, producing watch components and was surprised to learn that they were not training but were working on the production line producing genuine parts.

Germany is also known for its high calibre dual FET system which incorporates a firm-based training programme combined with a school component (Solga, Protsch, Ebner & Brzinsky-Fay, 2014). The success of the German FET sector, which has increased graduate employability, has led to nations endeavouring to introduce similar concepts (Deissinger, 2015) as both the theoretical and the practical components of vocational education are addressed. In Finland, FET enrolments increased from 23 to 68.8% between 2003 and 2009 (Virolainen & Stenström, 2014) with approximately 50% of the population above the age of 16 choosing to enrol in vocational education (Merilainen, Isacsson & Olson, 2018). This increase in enrolment has been ascribed to a variety of factors including counterbalancing theory and practical work through the introduction of workplace periods and skills demonstrations.

According to Merilainen et al. (2018), all the vocational subjects offered in Finland guarantee students employment opportunities when they graduate, as those enrolled in vocational education are required to complete a mandatory six-month minimum of practical work in the workplace. This highlights that there must constantly be a match between vocational courses and industry demands in order to ensure the guaranteed employment of graduates. In their review Maclean and Fien (2017) discovered that while the Middle East invests strongly in education, it invests little in the TVET sector and workplace training. They further assert that this is the reason why one-third only of learners in the Middle East believe that they are adequately prepared for the labour market entry upon completion of their studies at TVET institutions. The researcher perceived the latter observation as also being relevant to College X, the institution under review. Following a review of scholarly articles, it became evident that countries that invest in VET have lower unemployment rates, are internationally competitive and have

booming economies as opposed to those that do not invest in vocational education and which are characterised by high youth unemployment rates.

FET colleges in South Africa were renamed Technical Vocational Education and Training (TVET) colleges at the launch of the departmental White Paper on Post-School Education and Training, as it was felt the country needed a name that was internationally aligned for vocational education (Department of Higher Education and Training – DocNotices, 2016). It is for this reason that the two terms, FET and TVET, are often used interchangeably, as existing literature refers to TVET institutions as FETs. Technical Vocational Education and Training is defined as "a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life" (UNESCO, 2007). Technical Vocational Education and Training education may, therefore, be referred to as a learning programme that combines theory and practice with the aim of equipping learners with the skills that are critical in the world of work.

In their review, Wheelahan and Moodie (2016) argue that for all countries to achieve Goal 4 of the Education 2030 Framework for Action, which is to ensure inclusive and equitable quality education while promoting lifelong learning opportunities for all, there is a strong need for a vocational education system that supports the economy, especially in countries that are suffering from chronic unemployment rates. They cite the possibility that TVET colleges may have been focusing on preparing learners for lower and middle level jobs while the demand for such job levels has been gradually decreasing. TVET institutions may need to balance the level of jobs for which they are preparing learners. It may be that South Africa is focusing primarily on promoting university education and, in the process, neglecting trade qualifications.

Africa has been struggling with the decision as whether to invest more in vocational education or general education for some time (UNESCO, 2007). South Africa (SA) introduced the concept of WIL in 1979 by aligning itself with the system followed in the

Dual Hochschule Baden-Wurttemberg Institution founded in Germany in 1974 (Reinhard, Pogrzeba, Townsend, & Pop, 2016). Reinhard et al. (2016) point out that South Africa did not waste time in introducing WIL, while Namibia followed years later in 2011 with only one institution in the country offering WIL. The introduction of WIL in South Africa meant that FETs had to be established in order to offer dual programmes, with these institutions focusing on offering theoretical content to learners while also preparing them for industry. At the time of this study, over 70% of South Africa's population comprised of youth (people under the age of 35 years) who were either semi-skilled, unemployed or in the process of attaining a qualification at a higher institution of learning (Govender & Taylor, 2015). It is generally observed that most learners in higher institutions of learning are young people whose aim it is to enter the world of work.

The great recession of 2008 left a high number of both developed and developing countries in severe distress with unemployment rates doubling (Eichhorst, Núria, Ricarda, & Klaus, 2014) and, consequently, driving the labour market and macroeconomies policies in most countries, including countries in Europe, to focus on lowering these chronic unemployment rates (Heyes, 2014). Young people suffered the most as a result of this economic crisis with Pugatch (2014) explaining that the rate of unemployment among South African youth far exceeds that of adults as it estimated to be at 50 percent. It is undeniable that the shock waves of the great recession of 2018 impacted severely on South Africa strongly as it did on other developing countries worldwide.

As pointed out above, the great recession also affected the socio-economic livelihood of developed countries. Greece was among the countries which were hit hard by the recession, according to Heyes (2014), half the country's youth unemployed. The least affected country in Europe was Denmark with a youth unemployment rate of 11.2%. Nevertheless, a quarter of the young people were left unemployed in the European region after the recession. Heyes (2014) argues that this economic crisis was a worldwide challenge with most countries experiencing an increase in unemployment rates. He further argues that the recession compelled Europe to focus on vocational education and apprenticeship as a way of enabling young people to enter the labour market in order to

remedy the situation. The expectation of WIL is that since most populations have a higher percentage of young people, should the youth enter the world of work in high numbers, the economy of the country in question stands to benefit significantly.

As much as the great recession of 2008 was global, it would appear that African countries were the most severely affected, with a youth unemployment rate of 80% in Nigeria (Inyiagu, 2014), thus resulting in Nigeria being listed among the poorest nations in the world. Inyiagu (2014) adds that the country is struggling to develop a competent workforce and sustainable global economic growth and cites changing working demands as a cause of the high rate of unemployment.

Sibiya and Nyembezi (2018) explain that South Africa is facing serious challenges, especially a high unemployment rate, inequality and poverty. They further state that it would seem that obtaining a qualification does not guarantee employment as a high number of unemployed youths are graduates. However, the qualifications referred to in their study were not identified as either vocational or main stream qualifications. In their report Wedekind and Mutereko (2016) emphasise the challenge of unemployment citing a lack of skills, skills mismatch and institutions' unresponsiveness to the labour market as some of the causes of youth unemployment. Pugatch (2014) concurs that a skills mismatch between the labour market demands and youth skills together with low productivity in the country are among the causes of unemployment. It neither helps nor improves the economy if a high number of graduates in the same field are produced or if institutions produce graduates with skills that are either not needed or are already in excess. Tshilongamulenzhe (2017) adds that the dire shortage of skills in South Africa is a result of socio-political and economic factors and, in particular, the apartheid regime legacy, although the South African Government is strongly committed to addressing these shortages. It is thus essential that institutions focus on the employability of youth, bearing in mind that, as Pugatch (2014) states, the provision of skills required by employers to the youth may be facilitated through vocational education.

The aim of post school institutions is to prepare learners to be workers in the labour market and/or establish their own businesses while making a contribution to developing the country's' economy (*White Paper for Post School Education and Training*, 2013). While the aim of ordinary secondary schools and high schools in South Africa is to ensure their learners are eligible to access higher institutions of learning, they do not however make provision for labour market entry. Govender and Taylor (2015) reiterate the fact that 26 HEIs, 50 FET colleges and 21 Sector Education and Training Authorities (SETAs) were amalgamated under the new Ministry of Higher Education and Training in order to balance the historically advantaged and disadvantaged institutions which offer WIL which is so prominent both nationally and internationally (Jovanovic et al., 2018). According to the Department of Higher Education and Training (2018), the enrolment figures at all four post-school education and training institutions in 2016 comprised 1.1 million at HEIs, 705 397 at the TVET colleges, 273 431 at the CET colleges and 168 911 at the private colleges, with TVET colleges clearly contributing a huge percentage to the PSET institution enrolment. The TVET enrolment figures are expected to rise as the government is continuing to inject more funds in technical vocational education and training programmes.

The number of students who graduated or completed their studies at the various PSET institutions were recorded as follows: HEIs first with 203 076, TVET colleges second with 111 460, CET colleges with 28 024 and, lastly, private colleges with just 24 032. Thus, a high number of learners are graduating from the TVET colleges – second after the HEIs (Department of Higher Education and Training, 2018). The report further indicates that HEIs contributed 50% to the enrolments, followed closely by the TVET colleges at 31 % which accounted for almost a third of the PSET institution enrolments. A smaller proportion enrolled at CET and private colleges to make up the remaining 19%.

At the time this study was conducted, there were 50 public TVET colleges with 250 campuses in South Africa which were administered in terms of the Continuing Education and Training Act, No 16 of 2006 (Department of Higher Education and Training, 2018). FET colleges are accessible to all communities as they are strategically placed in both

rural and urban communities (South Africa: National Report on the Development of Education, 2008). These colleges provide technical and vocational education to learners who have either completed Grade 9 or Grade 12 within the following three broad categories of qualifications:

- The National Certificate (Vocational) (NC(V)) offering levels 2, 3 and 4 on the National Qualifications Framework (NQF), with these levels being equivalent to Grades 10, 11 and 12 in mainstream schooling.
- Report 191 National Technical Education Programmes which are commonly known as Nated and offered at six levels from N1 to N6. Nated courses are divided into the following two sections, namely, engineering studies and business and general studies. The business and general studies include 18 months in class and a further 18 months which are spent in acquiring applicable work experience before a National N Diploma may be awarded.
- Occupational qualifications that include workplace-based learning and which are based on the needs and requests of workplaces. These qualifications are funded by both the Sector Education and Training Authorities (SETAs) and the National Skills Fund (NSF) in the form of grants.

Existing literature reveals that the majority of the research on WIL focuses primarily on its benefits for students, institutions and employers (Ferns, Smith, & Russell, 2014) and not so much on the way in which WIL is implemented or how learners are prepared by it. As an education specialist at College X and based on observation, the researcher has realised that there is a perception that learners exit the NCV curriculum without the necessary practical work component of WIL due to the way in which they are being prepared by WIL in class as the NCV curriculum does not make provision for compulsory WIL implementation (Duncan, 2016). There is a gap in the literature with regards to how learners are being prepared by WIL.

The study aimed to establish how national certificate vocational learners are prepared for industry by work integrated learning at College X. It was anticipated that the findings could assist in restructuring and/or improving the current WIL system should the results of the research prove that the above perception was true. The study assumed that the learners

were not being adequately prepared by WIL for industry as they ought to have been. The importance of vocational education has been highlighted as well as the developed countries have implemented WIL to optimally reap its benefits.

### 1.2. Problem statement

The existing Further Education and Training (FET) curriculum in South Africa does not make provision for a compulsory on course or hands on training experience (Duncan, 2016), thereby limiting a learner's employability and access to WIL opportunities. There is much criticism that insinuates that vocational education is no different from ordinary school, it is outdated and it is not in line with the demands of the world of work (Wedekind & Mutereko, 2016). Wedekind and Mutereko (2016) further explain that there is limited space and opportunity for practical teaching in many colleges and, as a result, the practical component of NCV is not taken seriously, with theoretical knowledge being more dominant. The reasons for the limited space and opportunities for practical teaching is an aspect which merits investigation. Accordingly, both learners and lecturers should be able to shed more light on the matter as they are the main stakeholders of WIL at the TVETs. The identification of such reasons may help to understand how learners are being prepared for industry by work integrated learning.

The Department of Higher Education and Training (DHET) has recently acknowledged that there are challenges in relation to the work placement of TVET learners (DHET, 2017) with employers not being informed on the purpose of NCV. This is leading to growing insecurities about the qualifications (Wedekind & Mutereko, 2016). The Department made a statement to this effect in response to the TVET protests which took place in 2017 when learners submitted a memorandum of their grievances. The grievances voiced by the learners included the ineffectiveness of the WIL programmes at TVET colleges (DHET, 2017). The task of who should inform employers and how they should be informed or educated on WIL lies with the DHET, as it is responsible for all the TVET colleges in the country.

Duncan (2016) lists the following prerequisites as critical when sourcing employment because employers look for these prerequisites in potential employees:

- technical, occupational or vocational skills
- current workplace experience
- workplace behavioural skills
- connections to employees.

Duncan (2016) explains that although technical occupational or vocational skills may be acquired in class, it is possible to acquire the other prerequisites only by spending time in the workplace doing authentic work. These prerequisites strengthen the need for the placement of learners in workplaces.

Apart from the many benefits that are credited to WIL, there is little focus and attention on the process of what, how and from whom students acquire essential skills during work placement (Jackson, 2015) and why learners are exiting the NCV programme without the necessary practical skills (*White Paper for Post School Education and Training*, 2013). This was also noted by Comyn (2018), who explains that learners are completing the FET phase without having been adequately equipped with the numeracy and literacy skills that they require for both further learning and workplace entry. Although there is an assumption that WIL makes it easy for students to penetrate the workplace, WIL should be seen as a two-sided interaction, thus prompting research on the way in which WIL may be formalised or how to better integrate WIL in an optimal way (Gellerstedt, Johansson, & Winman, 2015) so the question of how learners are prepared by WIL for industry may be addressed. It is thus important to investigate the classroom practices that may help to enhance WIL as well as who should offer such skills to learners. Govender and Taylor (2015) maintain that although other countries have appropriate WIL models in place, South Africa is among the countries which are still in the infancy stages of WIL implementation. This indicates an urgent need for the development of a WIL model that will cater specifically for the needs of TVET colleges. Hence, the question as to how WIL is implemented and how learners are being prepared arises.

At College X, WIL was partially implemented seven years after the implementation of the NCV curriculum. However, no formal statistics were recorded for 2015 and 2016 on WIL activities, as stated in a private report of the college, and it may therefore be assumed that learners are exiting the NCV programme without practical experience and, hence, the need to investigate how learners are being prepared by WIL. At the time of the study learners were being prepared for WIL through various activities such as excursions, which entail visits to various industries for a few hours, and the placement of learners in various companies for a maximum of five days in a year. However, Dunn, Schier, Hiller, and Harding (2018) strongly suggest a shift from focusing on the specified period of time for which learners engage in WIL to taking into consideration the pedagogical features of the WIL activity. Jackson (2018) argues that the benefits of WIL vary, depending on the type and length of placement and thus the amount of time that learners spend in the workplace is critical in determining the quality of the experience gained.

There is pressure on lecturers to place students at appropriate workplaces in order to provide them with the skills required in their fields of learning. However, there may at times be a mismatch between what learners are taught in class and the type of work experience they gain during work placements. The fact that the excursions also demand that learners be taken out of class while they go out and learn certain aspects of the curriculum in industry may result in lecturers regarding this as a loss of teaching time as they have significant amounts of theoretical work to cover.

This study focused on the office administration vocational programme, which was selected from the Business, Commerce and Management organisational field at College X in order to determine how these learners were being prepared for industry by WIL.

The fact that there had apparently been no research conducted on the preparation for industry of national certificate vocational learners by WIL was the main driver for conducting this research.

## 1.3. Purpose of the study

The purpose of this research study on the preparation of learners for industry by WIL was to examine how learners at College X were being prepared by WIL for industry as, at the time of the study, there was a perception that learners were not being adequately prepared by WIL. This is contrary to what is stated in the *White Paper for Post School Education and Training* (2013), namely, that workplace learning must be seen as an essential component of the NCV qualification and programme design. Learners should be motivated to remain in TVET colleges and complete their studies, as vocational education is closely linked to both work tasks and hands-on practical experience (Eichhorst et al., 2014).

The researcher intended to establish the following:

- the activities offered by the college to prepare learners for industry by WIL.
- the lecturers' and learners' understanding of what constituted WIL and the challenges experienced by both groups.
- the learners and lecturers' perceptions and expectations of WIL.

## 1.4. Rationale for this research study

As an education specialist at a FET College it was a matter of concern to the researcher to note that the learners' dreams of being practically trained for absorption by industry were not being realised. FET colleges boost economic development by guaranteeing that those entering the job market are qualified and skilled to work, thus helping to address the issue of youth unemployment in South Africa (Powell & McGrath, 2014). South Africa needs a skilled workforce both to help eradicate poverty and to improve the country's financial rating of junk status.

In countries where WIL is properly implemented, the benefits have been emphasised by numerous researchers, as WIL graduates are said to be more employable than non-WIL students and have a higher degree of job security (Reinhard et al., 2016). Ferns et al. (2014) claim that WIL impacts on students' work readiness, thus contributing to their

employability opportunities and that learners are equipped with employability skills after completing a WIL programme (Jackson, 2015). WIL is, therefore, a worthwhile investment which ensures that a nation's economy remains sustainable (Ferns et al., 2014). This assertion is supported by Inyiagu (2014), who states that WIL imparts both vocational and entrepreneurial skills to learners and that this in turn makes them employable in industry and promotes self-employment. A person is better prepared to perform a task that they have engaged in before and WIL is the key to mastering workplace tasks.

WIL both enhances graduate employability skills (Jaaffar, Ibrahim, Shah, & Zulkafli, 2016) and increases a sense of ownership in learners over the work they perform (Abery, Drummond, & Bevan, 2015). Learners are able to relate better to what they learn in class if they continuously put it into practice. However, there appears to be little attention paid to the process of what and how students acquire the necessary skills to render them employable (Jackson, 2015). The preparation process is clearly a problem as learners are not suitable for or sufficiently knowledgeable in their vocational areas. The researcher intended to develop a model that would ensure the effective preparation of NCV learners for industry, meet international standards and provide a better understanding on the skills required for the various programmes. Teaching methods should include WIL principles and this may be attained by the development of various models which will ensure that learners participate in WIL programmes (Rook, 2017).

The implementation of an effective WIL system facilitates economic development and also drives innovation and technology advancement, simultaneously increasing a country's global competitiveness. Not only will graduates be happy to have secured employment opportunities but they will also appreciate the significant contribution that they will be able make towards the economy.

## 1.5. Research questions

### 1.5.1. Main research question

The following main research question guided this study, namely, *How are national certificate vocational learners prepared for industry by work integrated learning?*

### 1.5.2. Secondary research questions

- What work integrated learning challenges are experienced by NCV learners and their lecturers?
- What activities does the college offer to prepare learners for industry by work integrated learning?
- What are learners' and lecturers' perceptions and expectations of work integrated learning?

## 1.6. Research aims

The research study intended to establish the way in which NCV learners are prepared for industry by work integrated learning. In order to address the research problem the following research objectives were formulated

- to investigate the work integrated learning challenges experienced by NCV learners and their lecturers.
- to identify the activities offered by College X in order to prepare learners for industry by work integrated learning .
- to understand the learners' and lecturers' perceptions and expectations of work integrated learning.

College X was the main site where all the requisite data were collected. This was done by means of structured interviews conducted with the lecturers in and the learners studying the Office Administration NCV curriculum. Should the findings be significant and be implemented, it would assist the college to improve.

## 1.7. Operational definitions of concepts

### National certificate vocational (NCV)

The National Certificate Vocational is a qualification at NQF levels 2, 3 and 4 which may be equated to Grades 10, 11 and 12 in mainstream schooling although the two do vary distinctly. The national certificate vocational enables learners to gain the knowledge, practical skills, competence and understanding required for an elementary level employment in a specific trade (Draft Policy for the National Certificate (Vocational): A Qualification at Level 2 on the National Qualification Framework (NQF), 2006). The qualification programmes are developed in such a way that industry specific knowledge and practical skills are communicated to the learners. The programmes include subjects that integrate the theory and practical skills specific to each vocational field.

This research study focused on learners at a TVET college registered for levels 2, 3 and 4 NCV curriculum in order to gain an insight into how they were being prepared by WIL for the world of work. The researcher took into consideration the variations that may have emerged, as the preparation of learners varies based on the vocational field in which the respective learner is enrolled. At the time of study there was a misconception about NCV in communities as FETs were perceived as colleges which had been introduced specifically for learners who were struggling academically.

### Work integrated learning (WIL)

WIL is imperative in relation to the economy of a country such as South Africa, as well as the Department of Higher Education and Training's (DHET) aims and purposes. The central keywords that define WIL are work and learning, although WIL is multifaceted with varying outcomes depending on the context (Ferns et al., 2014). Du Pre (2010, cited in Reinhard et al., 2016) defines WIL as a strategy for learning which includes a structured instructive programme that consolidates gainful and significant work involvement. This view concurs with the definition of Ferns et al. (2014) that WIL may be seen as an instructing and learning approach that imparts working environment proficiencies to

learners, thus providing work-ready learners. WIL makes provision for learners to gain work skills while they are still enrolled at vocational institutions.

Examples of WIL include sandwich courses, joint industry courses, placements, cognitive apprenticeships, job shadowing, practicum, post-course internships, cooperative programmes, pre-course experience etc. (Martin, 1997, cited in Reinhard et al., 2016). Drysdale and McBeath (2018) also note the various models of WIL around the world as internships, cooperative education, practicums and sandwich degrees which all have the core aim of ensuring the integration of academic learning with practical learning.

In view of the inexhaustible definitions and examples of WIL, it may be concluded that theory and practice integration form the basis for all WIL activities. However, Jackson, Rowbottom, Ferns, and McLaren (2017) caution that having a myriad of WIL approaches or activities may create confusion and hinder partnerships with businesses if the learners are from the same geographical area, thus calling for uniformity. This suggests that learners from various TVETs who are enrolled in the same programme should be engaged in similar WIL activities in order to avoid confusion.

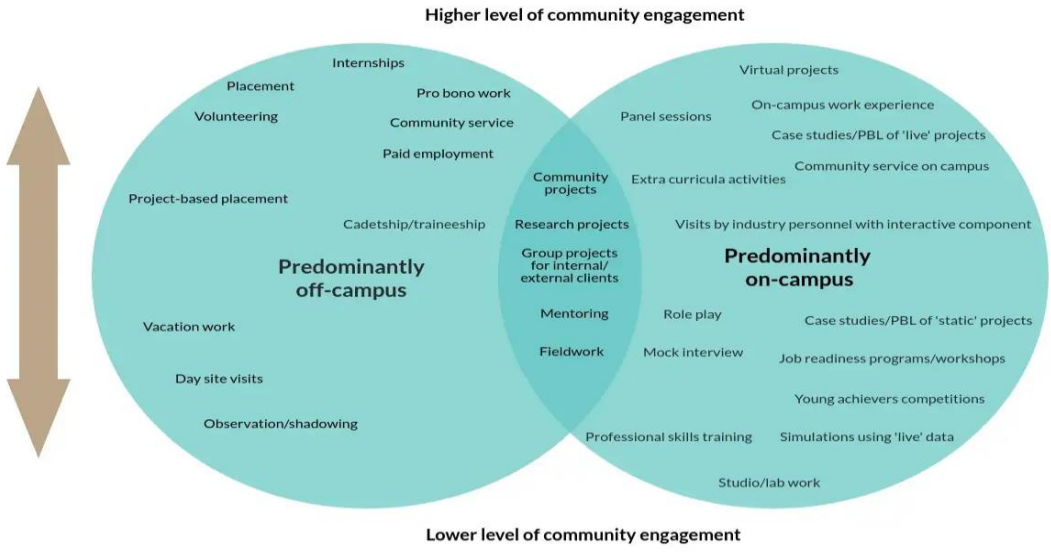


*Figure 1.2: Learning activities that constitute work integrated learning*. Source: ("ACDS Teaching and Learning Centre," n.d.)

Figure 1.2 indicates the myriad of activities in which learners may be engaged both on and off campus and which constitute WIL. The various activities are also ranked in terms of their importance. College X tends to engage more on day site visits which are referred to as excursions. However, this off-campus activity is ranked at a fairly low level.

Integrating theory with practical work is termed work integrated learning in Australia (Ferns et al. 2014), work-integrated education by the World Association for Cooperative Education (Moletsane & Moloi, 2015) and cooperative education (Reinhard et al., 2016). Other terms such as cooperative education, entrepreneurship education, work-based education, entrepreneurial education and experiential education are also used interchangeably with reference to WIL (Moletsane & Moloi, 2015), while some researchers use the terms experiential learning, work-based learning, professional learning and cooperative education when referring to both placement and non-placement WIL (Jackson et al., 2017)

**Further Education and Training (FET)**

Further Education and Training colleges are designed for school leavers who either have completed their high school studies or not (*White Paper for Post School Education and Training*, 2013) in diverse communities. The main purpose of these colleges is to provide young school leavers with theory while preparing them for the world of work. The *White Paper for Post School Education and Training* (2013) lists the occupations on which FET colleges focus as engineering and construction, tourism, hospitality, general business and management studies.

FET colleges were formerly technical colleges. From 2002, the 152 colleges in the country were merged to form 50 FET colleges under the aegis of the Department of Higher Education and Training as of 2013 (*White Paper for Post School Education and Training*, 2013). The 50 FET colleges are spread evenly across all nine provinces of South Africa in both urban and rural areas. The government is hoping that the FETs will help to develop the country economically. These colleges are funded in the form of bursaries from the

National Student Financial Aid Scheme (NSFAS), with learnerships and skills programmes being funded by the SETAs ("South Africa: National Report on the Development of Education," 2008) in order to ensure that vocational education is accessible to all.

The programmes that were offered at FET colleges were Nated programmes or N courses until the introduction of NCV in 2007. The implementation of the NCV programme happened in stages with level 2 being introduced in 2007, L4 in 2008 and L4 in 2008 (South Africa: National Report on the Development of Education, 2008). However, the NCV curriculum does not incorporate extensive practical components as suggested in the *White Paper for Post School Education and Training* (2013). This creates a problem as a practically trained workforce is required in order to address the skills shortages in the country.

This research study focused on TVET colleges and learners in the NCV stream in an attempt to address the problem, as outlined in the *White Paper for Post School Education and Training* (2013) that learners are often found to be exiting the NCV programmes without the practical skills that they require in order to enter industry. The TVET colleges should be producing learners who are competent in all areas if the set objectives of the government are to be met

### 1.8. Research methods

The researcher employed a qualitative approach in the study. This approach was selected as qualitative data is based on meanings that are expressed through words which may be classified into categories and then analysed using conceptualisation (Saunders, Lewis, & Thornhill, 2009). The classification of the data into categories enables the researcher to achieve the aims of the research with ease

### 1.8.1. Qualitative approach

As already mentioned, this study followed a qualitative approach. Qualitative research investigates characteristics, qualities and traits which cannot be measured (Leedy & Ormrod, 2014). Any research that produces findings that are not obtained through statistical procedures is deemed to be qualitative. Generally speaking, the collection of data for qualitative research includes the use of interviews and observations as the researcher studies emotions, feelings, experiences etc.

A qualitative approach was therefore appropriate for this study, as the answer to the question of how can only be answered through interaction with the affected participants, hence a case study design was adopted. The key features of qualitative research that assisted in this study are summarised as follows by Briggs, Coleman, and Morrison (2012):

- Qualitative researchers focus primarily on detailed observation.
- Research is conducted through direct contact with real-life participants.
- The emphasis in qualitative research is on interpreting information using words.
- The research is frequently concerned with processes.
- The entire research is holistic.

Thus, the qualitative approach which was adopted for the purposes of this study allowed for the gathering of information through face-to-face, structured interviews in order to explore the views of all the participants.

### 1.8.2. Research design

Leedy and Ormrod (2014) note the following five qualitative research designs, namely, content analysis, ethnography, case study, phenomenology and grounded theory. The researcher selected the case study design as the most appropriate method to be used in this research.

A case study is an intensive study of a single unit which is then generalised to larger set of units (Gerring, 2004). It allows for the exploration and understanding of a complex issue

or problem through accessing reports from past studies (Zainal, 2007). A case study design, therefore, ensures that additional information is obtained even when there is little known about the situation in question. Leedy and Ormrod (2014) concur that it is an appropriate design for investigating how things change with time as a result of certain conditions.

The case study design enables the researcher to make assumptions about a phenomenon using existing writings as it enables data to be collected at a micro level (Zainal, 2007). The case study design used in this study allowed the researcher to ascertain the perceptions of learners about the NCV curriculum and the views of lecturers at College X, thus accumulating subjective data that could be studied in depth.

Case study designs are criticised for their limitation in respect of the number of cases that may be studied (Leedy & Ormrod, 2014) and their restriction to a single organisation (Davison & Martinsons, 2015). Zainal (2007) is of the view that they may sometimes be too long as they may produce a vast amount of documentation. The use of interviews may lead to the accumulation of a lot of information and, hence, it is important to have a carefully thought out data collection plan in place. Facts should be captured clearly. Objectivity is key in case study design in order to eliminate bias and information altering.

A case study design enables the researcher to focus on limited subjects while examining the subjects with ease. Hence, this study was limited to one specific NCV programme of the four programmes offered at College X. This design also allowed for the selection of a small geographical area with the participants in the study all being drawn from one college. The various views and experiences of the staff members and learners made provision for multiple sources of evidence. This design helped answer the main research question on the way in which NCV learners prepared by WIL for industry. The question of how calls for an explanatory study.

### 1.8.3. Data collection strategies

Structured interviews were used for the data collection as this was deemed to be the most appropriate method with which to collect the data required for the study. Interviews generally yield much information on facts, beliefs, motives, feelings and behaviours (Leedy & Ormrod, 2014). Cohen and Crabtree (2006) recommend the use of structured interviews as they allow the researcher an opportunity to ask the participants the same series of predetermined questions. This study used standardised questions for the triangular data sources. This enabled the researcher to acquire in-depth information on work integrated learning from various parties in a friendly environment. Probing questions were, however, also asked as and when they arose without deviating from the main aim of the study.

### 1.8.4. Data analysis and interpretation

In a qualitative study data come in various forms and then have to be analysed. As already mentioned, structured interviews generally yield a great deal of information (Thorne, 2000). However, Thorne (2000) highlights shortfalls in data analysis computer programs as they are unable to intellectually transform data into meaningful findings.

In this study the data were analysed using constant comparative analysis. This strategy takes one piece of the data which has been collected and compare it with other data (Thorne, 2000). The use of structured interviews in this study facilitated the employment of this data analysis process. Thorne (2000) states that although the constant comparison analysis process was designed for grounded theory, researchers may also create interpretive knowledge by using it. In this study an enquiry was conducted into both similarities and deviations in the answers provided by the participants. The data were then grouped into themes in order to make interpretations. The various views of the three different data sources were then classified.

### 1.9. Credibility and trustworthiness of the research

Credibility in the research context may be defined as the extent to which the participants' views correlate with the study's findings (Lodico, Spaulding, & Voegtle, 2010). Since qualitative research studies a particular phenomenon in depth, it is important that the resultant report is credible as there are no variables being measured. The findings should be a direct reflection of the views of the participants, as well as their feelings and actions as gathered during the data collection. The credibility of qualitative research depends largely on the methods used in the enquiry (Cho & Trent, 2006) and, hence, it is critical that the researcher uses methods that yield accurate and detailed reflections of the participants' experiences (Lodico et al., 2010).

Pitney and Parker (2009) define trustworthiness in the research context as an element that helps in responding to the question of how the reader may trust what a qualitative researcher is reporting. Researchers are urged to consider issues of accuracy and quality when conducting a study (Pitney & Parker, 2009), as this will help to render their work more believable. Some of the strategies that may be used to address issues of credibility and trustworthiness include triangulation, member checks, negative case analysis/disconfirming evidence and peer debriefing (Brink, 1993; Lodico et al., 2010; Pitney & Parker, 2009). Brink (1993) further adds thick description as another method that helps to ensure the credibility of a study.

Triangulation refers to the use of multiple data sources in search of common themes (Leedy & Ormrod, 2014). This study used data source triangulation by interviewing learners, WIL facilitators and lecturers to cross-check information and to gain a holistic view of the phenomenon under investigation. The study also looked for cases that contradict existing hypotheses in search of disconfirming evidence. An audit trail detailing the context of the study and a description of the procedures followed from start to finish was kept.

In order to ensure credibility in this study, the data analysis was recycled back to the informants to ensure consistency in their views of the data. The researcher's

understanding of the participants views was also compared with that of participants to ensure accurate interpretation. The study also used more than two data sources when collecting the requisite data. An experienced qualitative researcher was consulted to ascertain that the study had been carried out systematically. In addition, the participants were asked to check whether the information which had been captured correlated exactly with what they had said during the interviews.

## 1.10. Reliability of the research

Reliability is of fundamental importance in every research project. Saunders et al. (2009) define reliability in the research context as the extent to which the data collection techniques may produce or yield similar findings or whether the same findings may be made from similar observations. Reliability advocates transparency, authenticity, validity and dependability in a study. Reliability in this context is also defined as the probability that repeating a research method will produce consistent results (Briggs et al., 2012). When the results of a study are reliable, they may be replicated and the same study may be conducted by various researchers and still yield consistent results. In this study, reliability was maintained as all the participants were asked the same questions during the data collection interviews. Probing questions that emerged from some of the responses were addressed cautiously in order to ensure a low degree of deviation.

## 1.11. Limitations of the research

It is not possible to generalise the findings of the study to all TVET colleges, as there are 50 such colleges in South Africa and it was not feasible to carry out the study to across all the colleges due to funding and time constraints. A study across all the colleges would have required extensive travel, which is often costly and involves a lot of time. Furthermore, it was not possible to investigate all the 19 programmes in the NCV curriculum as they offered in different colleges and on different campuses. Rural and urban TVET colleges also do not have the same infrastructures and, hence, it may be difficult for the findings to be adapted to suit one or other of these contexts.

## 1.12. Ethical considerations in research

Ethical issues in research focus on ensuring the safeguarding of the subjects (Lodico et al., 2010) and, as such, ethics plays a significant role in every research study. The participants in this study were human beings and it was important that their rights were not infringed during the investigation. Pitney and Parker (2009) emphasise how universities have been compelled to expand the rules for researchers studying human participants due to federal laws. All participants should participate in a research study without any form of compulsion or force.

The researcher applied for ethical clearance from the University of Pretoria before the collection of data commenced after having successfully defended the research proposal. Permission to proceed with the study was granted. The participants were protected from any form of harm and the researcher also did not subject them to unusual stress or embarrassment in any way. An internal review was also conducted by the University Research Committee which checked the proposal and ensured that all procedures followed were not harmful to participants and that appropriate procedures were followed throughout the study.

The researcher also wrote to the DHET to obtain permission to conduct the research and was granted permission to continue by the principal of College X as per department instructions.

### 1.12.1. Anonymity and confidentiality

All precautions were taken to safeguard the confidentiality of all participants during the study. The participants were all interviewed at their respective workplace after appointments had been made in advance. The lecturers and the WIL facilitator were known to the researcher as co-workers. The participants were clearly informed of their right to withdraw from the study should they feel compromised in any way or if they decided not to continue with their participation in the study. Furthermore, the researcher provided clarity on the fact that the study was not a fault-finding exercise, its aim was not

to alter or bring about any changes in the existing way in which the college was conducting its activities, and neither would the findings of the study be used against the participants either positively or negatively. The participants were also informed that their responses would not be made available to, nor would they be discussed with, their superiors.

The study participants were given an option to decide on whether or not they wanted to participate in the study and a consent form was subsequently signed indicating their right to withdraw from the study at any time. This ensured that their participation in the research was voluntary and that they had consented to it. The participants' information was kept confidential and pseudonyms were used to protect the identities of the participants.

The other group of participants, namely, the learners, were not personally known to the researcher as they were not enrolled in the programme which the researcher is part of. Owing to the possibility that the participants may have known the researcher from a distance as the study is conducted on one campus, they were reassured that there would be no positive or negative consequences arising from their participation in the research. The researcher also informed them that they should not raise their hopes in any way as it was not intended to bring any policy changes nor to find host employers for the learners. The confidentiality of the learner participants was maintained and their rights were not violated in anyway, as outlined in the informed consent form.

### 1.12.2. Honesty

The research study was reported in a complete and honest manner with every effort being made to avoid the misinterpretation of facts and the fabrication of information when reporting the study. Thus, the research results were a true representation of the actual data obtained from the participants. In addition, the researcher did not use her position to influence or direct the participants' views.

## 1.13. Setting of the study

The study was conducted at College X in the Gauteng province with the sample comprising a total of twenty participants. Fifteen learners were sampled from the Office

Administration vocational programme in levels 2, 3 and 4, while four programme lecturers and one WIL facilitator, who was also a lecturer, were interviewed. The requisite data were collected from the learners in their home classrooms and from the staff members in their offices or preferred locations on the college campus.

## 1.14. Significance of the study

It was anticipated that the study would be of benefit to various stakeholders, as WIL is of great importance to the development of the South African economy. In the event that the research findings were accepted by the stakeholders, learners would, as a result, be better informed of what constitutes WIL and the benefits it holds for them, including the role that WIL may play in the development of their entrepreneurial skills. In addition, they would also be able to identify and engage in activities that constituted experiential learning. On the other hand, the lecturers would better understand the importance of WIL and their role in implementing it successfully. Furthermore, lecturers would be able to evaluate their contribution in the project and improve where necessary. TVET colleges could gain knowledge of the learners' expectations of WIL and be in a better position to train and empower learners for industry through WIL, while also providing more information to potential host employers on WIL and how it may best serve them. In addition, the findings of the study could be adapted by other TVET colleges in the country and applied to the various vocational programmes in their respective colleges, thus improving the preparation strategies used by TVET colleges. In addition, more studies could be conducted on the WIL processes at the TVET colleges**.**

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## 1.16. Overview of the study

The study was structured according to chapters in the following way:

**Chapter 1**

The first chapter outlined the background to the study as well as introducing the purpose of the research by presenting the rationale for undertaking the study. The implementation of WIL in other countries was explored together with its benefits and shortcomings. The South African education system was explored in detail in order to establish the role of vocational education and its importance for economic development. The chapter also discussed the problem statement, research objectives, study rationale, main research question and sub questions, research methods employed, limitations of the study and the conclusion to the study. The chapter highlighted that it was hoped that the study findings would generate interventions which College X could use to facilitate WIL on the campus and that, in the broader context, these interventions could be adopted by other TVET institutions in South Africa.

**Chapter 2**

This chapter presents a review of recent literature on WIL, focusing specifically on how learners are being prepared by WIL in educational institutions. The literature review also assisted in identifying the gap that exists in the existing literature. The theoretical framework adopted for this study was based on Bandura's self-efficacy theory, which is in turn based on the four sources of self-efficacy, namely, past experiences, vicarious experience, verbal persuasion and emotional cues.

**Chapter 3**

This chapter discusses the methodology selected including the research design and paradigm, as well as the reasons for the choice of these methods. The application of all chosen methods was explained in detail, as were the data collection process, data analysis procedure and the presentation of the study findings..

**Chapter 4**

This chapter discusses the findings of the study and the interpretation of such findings while elaborating on the contribution that such findings should make in preparing learners

for using WIL. The data which collected are analysed by being broken down into themes. In addition, the research analysis method selected is explained.

**Chapter 5**

This chapter comprises a summary of the findings, as well as the recommendations made and the references used. The chapter also contains concluding remarks in respect of improving the processes used in the preparation of learners by WIL, while recommending that further studies on WIL be undertaken by other researchers. The recommendations for further research in the field are made based on the interviews which had been conducted with the participants.

## 1.17. Conclusion

In conclusion, the chapter outlined the origins and the background of FET institutions globally in a broader context before scaling down to the South African context. Various pieces of legislation that have had an impact on the introduction of the National Certificate Vocational (NCV) curriculum were discussed, together with the driving factors that led to the introduction of WIL and the aims of the DHET. The role played by the great recession of 2008 in the expansion of vocational education was discussed.

The chapter covered all the phases of the research, including the background to the research topic, problem statement, purpose of the study, rationale behind the study, research questions, research hypothesis, research aims, definitions of key words, research methodology, research design and data collection methods.

# Chapter 2: Literature review

## 2.1. Introduction

The previous chapter contained detailed reasons that led to the introduction of the NCV qualification and the policies thereof aimed at promoting the qualification. This chapter aims to review recent and relevant literature that will assist in identifying gaps that prompted the research study. The literature will clearly articulate Work Integrated Learning globally before scaling it down to the South African context. The theoretical framework that underpins this study will be explained in detail in order to link it with the research question. There is limited research on the way in which learners at TVET colleges are being prepared by WIL for industry and nor would appear is there a proper way for assessing WIL (Jackson, 2018). There has, however, been extensive research work carried out on factors that lead to the high dropout rates at TVET colleges, the benefits of WIL and the development of TVET lecturers. In addition, Rook (2017) argues that various researchers have identified several challenges in the design, development and implementation of WIL programmes.

## 2.2. Themes

### 2.2.1. Work integrated learning defined

The concept of WIL originated in Germany as a result of an excess number of graduates who demonstrated extensive experience in academic study but who lacked application knowledge in the real-world context. In South Africa WIL may be traced back as far as the 1970s (Reinhard et al., 2016). WIL programmes are in high demand as a result of both government and industry requiring graduates who are work ready on graduation (Rook, 2017). Various definitions of WIL exist, with Jackson (2018) defining WIL as a combination of academic study and the students' exposure to industry. WIL places a strong emphasis on purposefully integrating a work-setting experience for students with their field of study through a specialised curriculum, pedagogic practices and the engagement of students (Atkinson, 2016) and the authentic experience of work by students in the real world (Jackson, 2015). It is therefore imperative that there is a close

link between the work experiences to which the students are exposed and the specific programme in which they are enrolled. Thus, WIL includes a practice whereby formal learning in class is combined with learner exposure to the world of work in their vocational area with the aim of preparing such learners for easy entry into or access to the workplace (Jackson, 2015).

The German Further Education and Training system is said to be the most highly effective vocational education system in the world with over 10 000 partner companies operating in nine locations and hosting three campuses (Reinhard et al., 2016). While youth unemployment in South Africa remains high, the opposite may be said about Germany, thus leading to speculation that the dual system in Germany may be credited with this achievement (Solga et al., 2014). It would appear that Germany is investing substantial resources and time in ensuring the effective implementation of WIL in the FET colleges.

Research on WIL has led to various attempts by scholars to define the concept of WIL (Reinhard et al., 2016) with its wide reaching benefits (Thompson, Bates, & Bates, 2016). The central keywords that define WIL are work and learning, although WIL is multifaceted with varying outcomes depending on the context (Ferns et al. 2014). Al Shehri (2012) defines WIL as a combination of practical activities with theory in order to prepare learners for the real workplace and increase the learners' chances of career success. It would appear that there is much hope invested in WIL, not only in term of economic growth but also in ensuring that a relevant workforce is produced.

Many countries have had to prioritise TVET and skills development policies as a result of the ongoing high youth unemployment rates, skills mismatch, rapidly changing employment demands, migration (Comyn, 2018), ageing workforce, skills shortage and flexicurity which refers to a combination of labour market flexibility, social security and proactive labour market (Mulder, Messmann, & König, 2015). Mulder et al. (2015) emphasise industry's need for the professional, competent, employable and flexible employees that should be produced by vocational institutions. As a result of these factors, skills development and TVET have received high recognition with the expectation that

learner employability may be enhanced. Comyn (2018) believes that in order to promote the economy and provide jobs, governments should focus on improving skills and eradicating poverty as policy makers are confronted with the provision of learners who are sufficiently prepared for the labour market and who are employable. This is possible only through quality education. The type of education that equips learners with employability skills is offered by the TVET colleges.

WIL was introduced for the sole purpose of preparing learners for entry into industry. However, if graduates are to be prepared effectively they need to be constantly engaged in workplace practical work that links theory and practice. Countries that have mastered WIL implementation have lower unemployment rates, are globally competitive and are doing well economically. The factors that have led to such benefits stem from the way in learners are prepared, how WIL is perceived and the activities that constitute WIL.

### 2.2.2. The benefits of WIL

A study by Jonck (2014) found that the unemployment rate for learners without WIL experience was found to be higher at 63% while that of learners who had engaged in WIL as part of their learning programme was 26% in a sample of 1350 learners. Jackson (2015) found that the skills such as teamwork, problem solving, and communication acquired through WIL help to enhance both student employability and their ability to function effectively in the workplace. It has been found that the employability of learners with WIL experience is higher than those without WIL experience with the provision of work experience for learners enhancing both self-efficacy and employability (Benton, 2015).

In an examination of whether TVET education benefits learners after graduating or if it offers them little chance of succeeding in industry, Pugatch (2014) established that although it would appear that vocational education is being overlooked due to the stigma that it is a second choice education that results in low level jobs, WIL was found to be of benefit for learners when they exit the system and enter the labour market. This indicates that learners who engage in WIL have a greater chance of being employed compared to

those who have not engaged in any WIL activities during their course of study at an institution. A graduate report in Australia indicated that 69% of the country's' graduates who were engaged in WIL were employed fulltime less than four months of graduating while 20% engaged in part time employment, thus indicating that a lower margin remained unemployed (Kaider, Hains-Wesson, & Young, 2017).

When students' learning incorporates effective WIL activities, their competitiveness in the job market is increased as WIL is recognised as an integral tool for the development of knowledgeable and skilled graduates who are sufficiently trained to work effectively in the workforce (Jackson et al., 2017). This assertion was affirmed by Reddan (2015) who established that learners viewed their placement in workplaces as influential in equipping them with the theoretical and practical aspects of specific occupations and making it easier for them to set their career goals. He found that learners were able to identify and carry out their job responsibilities and duties in their fields. Kaider et al. (2017) explains the pressing need for higher institutions of learning to equip learners with employability skills that the industry needs through work integrated learning. A study by Deissinger (2015) revealed that the German model of WIL is also an effective model for other countries. South Africa adapted the German model in about 1979, although it would appear that the benefits of the same programme in Germany do not compare with those in South Africa. A functioning economy and a sound labour market are critical in benefiting from such a model (Deissinger, 2015) and, in addition, effective communication among all stakeholders is key.

FET institutions are criticised for not providing practical foundations in business or entrepreneurship by focusing only on providing skills training (Sandirasegarane, Sutermaster, Gill, Volz, & Mehta, 2016) and it would thus be beneficial if WIL encompassed theory, a practical work component as well as entrepreneurial training. Vocational education has the capacity to orientate learners to the world of work, while a well-structured TVET system may increase productivity, equip learners with the skills required in the labour market, enhance a country's' competitiveness in the global market and produce entrepreneurs (Inyiagu, 2014). There are numerous advantages to

entrepreneurship and learners who engage in WIL could start their own companies and create more employment opportunities, with WIL playing a significant role in equipping learners with the required abilities. The placement of learners in work environments gives them an opportunity to perceive how different entrepreneurs maintain their companies and furthermore, on an individual level, explain how they manage their businesses. It is evident that one of the great benefits of WIL is the production of learners who are eager and equipped to start their own businesses.

FET colleges offer the specialised aptitudes required by the nation (Amedoeme & Yesuenyeagbe, 2013). This is likewise affirmed by Cedefop (2009, cited in Duch & Andreasen, 2015), who indicates that lawmakers in Europe anticipate that vocational education will address the work issues in their nation while Caillods (1994, cited in Agrawal, 2013) stresses the role of FET in redressing labour market imbalances. FET colleges also contribute to the developing economy of a nation, guarantee that those entering work markets are sufficiently qualified and skilled to take up business and, in particular, would help to address the youth unemployment in South Africa (Powell & McGrath, 2014).

Engaging in WIL assists learners to gain valuable insights into professional ideology and also assists them in developing their careers (Jackson, 2018). This assertion is supported by Inyiagu (2014), who explains that vocational education institutions train learners in a broad and a diversified way, equipping them with knowledge in all the areas that affect their field of trade. Reddan (2015) adds that learners become more aware of the skills that they already possess and WIL helps them to develop the skills they lack while also identifying areas in which they need to improve. The aim of FET colleges is to equip learners with the fundamental abilities required in the occupation market of a nation. FET institutions ought to continually liaise with the government, while bearing in mind that the end goal is to create programmes which are in line with the necessities of the economy, thus helping to guarantee the success of the nation's economy. FET colleges help to increase relevance of schooling and change individuals' views of various occupations.

WIL is said to enhance graduate employability skills (Jaaffar et al., 2016) and learners who have engaged in WIL activities have indicated that they experience a sense of ownership over the work they perform (Abery et al., 2015). This is critical since industry no longer considers content-focused qualifications as sufficient for entry into the workforce (Jackson et al., 2017). Learners intentionally enrol at FET institutions to be prepared for the world of work (Powell & McGrath, 2014), as WIL is considered to play a vital role in improving the work readiness of students (Venville, Lynch, & Santhanam, 2018). It is not possible for the classroom and the workplace to teach all the skills that a person requires in the labour market and, thus, a combination of both is beneficial and much needed (Atkinson, 2016) as this provides students with an opportunity to develop specific skills. Atkinson (2016) lists the various benefits of WIL as providing students with the opportunity to acquire generic employability skills, knowledge about a specific trade and an opportunity to gain more understanding of diverse workplace cultures and professionalism.

As highlighted by various researchers, the enhancement of learner employability is a significant direct benefit of WIL in comparison to all the other benefits. Learners who are prepared by WIL stand a better chance of being employed full time after completing their studies. Not only does WIL make it easier for graduates to develop of technical skills and to find employment but it also plays a role in the development of the soft skills required in work environments. In addition to preparing learning for industry, WIL has also been found to have the potential to produce entrepreneurs who are able to contribute significantly to the economic development of a country.

### 2.2.3. The challenges with NCV and WIL

The NCV curriculum in South Africa was criticised for its bureaucratic approach at the time of implementation (Mgijima, 2014). The curriculum was implemented without proper consultations with relevant stakeholders and there was no mechanism for monitoring the FET lecturers' qualifications. Powell and McGrath (2014) point out a lack of research on understanding students' views on how FETs may best serve them, while Mgijima (2014) stresses a lack of research on the development needs of the lecturers at FETs as his

study found that 50% of the NCV fundamental subjects (Mathematics/mathematics literacy, English and Life Orientation) lecturers indicated a need for continuous professional development. Lecturers are the main drivers of WIL and their development may help to address many of the FET challenges.

There are a variety of factors that may result in WIL being either effective or non-effective. Atkinson (2016) cites that these factors may include employer engagement in the process, teacher capability and engagement and student involvement in the process while Venville et al. (2018) highlight the inability by institutions to capture student experiences during work placement. Vocational education teachers are perceived to be the main implementers of work integrated learning, with Brown (2017) explaining the need for vocational teachers who are grounded in the knowledge and skills of the field they teach if they are to prepare learners effectively for the world of work. He further highlights the need for such people to possess authentic workplace experience in addition to field specific qualifications but argues that this is not the case in many vocational institutions. Kaider et al. (2017) emphasise the importance of placements in enhancing learner employability but note that despite the significant benefits of WIL for both employers and learners only a few learners are given the opportunity to be placed in workplaces.

Students have also expressed concerns over the lack of supervision while undertaking experiential learning in industry (Rook, 2017). Clear objectives should be set and outlined if employers, teachers and students are to engage fully in the WIL process. Constant changes in the labour market may hamper WIL effectiveness as, while certain jobs decline, others grow in importance, requiring new and updated skills (Inyiagu, 2014). This implies that institutions may have to constantly update the curriculum as well keep abreast of these trends. The requirement for graduates to possess work experience is becoming an international trend (Hewitt, Owens, & Stewart, 2018) in many countries, thus making it more difficult for learners without any form of experience to find employment. Vocational institutions are criticised for not being authentic sites for imparting work-related skills as opposed to workplaces although the workplaces themselves lack the explicit pedagogy and curricula offered by institutions (Tyson, 2016). It would seem that it is critical that

learners are equipped with both curricula and workplace skills if they are to be considered fit for the world of work.

The biggest challenge with WIL in the NCV curriculum stems from the time when it was introduced as key stakeholders were not involved and, thus, their inputs were not accommodated when the objectives were set. Lecturers are the end users of the curriculum and are responsible for delivering the curriculum in the classroom and, as such, their competencies are important in ensuring that learners are adequately prepared. Learners face challenges when they try to find placements in workplaces and this compromises the opportunity for them to acquire the authentic experience which is expected by industry upon graduation.

### 2.2.4. The role of TVET lecturers and institutions

It is vital that the pedagogy and didactic skills of FET educators are consistently developed and honed through professional development. Wedekind & Mutereko (2016) advocate a policy on lecturer professional development that may assist in ensuring that lecturers remain connected to industry and are, therefore, able to influence the teaching of a curriculum that is responsive to the labour market. In their review Duch and Andreasen (2015) researched how the Diploma in Vocational Pedagogy was being implemented as the qualification was introduced to ensure the production of a skilled future labour force and improve vocational didactics and pedagogy. This qualification was presented in 2010 and was aimed at both existing and future FET educators. The goal of the qualification was to guarantee a coordinated effort between the school and all stakeholders to ensure that learners are given the capacity to entry the working environment in both the private and the public sectors (Duch & Andreasen, 2015). They found that certain institutions hone diverse models and offer the learners diverse frameworks for implementing theories, in this manner a solid conclusion could not be drawn on whether the Diploma in Vocational Pedagogy was assisting in the production of a skilled workforce or improving vocational didactics and pedagogy. The nonappearance of a distinct conclusion along these lines drives the exploration of the different types of development or teacher improvements that are required in FET colleges.

At the time of the study it was clear that the effectiveness of FET lecturers in the implementation of WIL was being compromised by a lack of development. Rook (2017) attributes the lack of proper WIL implementation to lecturers' negative perceptions of WIL even though they are responsible for developing and sustaining the programmes. Rook (2017) suggests that training interventions for all lecturers involved in WIL development are needed. It is essential that TVET is developed in such a way that the lecturers involved are able to keep up with industry changes and demands so they may impart the necessary skills to learners (Comyn, 2018).

In view of the aim of WIL to integrate work and educational experiences, teachers have a key role to play in the organising and enacting learning and, thus, their skills and training are important (Atkinson, 2016) in ensuring that the work experience is linked to the curriculum and it is relevant. Venville et al. (2018) dwell on the importance of the learning and teaching units working together in matters relating to WIL, while Rook (2017) emphasises the importance of institutions embedding WIL, as well as the commitment of all stakeholders. Institutions of higher learning, including vocational institutions, are faced with the challenge of ensuring the transition of learners from the institution to the labour market (Amenduni & Ligorio, 2017). Thus, the role of educational institutions does not end with teaching content in the classroom as there is a life after graduation.

Pennaforte (2016) makes an assumption that learners engaged in placement in WIL require support from the host employers, the institution, the supervisor and the employees of such organisations. Jovanovic et al. (2018) argue that although the success of WIL depends on the involvement of lecturers, the process also demands time and emotional investment, thus placing the staff of such institutions under a lot of pressure.

According to Farstad (cited in Sandirasegarane et al. 2016), educator capabilities/qualifications and their attitudes are continually being investigated in sub-Saharan Africa. In addition, the question of whether FET lecturers in South Africa are sufficiently prepared to teach FET learners remains an issue of urgent concern. The

Danish Ministry of Education (2014) (cited in Duch & Andreasen, 2015) stresses the importance of improving the nature of professional educator training programmes in order to facilitate the creation of solid links between schooling and experiential learning in industry. Hypothetical or theoretical information on the part of the FET lecturer is insufficient to meet the objectives of FET as learners require industry exposure. Teachers who have both theoretical and practical industry experience would, therefore, assist in addressing at least some the issues and difficulties in relation to learner placement and turn out to be better equipped to form associations with businesses.

A review on the situation in South Asia revealed a typical issue which is by all accounts common in that region, namely, the low quality of the educators and the limited association with the private sector segment. In addition, educators in Afghanistan are said to be inadequately trained and lack industry-specific work experience (Agrawal, 2013). The fact that Bangladesh does not appear to produce quality graduates may be the result of poor teaching, as researchers agree that there is a positive correlation between teacher development and student learning. In his study, Agrawal (2013) found that there is a strong mismatch between FET outputs and labour market demands in the Asian region and proposed that there should be increased focus on ensuring the productivity of the FET framework.

Agrawal (2013) suggests that Asia lacks teachers with industrial experience and that the learner curricula do not provide for the practical component of learning. Industrial experience is a basic requirement for FET teachers in view of the fact that they are responsible for placing learners in work environments. The question arises as to the capacity in which they are able to place learners if they have no industry experience. Wheelahan and Moodie (2016) explain that while TVET institutions and lecturers have been compromised by a lack of funding and deregulation, they are, unfortunately, blamed for the economy not performing well, the skills shortages and the mismatch between the world of work and TVET qualifications. However, it is clear that lecturers and institutions are only able to do so much to improve TVET efficiency, as there are other critical factors at play. Comyn (2018) also notes that as a result of the pace at which labour markets are

changing, there is significant pressure on institutions to anticipate the future skills that are needed in comparison to the existing skills. Nevertheless, the development of a vocational education that will meet and respond to the needs of the labour market is possible through the availability of lecturers who are well resourced and working in strong institutions (Wheelahan & Moodie, 2016).

Vocational education lecturers in South Africa are not required to be in possession of a specific qualification that distinguishes them from ordinary school teachers in order to lecture learners. Accordingly, there appears to be a lack of development in terms of the skills that they possess and little or no connection between them and industry. There is, therefore, an urgent need for training that may help lecturers to better prepare learners, as well as to implement WIL in their respective institutions. If lecturers possess both theoretical and practical knowledge, they should be in a position to better source placement opportunities for learners and ensure that there is no mismatch between the type of skills that learners acquire and the theory taught in the classroom. In addition, they would be better able to offer activities that enhance learners' practical skills and, thus, better prepare them for the world of work.

### 2.2.5. TVET partnerships with businesses

Reinhard et al. (2016) highlights the existence of a weak industrial base in South Africa and the limited use of industry experts, which limits the practical relevance of what students learn in class. Virolainen and Stenström (2014) attribute the economic and vocational success of Finland to the introduction of skills demonstrations which may done by guest lecturers. Mulder et al. (2015) argue that the way in which institutions interact and relate with industry is crucial in determining the quality of the vocational education offered. There is an urgent need for strong partnerships between industry, educational institutions and communities to ensure authentic experience may be offered to learners (Ferns et al., 2014). It is also beneficial for institutions to work at building solid relationships with both industry and professional bodies (Rook, 2017), with industry providing input to the development of case studies, role-plays and scenarios during curriculum development (Jackson, 2015). Jackson et al. (2017) established that labour

market involvement in WIL is significantly influenced by the support, connection and communication between the educational institutions and businesses. This type of practice may contribute to a more effective implementation of WIL and the better preparation of learners by WIL for industry.

According to Atkinson (2016), vocational education and training institutions face challenges when it comes to engaging with employers. Gellerstedt et al. (2015) concur that cooperation between the three key stakeholders of WIL, namely, students, employers and institutions, is difficult due to differences in expectations, motives, culture and ways of operation. On the other hand, Merilainen et al. (2018) argue that the success of Finland's vocational education may be attributed to the good cooperation with employers as they participate in the development of assessments and curricula. Atkinson (2016) attributes the challenges faced with industry to unclear information, inflexible approaches, lack of commitment on the part of business and the educational drivers of WIL, as well as a lack of commitment and skills on the part of the teachers responsible for WIL. If businesses are well informed on what WIL is, this enhances their commitment to the initiative, although the provision of such information is possible only if the educational institutions are also committed to WIL. Teachers, who play a critical role in the implementation stage, also require training to ensure that they are equipped with the skills required for the effective implementation of WIL.

It is incumbent on educational institutions to dedicate time to informing industry on the WIL activities that are available and to create partnerships for them to work together (Jackson et al., 2017) to improve existing WIL practices. Duncan (2016) calls for a well-formulated advocacy campaign targeting employers to help them to understand what WIL entails and to communicate to them that providing training for learners may generate greater value for them. The employability of NCV graduates will continue to suffer if employers are not made aware of what the NCV qualification comprises of and how they stand to benefit from it by institutions (Wedekind & Mutereko, 2016). Wedekind and Mutereko (2016) further raise the concern that without employer engagement even a change in curriculum will not enhance the employability of learners. This supports the

notion that WIL is not the duty of one stakeholder but that what is required is a strong collaboration between all stakeholders. There are sometimes several expectations and competing demands which need to be managed if institutions are to develop positive work relationships with employers (Rook, 2017). The benefits students derive from WIL depend on the involvement and interest of employers who are willing to place learners for experiential learning (Fleming, McLachlan, & Pretti, 2018).

While investigating employers' understanding of WIL, Jackson et al. (2017) identified numerous strategies recommended by employers which they felt educational institutions should employ to better engage industry in WIL. These include the following:

- case studies that provide insight into what WIL is, its elements and its benefits
- the use of WIL in assisting businesses with backlogs
- supervisory staff's professional development in relation to the WIL process
- the use of social media to promote WIL.

Employers further advised that learners should be inducted into employer expectations regarding work etiquette and conduct. It is advised that these recommendations are considered by TVET institutions as they have been suggested by the industries that they hope to access.

Australia has a strong tradition of engaging industry with FET institutions, as the vocational system of the country enables industry to be involved in both the development of standards and curriculum and the assessment of students undertaking WIL in the workplace (Atkinson, 2016). This has contributed significantly to the quality of the vocational system in the country. Jackson et al. (2017) argue that a lack of understanding on the part of employers about what WIL entails and how they may be involved in the process in countries other than Australia is a major barrier to the effective implementation of WIL. Inyiagu (2014) notes how Australia, together with Canada, Germany, Singapore and Japan, are reaping the benefits of WIL after having embraced it and that these countries have now become global leaders in WIL. In 2015, Australia developed a strategy known as the National Work Integrated Learning Strategy with the aim of

promoting and strengthening the relationship between FET institutions and industry. Such a relationship makes it much easier for the two parties to function effectively. In South Africa such a relationship remains to be strengthened before such a strategy can be implemented, thus posing a great challenge for employability, as industry is constantly on the lookout for work-ready graduates with sufficient experience in their field of work.

Renold et al. (2018) investigated the effects of the power sharing/education–employment linkage on the success of vocational education in 20 top-performing countries in the world. They found that if the education system has all the power, the needs of employers tend to be ignored. On the other hand, if the employers have all the power, the learners are able to finds jobs but, at a later stage, they are unable to further their studies.

The figure below depicts the ideal that countries which aim to provide high quality vocational education system should attain.

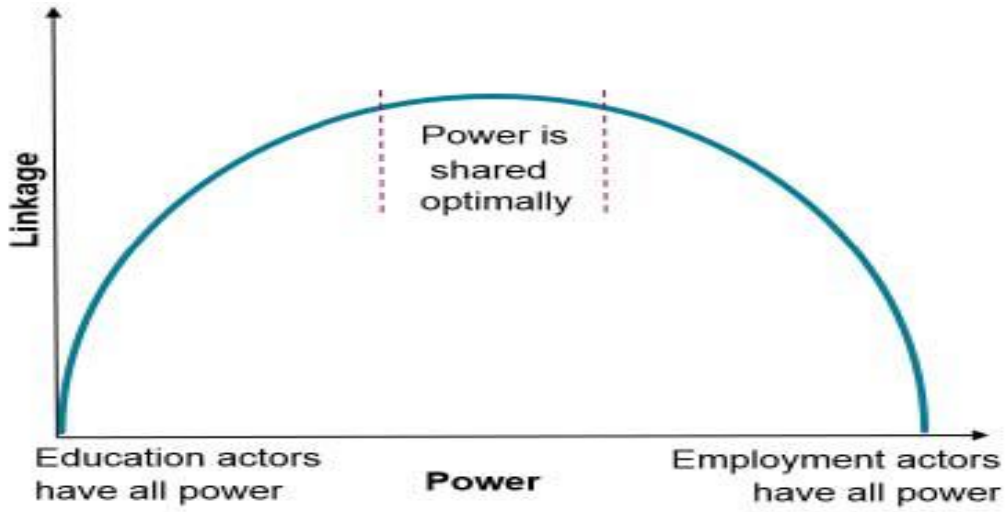


*Figure 2.1 Education–employment linkage is power-sharing*. Source: (Renold et al. (2018))

Figure 2.1, which was suggested by Renold et al. (2018), indicates that there should be a balance in the amount of power held by both the employers and the institutions. When power is shared optimally, all the stakeholders stand to benefit from the relationship. A curriculum that is more market orientated produces social inequalities and exclusions

instead of responding to social issues (Sibiya & Nyembezi, 2018) and, hence, it is important that power is shared optimally between all stakeholders.

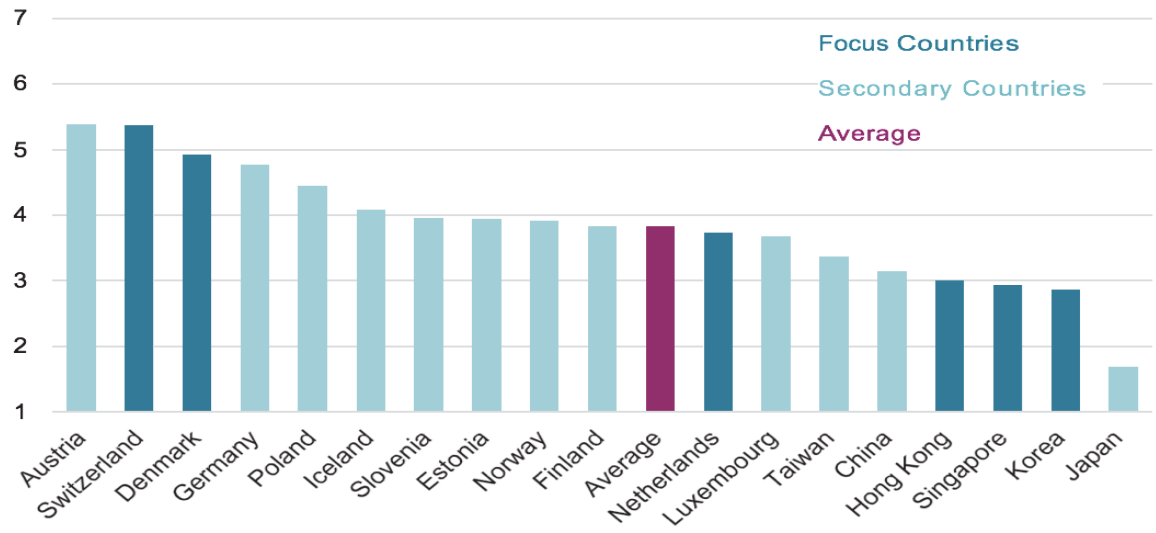


*Figure 2.2: Education-employment linkage scores.* Source: (Renold et al. (2018))

Figure 2.2. presents the education and employment linkage findings expressed as scores out of 7 of the 20 top-performing countries in vocational education and training. It emerged that the higher the education–employment linkage score, the better the youth labour market outcomes and, thus, a lower youth unemployment rate (Renold et al., 2018). Over 50% of the 20 top-performing countries demonstrated that power was being shared optimally between the educational institutions and employers which was not the case with the other remaining countries. This may explain the low youth unemployment rates in these countries.

The development of good relationships with industry may also be strengthened by inviting guest lecturers. WIL opportunities are criticised for consuming too much personnel time, attracting high costs and requiring the skills development of the practitioners at institutions (Ferns et al., 2014). In addition, there is much concern over issues such as indemnity and the confidentiality of trade secrets (Govender & Taylor, 2015), with many host employers indicating there they are able to accommodate a limited number of students as the amount of time they need to invest in managing and supervising the student is

limited (Rook, 2017). If the entire WIL project is viewed as an exercise that consumes time, it may lead to the preparation of learners by WIL for industry not being given preference. Atkinson (2016) lists the following barriers and constraints as factors that may result in employers not engaging in WIL:

- financial constraints
- time constraints
- limited information on WIL
- differences in outcomes specifications
- institutions not flexible in accommodating employers' needs
- health and safety issues
- business size not able to accommodate students
- legal concerns
- outdated curricula and lack of industry relevance.

It is possible that as a result of the lack of information on WIL, businesses may believe that they are compelled to remunerate learners undertaking placement in their organisations and decide not to participate in WIL due to the costs involved. Another critical factor is the health and safety of learners, as organisations may have insurance for their full-time employees only. In addition, the confidentiality of trade secrets also cannot be guaranteed when accommodating learners, as WIL agreements are usually between the institutions and the employer and not the learners and the employer and, as such, makes the task of individual accountability difficult.

Moll, Steinberg, and Broekmann (2005) state that researchers concur that businesses in many nations are not informed about what constitutes WIL. There are outstanding connections between the government, FET schools and managers in Germany. The fact that businesses are included in policy and curriculum development means that the FET programmes planned address the necessities of the economy. It is for these reasons, as well as the accessibility of WIL organisations, that more learners are said to choose FET instead of mainstream schools (Moll et al. 2005). Businesses that are involved in the WIL

curriculum are more informed on what the programme entails and, as such, are more prepared to open doors for learners to gain workplace exposure.

While there are disadvantages or rather factors that employers may deem to be disadvantageous to them, Atkinson (2016) cites the following WIL benefits for the employer from the available literature:

- **Corporate responsibility** – Corporate responsibility is said to be a strong motivator for employers as they are given an opportunity to give back to the community.
- **Recruitment strategy** – The placement of students in workplaces provides an opportunity for employers to identify potential new talent and to access a wider pool of applicants during their recruitment.
- **Extra resources** – Employers benefit from having additional staff to carry out tasks which saves the employer time and may increase productivity.
- **Staff development** – As students are not full-time employees, they have to be supervised as they perform their duties with such supervision being delegated to existing employees. This supports the professional development of these staff members.
- **Access to new thinking, ideas and technology** – Students are usually young and innovative and their exposure to industry often motivates them to come up with new ideas and, as such, to introduce new information, methods and practices.
- **Better knowledge of and integration with FET institutions** – Partnerships with FET institutions make it easier for employers to collaborate on other projects with these institutions.

Because employers may not be aware of these factors, it is incumbent on FET institutions to ensure that employers are aware of the benefits that WIL holds for them as opposed to WIL being viewed as being beneficial only to students. Employers have indicated the pleasure that they derive from offering placement opportunities to students as they view themselves as partners with the state in helping to meet the national skills development imperatives while also being offered an opportunity to screen future prospective

employees (Govender & Taylor, 2015). Atkinson (2016) highlights that institutions need to do more in demonstrating and proving to employers that WIL is beneficial to them as not all employers view it as beneficial.

The following strategies may be implemented to help employers to become more engaged in WIL, namely, clear expectations and improved communication; flexibility and responsiveness to industry needs; employer engagement in the design and delivery of curriculum and engaging small to medium enterprises (Atkinson, 2016).

A poor relationship between vocational institutions in South Africa and industry makes it difficult for learners to find placement opportunities. Countries in which there are strong relationships between vocational institutions and industry are succeeding in effectively implementing WIL. Power sharing between industry and institutions determines the success of the vocational institutions in question. If power is distributed evenly, the benefits are greater. However, if the institutions hold all the power, learners are not able to secure workplaces for practical learning.

### 2.2.6. WIL activities at TVETs

In a survey carried out by Jackson (2015) of 131 learners who had participated in WIL, it was revealed that the learners believed they had not been adequately prepared in the classroom for WIL, as what they were taught in class was rarely applicable to the real world. In other words, they viewed classroom preparation alone as inadequate for work preparation. These findings contradict the provision of work experience as the reason for enrolling in vocational institutions, as indicated by Reddan and Rauchle (2017). This indicates a disconnect between what learners perceive to be preparation for the world of work and the work itself, as a high percentage of the students indicated that they had experienced difficulties in carrying out the tasks assigned to them in the workplace setting. This highlights the importance of expanding WIL from classroom practice to workplace practice. Jackson (2015) suggests that further research be conducted on developing and establishing best practices to effectively prepare and support learners in their WIL experiences.

Jonck (2014) is of the opinion that institutions offering WIL should make provision for the work placement of learners, while Venville et al. (2018) cite various factors to consider when obtaining feedback from students' WIL experiences, for example factors enhancing the learning experience, opportunities to integrate theory and practice, as well as key professional learnings, challenges and suggestions for improvement. Gathering detailed feedback on the these factors may enable institutions to decide on the effectiveness of the activities in which they engage students.

WIL can take many forms based on what form of training and purpose it serves at that moment, to a full integration within a course (Venville et al., 2018). Atkinson (2016) lists and summarises the types of WIL as apprenticeships, simulation and placements.

- Apprenticeships and traineeships – learners who are engaged in apprenticeships spend most of their time in the workplace as opposed to the classroom as their training requires more practical skills.
- Simulation –students engage in real-work situations simulated in an educational setting. This is the most common type of WIL found at FET colleges as learners in the NCV programme spend more time in the classroom than in the workplace. Simulation also includes case studies, role plays and scenarios.
- Placements – students are placed in workplaces for a certain period of time. At College X this can be for a period of five days or more. This is the second most common type of placement for NCV learners at college X.

In their study, Richmond, Richards, and Britt (2015) investigated the effects of authentic simulated tasks on learner preparedness to undertake WIL in the workplace. They found that simulated tasks improved the learners' communication skills, confidence and skills relevant in industry. These findings support the view that while engaging in simulated WIL activities which may be classroom bound, such activities are not a substitute for real-world placement; they merely assist in preparing for work placement.

As noted by Mulder et al. (2015), there are three learning contexts in vocational education, namely:

- learning environment at school
- work environment in the work organisation
- learning environment in the work organisation.

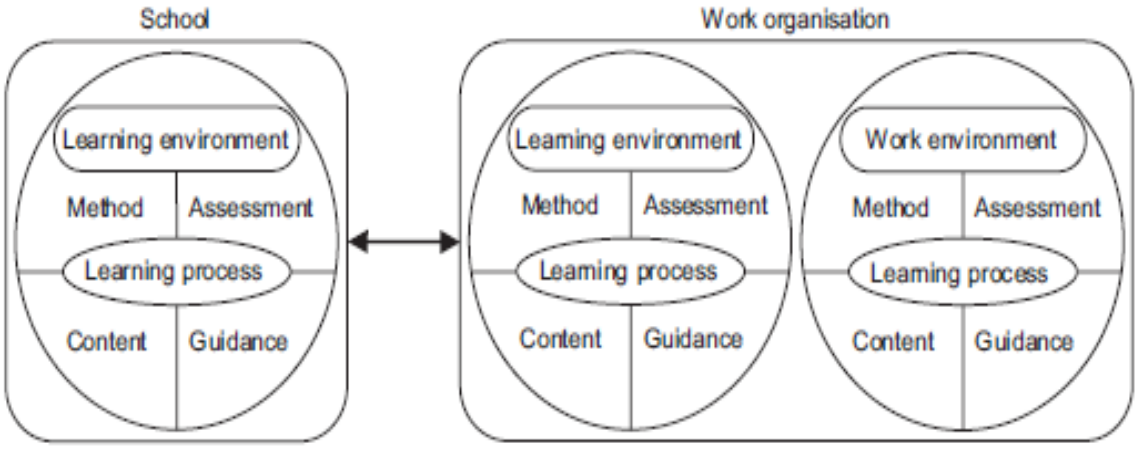


*Figure 2.3: Components of vocational education training*. Source :(Mulder et al. (2015))

It may be deduced from the above figure that an effective vocational education system should consist of training undertaken both at school and in the workplace.

A review conducted by Jackson (2015) found that the learners in his study were of the opinion that case studies, role plays and scenarios helped them to prepare for the world of work and to tackle problems as they arose. However, Jonck (2014) argues that although case studies, simulations and problem-based learning add value to learning, they do not constitute WIL. With these contradicting views the question arises as to what makes up effective WIL practices for the adequate preparation of learners for industry. This highlights the urgent need for an investigation to be undertaken into how learners are prepared by WIL for the world of work.

Classroom-bound activities can contribute only so much to the development of workplace skills. Learners are not convinced that merely carrying out activities that simulate workplace activities is sufficient to enable them to carry out such tasks in an real-life

setting. The feedback that learners give after engaging in either work placement WIL or non-work placement WIL should be considered and prioritised in future planning by vocational institutions. It is imperative that WIL takes place both in the classroom and the workplace for it to yield its expected benefits.

### 2.2.7. Effective WIL practices, implementation and assessment

Effective WIL practice is essential in realising every country's objective of combating unemployment. Jackson et al. (2016) cite the difficulties that are experienced in the implementation of WIL, for example a high demand for certain resources and a low level of employee engagement. He further notes with great concern that there is no effective assessment plan for WIL in place worldwide, while Dunn et al. (2018) advocate the development of a framework to evaluate both placement and non-placement WIL activities. An effective WIL practice is said to require an institution that has a wide vision, thorough education practices and a well-grounded relationship with other WIL stakeholders (Dunn et al., 2018).

Rook (2017) found that a lack of resources, legal issues, expectations, course/field characteristics and institutions' views of WIL are the underlying reasons for the failure to effectively implement WIL. If WIL cannot be effectively assessed, how then can learners be prepared by WIL effectively or the set goals or objectives of the state realised? With South Africa struggling to implement an effective WIL model, Govender and Taylor (2015) have developed a WIL partnership model comprising of five phases, which they propose for all institutions in the Ministry of Higher Education and Training.

| **PHASE 1: DESIGN, DEVELOP AND APPROVE WIL MODEL (2 MONTHS)** |
| --- |
| 1. Conceptualise WIL model and develop the model outline.<br>2. Identify pilot student groups and industry partners<br>3. Consult with stakeholders for approval, support and review.<br>4. Develop the support documentation.<br>5. Communicate the compulsory, non-remuneration WIL project plan |

| **PHASE 2: DESIGN, DEVELOP AND APPROVE WIL MODEL (2 MONTHS)** |
|---|
| 1. Awareness and information sessions; preparation of stakeholders for WIL programme<br>2. Distribute WIL information packs<br>3. Prepare students for entry into workplace<br>4. Finalise industry base |
| **PHASE 3: IMPLEMENT WIL MODEL (3 MONTHS)** |
| 1. Confirmation of placement list<br>2. Risk management<br>3. Support base for students and partners communicated<br>4. Tracking and feedback from students and supervisors |
| **PHASE 4: EVALUATE WIL MODEL (2 MONTHS)** |
| 1. Feedback from POE assessment.<br>2. Feedback from students.<br>3. Feedback from industry partners.<br>**4.** Evaluation, recognition and appreciation. |
| **PHASE 5: REVIEW WIL MODEL (1 MONTH)** |
| 1. What worked?<br>2. What did not work?<br>3. What should be changed?<br>4. Revise and improve model. |

*Table 2.1: WIL partnership model by Govender and Taylor (2015)*

Although the model presented in Table 2.1 above was developed for a specific higher institution of learning, the majority of the listed processes could be adapted for the NCV curriculum. Govender and Taylor (2015) do, however, suggest that there be further research measuring the impact of each phase individually. According to them, this model may be successfully be implemented over a ten-month period. Although the model does make provisions for review and improvement, there is still a need for a model that will

specifically cater for TVET institutions offering the NCV curriculum and that does not take up much classroom learning time.

The majority of learners who enlist at FET foundations have one goal, namely, an opportunity to enter the workplace (Placklé et al., 2014).

The characteristics of a powerful learning environment in vocational education are summarised as follows (Placklé et al., 2014):

- authentic learning tasks organised in challenging learning pathways
- opportunities for the development of key competencies
- adaptive learning support
- a positive and safe learning community

These characteristic of a learning environment are somewhat similar to the six factors of the WIL curriculum developed by Smith et al. (2016). According to Smith et al. (2016) these factors should be present in any particular placement as the extent of their presence will help to determine how successful a placement is. These factors are discussed below:

- Authenticity

  Learners should be able to do meaningful professional work that is in line with their specific field or trade. The work placement should not be merely for compliance purposes or to enable an institution to achieve set WIL targets. When learners realise the link between their classroom content and what their practical entails they will be motivated and will achieve the set outcomes.
- Supervision

  All learners placed in workplaces require a supervisor who will be able to guide them through the process of the placement. It is beneficial to have both a supervisor representing the institution and a supervisor who is an employee of the host company. The availability of both supervisors will ensure that the learners receives meaningful and constructive feedback. In addition, someone should always keep in touch with the learners and assist them in the completion of

logbooks. This also gives the learners a sense of belonging and a feeling that they are also important.

- Preparation

  Preparation before the commencement of a work placement activity is vital. For NCV learners there are several factors to consider when preparing learners for placement, for example the financial implications of the placement, knowledge and familiarity with the workplace conduct procedures and the employer's expected outputs. It is important to brief learners on these aspects to ensure that they obtain the full benefit of the experience. At the time of the study, College X offered a subsidy of R50 per day for learners who participated in work placement WIL.

- Debrief

  A debriefing session should be held with learners while they are still in the workplaces and also at the end of the workplace opportunity. This will help to identify successes and problems encountered during the work placement. The availability of such information may also be useful even when other learners go for work placement.

- A focus on integrative learning – assessment and learning activity

  It is important that learners get an opportunity during their placement to experience the world of work, acquire industry relevant skills and attributes and be able to use the knowledge they acquire in the workplace.

- Employability

  Skills demands are rapidly changing with some jobs becoming redundant. It is, therefore, important that workplace experience should where possible prepare learners for diverse roles to increase their employability.

WIL is a marvellous example of a true taskthat happens at FET institutions and universities. Authentic tasks ought to be reasonable and they ought to be something that learners can identify with. Such assignments ought to be created from everyday issues or vocational practice (Placklé et al., 2014) with TVETs concentrating on delivering practical skills that assist a person in the world of work (Agrawal, 2013). There must be a link between what learners are instructed in class and what they experience in the real world. Institutions are becoming increasingly economy driven and are being compelled

to adjust to the needs of communities and industry (Gellerstedt et al., 2015). De Bruijn (2012) (cited in Placklé et al., 2014) cites a central tenet in the planning of authentic tasks, namely, the development of a closeparticipation with society and professionals.

Students in TVET institutions need testing learning pathways and want to be involved in the improvement of learning exercises (Placklé et al., 2014) thus putting a great emphasis for students to provide feedback on their WIL experiences which becomes the responsibility of the institutions though such an evaluation of learning is said to be complex ((Venville et al., 2018). Students find authentic issues valuable as it enhances collaborative learning among students. Students are stakeholders and end users of WIL and they should be included in the planning of assignments. Learners ought to play a role in WIL undertakings, they have an obligation to source for organisations where they can get experiential learning opportunities as well.

Jackson (2018) strongly believes that WIL assessment should be the responsibility of both the student and the workplace supervisor where the experiential learning is being carried out as the assessment should measure the professional competence level of the student. A pilot study carried out by Bates, Nguyen, Sawhney and O'Connor (2014) on the effect of WIL on the student work self-efficacy (WSE) of both WIL and non-WIL students found that the WSE scores where high for non-WIL students and low for WIL students. These findings, however, cannot be accepted unreservedly as the sample size was small and, in addition, some of the non-WIL participants possessed some form of work experience (Bates et al., 2014). Nevertheless, the researchers attributed the low WSE scores to a lack of knowledge and skills related to the work experience. There is a lack of a solid assessment method that can fully assess the process of WIL and its influence on WSE. In addition, if the non-WIL students lacked skills related to work experience, how were they being prepared by WIL in the classroom?

In Pakistan, professional instruction is given through polytechnics, apprenticeship plans, and various vocational preparation and professional establishments (Agrawal, 2013). Pakistan makes every effort to guarantee the practical training of learners in work

placement. However, Dunn et al. (2018) are of the opinion that the provision of both placement and non-placement WIL is viable in order to increase students' work readiness.

In Finland, the role of FET is crucial due to the need for an adequate, competent labour workforce (Virolainen & Stenström, 2014). The increase in enrolments at vocational institutions was noted to be a result of the following factors:

- Educational policy obligating the youth to participate in FET or loose unemployment benefits.
- Introduction of workplace period and skills demonstration in the curriculum.
- Improved image of FET due to skills competitions.
- Visibility in popular media of, for example, waiters, chefs etc.
- General eligibility to enter higher education.

In South Africa, although NCV qualifies for entry into higher education, the other above-mentioned, sound practices are not common. WIL evaluations focus primarily on the benefits of WIL for learners. However, WIL is so complex a phenomenon that there is a need for an examination of the WIL processes in respect of how and why (Rowe, Nay, Lloyd, Myton, & Kraushaar, 2018) learners are prepared by WIL for industry and whether the processes and models are working. Furthermore, Dunn et al. (2018) mention the existence of the two approaches to WIL, namely, work placement WIL and non-work placement WIL and raise the question as to how non-work placement WIL activities may be evaluated as activities that help to prepare students for industry. There remains much debate surrounding the issue of what constitutes WIL (Dunn et al., 2018) as there is a much concern as to whether, during the recruitment processes, employers may regard students who have engaged in in non-work placement WIL as being work ready in comparison to those with a work placement WIL history.

| SWOT | Work Placements | Non-Work Placements |
|---|---|---|
| Strengths | Enables a strongly supported introduction into the field<br><br>Enhanced professional identity on the part of students<br><br>Advanced students' competence as field professionals<br><br>Boosts employability of graduates | Improved quality control of student activities.<br><br>Guarantees reasonable experiences in a profession<br><br>Easy assessment of activities and tasks<br><br>Cost effective and in alignment with government requirements in respect of integrating WIL into curricula |
| Weaknesses | Under-resourced placements undermine good WIL practice and accountability for quality assurance of student work experience<br><br>Only one WIL placement unit may typically be provided, which may limit the ability to cover the required breadth of the field<br><br>Business may not offer experiences for all fields or for the required time<br><br>Some employers may choose to recognise work experience acquired from some employers | High probability of graduates without direct work experience/skills.<br><br>High costs as a result of<br>site visits, guest speakers, scenario development,<br>industry-aligned assessments and virtual materials<br><br>Difficulties in ensuring that experiences are a true reflection of the world of work<br><br>May require industry partners to help develop the curriculum within set times. |

| | | |
|---|---|---|
| | Placements may interfere with class time and may be costly due to the distance between the institution and the employer. | |
| Opportunities | Authentic experience is gained, and students develop professional networks.<br><br>Ability to merge theory and practice<br><br>Students given an opportunity to act individually, be innovative and work in teams<br><br>Enlarged database of industry contacts for institutions | A broad range of topics and learning outcomes may be accommodated during the curriculum design<br><br>Activities may be selected/designed to ensure professional authenticity<br><br>Debriefing may be facilitated and formalised with reflection<br>on WIL activities included as an integral component of<br>student assessment<br><br>Encourages the development of close working partnerships between all key WIL stakeholders |
| Threats | Unavailability of work sites<br>places pressure on availability of well managed placements<br><br>Students may not be comfortable with placements in rural areas | Graduates may be less job ready in comparison to work placement WIL graduates<br><br>Lack of real-world experience may contribute to low self-efficacy on part of graduates. |

| | | |
|---|---|---|
| | Not sufficient resources for institutions to supervise students undergoing work placement<br><br>Delays in completion of coursework due to time required for work placement<br><br>Poor outcomes as a result of students feeling compelled to undertake work experience. | |

*Table 2.2: SWOT analysis of placement and non-placement WIL.* Source: (adapted from Dunn et al. 2018)

Table 2.2 is an adaptation of the results of a SWOT analysis conducted by Dunn et al. (2018) on placement and non-placement WIL. It is clear from this SWOT analysis that although there are advantages to both WIL and non-WIL placements, as compared to engaging in one type of placement only, it would be more beneficial for students to engage in both types of placement in the interests of optimal preparation.

Kjellén and Svensson (2014) investigated how classroom practices reflect and are affected by WIL and were able to develop a taxonomy which seeks to answer how WIL may be best realised in the classroom. Nevertheless, they emphasise the need for further developments and research on their proposed model in order to develop a framework that guides instructional WIL design. Interviews were conducted with teachers to ascertain their views of WIL and its effects on instructional design. Supervisors were also interviewed to establish the amount of time that students spent on WIL activities. The result was a classification of activities into four categories in an attempt to describe the implementation of WIL in classrooms (Kjellén & Svensson, 2014):

- Using Practice as Inspiration (’Case’)

  This category encompasses instructional designs such as teaching cases, practice-orientated simulations and role play, i.e. activities that to some extent, are related to practice and may be edited versions of actual situations.

- Bringing Practice to Class (’Imprint’)

  This category includes the use of imprints of practice as resources in educational practice. Examples are inviting guest lecturers and importing artefacts from various professional fields, e.g. commercial programming code and annual reports from existing corporations.

- Utilising Professional Tools (Tool)

  The aim of the activities in this category is to train students to use the de-facto standard tools of a profession in the educational design, for example reference manuals or databases (online or printed), state-of-the-art software packages or professional routines and procedures.

- Bringing Class to Practice (Field)

  The activities in this category comprise empirically orientated fieldwork where students leave campus in order to experience and study real professional settings as part of their education, e.g. projects or thesis work.

WIL requires resources which may be expensive or time consuming for all stakeholders. However, the use of a proper WIL implementation model may help. It is essential that all the activities in which the learners engage are properly assessed to ensure that the set learning outcomes are achieved. South African institutions offering NCV should not focus merely on attaining certification rates but should ensure that when learners pass, they are also fully competent to start working.

## 2.3. Theoretical framework

Jr and Mertz (2014) define a theoretical framework as any empirical or quasi-empirical theory of social and/or psychological processes at various levels that may be applied to the understanding of phenomena. A theoretical framework helps in the understanding of both a problem and the phenomenon/a being studied.

A theoretical framework may be said to be a blueprint that serves as a guide to a study. It is derived from an existing theory in literature that has already been tested, validated and accepted in scholarly literature (Grant & Osanloo, 2014). Grant and Osanloo (2014) view a theory as providing a structure for an entire dissertation. In other words, a theoretical framework is the overall roadmap that drives the entire dissertation.

This study was informed by Bandura's self-efficacy theory as a framework because one of the main objectives of WIL, as agreed by various researchers, is to make the transition from class to work for students as easy as possible. This study investigated the preparation of learners by WIL for industry and, thus, self-efficacy theory was deemed to be best suited to the study because of its perception that efficacy is influenced by the following factors, namely, past experience, vicarious experience, verbal persuasion and emotional cues (Bandura, 1994).

Self-efficacy refers to the individual's belief in their competence to complete a task successfully (Bandura, 1994). The theory states that when people believe that they are able to carry out a complex task, they do not see it as something to be avoided and they are more likely to succeed. If they are not confident enough in their ability to complete a task, then they are more likely to fail. Hickton (2016) suggests that people who want to develop resilient self-efficacy should invest more time in the people who encourage and support them and set realistic goals that they are able to achieve.

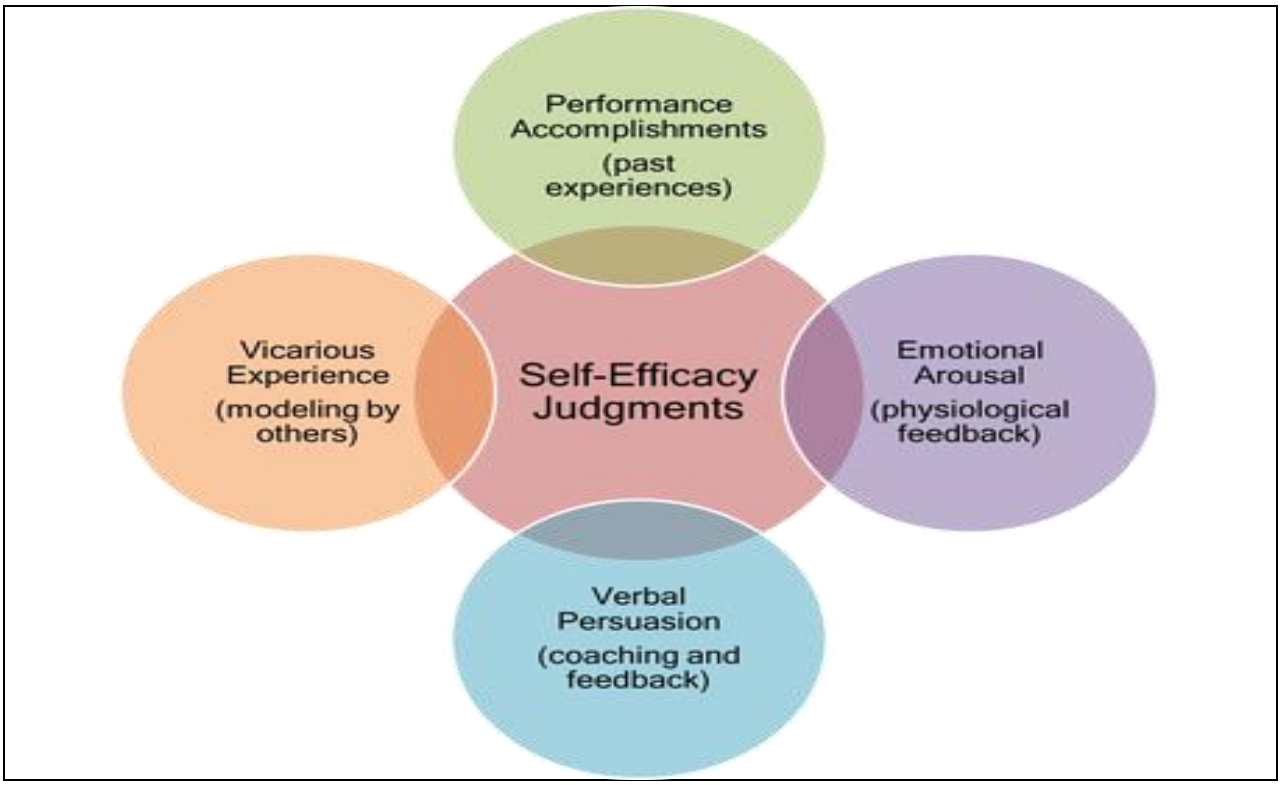


*Figure 2.4: Sources of self-efficacy – Adapted from Bandura (1994)*

**Past experiences.** When a person succeeds in something, this gives them a sense that they are able to do the task in question and their confidence is elevated, which results in high self-efficacy. However, should that individual fail at a certain task, then their belief in themselves and their capabilities diminishes, thus resulting in low self-efficacy. If students are given an opportunity during their WIL experience to perform a certain task and they succeed in it, then later in life, when they encounter something similar, they will be more eager to take on the task no matter how challenging it may be. Bandura (1994) is of the view that people should learn to persevere and overcome difficult obstacles in order to develop a resilient sense of efficacy.

**Vicarious experience,** also referred to as modelling by others, is the second source of efficacy. According to Lunenburg (2011), merely observing or seeing a colleague or a role model successfully completing a task may boost one's self-efficacy. Self-efficacy improves even more when the person completing the task is also like an observer (Bandura, 1994) as then the observer is enabled to gauge themselves .However, Bandura

(1994) cautions that seeing someone fail at a task may also have a negative effect on the observer. Students engaging in WIL are given exposure to the real world of work and through activities such as job shadowing, they see people occupying the positions that they would like to occupy someday and also performing various tasks pertaining to their field of study. Such an opportunity gives students the confidence that this is possible, especially if the person who is doing job is in the same age group as they are. It is critical that supervisors and workers in industry give students an opportunity to occasionally job shadow.

**Verbal persuasion.** No matter how good a person may be at what they do, hearing positive words from another person helps to build up high levels of confidence. The use of the Pygmalion effect which refers to the ability of a person to perform well when someone expects them to perform well often has a positive result on individual performance (Lunenburg, 2011). Lecturers at institutions and both workers and supervisors in industry will encourage students by merely saying good things to and about them. If students are constantly encouraged and told they are able to perform a specific task, their self-efficacy may improve dramatically in line with the saying that "you are who you say you are." Bandura (1994) believes that when managers show high levels of confidence in their subordinates, these subordinates in turn put in more effort and work harder with the will to succeed (Bandura, 1994). When students are taught and motivated in class then later engage in WIL experience where they are supported by a supervisor who encourages them and assists them to build resilient self-efficacy, students perform better when they eventually enter the labour market after completing their studies. Holding regular meetings, brainstorming sessions and giving performance feedback are key in verbally persuading students that they are capable people. It is worth noting that negative words tend to lower an individual's self-efficacy. There are many role players in the life of a student who can contribute to building high self-efficacy, including parents, coaches, teachers and supervisors among others.

**Emotional cues.** When a person looks at a given task and, before even attempting it, concludes that it is difficult and unattainable, such a person is likely to fail in that task

(Bandura, 1994). This implies that a person's state of mind may influence their self-efficacy. Bandura mentions factors such as stress and tension as being detrimental to a person's capabilities. For students engaging in WIL, their emotional states may also depend on verbal persuasion as what they hear may affect their moods.

Based on the above four sources of self-efficacy, it is worth noting that self-efficacy is may be cyclical in that a person must believe that they will succeed in the future, work hard and sometimes experience failure but use such experiences to regain strength in order to work on improving the skill set in question and to succeed before again aiming for success. Indicators that a student has high self-efficacy may include, but are not limited to, high confidence in abilities, positive approach to obstacles and a strong belief that they can handle almost anything. On the other hand, a student with low self-efficacy is more likely to have low confidence levels, feel as if they are not in control and believe that all efforts are a waste of time and energy.

Based on Bandura's four sources of self-efficacy, Hickton (2016) differentiates between people with a strong sense of self-efficacy and those with a low sense of self-efficacy as follows:

| **People with strong sense of self-efficacy** | **People with low sense of self-efficacy** |
|---|---|
| • Problems are tasks to be mastered.<br>• Deep interest in activities in which they engage.<br>• Very committed to their interests and activities.<br>• Quickly recover from setbacks, failures and disappointments. | • Avoid challenging tasks and obstacles.<br>• Believe that difficult tasks are beyond their capabilities.<br>• Focus on failure and negative outcomes.<br>• Quickly lose confidence in their abilities. |

*Table 2.3: Characteristics of people with strong and low sense of self-efficacy. Source: (*Hickton, (2016))

This theory supports the reality that a person will attain what they believe to be attainable, and what they believe to be unattainable will indeed be difficult for them to achieve. The perceptions of learners and lecturers about WIL play a critical role in how effective WIL practices will be. It is important that learners engage in more tasks that are related to their field of study to enable them to develop their confidence in relation to their ability to carry out such tasks in the workplace.

Learners' past experiences in relation to workplace activities are important in enhancing their self-efficacy. This requires that the activities to which NCV learners are exposed during their college training years should resemble the activities that they will most likely have to repeat when they are employed. When learners are in the workplace and they are exposed to activities which they have encountered previously, they tend to perform better. An opportunity to job shadow when someone is carrying out a task and succeeding also enhances self-efficacy. The students are given an opportunity to engage with their lecturer and workplace supervisors during their work placement periods. These are the people that the learners look up to and they hold the views and feedback that they give in relation to the learners' performance and strengths in high regard. Positive feedback helps learners to develop high self-efficacy while negative feedback may decrease their self-efficacy levels. This in turn affects the learners' state of mind and how they view themselves in relation to completing tasks.

Self-efficacy theory was deemed appropriate for assessing how learners are prepared by WIL for industry, as all its facets focus on the various activities in which learners engage during WIL preparation.

## 2.4. Conclusion

Chapter 2 focused on the challenges facing South Africa's NCV programme at the time of the study in relation to the implementation of WIL. Lecturers are responsible for ensuring that learners are given opportunities to engage in WIL during their period of study and, as such, they themselves ought to be competent to do so. The expectation is that lecturers should include practical activities in the classroom and also find and create partnerships with businesses that will take in learners for real work practice. Both work placement and non-work placement WIL activities should be provided for students.

The literature review revealed a gap in the previous literature on WIL with regard to how exactly learners should be prepared by WIL, its implementation in the NCV curriculum and what constitutes WIL (Dunn et al., 2018). It is clear that the NCV policy needs to be amended to ensure the compulsory implementation of WIL for all NCV students at TVETs. It would appear that a poor industrial relationship exists between businesses and TVETs which is resulting in businesses not being informed of what WIL is. Employers are faced with the task of deciding whether WIL holds more benefits or challenges for them. Arriving at such a conclusion is possible only once enough information has been made available by TVET institutions. Roadshows and information sessions may help to better equip prospective employers with knowledge about WIL and to address any concerns that they may have regarding their participation in student placements.

Although there is extensive literature on both the challenges and benefits of WIL, the engagement of learners in WIL and/or how they should be prepared remains unexplored. The models developed to successfully implement WIL speak mostly to HEIs, thus highlighting the need for a TVET-specific model to be developed. Previous research has focused on the development of lecturers at TVETs, countries which are excelling in vocational training and the benefits of WIL in general. While the role of lecturers is significant if WIL is to be a success, the overall success of WIL depends on all three key stakeholders of WIL, namely, institutions, employers/businesses and students. Lecturers must engage in work placements in order to be remain abreast of the recent developments in industries that relate to their field of lecturing, while students must also take responsibility for their own learning and this includes sourcing the host employers during recess periods in order to acquire skills in line with their fields of study. Numerous activities are mentioned by various researchers in literature that may be undertaken to ensure that the NCV curriculum makes sufficient provision for learner preparation by WIL in the classroom.

The study findings discussed in the next chapters indicate the activities that both learners and lecturers agree are required to ensure that learners are effectively prepared by WIL for industry at College X.

The next chapter outlines the methodology used in the research project by presenting the research design, sampling techniques and strategies used for the collection of data.

# CHAPTER 3: Methodology

## 3.1. Introduction

The previous chapter contained a detailed review of relevant literature. This chapter aims to outline the research methodology and research design used in the study. Saunders et al. (2009) refer to research methodology as the theory according to which a study is to be conducted. Thus, the research methodology details the techniques and methods that will be employed when a research project is carried out. According to Labaree (2017), the methodology section in a research project describes the rationale for using certain techniques to identify, select and analyse the information required to clarify a particular research problem. He further states that the focus of the methodology is on providing an answer to the way in which the data collection and data analysis were carried out.

The importance of a good methodology is summarised as follows by Labaree (2017):

- The collection of the data should be transparent and clear.
- Clear reasons should be provided for the choice of method undertaken during the investigation.
- The method should be appropriate and help to achieve the research objectives which have been set.
- Sufficient information should be provided to give scope for further research.
- Both the limitations of the study and anticipated problems should be acknowledged in the mitigation plan outlined.

The research methodology frames the entire research project.

## 3.2. Paradigm assumptions

A paradigm is a model which is derived from a worldview or belief system about how things work and which helps to guide the researcher on how to act in order to conduct an inquiry (Cohen & Crabtree, 2006; Saunders et al., 2009), thus enabling the researcher to determine which information to use and which not to use based on the paradigm that the study adopts. In other words, the research paradigm plays in an important role in the

choice of research method. Saunders et al. (2009) maintain that the choice of research paradigm is guided mainly by the research question.

The previous chapter presented a review of existing literature on WIL and attempted to find strategies by which WIL will better prepare learners by for industry. It was decided to use an interpretivism paradigm for the purposes of the study. Interpretivists hold the view that reality may be fully understood only through subjective interpretation of and intervention in that reality (Davison & Martinsons, 2015). Hence, the participants in this study were interviewed in a natural setting. Saunders et al. (2009) emphasise the need for researchers to adopt an empathetic stance as it is essential that they fit into the participants' social world and understand the participants' various point of views.

The aim of this research was to study phenomena in a natural setting – this forms the basis of the an interpretivism paradigm. It was important to understand the views of the learners and lecturers at College X in order to understand how the learners were being prepared for industry by WIL. Although an interpretivist paradigm may yield a variety of realities, Davison and Martinsons (2015) are of the view that the findings emanating from a study based on such a paradigm constitute, in a true sense, the required knowledge.

### 3.3. Research design

The research design ensures that the data which are collected will enable the researcher to answer the research question and to address the research problem in a fair and logical manner (Labaree, 2017). The research design that was chosen for the purposes of this study was in line with the strategies selected by the researcher that corresponded with the research ontology and epistemology, research methods and research approach employed. The selection of a research design is significantly influenced by the type of study, data identification, data collection and data analysis (Green & Thorogood, 2004). The selection of the research design assists in the realisation of the research objectives. This study adopted an interpretivism paradigm together with a qualitative inquiry approach. As stated by Green and Thorogood (2004), the research question frames the type of questions that will be asked and how this will be done and, thus, the question of

how learners are prepared for industry by WIL required in-depth answers that could be answered through interviews. Green and Thorogood (2004) highlight that the research design selected should be appropriate for the research to be conducted. In view of the fact that that the study intended to gain in-depth information from the participants, a case study design was deemed to be the most appropriate research design for the purposes of the study.

According to Labaree (2017), a good research design helps to ensure the achievement of the following:

- identification of and justification for the research problem
- review of prior literature on the research problem
- a clear specification of the research hypothesis
- description of the data collection process
- description of the data analysis methods to be applied.

### 3.4. Qualitative research approach

This research study adopted a qualitative approach. Qualitative research focuses on phenomena that occur in a natural setting and involves the study of the complexity of such phenomena (Leedy & Ormrod, 2014). Mack, Woodsong, Macqueen, Guest, and Namey (2005) summarise a qualitative study as an investigation that aims to respond to a research question using predefined procedures and data collection methods in order to produce findings that were not known beforehand but which will be applicable beyond the immediate boundaries of the research study. Green and Thorogood (2004) are of the view that qualitative research is not characterised by the type of data it processes nor the collection method used but rather by the aim that focuses on answering questions about the ‘what’, ‘how’ and ‘how’ of a particular phenomenon. They further elaborate that the majority of qualitative studies focus on understanding a phenomenon as opposed to measuring the phenomenon and, hence, terms such as explore, investigate and examine are common in qualitative research aims. The researcher believed a qualitative approach was the most appropriate method for this research study as the aim of the study was to

establish how National Certificate Vocational learners were being prepared for industry by WIL.

Ritchie and Lewis (2003) list the following key elements of qualitative research:

- aims directed at the provision of an in-depth understanding of the participants' social world by studying their experiences and perspectives
- small purposively selected sample
- interactive data collection methods that involve close contact with the participants, for example interviews
- detailed and extensive data
- data analysis that produces detailed descriptions, develops concepts and identifies patterns
- findings that focus on the interpretation of social meaning.

This study was characterised by all the above mentioned elements as the sample size was relatively small with a total of twenty participants. Interviews were used to collect the requisite data which meant that the researcher had to be in close contact with the participants and the data were grouped into themes with the aim of acquiring information on the experiences of the participants by exploring their perceptions. A qualitative approach was therefore deemed to appropriate for answering the main research question, namely, how NCV learners are prepared for industry by WIL. Hence, a case study design was adopted. The ability of qualitative research to provide rich descriptions of how people experience issues and its ability to identify intangible factors assisted in this study. The researcher wanted to explore the meanings that learners and lecturers ascribe to the preparation process of learners, thus making a qualitative approach the best suited approach for the purposes of this study.

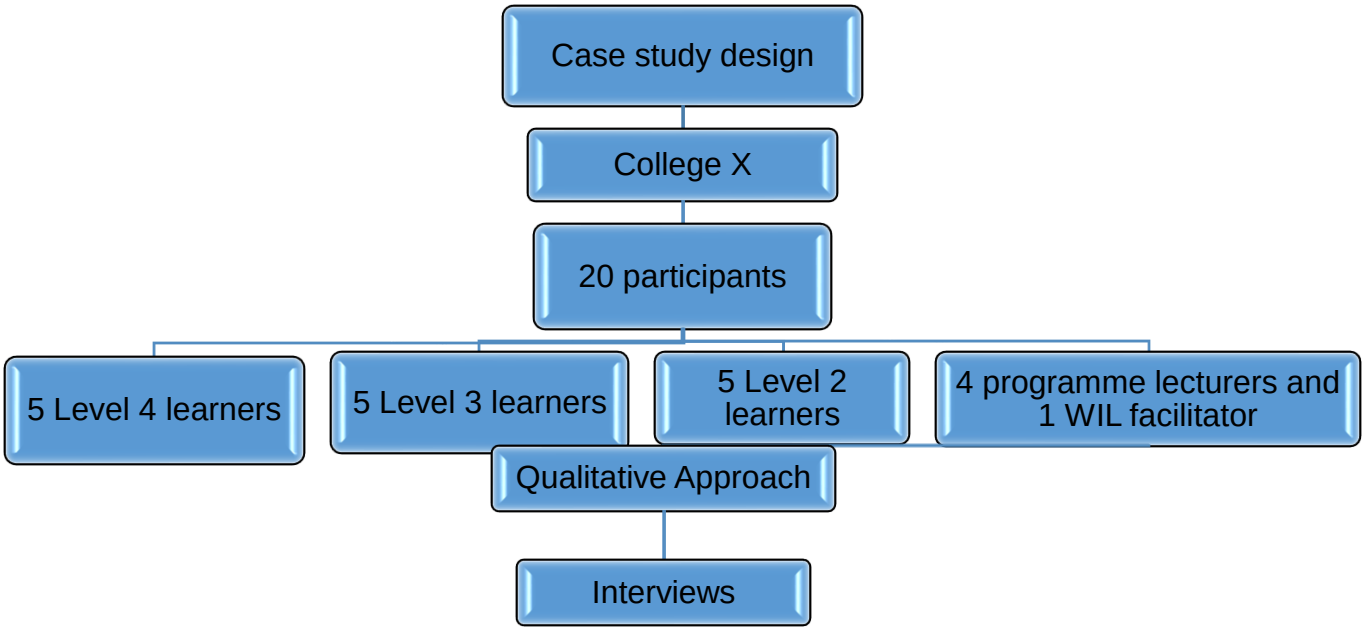


*Figure 3.1 Research approach: Qualitative approach*

Figure 3.1 illustrates that data was collected from one college using a qualitative research approach in order to answer the research question. This approach included detailed interviews with major stakeholders in WIL.

Interviews were conducted with the learners in order to ascertain how they experienced WIL together with how they perceived WIL. The interviews were conducted in an office setting while handwritten notes were being documented. In addition, interviews were conducted with the lecturers on their understanding of WIL and vocational education.

### 3.5. Sampling techniques

It is impossible to collect data from the entire population due to financial, time and access constraints (Saunders et al., 2009). In addition, a huge sample does not generally yield better results than a lesser sample. The college campus where the study was conducted enrols over 800 learners yearly and it would have been practically impossible to collect data from all these learners.

The researcher used a non-probability purposive sampling method. This sampling method was chosen as it provides for the use of various techniques to select samples based on subjective judgement (Saunders et al., 2009). The research question called for an in-depth study to be conducted and, hence, non-probability sampling method was selected for the purposes of the study. Saunders et al. (2009) argue both that purposive sampling allows the researcher to select cases that will meet the study objectives and also that works best when a small sample size is used. Accordingly, this study adopted a purposive sampling method in order to ensure that relevant participants were sampled purposefully in line with the research question of how learners are prepared by WIL for industry.

A total of 20 participants took part in the study – five learners across the three NQF levels (2, 3 & 4), one WIL facilitator and four lecturers. The learners being sampled were all learners who should have been be benefiting from WIL during their three years of study at College X. The learners and the lecturers were from the Office Administration faculty at College X. Lecturers were selected as they are assumed to be in constant interaction with learners and key role players in WIL implementation and facilitation.

A satisfactory sample size is important if the study findings are to be substantive. Vasileiou, Barnett, Thorpe, and Young (2018) assert that in qualitative research, the composition and the size of the sample determines the adequacy of the sample. They further point out that there is frequent utilisation of purposive sampling in qualitative research and also that the sample size may be small with the aim of supporting and providing rich information in relation to for the case under investigation. Morse (2000, cited in Vasileiou et al., 2018) cautions researchers to consider the scope, topic and design of the study together with the quality of the data to be collected when selecting samples in qualitative research.

Since qualitative research uses non-probability sampling methods, the selection of participants is deliberate in order to reflect certain features (Ritchie & Lewis, 2003).

Ritchie and Lewis (2003) contend that small-scale sample sizes in qualitative research may be selected based on the attributes of the population. The various programmes offered in NCV are comparable in terms of conduct, administration and assessment and, hence, the selection of one specific programme is was sufficient for the purposes of this research study as all the programmes are distinguished upon completion by the field of operation as a result of the vocational content. In line with the suggestion of Green and Thorogood (2004), the sample was selected opportunistically in order to ensure that relevant data would be generated.

The selection of a sample generally relies on the study design. Green and Thorogood (2004) concur that even a sample size of one may be adequate in the case of a life history study. They propose that a representative sample should be selected to ensure the credibility of the study and, hence, the chosen sample size for this study comprised two categories consisting of learners from all three levels in the NCV curriculum and lecturers. Green and Thorogood (2004) further caution that a sample size of twenty belonging to one category will not generate sufficient information although this was not the case in this study. It was the view of the researcher that the sample chosen was both adequate and representative. Furthermore, it was expected that the sample would generate relevant data which would assist in answering the research questions.

### 3.6. Data collection techniques

The researcher used structured interviews in order to collect the requisite data.

#### 3.6.1. Researcher's role

The researcher did not influence the results or the participants' responses in any way. The data were collected without bias and without using any form of power over the participants. The researcher understood that her role was to provide data which would be analysed in a clear and transparent manner. The participants belonged to a different faculty to the one the researcher was working in at the time of the study and, thus, there were no links between the participants and the researcher that could have led to bias. In

addition, the WIL facilitator was made aware of the fact that the research was not aimed at measuring his progress and the importance of complete honesty was clearly communicated to him.

### 3.6.2. Interviews

Briggs et al. (2012) describe an interview in the research context as a research instrument where one human being interacts with another in a sensitive manner. On the other hand, according to Green and Thorogood (2004), an interview is a conversation that is usually driven by the type of data that a researcher hopes to obtain. Thus, an interview may be described as a conversation between two or more individuals during which specific information is shared with the aim of addressing an issue or gaining more information on the issue in question. Interviews are viewed as research tools that are flexible (Briggs et al. 2012) and are easy both to manage and to conduct. The collection of data in this study entailed deep conversations driven by the research questions that the research aimed to answer.

Structured interviews were set up and conducted to enable the researcher to obtain the requisite data from the participants. The researcher followed the set questions in order to get answers that would be comparable and which could easily be classified into themes. All the participants were given background information on the research topic so that they understand the set objectives of the study. In addition, the participants were informed of their right to withdraw from the study at any time and assured that their personal dignity would not be infringed in any way during the data collection process.

A consent form was given to participants before the interviews were conducted and the researcher also obtained their consent to record the interviews in addition to writing notes. Briggs et al. (2012) suggest that interviews may be recorded by both taking notes and using a recording device. As already mentioned the researcher took notes during the interviews.

All the questions posed in the interviews were based on and developed from the research questions. The learners were asked questions about the WIL challenges that they are facing at the time of the study and their overall perceptions of WIL, while the lecturers and WIL facilitators were asked questions about the way in which they ensured that the WIL curriculum was implemented in the classroom. Information was obtained on the activities that the college was offering to the learners as part of their practical training or experience.

The researcher asked probing questions as and when they arose during the interviews. The interview schedule included the participants' details which included their biographical details, their positions in the college, WIL challenges experienced, WIL activities offered by the college and their perceptions of WIL. All the participants in the same category were asked similar questions to ensure that the study findings were as reliable as possible.

#### 3.6.2.1. Semi-structured interviews

All the interview questions emanated from the main research and the sub research questions. The biographical details of the students and lecturers including the existing enrolment levels were recorded. The questions asked were not closed questions and, thus, the participants' responses were not restricted to a no or yes answer but allowed for detailed responses. The researcher did not make any assumptions or draw any undue conclusions. The researcher decided that interviews were an appropriate method of data collection as follow-up questions could be asked in relation to the participants' perceptions of WIL. The responses to the questions ensured that the analysis and interpretation of the participants' experiences in relation to WIL were more realistic.

#### 3.6.2.2. Purpose of the interviews

Interviews are useful for an in-depth investigation of issues and for discovering individuals' feelings about a specific topic, adding a human perspective to impersonal data and deepening a researcher's understanding when undertaking a study (Evalued, 2006).

Structured interviews were used for the data collection as such interviews yield considerable information on facts, beliefs, motives, feelings and behaviours (Leedy & Ormrod, 2014). Cohen and Crabtree (2006) recommend the use of structured interviews as they allow the researcher an opportunity to ask participants the same series of pre-determined questions.

This study used standardised questions for the triangular data sources with in-depth information on work integrated learning being obtained from various participants in a friendly and safe environment.

#### 3.6.2.3. Advantages of using interviews

It would seem that the benefits of interviews in research outweigh the disadvantages. An online article by Evalued (2006) summarises the advantages of interviews as follows:

- Detailed information that incorporates feelings, perceptions and opinions is obtained.
- Detailed questions can be asked.
- The participants' own responses are documented and recorded.
- Follow-up questions may be posed so as to avoid misunderstanding and assumptions.

Briggs et al. (2012) caution that attention should be paid to the location where the interviews are conducted so that interruptions may be avoided. Furthermore, it worth noting that since interviews may be planned well in advance, a location convenient for the participants may be arranged timeously. In addition, interviews are easy to use as the same questions may be asked to the same participants. This assertion is supported by Briggs et al. (2012), who add that consistency in the questions asked of each participant ensures that the same issues are covered. Body language should also be observed during the interviews to enable the researcher to determine when a participant is no longer eager to respond to questions (Briggs et al. 2012).

#### 3.6.2.4. Disadvantages of using interviews

Leedy and Ormrod (2014) argue that while an interview may be a convenient tool for data collection, should a researcher be attempting to collect data on past events, the participants' memories may at times be distorted and they may also give incorrect information based on their feelings and attitudes when asked about prevailing circumstances. In addition, interviews are criticised for providing only information of what participants say and not what they do (Green & Thorogood, 2004).

Face-to-face interviews require participants to sit down and answer questions and are thus time consuming as a researcher has to set up for the meeting, transcribe information, analyse it and then report it (Evalued, 2006). Depending on the location of the participants, the researcher may incur additional costs from travelling. Nevertheless, although interviews have some disadvantages, they are commonly used in qualitative studies.

## 3.7. Data presentation and analysis

### 3.7.1. Document analysis

Extensive literature in the field of WIL and vocational education relevant to various countries was analysed. Documents such as College X's academic board documents, lecturers' timetables, statistics on post-school education and training in South Africa, Directives for Certification National Certificate (Vocational ) Levels 2-4 policy documents, Draft Policy for the National Certificate (Vocational), National Certificate Vocational (NCV) Policy, Policy on Professional Qualifications for Lecturers in Technical and Vocational Education and Training and the *White Paper for Post School Education and Training* were all examined in detail.

### 3.7.2. Lecturers' personal timetables

The lecturers' timetables indicating their daily workload were analysed in order to obtain an indication of the amount of time allocated to their various subjects and also to establish

whether WIL was catered for in the teaching timetable. The amount of time allocated per period and the activities in which the lecturers engaged during class were also discussed.

### 3.8. Biographical background of the participants

A total of twenty participants were interviewed from one campus of College X in Gauteng province, namely, five level 2 students, five level students, five level 4 students, four lecturers from the Office Administration faculty and one WIL facilitator for the campus.

| Age | Gender | Current NCV Level | Grade 12 Qualification |
|---|---|---|---|
| 19 | Female | 2 | No |
| 19 | Male | 2 | Yes |
| 18 | Female | 2 | No |
| 22 | Female | 2 | No |
| 18 | Male | 2 | No |
| 18 | Male | 3 | No |
| 24 | Female | 3 | yes |
| 22 | Female | 3 | No |
| 19 | Female | 3 | No |
| 21 | Male | 3 | Yes |
| 23 | Male | 4 | Yes |
| 23 | Male | 4 | Yes |
| 22 | Male | 4 | No |
| 20 | Male | 4 | No |
| 24 | Female | 4 | No |

*Table 3.1: Participants' details (learners)*

Table 3.1 presents the ages of the participants (learners), their gender, current NCV level and whether they had a Grade 12 qualification or not.

| Participant | Highest Qualification | Field of Study | Subject Taught | Lecturing Experience |
|---|---|---|---|---|
| **Melanie* | National diploma | Humanities | OP L2<br>NVC L2 | 3 years + |
| **Samantha* | Degree | Management | BP L2-4<br>OP L3-4 | 5 years + |
| **Nkateko* | National diploma | Information Technology | ODP L2-4 | 4 years + |
| **Masana* | Degree | Management | NVC L3-4 | 5 years + |
| **Thomas* | Honours degree | Management | Entre L2-4 | 5 years + |

*Table 3.2: Participants' details (lecturers)*

Table 3.2 presents the names of the participants (lecturers and WIL facilitator), their qualifications, fields of study, subjects taught and lecturing experience.

*Note: * Indicates the use of a pseudonym

OP – Office Practice

NVC – New Venture Creation

BP – Business Practice

ODP – Office Data Processing

Entre – Entrepreneurship

*Melanie* was a female lecturer with a National Diploma in Humanities. She had only been in the Office Administration faculty for the year prior to the study, although she had worked at College X for three years. Because she was a novice lecturer in the faculty, she was lecturing only Level 2 students for Office Practice and New Venture Creation.

*Samantha* was a female lecturer who had been in the faculty for more than five years at the time of study and a bachelor's degree in management. She lectured Business Practice L2-4 and Office Practice L3-4.

*Nkateko* was a female lecturer who has been in the faculty for four years, lecturing office data processing which is a computerised subject. She had a National Diploma in Information and Technology.

*Masana* was a female lecturer who had been with the college for more than five years but a year and a half only in the Office Administration faculty. She had a bachelor's degree in management and, at the time of study, she was lecturing New Venture Creation L3-4.

*Thomas* was a male lecturer with an honours degree in management. He had been at College X for five years and was responsible for WIL facilitation and entrepreneurship projects at the college

### 3.9. Data analysis

The study used constant comparative data analysis. This method compares the data which collected after having categorised them. The data in this study were collected through interviews. Qualitative data are of a diverse nature although it is possible to group such data into three types as follows (Saunders et al., 2009):

- Summary of meanings (condensation)

  It is important to produce a summary of the emerging key points from the notes made during the interview process. By doing this, apparent relationships may be identified.

- Category of meanings (grouping)

  This involves developing categories and linking them to meaningful data, thus enabling a researcher to recognise relationships between the categories.

- Structuring of meaning using narrative (ordering)

  It is advisable to analyse the data in the form in which they were related during the interviews. This includes taking into account the participants' engagement and actions during the interviews.

### 3.9.1. Summarising the data

Similarities and deviations in the data were studied in detail in order to allow for the grouping of themes so that interpretations could be made. The various views of the three different data sources, namely, WIL facilitators, national certificate vocational learners and programme lecturers, were then classified, and the study findings compiled from the themes that emerged.

## 3.10. Conclusion

In conclusion, it would appear WIL addresses several of the national problems pertaining to skills shortages and the provision of a skilled workforce in South Africa. When learners are constantly engaged in activities that promote WIL, they are more prepared for the world of work. When the curriculum does not make provision for practical training, the aims of TVET colleges are not being realised.

The next chapter outlines the presentation of the data, the data analysis and the interpretation of study findings which emanated from the semi-structured interviews.

# CHAPTER 4: Research findings and analysis

## 4.1. Introduction

The previous chapter outlined and discussed the methodology used in the study, including the research process, data collection methods and data analysis methods. This chapter presents and discusses the data which was gathered during the interviews which were held with lecturers and learners. The aim of this study was to explore ways to effectively prepare NCV learners for industry using WIL. The study was guided by the following research question:

**How are National Certificate Vocational learners prepared for industry by work integrated learning?**

The following secondary questions that guided the study included the following:

1. What work integrated learning challenges are experienced by NCV learners and lecturers?
2. Which activities are offered by the college to prepare learners by work integrated learning?
3. What are learners' and lecturers' perceptions and expectations of work integrated learning?

A constant comparative analysis was used to analyse the data which had been collected. This data analysis process was guided by the three types of processes for grouping qualitative data, as suggested by Saunders et al. (2009). The requisite data were collected by means of semi-structured interviews which were conducted at one college. The interviews were conducted with lecturers and learners individually with the researcher taking notes during the interviews. The data was first summarised with emerging key points being clearly stated after the compression of long statements and then categorised into various similar categories as guided by the research questions and research

objectives. This enabled the researcher to recognise relationships and then structure the data as a narrative in order to carry out a meaningful analysis. The names of the lecturers who participated in the study were not mentioned with pseudonyms being used. The data were then interpreted as the findings of the study.

### 4.2. Emerging themes from the research questions

The participants interviewed could be classified into two categories, namely, the lecturers or teachers and the NCV learners. Although the questions which were posed to the two groups of participants were similar, the themes that emerged differed, thus necessitating the separation of the questions and themes for the two categories of participants.

| Research Question | Theme |
|---|---|
| 1. What is your understanding of work integrated learning? | • Moderate knowledge of WIL |
| 2. What is vocational education? | • Clear understanding |
| 3. Do you value work integrated learning? | • High regard for WIL |
| 4. In which activities do you engage learners that make up work integrated learning? | • Limited classroom bound activities, carried out primarily in class |
| 5. Does the curriculum make sufficient provision to allow work integrated learning to take place? | • Dissatisfaction with curriculum |
| 6. Do you teach your learners about work integrated learning and its importance? | • Rarely educate them |
| 7. How do you report on work integrated learning? | • Poor recording system |

| | |
|---|---|
| 8. What may be done to improve work integrated learning? | • Lecturers' need for training<br>• Departmental intervention needed on curriculum revision |
| 9. Have you placed any learners or sent them to a workplace? | • Placement of learners not prioritised |

*Table 4.1: Research questions and themes for lecturers*

Table 4.1 presents the themes which were identified from the interviews conducted with the lecturers

| Research Questions | Themes |
|---|---|
| 1. What is your understanding of work integrated learning? | • Fully aware of what WIL is<br>• Able to give examples of WIL |
| 2. In which activities do you engage during class time that you would classify as work integrated learning? | • Limited to classroom activities<br>• ISAT and assignments<br>• Role plays<br>• No external activities |
| 3. Does the curriculum make sufficient provision for work integrated learning? | • Majority of learners satisfied with the curriculum<br>• A few learners not happy with the curriculum |
| 4. What led you to enrol at a technical vocational education and training institution? | • Financial constraints<br>• No matriculation qualification<br>• Need for practical training |
| | • No knowledge of policy at all |

| | |
|---|---|
| 5. Do you know about the National Certificate Vocational (NCV) policy? | |
| 6. What role do you think you have to play in ensuring the success of work integrated learning at the college? | • Volunteering<br>• Source for holiday work<br>• Do not rely on the college |
| 7. Challenges with WIL | • Being treated as amateurs and minors<br>• Lack of confidence due to limited experience<br>• Faculty not prioritised |
| 8. Do you think being a learner at a technical vocational education and training institution gives you a competitive advantage in the labour market? | • Very optimistic |

*Table 4.2: Research questions and themes for learners*

Table 4.2 presents the themes which were identified from the interviews conducted with learners across the 3 NCV levels.

The following themes emerged from interviews with the lecturers: moderate knowledge of what WIL is; clear understanding of vocational education; high regard for WIL; limited classroom bound WIL activities; dissatisfaction with the curriculum; lack of interest in engaging students on the subject WIL; ineffective WIL reporting methods; need for training on WIL in order to do more and prioritise the initiative.

### 4.3. Discussion of research findings

The researcher identified the following findings from the analysis of the data which were collected from the lecturers, namely, the meaning of work integrated learning, the value

of WIL in vocational education; work integrated learning activities, reporting mechanisms on WIL activities, curriculum challenges; prioritisation of learner placement and training on work integrated learning.

The following findings emerged from the interviews which were conducted with the learners, namely, knowledge of WIL; classroom bound WIL activities; learner satisfaction with the curriculum; factors leading to enrolment at TVET colleges; awareness of expected roles in WIL implementation; challenges experienced by learners with WIL and optimism in relation to easy labour market penetration.

### 4.3.1. Findings that emerged from the interviews with the lecturers

#### 4.3.1.1. The meaning of work integrated learning

The researcher assumed that all the lecturers would be fully informed on what constitutes WIL and also fully aware of their roles in the implementation of this initiative. Although it emerged from the interviews that the lecturers were familiar with the main keywords found in every definition of WIL, theoretical work and work experience, it was also found that they were not making time to educate the learners on the concept of WIL, its benefits or its importance.

When the lecturer participants were asked whether their learners were being informed about WIL and its importance, they made the following responses;

Samantha*: "Yes. I usually do it with a group of learners and not during class time. They are eager to go out and do WIL but the college does not do enough to show them how to go about getting companies to do WIL although I do engage them from time to time on WIL."*

Nkateko: *"No. I have never had a session with the learners"".*

Masana*: "I do talk to them, but I doubt if they understand the importance of it. I also believe that society influences them not to be responsible."*

The responses revealed that the lecturers seemed not to want to take responsibility for giving the learners information on WIL. In fact, even those who did do so did not view it as something that was worth investing much time in. Samantha was clear that it is the college's responsibility to educate the learners on how to approach host companies, while Masana was of the view that the learners are irresponsible, adding that they did not view WIL as important. There seemed to be a shifting of responsibility as the college also includes the lecturers. It may have been that Samantha was accusing herself of not carrying out her duties. It was possible to conclude from these responses that there is every likelihood that the learners in this department will complete their exit level without engaging in any practical work unless they themselves take the initiative to do so.

The responses also indicated that the lecturers' definition of WIL was in line with that described in the literature, in particular that WIL includes both theory and practical workplace experience.

#### 4.3.1.2. The value of WIL in vocational education

The study established that the lecturers had various definitions of what vocational education entails, although a common feature was the fact that they all found WIL to be valuable in vocational education. Nkateko, a participant, defined vocational educational education as a type of learning that teaches learners about a certain directed vocational path with significant emphasis being placed on the fact that it is not possible to separate vocational education from practical work. According to one of the participants, Masana, vocational education was designed for learners who are struggling academically. Unfortunately, this is a popular view in many countries and has resulted in vocational education being perceived as leading nowhere and as being second-choice education (Eichhorst et al., 2014). This view is fairly common, with Wheelahan and Moodie (2016) also highlighting the low status of vocational education and indicating that it will take more than political will to address and change the situation.

The lecturers cited various reasons for the important role of WIL in vocational education. These reasons include the importance of learners being given an opportunity to gain practical experience in the workplace as there is often a significant difference between what is taught theoretically in class and real practice; the fact that hands-on experience can be both fun and improve the learners' understanding of what is taught in class; and that WIL can create an opportunity for learners to become more responsible as they come to realise the importance of meeting deadlines. In this way, they often become more professional before they even penetrate the labour market. Samantha went on to add that "*you can never forget the experience."*

The way in which the lecturers spoke about the value of WIL in vocational education indicated that should they have an opportunity to engage in WIL sessions. This may even result in changing their attitudes about who is responsible for implementing WIL.

The literature review revealed that there have been significant improvements in the economies of countries that prioritise and invest in vocational education. Sadly, the study findings indicate that the college under review was not prioritising vocational education and, therefore, would not see improvements in its contribution to the South African economy.

#### 4.3.1.3. Work integrated learning activities

The researcher discovered that the lecturers did engage the learners in limited activities that constitute WIL, for example role plays, presentations, assignments and ISAT tasks developed by the department with one lecturer mentioning taking students on excursions. Nkateko, however, appeared to be of the opinion that there was little need for her to initiate any additional activities, saying, *"I believe my subject covers WIL as it is practical and the use of a laptop in class will not differ from the use of a laptop in the workplace."*

It was clear from the interviews that apart from what was set out in the curriculum, no additional initiatives were being undertaken or would be undertaken by the lecturers to introduce more activities that could contribute to learners gaining experience. Nagle,

Lannon, and McMahon (2018) suggest that WIL activities should not be limited to learning in work environments, thus highlighting the need to link both theory and practice as well as the fact that limiting WIL to classroom learning would not adequately ensure the preparation of learners for the workplace.

The activities which learners were being offered at the college were in line with the majority of the classroom-bound activities highlighted in the literature as examples of WIL, although the workplace component of WIL was missing. While the literature advocates a combination of both classroom activities and workplace activities, the study findings indicate that little provision for work placement WIL was being made at the college.

#### 4.3.1.4. Reporting mechanisms on WIL activities

Students at TVET colleges use files to store any summative tasks that they perform in class. These are known as portfolio of evidence (POE) files. These files are kept by the lecturer on behalf of the learners once corrections have been done and, according to the DHET, they should be stored for a period of five years by the college before being discarded. During the interviews it came to light that lecturers set great store by these files as they enabled the lecturers to record the presentations and ISAT marks contained in them. All of them were confident that record keeping was being carried out effectively.

When asked on how they reported on activities other than the ISAT tasks, varying responses were given:

Nkateko: *"I don't use any recording method for my practical tasks."*
Melanie: *"I take pictures during role plays."*
Masana: *"I don't take the reporting seriously. I just report to my senior lecturer verbally when I have done other practical activities such as excursions and let her handle the admin work. There is no formal reporting for me."*

It emerged from the data analysis that only a portion of the WIL activities was being reported in an appropriate manner, with relatively little attention being paid to other

activities. Masana's claims that the senior lecturer handled the administrative work could not be followed up as the programme senior was not one of the participants. It was, therefore, not possible to say whether reporting did or did not happen at that level.

Documented evidence of WIL may assist in the assessment of WIL. However, the study findings indicated discrepancies in the way in which WIL was being reported at College X. The literature stresses the need for the proper assessment of WIL if it is to be effective.

#### 4.3.1.5. Curriculum challenges

The study found that curriculum challenges were a general problem experienced by all the lecturers. It was revealed that lecturers found the textbooks to be strictly theoretical, outdated, not catering for WIL and forcing the learners to be classroom bound. The concerns raised about the teaching material helped to shed some light on why the lecturers appeared not to be investing much time in WIL activities. Curriculum content should be unique to the needs of a country's labour markets (Renold et al., 2018), with Sibiya and Nyembezi (2018) recommending that the relevance of TVET curriculum content to the needs of society and economy be researched. They further recommend that HEIs and TVETs should work together to develop curriculum content that will be responsive to industry. The participants raised some of the following concerns:

Melanie: *"… we focus more on wanting to complete the syllabus as there is a lot of theoretical work to be covered. There is not sufficient time to do much practical work.""*
Samantha*: "… the curriculum forces learners to be taught only in class. There are few activities in the curriculum that warrant learners going out into the practical world. Learners must constantly think and only imagine what is taught.""*
Nkateko: *"… the curriculum doesn't correlate with the current happening in the outside world. It also creates confusion because what learners see when they go out to companies doesn't correlate with what their textbook shows."*

Nkateko revealed that the textbook for her course showed the old type of receptionists and old office equipment, thus highlighting the confusion that arises when learners are

unable to understand why what they are being taught and shown in class appears to differ significantly from what happens in the corporate world. The textbooks the lecturers were using had been published in 2009, thus a decade before the time of this study. This finding contrasts with the views expressed by Renold et al. (2018) that curriculum content needs to change over time due to technology, processes and evolving labour markets to ensure that it does not become obsolete. In view of the rapid rate at which things are changing and the constant technological developments, there is clearly a need for the textbooks to be revised in order to keep up with current trends. The study found that the lecturers were very dissatisfied with the curriculum.

The literature review highlighted high levels of bureaucracy in the implementation of the NCV curriculum as the stakeholders had not been consulted and thus the curriculum may have been developed without their input. Lecturers are supposed to be the leaders of WIL curriculum development and their dissatisfaction with the curriculum has an adverse impact on how well they implement it.

#### 4.3.1.6. Prioritisation of learner placement

The interviews revealed that the lecturers were not prioritising the placement of learners in workplaces. One lecturer indicated that she has placed ten learners in a workplace in the more than four years she had been at the college. However, the other lecturers all stated that they had never placed any learners in the workplace, citing various reasons for this. The concerns raised about the lecturers' unclear roles in WIL implementation, curriculum challenges and a lack of training on WIL were indicated as the reasons for the lecturers not prioritising the placement of learners in workplaces.

The literature review indicated that the challenges that learners experienced with WIL implementation included a lack of placement in workplaces which, they believed, makes it very difficult for them to acquire the skills that are required by industry. It was clear that the learners at College X were not being given many opportunities to engage in real workplace practical work.

#### 4.3.1.7. Training on work integrated learning

The majority of the lecturers expressed their hopes of being offered training on WIL so that they would know exactly what is required from them. When asked what they thought should be done to improve WIL at the college, emotions ran high and feelings of sadness and self-blame were observed. This supported the observation of Green and Thorogood (2004) that when interviews are conducted with empathy and understanding, it creates a positive experience for the participants and they feel that someone cares about their concerns. This was indeed the case in this study as one lecturer actually expressed this. She also stated that she felt it was the duty of the WIL office to place learners while another participant pointed out that the lecturers realised that they had a duty to assist learners with WIL and that they believed that if they received training, they would be in a much better position to do so. This participant went on to say *"learners come to our college hoping for a 70% practical and, instead, they receive 90% theory and 10% practical. I feel we are not doing our students justice. Companies assume our learners have practical experience which is not true."* It may be that the sudden change of heart in the middle of the interview was brought about by the sense of trust that the participant felt as the researcher was not at all judgemental during the interview. These findings are supported by the suggestion made by Brown (2017) that vocational education teachers require an add-on education and teaching model that will complement the skills that they already possess to enable them to adequately prepare learners for industry.

Another lecturer cited a need for a strong IT system that learners would find interesting. This should include the use of Skype with other vocational institutions that were doing well so these institutions could share good practices. The participant emphasised their need for training and resources that would allow for more practical work to be done. Melanie indicated that *"the L4s do not even seek employment, they just graduate and go and sit at home. Meanwhile, had they had the opportunity of working they would have an appetite to look for work""* with Samantha expressing similar views that practical work enables learners to envision themselves in the corporate world and feel more excited about working.

The participants' the responses and the emotions expressed when the question on improvement was posed revealed how strongly they felt about their need for training and how they felt they could make a significant contribution to the lives of the learners.

The lack of development of vocational education educators in most sub-Saharan Africa countries is discussed in the literature, with the need for urgent intervention being highlighted. South Africa is also in the process of introducing a special qualification for vocational education educators in an attempt to remedy this situation. The study findings revealed that one of the reasons for the lecturers not being able to implement WIL effectively was a lack of training.

### 4.3.2. Findings that emerged from interviews with the learners

#### 4.3.2.1. Knowledge of WIL

Although the researcher had assumed that the learners would not know much about what WIL was, the interviews revealed that learners were optimally informed on what WIL, its importance and its benefits for them. The learners' knowledge of WIL and their expectations were revealed when they were asked about how they thought they could benefit from WIL. Their responses included the following:

*"… we are taught about how to use office equipment so it helps make things easy as it won't be the first time we see a fax machine when we get to a workplace."*
*"…I will gain more experience so, when I get to the workplace, I will know what to do."*
*"…it will help me to identify what is expected of me in the corporate world."*
*"…I will not require a lot of training when I start working."*
*"…I would benefit on how to fit in the workplace."*
*"…I would get an opportunity to improve my communication skills and learn various communication channels."*

The responses indicated that the learners understood that an effective WIL programme would have several advantages for them by the time they graduated. It was also clear

from the learners' responses that lecturers did sometimes discuss WIL with the learners. A few of the lecturers were singled out by different learners who indicated that they did, from time to time, talk to them about finding companies to host them and encouraging them to open their own businesses.

#### 4.3.2.2. Classroom-bound WIL activities

The researcher found that learners did engage in practical activities, primarily in the classroom, in the form of presentations, role plays, assignments and ISAT tasks. Kaider et al. (2017) support the use of non-placement activities in the classroom setting as they believe that these activities meet the criteria for equipping learners with the skills that they will be required to apply in the labour market. They however argue that the authenticity of these activities is questionable as authentic tasks should be tasks that are real as opposed to role plays and the use of simulation rooms. There was a general outcry from the learners about their not being exposed to the real world of work. While these activities were practical in nature, WIL is a complex phenomenon that cannot be restricted to a classroom setting only and, as such, this type of preparation alone may not be sufficient in effectively preparing learners for the world of work. In his study Jackson (2015) revealed that learners had indicated that classroom preparation alone was as inadequate for work preparation.

The learners expressed both their desire and their hope for being given an opportunity to visit real workplaces where they would be able to link theory and practice. This is important because learner performance in the classroom can differ greatly from their performance in the workplace (Jackson, 2018). Simulated environments provided by institutions are inauthentic as they are no substitute for the real workplace environment. In addition, there are time constraints as institutions have to complete various lessons as opposed to a workplace where one aim is being pursued throughout the day (Tyson, 2016). Nagle et al. (2018) emphasise the importance of linking theory and practice as they believe that a person must possess some level of competence in order to apply a certain skill as well as the strategic knowledge required to be able perform a certain task.

This supports the need for learners to be placed at in the work environment as theory and practice should not be separated.

Literature reveals that learners who engage only in classroom WIL activities do not perceive themselves as employable or work ready and have often, after entering industry, found that they are unable to carry out the required work activities successfully. The learners at College X indicated that, for them, WIL occurred primarily within the institution.

#### 4.3.2.3. Learner satisfaction with the curriculum

The study found that the learners at levels 3 and 4 were satisfied with the curriculum but felt that it was the lecturers' responsibility to link it with practice. One learner stated without hesitation *"my textbook teaches me things that my peers are doing in the workplace. At one time my friends asked for my assistance in hiding a spreadsheet column on her work report as she couldn't do it."* The learner attributed her ability to help her friend to the practical activities in which she constantly engaged during her computer-related subjects. A vocational education system that prepares learners to enter the labour market should include an element of both classroom learning and work experience (Renold et al., 2018). Another senior learner said *"two of my textbooks have sections where you are given tips on how to prepare yourself for an interview".* This seemed to inspire in the learner with hope that by merely reading about the interview tips, should he go for an interview he would know how exactly to handle it.

However, the Level 2 learners expressed different views to their peers as they indicated that they found the curriculum to be theoretically based. The curriculum is of great importance in every institution as this is where knowledge is selected, translated and transferred (Wedekind & Mutereko, 2016). Wedekind and Mutereko (2016) further emphasise that it should represent what the institution intends to achieve. A sound further education and training curriculum combines general and occupation-specific knowledge (Eichhorst et al., 2014). The learners criticised the curriculum for its lack of occupation-specific activities.

These findings indicate that it would appear that the bureaucracy that characterised the introduction of the NCV curriculum, as indicated in the literature, has somehow contributed to the dissatisfaction of its end users.

#### 4.3.2.4. Factors leading to enrolment at TVETs

According to Pugatch (2014), there is little information on the reasons why South African youth enrol at TVET colleges or even how they subsequently perform in industry. There have, however, been various reasons cited for the enrolment of learners at these college. Eichhorst et al. (2014) provide insight into some of the reasons for enrolling at vocational education institutions, for example a lack of skills demanded by the labour market, lack of funding to pursue higher education and, most important, the need for training that facilitates earlier entry into the labour market. These reasons were in line with the reasons given by the learners at College X, which revealed that some learners who had passed Grade 12 had not had enough money to attend higher institutions of learning and had found the TVET bursaries to be easily accessible.

Some of the learners indicated that they had chosen not to go to university as they had thought that TVET colleges equipped learners with the skills required in the workplace, while universities tended to focus more on theory. One learner shared a heartfelt reason for his enrolment at the college by saying: "*I used to work at a filling station and there was an opportunity for me to become a clerk, but I missed the opportunity due to not knowing how to use a computer. I then decided to go to look for an institution that would teach me how to use a computer and that's how I came to enrol here."*

A few learners had enrolled at the college as they had been unable to complete or reach Grade 12 and so they had sought an alternative way in which to obtain an NQF Level 4 qualification. This choice appeared to be working to their advantage as one learner indicated how her performance had improved since she had enrolled at the college. She also indicated that she was doing some practical tasks in her studies.

The literature review indicated the transition from school to workplace as the primary reason for learners enrolling at vocational institutions in South Africa. The study also found that College X learners had enrolled at the college in the hope that it would help to access industry.

#### 4.3.2.5. Awareness on expected roles in WIL implementation

The learners did not appear to know anything about the NCV policy or what it entailed. It emerged from their responses when they were asked if they knew about the policy that they seemed to feel that the college should make this type of information available to them. However, the interviews also created some form of awareness to the learners as to what the learners themselves could also do to gain experiential learning, as they indicated that they would visit companies and ask for holiday jobs and volunteer in various workplaces, thus showing an interest in the fact that they, too, could contribute by sourcing host employers.

It was found that some of the senior learners had taken the initiative to try to find places where they could work and also that some learners had done holiday work during the college recess periods. The interviews appeared to have helped the learners to understand that it was not only the lecturers who had a role to play in their work placement.

#### 4.3.2.6. Challenges experienced by learners with WIL

Significant dissatisfaction was noted when the learners were asked to cite the challenges that they had experienced. These challenges varied with some being intrinsic, with one learner indicating his lack of confidence whenever he had to do presentations and another indicating that he found the lecturers to be unapproachable and that this was resulting in his fearing to ask questions or to seek advice. However, these reasons were of a personal nature and it would require expert knowledge in the field of psychology to address them.

The general sentiment expressed was that the learners never had an opportunity to visit workplaces to do practical tasks and that all the tasks they were assigned were classroom-bound activities and that even these activities did not take place on a regular basis. Classroom activities do not compensate for the real experience that is gained in the workplace (Richmond et al., 2015). In a study by Sibiya and Nyembezi (2018) the learners argued that they were not ready for labour market irrespective of their course of study due to a lack of experience and that industry's expectations of work-ready graduates were unfair. These views align strongly with some of the challenges mentioned by the learners at College X who made the following responses:

*"… sometimes we are given assignments and the exams are also closer, so we don't have sufficient time to cover the work."*
*"… I feel like we are disadvantaged. In June we were promised we would attend some training and that never happened. I don't know if the problem is with us not getting ourselves host employers or the college has limited resources to cater for all of us."*
*"… we don't get an opportunity to go out so we can experience what life will look like after we graduate."*
*"… ever since I came to this college, I have never done any practical work outside the college."*

The learners also indicated that they felt their specific programmes were not taken seriously. They revealed that the training which they had been promised and which had never transpired had been offered to some of their peers in other programmes in the college. One learner accused the college of making empty promises and not "practising what it preached". The learner appeared distressed that during the two and a half years he had been at the college, he had never once gone outside the college for any practical activity. Some of the learners who participated in the interviews and were already at the exit level expressed the view that it was already too late for them as they were about to complete their qualification, while others expressed the hope that the situation would improve. The feelings in respect of a lack of support from the institution expressed in this study were similar to those expressed by the learners in a study by Pennaforte (2016),

which found that the learners perceived that the educational institution was not supportive during their placement in the workplace as the institution did not engage with the host employer.

Some of participants revealed that when an assignment required them to visit banks in order to obtain information, they had been met by rude bank staff who had not treated them well nor given them an opportunity to ask questions or state the reasons for their visit. They shared that they had either been given pamphlets which did not address their questions in total or that they had been blatantly ignored and forced to leave without finding out anything. One learner noted that at the time of his visit, he had realised that it was during a very busy season and that the bank had been crowded with customers and that this had resulted in his not being attended to. This was in line with the views of Jackson et al. (2017) that hosting learners may be very demanding for businesses where multiple functions are performed by personnel, thus leaving little time for them to offer learners support or even supervise them if necessary. Another learner said she believed that the fact that she is young was the reason why she had not received any assistance as the workers had not treated her professionally.

The lack of placement opportunities for vocational education learners revealed in the literature review also a challenge mentioned by the learners in this study. If learners are to be adequately prepared by WIL for industry, it is imperative that they are prepared both in the classroom and in the workplace.

#### 4.3.2.7. Optimism about easy labour market penetration

Despite the various challenges expressed, the learners appeared to be optimistic that they had a better chance of being employed than learners with a Grade 12 qualification. They stated that although they felt they were not completely ready to penetrate the labour market, they had, nevertheless, gained some practical skills during their college studies that could work to their advantage. However, despite the fact that learners seemed to think that they were engaging in quality WIL in the classroom and, thus, could be ready to enter the world of work, Jackson (2018) argues that quality WIL may prepare learners

for authentic, practice-based, learning experience only, but it is no substitute for it. One learner stated that *“although I have matric, I cannot use my matric certificate to find a job as a receptionist. However, this course has prepared me to be a receptionist”.* Another mentioned that she believed that studying at a high school did not constitute preparation for any field of work and only enabled the person concerned to gain a university entrance.

Only one learner was of a different view as she stated that she was afraid that companies might opt for Grade 12 learners as they could train them according to their business needs and, as such, disregard the workplace skills that TVET NCV graduates claimed to have .

The enhancement of graduate employability is a common benefit of WIL that emerges in the literature. The findings of this study indicated that the learners were confident that they would be more employable than learners who had not engaged in vocational education.

### 4.3.3. Findings that emerged from the interview with the WIL facilitator

The WIL facilitator was deeply involved in WIL activities and possessed a thorough knowledge of the initiative. He was well informed about how learners should go about approaching companies that can offer them practical experience, although he appeared to be more focused on securing internships for learners who had already completed their NCV qualifications as opposed to those who are still studying. He estimated that he had placed over 280 learners in workplaces in 2018. However, these learners were no longer enrolled at the college at the time of the study. These students according to the facilitator had, however, used logbooks to record the activities in which they had engaged during their work placements.

When asked on his views of the curriculum as he also lectured to classes, he said he found it to be outdated and not in line with what companies are looking for in graduates. The other challenge that he cited was that there was not sufficient time for practical activities as the theoretical component of the curriculum took up considerable time and, thus, learners were not able to gain meaningful experience in practical work. In addition,

he revealed that learners who were taught on WIL comprised primarily those learners who had completed their Level 4 and who were briefed in group sessions before going to workplaces for internships and learnerships.

The literature discusses in detail the challenges experienced by host employers when they offer learners opportunities to learn in their workspaces, for example financial constraints, time constraints, lack of resources, legal issues and the like. These issues were, however, discussed only briefly by the facilitator as he focused more on the lack of time resulting from a curriculum that includes considerable theoretical knowledge, thus making it difficult for learners to find enough time to go to workplaces.

### 4.4. Summary

The interview protocol used in the study comprised 12 questions which the lecturers and learners addressed and which related to the three research sub-questions. It was clear that both the learners and the lecturers had a clear understanding of WIL, as well as its importance and benefits. However, although the lecturers understood the concept of WIL it appeared that they did not invest much time in educating the learners about WIL in class, indicating that they rarely engaged in information sessions to discuss WIL. As much as they understood how important it is for learners and the fact that WIL should be the central focus in vocational education, they were clearly not prioritising it as they should have done. On the other hand, the learners seemed to be well informed about WIL and its benefits despite the fact that the lecturers had indicated that they rarely discussed it with the learners. It would, therefore, appear that the little time that the lecturers did speak about WIL was sufficient for the learners to grasp it as meaningful.

While the task of WIL implementation is the responsibility of every staff member, including the learners at TVET colleges, the lecturers seemed to be under the impression that it was the responsibility of the WIL facilitator alone, while the learners seemed to be under the impression that it was the lecturers' responsibility to find workplaces where they could do practical work and that they had no role to play in the process. The lecturers cited challenges which they claimed were contributing to the ineffective implementation of WIL.

These challenges included curriculum concerns and time and resource constraints. The learners also cited various challenges which ranged from personal reasons to external factors over which the college has no control, such as companies not giving the learners a good reception when they approached them for job opportunities.

# CHAPTER 5: Summary of findings, conclusions, recommendations and limitations

## 5.1. Introduction

This chapter outlines and summarises the findings which are based on the results of the study. The main objective of the study was to establish how National Certificate Vocational learners at College X in Gauteng were being prepared by WIL for industry. The focus was on gaining a more profound understanding of the activities in which the learners engaged in what constitutes WIL in both the classroom and in work environments. The findings and conclusions presented in this chapter assisted in answering the main research question, namely, How are National Certificate Vocational learners prepared by work integrated learning for industry? The recommendations derived from the study findings are also presented in this chapter together with the limitations that indicated the shortcomings of the study and, finally, a brief conclusion that summarises the entire study.

## 5.2. Background

The quest to establish the way in which National Certificate Vocational learners are being prepared by WIL for industry and to understand the level of knowledge and perceptions of both learners and lecturers of WIL was the main reason that inspired the researcher to undertake this study. WIL is an joint intervention involving academic study and work environment practice where learners are exposed to the work environment as a formal part of their learning (Jackson & Collings, 2018). Jackson and Collings (2018) further discuss the pressure on educational institutions to produce graduates who are ready for work in order to supply industry with the skills it requires. The main aim of WIL is to prepare learners for industry and to ensure such preparation guarantees them employment. McGrath (2016) refers to perception as an individual's capacity to become mindful of something through the senses and then to interpret or regard the phenomenon in question in a particular way. He goes on to state that how a person perceives such a phenomenon directly influences their performance in respect of such a phenomenon. The

aim of this research study was to explore how National Certificate Vocational learners are being prepared by work integrated learning for industry with the way in which both learners and lecturers perceive work integrated learning playing a fundamental role in realising the objectives of the study.

The study also intended to establish how learners and lecturers perceived WIL, their understanding of what constitutes WIL and the activities offered by College X to prepare learners by WIL for industry. In order to meet labour markets demands, it is vital that vocational institutions prepare learners for industry in such a way that that their employability is enhanced, thus distinguishing them from the growing pool of other new recruits (Jackson & Collings, 2018). The objective of the research was to establish how learners were being prepared by WIL for industry and, hence, it was imperative to investigate the activities in which the learners were engaging as part of their WIL experiences.

The focus of the study was the lecturers' understanding of WIL and their experiences in relation to its implementation. The study also focused on how the learners understood WIL, the importance of vocational education, the benefits of WIL and the activities in which they engaged that were contributing to their attainment of practical skills. A group of five students each from the three NCV levels offered at College X together with five lecturers participated in the study. The requisite data were collected through structured interviews with a case study design being used.

### 5.3. Summary of research findings

The following primary research question was asked, namely, how National Certificate Vocational learners are prepared by work integrated learning for industry. In this section the researcher responded to the secondary research questions in order to address the main research question and the research topic.

### 5.3.1. WIL challenges experienced by learners and lecturers

The first research sub question of the study was as follows: What work integrated learning challenges are experienced by NCV learners and their lecturers?

Three themes emerged from this question:

Theme 1: Lecturers' role in advocating WIL
Theme 2: Lecturers' reporting mechanism in relation to WIL
Theme 3: Challenges experienced by learners

This question probed the role that the lecturers were playing in educating their learners about WIL and the reporting mechanism that they used to document their WIL experiences. The lecturer participants recognised WIL as an initiative that could help learners prepare for the world of work. They agreed that WIL is a way of preparing graduates for the world of work by equipping them with the attributes that are required in industry (Mutereko & Wedekind, 2016). The study found that the lecturers held the WIL in high regard and viewed it as something that could improve the lives of NCV learners when they complete their exit level. Existing literature on WIL and TVET lecturers emphasises that teacher competence and student learning outcomes are closely related and, as such, the competence of lecturers plays a vital role in effective teaching (Ismail, Hassan, & Rosli, 2017). Lecturers who are competent in specific content are best able to educate learners on such content.

The lecturer participants revealed that they did, from time to time, engage with the learners on the importance of WIL although, on the whole, they did not put much effort into it. According to the WIL facilitator, he did occasionally arrange information sessions to educate learners about WIL but this took place primarily as a form of orientation with learners who, at the time, may have been selected to undertake a WIL assignment. There was, however, no formal policy or document that directed lecturers on the role they should

play in the provision of WIL experiences for learners, apart from announcements during staff meetings that everyone had a role to play in WIL implementation.

The participants (lecturers) also indicated that there was no formal mechanism that they used to report on WIL activities. Some reports would simply be communicated verbally to their supervisors while, at most, the only tangible evidence of the non-placement practical activities carried out in the classroom would be kept in learners' portfolio of evidence files. They did, however, agree that they have an important role to play in ensuring that WIL is implemented effectively at the college. This role includes the need to organise information sessions to educate learners on WIL and the sourcing of companies where they could place learners for experiential training. They strongly believed this could help the learners to be better prepared for industry as their employability would be enhanced through their WIL engagement.

The second group of participants, namely, the learners, revealed that they experienced a myriad of challenges with WIL. These challenges included a lack of interest on the part of employers to host them or to provide them with relevant information for their courses, not enough practical activities at the college, lack of self-confidence and little exposure to industry. The challenge in relation to the lack of confidence on the part of the learners is discussed in Bandura's self-efficacy theory under the source 'verbal persuasion' where it is highlighted that when a person receives positive words from another it improves the person's confidence. Sadly, however, it would appear that this was not the case for the learners at College X where little was being done to encourage them to embark on challenging tasks. These findings are in line with with Bandura's self-efficacy theory, as constructive feedback gained from work placement experience significantly increases both verbal persuasion and mastery experience.

In his study, Reddan (2015) found that compared to their counterparts who did not participate in WIL programmes, learners who did participate in such programmes had more confidence in their ability to carry out tasks and solve problems. Lecturers may assist in this regard by continuously encouraging learners to pursue their goals despite

the challenges they face. When learners realise the level of confidence that their lecturers have in them, they, too, would be in a better position to go out with confidence and source placement opportunities. According to the learners, lecturers are doing enough to educate them about WIL by providing them with information on what WIL is and how important it is for their learning. However, the study found that they had no information either on the policies that governed their learning or the contents of such policies.

### 5.3.2. WIL activities at College X

The second sub research question was as follows: Which activities are offered by the college to prepare learners by WIL for industry? The purpose of this question was to establish the various activities that are offered to learners as part of WIL in order to practically prepare them for industry both in the classroom and outside of the classroom.

The themes which were linked with to this question included:
Theme 3: Benefits of WIL
Theme 4: Activities classified as WIL
Theme 5: Provision for WIL in curriculum

The researcher sought to explore the activities that learners undertook during the period of their study at the college that constituted WIL and to determine the contribution of such activities towards the attainment of the skills required in the workplace. The activities that learners undertook at all three NCV levels were of a similar nature, with the majority of such activities being carried out in classroom settings. However, there was little indication of WIL activities being carried out in actual workplaces. The common activities mentioned by learners included practical tasks such as integrated summative tasks (ISAT) which required students to do role play and presentations. The learners were happy with these tasks but raised concerns over the fact that they took place perhaps once or twice a year which they felt was not sufficient to develop their skills fully. The learners revealed that apart from the classroom activities in which they participated, there had not been one instance where they had been taken to a workplace to put theory into practice.

The data collected revealed that the types of activity in which the learners engaged were the same across all the levels, thus indicating a repetition of practical tasks for all the NCV levels. The activities identified included practical assignments, integrated summative tasks, role plays and presentations which all symbolise non-work placement WIL. None of the activities identified were found to correlate with those suggested by Bilgin, Rowe, and Clark (2017), who propose that WIL should include an array of experiences, including teacher practicums, work carried out in simulation rooms, placements, mentoring, internships and project work. In his study, Reddan (2015) discovered that WIL activities carried out during placements in workplaces helped to alleviate learners' fears that about future employment and also assisted them to improve their problem-solving skills. The aspect of work placement must not be excluded from WIL if the aims of vocational education are to be optimally achieved.

Kaider et al. (2017) expanded an authenticity-proximity framework developed by other researchers in order to determine the authenticity and proximity of the activities in which learners engage at vocational institutions. They define authenticity in this context as learning activities that require learners to work on problems that may arise in their prospective workplaces, and proximity as learning activities that happen in actual workplace environments which enable learners to interact with the labour market directly. Based on these research findings, this framework was expanded further to include the activities identified by the participants in order to assess the authenticity and proximity of supposed WIL activities offered by College X. Other activities identified by Kaider et al. (2017) were included in order to assess their authenticity-proximity levels and, hopefully, to incorporate them in the design of the proposed NCV WIL model. The figure below presents the authenticity-proximity of various activities.

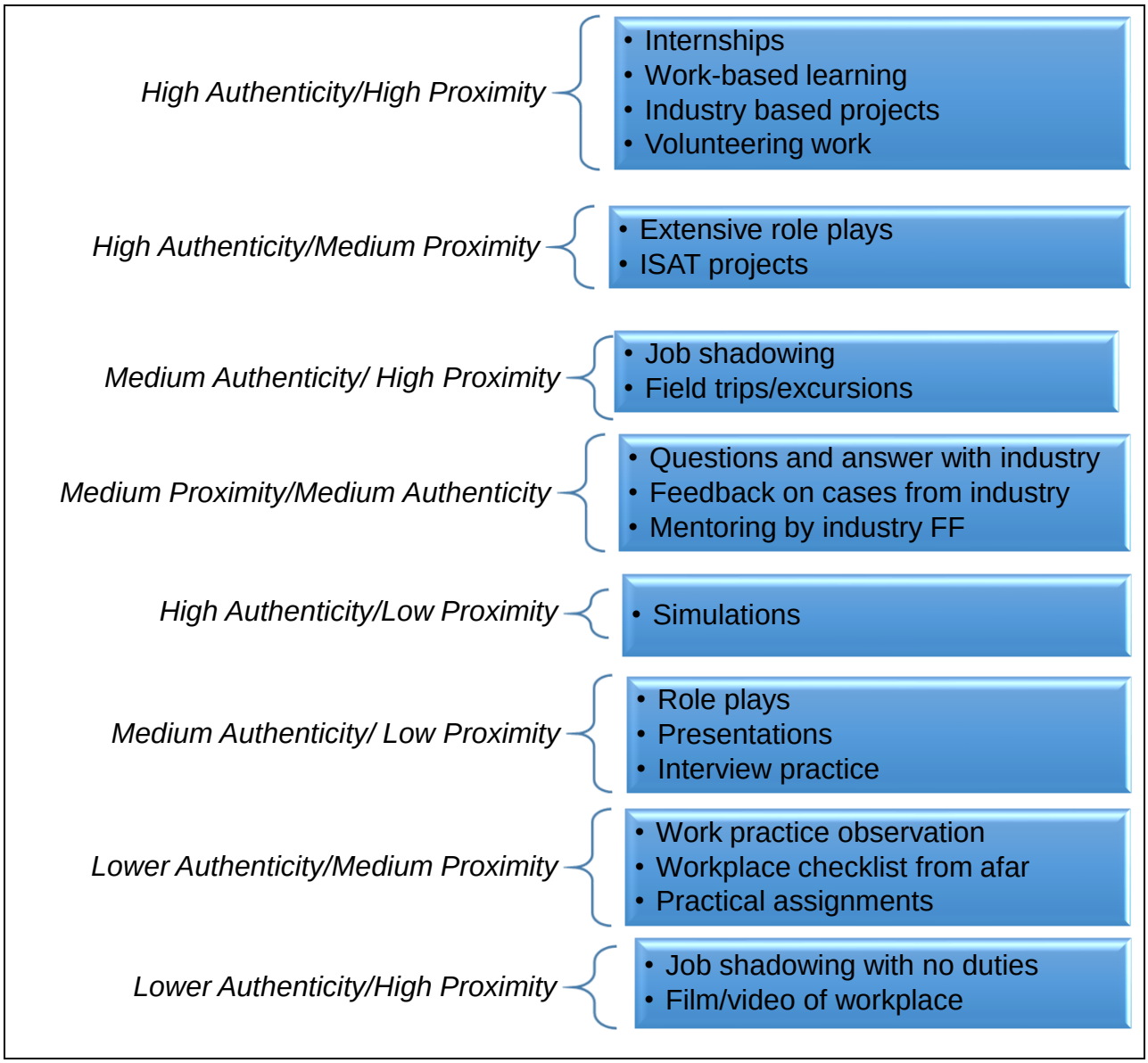


Figure 5.1: Practical typology of authentic WIL framework, adapted from Kaider et al. (2017)

According to Kaider et al. (2017), activities classified under low authenticity and low proximity categories must not be regarded as authentic WIL assessments, as they focus only on developing the learner's cognitive knowledge and theory. According to the study findings, simulations, role plays, presentations and job shadowing without assigned duties were some of the activities in which the learners engaged. According to the authenticity-proximity framework those activities are ranked low. ISAT tasks and excursions were the only tasks which were ranked higher on the framework. It was, thus, evident that the

activities or assessments carried out at College X were not sufficient for the adequate preparation of learners by WIL for industry.

Although all the participants were aware of the benefits of WIL for all the stakeholders, the study found that they were also aware that they themselves were not benefiting from WIL. The participants (learners) mentioned that there was a specific subject that they enjoyed, namely, using a laptop throughout a class session, and they believed that such a subject would be useful when they found administrative positions. The lecturers felt strongly that they were not providing enough practical activities for their learners, even in the classroom, and they were concerned that when the time came for them to enter industry, they would not be work ready. The self-efficacy theory source of past experience comes into play here, as if learners believe they are able or they are unable to do a task it will affect their performance. Effective WIL practices should be offering learners the opportunity to engage in tasks similar to those carried out in industry.

Modelling takes place in placement WIL only where learners are given the opportunity to observe someone else performing a specific task. According to Bandura (1994), such an experience is sufficient to improve the self-efficacy of the observer. However, for this to happen, learners must be given an opportunity to visit the workplaces where they wish to work someday and to spend time job shadowing in order to gain vicarious experience from those who are already experts in the field. This source requires only that learners have an opportunity to sit and observe.

There were mixed views on how both the learners and lecturers viewed the curriculum in relation to it making provision for WIL to take place. The lecturers were of the view that the curriculum was outdated, irrelevant, constricted and full of theoretical content. As indicated by Smith et al. (2016), the curriculum should include what should have been attained at the end of a learning programme and the objectives of the educational process. For courses such as the NCV that should include placement WIL as part of the learning, the curriculum should make provision for practical tasks. The majority of both

the learner and the teacher participants were, however, dissatisfied with the NCV curriculum and described it as rigid.

It was revealed by some of the students that even the type of office equipment depicted in the pictures in the textbook was old fashioned and no longer used in modern offices. The entry level learners (Level 2) were satisfied with the amount of practical work that the curriculum covered. However, upon checking the curriculum, it was discovered that the practical tasks used for NCV Level 2 ISAT, which are intended to compensate for practical experience, had been developed as far back as 2012. Technology is improving rapidly, and a seven-year gap may signify a loss of valuable information, as even work methods and industry demands move with the times. It was revealed that the curriculum had been developed when the FET colleges were still under the Department of Education and that no changes had been made when the colleges had moved to the Department of Higher Education and Training.

### 5.3.3. Learners and lecturers' perceptions of WIL

The third research sub question was as follows: What are the learners' and lecturers' perceptions and expectations of WIL? The researcher wished to understand the perceptions of both learners and lecturers of WIL in the NCV curriculum and what the learners hoped to gain from WIL, including the reasons why they had enrolled at the college.

The following themes were linked to the question:
Theme 6: Participants' understanding of WIL
Theme 7: Reasons for enrolling at College X
Theme 8: Learners' role in work integrated learning
Theme 9: Work readiness of learners
Theme 10: WIL improvement plan

The definitions of WIL given by the majority of the participants were similar in that the keywords that define WIL, namely, theory and practical work, were present in all the

definitions provided by various researchers. Almost all the participants revealed some type of understanding of what WIL entailed, with a few of the learners only revealing their uncertainty about what WIL is in their responses. It was revealed during the interviews that the benefits and importance of WIL were clear to all the participants. The lecturers believed that WIL is an effective vehicle that they can use to prepare their learners for industry and to equip them with all the relevant skills, while the learners believed that it would be very easy for them to carry out their duties in the workplace if they had received training in the same field during their college studies.

However, although the lecturers demonstrated a thorough knowledge of WIL and its importance, it appeared that they were unclear as to what was expected of them and whether there was a need for them to become optimally involved in the initiative. Their perception was that it was the responsibility of the college management to ensure that the learners were sent to workplaces to perform practical work. The lecturers who identified a need for training also indicated that based on how important WIL is, they believed they should be equipped with the skills they required to ensure its effective implementation. They indicated that they needed to be equipped in terms of how they should identify companies relevant to their vocational areas and also how to approach such companies in terms of the appropriate and professional channels to use and the identification of relevant people to approach.

Despite the fact that it seemed that a variety of factors had led the learners to enrol at College X, the desire to be work ready was ranked the highest followed by the availability of funds/bursaries for TVET colleges in comparison to the other reasons which emerged during the data collection. One of the participants indicated that they had realised that they had needed more skills to carry out their duties at a local organisation in which the learner was already volunteering and believed that a vocational qualification would improve the chances of obtaining full-time employment at that organisation when vacancies become available. The South African government has invested a considerable amount of money in higher education, in particular in vocational education, thus making it much easier to obtain funding to study at a TVET college and, hence, some of the

learners had chosen to enrol for vocational courses. The participants also revealed that their expectation that enrolling at a TVET would increase their employability coupled with the almost guaranteed free education had made College X their best option.

Just as the lecturers had initially distanced themselves from WIL as being part of their role, so too did the learners. According to the learners, it was the responsibility of the college to ensure that they secured work placements for their practical experience. However, during the individual interviews, it appeared that the participants' perceptions seemed to change as they indicated that they would do more in future to ensure their practical learning. Some of learners indicated that they were aware of certain businesses which they could approach to do volunteer work. It was discovered that the college did, from time to time, give out letters with the contact details of the WIL facilitator to the learners that they could use to source host employers on their own. The learners mentioned that although they had been in possession of such letters, they have not taken the initiative to source host employers. Thus, it appeared that the study had assisted in providing information related to the importance of all the stakeholders involved in WIL implementation.

The question on work readiness elicited various views from the participants as some of the learners indicated that they believed they would be in a better position to secure a job after completing their qualifications, while others felt that they were not being thoroughly prepared for the world of work. Some of the participants indicated that they intended to further their studies at universities after completing Level 4 and were concerned about whether the NCV qualification would enable them to do so. Despite some of the learners being certain that they would find jobs, the level of the jobs that they believed would be available to them was an issue of great concern as they were worried that they would earn very low salaries.

The study found that an NCV WIL model was required that would advocate the training of both lecturing staff and learners on WIL implementation. It is of the utmost importance that WIL should be part of every lesson, be it information sharing, carrying out practical

activities either on site or off site or just hosting quarterly campaigns that educate stakeholders on what NCV and WIL are. Both the learners and the lecturers had demonstrated their willingness to ensure the success of this intervention and, with sufficient resources and information, the preparation of learners by WIL for industry could be enhanced.

## 5.4. Conclusion

The information from the findings of the structured interviews provided insights into the way in which learners in the NCV stream are being prepared by WIL for industry. Bandura's self-efficacy theory was used as the theoretical framework of the study in an attempt to ascertain whether all the four sources of self-efficacy; namely; past experiences, vicarious persuasion, verbal persuasion and emotional cues were considered or present in the preparation of learners by WIL.

It was evident that the lecturers were performing their expected daily duties of teaching by adhering to the curriculum as outlined and as directed by the learning outcomes in the textbooks and subject guidelines. In addition, they were ensuring that the learners were carrying out compulsory assignments and ISAT tasks by making provision for the learners to complete these tasks as expected. However, in line with Bandura's theory of self-efficacy, these tasks only make provision for learners to have past experience as a source of self-efficacy. Thus, the experience gained pertained to classroom-bound activities only as it was found that no work placement was taking place. Nevertheless, the other three sources of self-efficacy were partially being catered for. Verbal persuasion was realised at times as some of the lecturers made time to educate their learners about WIL, as well as to motivate them to start their own businesses and to source host employers by constantly letting them know that this was achievable. Self-efficacy may significantly affect a learner's persistence when facing challenging tasks (Drysdale & McBeath, 2018).

In addition to the absence of a compulsory WIL curriculum, the college also had no policy on WIL implementation which clearly outlines how the WIL process should be addressed. Excel spreadsheets developed by the college WIL facilitators were being used to report

on WIL progress with the focus being on the yearly targets set by the college. It was clear that the preparation of learners by WIL was taking place in an unstructured manner as all the lecturers were aware is that they should at least make sure that their learners spent a minimum of five days in a workplace to enable them to obtain work experience. However, aspects such as the type of businesses to approach for such placements and the learning outcomes that should be achieved were not outlined anywhere. According to Bandura (1994), it is important to learn by experience from an individual who models the work in which the person in question has an interest. This is made possible by job shadowing but this was not the case with any of the learners interviewed, nor had it been made available by any of the lecturers interviewed.

The worldwide function of WIL is to ensure the work readiness of learners after completing their studies. This study found that the learners were not receiving any form of workplace placement that would prepare them for industry. The participants revealed that WIL was not prioritised by the college and that the college appeared to have no interest in ensuring that the initiative was implemented due to the lack of information on government expectations of the programme.

The lecturers revealed that they were faced with a considerable volume of theoretical content that they had to cover in class in order to complete the syllabus before the learners sat for their final examinations and, in view of the fact that the final examinations are also theoretical, they regarded it as imperative that the learners covered the theoretical content contained in the syllabus. The urgent need to complete the syllabus was also driven by the fact that the lecturers' performance is ranked at the beginning of the year and everyone wants to receive a good rating. Such a rating is based on the number of learners who have passed a lecturer's subject and, since the evaluation does not focus on WIL, more time is invested in what the evaluation is based on, namely, to ensure that learners pass the subject. In addition, the timetable did not make any provision for WIL as the lecturers are expected to be in class for most of the time.

It appeared that the college management may also have been expecting the lecturers to ensure that WIL was implemented, while the lecturers saw it as the role of management. Thus, with both parties shifting the onus for implementation onto the other, WIL was not being implemented. In addition, the learners expected the college management and the lecturers to implement WIL, while lecturers appeared to be of the opinion that giving the learners letters to take to host employers should, somehow, be informing the learners of their role in WIL implementation. As a result of this mix up in role communication, the study found that the learners were not being adequately prepared by WIL, thereby limiting their chances of securing attractive positions in industry.

The lecturers indicated that they were willing to undergo any form of training if it would prepare them to be better WIL facilitators as well as improve the employability of their learners. It is, therefore, clear that WIL was perceived to be a sound initiative that could dramatically improve the lives of the learners at College X by helping them to acquire work skills. WIL activities should be monitored and incorporated extensively into the syllabus. The activities in which learners engage should also not be classroom bound only but provision should be made for learners to access workplaces where the duties are in line with what learners are being taught in class to enable them to become better prospective employees. Dou, Brewe, Potvin, Zwolak, and Hazari (2018) note that when learners are interested in something, they are likely to develop high self-efficacy which helps them to engage easily when confronted with new tasks, thus implying that if learners engage in real work WIL activities, they would developing a greater interest in their respective study fields. College X has the resources to ensure the successful implementation of WIL, while proper planning by all stakeholders within the college, namely, the management, lecturers and learners, would help to ensure WIL was carried out effectively, thus producing work-ready graduates with the skills required even for higher-level jobs.

## 5.5. Recommendations

The findings from the interviews highlighted the need for the development of a model that College X could use to prepare learners by WIL for industry. The model consists of five stages and should be reviewed on a yearly basis in order ensure ongoing improvement to the model. The process is cyclical as it should occur on a yearly basis so that every staff member is given an opportunity to be part of the committee and, most importantly, to learn what WIL entails.

| ***Stage 1: Establishment of WIL Committee (November)*** |
|---|
| 1. Election of a minimum of 6 staff members (administration and academic) onto the committee<br>2. Campus senior management team appointed as permanent members<br>3. Conduct follow ups with learners who exited the system the previous year |
| ***Stage 2: Design of NCV WIL Policy (December, January and February)*** |
| 1. Drafting of WIL policy for NCV curriculum.<br>2. Define stakeholder roles<br>3. Set WIL targets for the year<br>4. Classify WIL activities based on authenticity and proximity<br>5. Issue information packs on WIL when issuing application forms<br>6. Distribute information pamphlets to local businesses<br>7. WIL workshops held daily during registration period<br>8. Plan for WIL briefing during student orientation<br>9. WIL training offered to all staff members<br>10. Develop a timetable that incorporates work placement for 10 days (1 week before commencement of term 1 cycle tests, 1 week during June school holidays, 1 week before commencement of internal examination in September term 3)<br>11. Finalise practical ISAT management plan and classroom bound WIL activities plans |

| |
|---|
| 12. Include WIL briefings in all planned parents' meetings for the year |
| ***Stage 3: WIL implementation (March – September)*** |
| 1. Group learners for placement with subject educators as supervisors.<br>2. Committee to keep records of all work placement activities and offer support<br>3. Provide logbooks to learners and lecturers |
| ***Stage 4: Evaluation stage (October)*** |
| 1. Collect all logbooks<br>2. Committee members to hold interview sessions with lecturers<br>3. Panel interviews to be held with learners to obtain verbal feedback<br>4. Committee members obtain feedback from host employers |
| ***Stage 5: Release of yearly report (November)*** |
| 1. Conduct a SWOT analysis from the feedback received<br>2. Match actual placements with planned placements<br>3. Draft improvements plans<br>4. Print final report for all stakeholders |

*Table 5.1: Recommended NCV work integrated learning model.*

The proposed model consists of five stages which, the researcher believes, could be adopted by TVET colleges for the NCV qualification. The model aims to improve processes at College X, prepare learners for industry and ensure that practical experience should not only be classroom based, as per the study findings, but also workplace based.

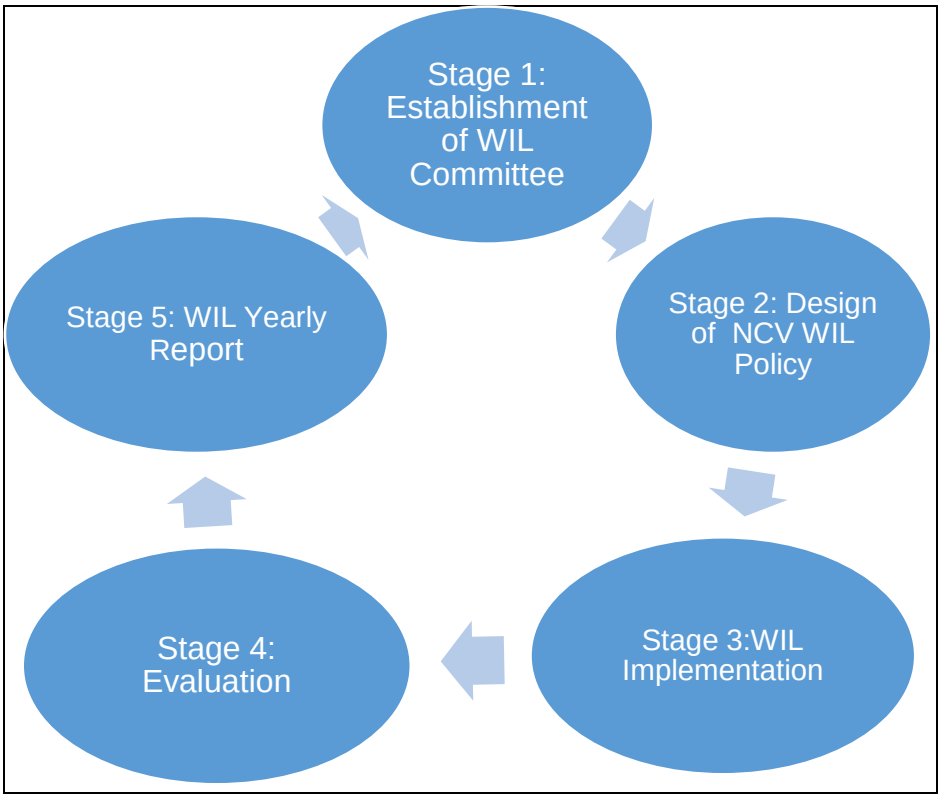


Figure 5.2: Life cycle of NCV work integrated learning model

The stages and their importance are discussed in detail below:

*Stage 1: Establishment of WIL Committee*

A committee should be established on a yearly basis towards the end of the year to enable the committee to start preparing for the following year. The appointment onto the committee of the senior management team of the respective campus, which includes the campus manager, deputy campus manager, head of academics and head of administration's appointment, is automatic. The first task of the committee is conduct a follow up with students who exited the system after completing Level 4 when examination results are issued in January. The expected paths to be taken by learners after completing Level 4 include entry into industry, enrol at a higher institution of learning, stay at home or start up own business. The follow up is conducted purposefully after nine months to allow the graduates sufficient time to have chosen a path from the expected list. Obtaining these statistics can also assist in any future the argument in respect of the role of WIL in

enhancing employability. Furthermore, the information could be used to introduce courses that lead to employment and also guide the management of enrolment figures for the coming year.

*Stage 2: Design of NCV WIL Policy*

The next stage on which the committee should embark is developing a policy on WIL. Once a policy has been developed, the committee members in future years could follow such a policy and focus only on amending and improving the policy, if necessary. This process may be lengthy and, hence, it should start in the December of the previous year so that by the time registration closes in February the following year, the process is complete. The roles of all WIL stakeholders should be clarified and relevant information given to all of them. From the time learners enrol in a certain course, they should know what future careers are open to them and also the type of workplaces that could equip them with the necessary skills. Campus placement targets should be made available to all stakeholders. The various activities aimed at preparing learners for the world of work should be identified, classified and ranked based on their authenticity-proximity level.

There should time allocated for a briefing to be held on WIL during student orientation as well as during all meetings held with parents through the year. Lecturers should be trained on how to better implement and facilitate WIL at the college before classes commence for the year so that they continue to educate learners on WIL in class. The teaching timetable should be designed in such a way that during the first term, there is a block week during which all the learners will be in workplaces, whether working or job shadowing, but gaining practical experience outside the classroom. First term and third term college holidays are generally short and, hence, for the first and third terms, placement should take place during college time. Only in June when the college holidays last a period of three weeks should learners be advised to find workplaces for a week. The submission of ISAT and assignment management plans should be submitted by lecturers so as not to clash with WIL placements.

*Stage 3: WIL implementation*

During this stage learners are placed in workplaces with the first phase taking place in March during term 1. It is recommended that work placement happen in the week preceding the cycle 1 tests. The ratio to be used is one lecturer for every 35 students and the grouping of learners into industry by the committee members should take this ratio into account when planning for placements, as supervision by the lecturers as well as the industry supervisor is important. During work placement learners are given the opportunity to ask questions directed at either their lecturer or the workplace designated supervisor. Conducting the placements during work time should also benefit the college as the lecturers will be gaining industry experience while they supervise their learners and their availability for supervision duties is guaranteed as the placements are conducted during their working hours as opposed to college holidays when they prefer to attend to their personal affairs.

The committee should also compile databases during the week of all the employers participating in the programme and ensure that all the resources required by both learners and lecturers are available on time. Records of work should be captured in logbooks which were devised during the design of the WIL policy. In addition, these logbooks should outline the learning outcomes and the activities carried out at the various workplaces. Depending on the size of the companies, the number of learners placed at one employer may vary and, if there is not space for all 35, then some lecturers may have to supervise more than one group of learners in a week.

*Stage 4: Evaluation stage*

The task of evaluation and control is a major management task that defines all the management functions. The committee which has been appointed should collect all the logbooks and study them thoroughly in addition to conducting interviews with both the learners and the lecturers on their experiences during their time in industry. The feedback obtained will then be used to determine whether the WIL targets set for the year were achieved, ascertain the challenges and successes experienced during the placements and assist in the drafting of improvement plans. This aim is supported by Benton (2015),

who states that continuous feedback and inputs obtained from industry, learners and staff provide learners with an opportunity to focus on enhancing their employability and, in addition, enhancing learner self-efficacy.

Learners should develop a culture of using feedback to improve their performance by embracing constructive criticism and learning from it in order to develop their self-efficacy levels with reference to past experiences once they have shown improvement in a task (Nagle et al. 2018). It is, therefore, important that learners are not left out during the evaluation phase of the NCV evaluation stage. In addition, the preparation of NCV learners by WIL can be empirically assessed through the feedback received from the various stakeholders. Committee members will also evaluate the feedback received from employers in the interests of improved planning in the future.

*Stage 5: Release of yearly report*

A SWOT analysis of the yearly WIL process should be summarised based on the feedback obtained from the various stakeholders. A final report should be compiled by the committee and printed for distribution to everyone involved in the process. Yearly achievements should be indicated as percentages with final year learners being briefed on their journeys going into the future.

### 5.6. Study delimitations

The research focused on one campus at a TVET college in Gauteng province and based on the preparation of national certificate vocation learners by WIL for industry. The selected participants were purposively sampled from a specific programme offered in the NCV curriculum and not all lecturers from the various programmes offered at college x participated in the study.

## 5.7. Limitations

In view of the fact that the study focused on one NCV programme only, other programmes were excluded from the research despite being offered at the same college. Furthermore, only one campus was involved in the study, thus leaving out all other campuses. It is important to note that there is a total of 50 colleges in the country. A qualitative research approach was used with interviews being conducted to collect the requisite data. It is possible that more participants could probably have been reached if a quantitative approach and online surveys had been used. It was, therefore, not possible to generalise the study findings to other colleges as the location of a college also plays a critical role in WIL when considering factors such as proximity to potential host employers.

## 5.8. Further research

There is a need for future research to be conducted on the following subjects:

- The processes of WIL in respect of who should drive WIL at TVET colleges all over the country and not only in Gauteng province.
- A similar study could be conducted in rural areas outside Gauteng province as this would assist in establishing whether the location of a TVET college influences the success of WIL at the college.
- More studies could be done on the implementation of WIL and its incorporation into the NCV curriculum.
- A comparative study could be conducted to explore why other TVET colleges offering NCV curriculum are succeeding in placing their learners in workplaces.
- Further studies may also explore whether the employability of previous NCV learners has increased since they completed their NCV qualifications.
- Research on the competence of TVET lecturers to implement WIL.
- Further studies could be carried out on whether the TVET colleges are contributing to the improvement of the South African economy.

## 5.9. Summary

It would seem that the study findings suggest that WIL is necessary for the increased employability and easy industry entry of NCV learners. It is important that WIL implementation becomes a top priority at TVET colleges. This should include the drafting of policies that will ensure the effective work placement of learners. WIL should be featured in the college timetable to ensure that it is not neglected and, in addition, it should be a topic from the time a learner completes the registration form at the beginning of the year. Self-efficacy sources may be modified through vocational education as success leads to higher levels of self-efficacy and less premature failure due to lower self-efficacy levels. It is, thus, important that learners are prepared for industry in a timely fashion in order to enhance their self-efficacy.

All lecturers should also be referred to as WIL facilitators to avoid the assumption that WIL is the responsibility of one person only. They should also trained to take on this role. The main reasons behind the introduction of the NCV qualification and government expectations of the qualification should be clearly outlined to all the WIL stakeholders. Lecturers should constantly encourage learners to source host employers who may give them an opportunity to develop their skills in their areas of interest. Reddan (2015) explains that it is important for lecturers to encourage learners while also focusing on goals that are realistic and achievable and not on difficult tasks which may prove to be detrimental to the learners' self-efficacy levels. In addition, social factors pertaining to the learners should be considered when sourcing host employers for learners or when directing learners to find work placement opportunities.

The study found that the preparation of learners by WIL for industry was not being carried out professionally at College X, as the lecturers were not even aware of what they should do to prepare learners using WIL. The learners were also not offered any workplace opportunities during the year. The absence of a proper WIL policy and the exclusion of WIL from the curriculum were exacerbating the situation as this was leading to WIL not being prioritised just as a lack of role communication was resulting in one party blaming the other for the learners not being adequately prepared for industry. While it may take

years for the curriculum to be revised, action may still be taken in the meantime while such processes remain in the pipeline. Although WIL offers benefits to all stakeholders, if it is not properly implemented and monitored, the value of the NCV curriculum may even decline in years to come.

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**Appendix A**



INTERVIEW SCHEDULE A (1)

STRUCTURED INTERVIEW: FOUR LECTURERS AND ONE WORK INTEGRATED LEARNING FACILITATOR AT COLLEGE X

The purpose of the schedule is to gain an insight of the lecturers' understanding of what work integrated learning is and how they are implementing it in their teaching and learning across the three levels and also to find out what the curriculum provisions are for work integrated learning.

1. What is your understanding of work integrated learning?
2. Give typical examples of what constitutes work integrated learning.
3. What is your understanding of vocational education and training?
4. Do you think work integrated learning is essential in vocational education?
5. If your answer is yes, give reasons for your answer.
6. In which activities do you engage learners that make up work integrated learning?
7. Do you think the National Certificate Vocational curriculum makes sufficient provision for work integrated learning to be implemented in the classroom?
8. If either yes or no, why do you think so?
9. Do you think the current activities in which learners engage as part of work integrated learning currently are enough to prepare learners for the corporate world?
10. Are your learners taught about work integrated learning and its importance in their learning?
11. What mechanisms are in place to record and report on work integrated learning activities?
12. What more do you think may be done to improve work integrated learning at the college?

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INTERVIEW SCHEDULE A (2)
STRUCTURED INTERVIEWS: FIFTEEN LEARNERS ACROSS LEVELS 2, 3, & 4

The purpose of this schedule is to gain information on the learners' understanding of work integrated learning, their perceptions of work integrated learning and the problems and challenges that they face and to ascertain the activities to which they are exposed that constitute work integrated learning.

1. What is your understanding of work integrated learning?
2. Do you think work integrated learning has any benefits for you as a learner?
3. In which activities do you engage during your course of study that you classify as work integrated learning?
4. What is the main reason that led you to enrol at a technical vocational education and training institution?
5. Do your lecturers inform you about the importance of work integrated in your studies?
6. Do you think the current curriculum makes sufficient provision for work integrated learning to take place?
7. What work integrated learning challenges do you come across?
8. Do you think the college prioritises work integrated learning?
9. Are you aware that the National Certificate Vocational (NCV) policy states that you should not be awarded a certificate without engaging in practical work in the field of your choice?
10. What role do you think you have to play in ensuring the success of work integrated learning implementation at the college?
11. Do you think that upon completion of your course, you will be fully competent to enter the labour market?
12. Do you think you will have a competitive advantage in the labour market over mainstream learners from non-TVET colleges?

Appendix B



30 October 2018

South West Gauteng College

Private Bag X33

Tshiawelo

1817

Dear Lecturer/Student

**Re: Request for your participation in research study: The preparation of National Certificate Vocational learners by work integrated learning for industry.**

My name is Alucia Mabunda, and I am currently enrolled for a Master's degree at the University of Pretoria. The topic of my research study is **"The preparation of national certificate learners by work integrated learning for industry."**

The main reason for pursuing this study is to examine the way in which learners are being prepared by work integrated learning and to understand how learners perceive and experience work integrated learning. In order to achieve this, the following objectives must be realised:

- To determine the work integrated learning challenges faced by National Certificate Vocational (NCV) learners.
- Identify the work integrated learning activities provided by the college for the learners.

- Understand the learners' perceptions and expectations of work integrated learning.

I will be conducting my research at your campus, Technisa Campus, and I would like to invite you to participate in this research study. If you decide to participate in the study, I will conduct a an interview of about 10 to20 minutes interview with you on a date and time and at a place suitable for you. During this interview, you may be asked to elaborate or explain some of your answers. The interview will not be recorded as I will be transcribing notes and I will give you an opportunity to comment on the accuracy of the transcription at a later stage.

Your participation in the study will be entirely voluntary and will, in no way, either advantage or disadvantage you. You will be free, at any stage during the process up to and including the stage at which you verify the transcript of your interview as described above, to withdraw your consent to participate, in which case your participation will end immediately without any negative consequences. Any and all data collected from you up to that point in the study will then be discarded.

The confidentiality of the information you provide, and your anonymity will be assured. Neither you nor your college will ever be referred to by name and, should there be a need in the research report to refer to a comment made by you, you will be assigned a pseudonym.

Your personal responses are crucial in assisting me to answer the relevant questions regarding the preparation of National Certificate Vocational learners by work integrated learning, and your participation would, therefore, be highly valued and appreciated.
Yours sincerely

Alucia Mabunda
Researcher
Cell: 083 580 9550
E-mail: aluciamabunda@gmail.com

Dr Samuel Adeyemo
Supervisor
Tel: 012 420 4279
E-mail: Samuel.adeyemo@up.ac.za

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Faculty of Education

**LETTER of INFORMED CONSENT**

**Voluntary participation in the research project entitled**

**The preparation of National Certificate Vocational learners by work integrated learning for industry.**

I,_____

_____

Hereby I voluntarily and willingly agree to participate as an individual in the above mentioned study introduced and explained to me by Mrs. Alucia Mabunda, currently a student enrolled for an M.Ed. Education Management, Law & Policy at the University of Pretoria.

I further declare that I understand, as they were explained to me by the researcher, the aim, scope, purpose, possible consequences, benefits and methods of collecting the data proposed by the researcher, as well as the means by which the researcher will attempt to ensure the confidentiality and integrity of the information collected.

_____ _____

Signature Date

**Appendix C**



30 October 2018
The Principal
South West Gauteng College
Private Bag X33
Tshiawelo
1817

Dear Principal

**Re: Participation in research study on the preparation of National Certificate Vocational learners by work integrated learning for industry.**

I am currently enrolled for a Master's degree in Education Management, Law and Policy at the University of Pretoria. One of the requirements for the awarding of this degree is the successful completion of a research project in the field of education management, law and policy. The title of my proposed research study is **"The preparation of National Certificate Vocational learners by work integrated learning for industry."** It is a great honour for me to have the opportunity to be able to invite you and your college to be part of my research project.

My intention is to interview 5 lecturers with one of them being a work integrated learning facilitator and 15 learners, 5 from each level in the office administration programme. Each interviews should last for approximately 10 to 30 minutes and will be conducted at a time

and place convenient to the participants. All the interviews will be transcribed by me and each participant will be given an opportunity to review the transcribed notes. I have included herewith, for your information, a copy of the preliminary interview schedule to be used during the interview process. All the participants will be invited to participate in the study voluntarily.

The aim of this study is not to pass judgement on or to evaluate the work integrated learning practices at your college but, rather, to contribute significantly to the way in which National Certificate Vocational learners are currently being prepared by work integrated learning. All the collected data will be treated as confidential and not even the Department of Higher Education and Training will have access to the raw data obtained during the interview process.

Yours sincerely

Alucia Mabunda
Researcher
Cell: 083 580 9550

Dr. Samuel Adeyemo
Supervisor
Tel: 012 420 4279

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

**CONSENT FORM**

**Voluntary participation in Master's degree research project – University of Pretoria**

I,_____, the principal of_____ situated at_____

_____

agree to the participation of my college in the University of Pretoria's research project entitled "The preparation of National Certificate Vocational learners by work integrated learning for industry" to be conducted by Mrs Alucia Mabunda. currently enrolled for the M.Ed. degree at the University.

I understand that my college's participation is dependent on the Department of Higher Education and Training granting the necessary permission for the college to participate in the study.

I further declare that I understand, as they were explained to me by the researcher, the aim, scope, purpose, possible consequences, benefits and methods of collecting data proposed by the researcher, as well as the means by which the researcher will attempt to ensure the confidentiality and integrity of the information collected.

_____ _____

Principal Date
College Stamp

## Appendix D


Alexa Barnby

Language Specialist

Editing, copywriting, indexing, formatting, translation

BA Hons Translation Studies; APEd (SATI) Accredited Professional Text Editor, SATI

Mobile: 071 872 1334

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alexabarnby@gmail.com


20 August 2019

To whom it may concern

This is to certify that I, Alexa Kirsten Barnby, an English editor accredited by the South African Translators' Institute, have edited the dissertation titled "The Preparation of National Certificate Vocational learners by Work Integrated Learning for Industry" by Alucia Mabunda for the qualification Masters of Education Management, Law & Policy.

The onus is, however, on the author to make the changes suggested and address the comments made.

## Appendix E

**Refiloe Mohlakoana** <Mohlakoana.R@dhet.gov.za> Tue, Oct 30, 2018, 1:34 PM

to David, Nompumelelo, me

Good day

Thank you very much for your application and response to previous email. Please be advised that the Department only gives permission letter when you are conducting research in ten or more college. You indicated that you will be visiting one College. Please take the attached policy with you to the College and refer them to the two clauses 5.3 and 5.4 in case they demand a DHET letter.

Regards

Ms R Mohlakoana

Department of Higher Education & Training

Tel: 012 312 5300

Email: Mohlakoana.R@dhet.gov.za



DHET (2015) Higher Education and Training Information Standard: Approval to conduct research in public Colleges. Pretoria.

4.2 The TVET and CET colleges are established by the Minister of Higher Education and Training in terms of sections 3(1a) and 3(1b) of the Continuing Education and Training Act, 2006 (Act No. 16 of 2006) through Proclamation No. 44 of 2009 which was published in Government Gazette No. 32367 of 1 July 2009.

5. APPLICATION PROCEDURE

5.1 Applicants are expected to complete an official application form titled *"Application to conduct research in public colleges"*, which is attached as an Appendix to this Standard.

5.2 Registered Master's and Doctoral students are expected to complete the application form attached as Appendix 1. Research organisations (including individual researchers who are not registered students), are expected to complete the application form attached as Appendix 2.

5.3 Applicants who wish to undertake research in less than ten public Colleges for a specific study, must submit their application to the Head of the college/s concerned.

5.4 Applicants who wish to undertake research in ten or more public colleges must submit their application forms (either Appendix 1 or Appendix 2), to the DHET. The Department will provide a letter of support, which the applicant could use to gain access to the colleges concerned.

5.5 The applicant must submit the application form to the Head of the college/Department at least two months before field research begins. However, urgent applications may be considered by the Head of the college/Department, where applicable.

5.6 Students registered at a recognised Higher Education Institution who wish to undertake research in public college/s must include an Ethics Clearance Certificate as part of their application. The Ethics Clearance Certificate is expected to be provided by the Research Ethics Committee of the institution where the student is registered.

higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

SOUTH WEST GAUTENG TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING COLLEGE

HEAD OFFICE

Private Bag X33, Tshiawelo, 1817
1822A Molele Street, Cnr Koma Road
Molapo | Soweto | 1801
Tel: 086 176 8849
Fax: (011) 984 0136
E-mail: headoffice@swtvet.co.za
www.swtvet.co.za

30 October 2018

Ms Mabunda
South West Gauteng TVET College
C/o Technisa Campus
Private Bag X33
Tshiawelo
1818

Dear Ms Mabunda

**PERMISSION TO DO RESEARCH IN THE COLLEGE**

I refer to your recent letter of in which you asked permission to do research at the college, as part of the requirements for your MED. You are hereby granted permission to interview any personnel and students at South West Gauteng College, as part of this research project (data collection). Care should be taken that these interviews do not interfere with learning and teaching.

The request permission is hereby granted, with the following conditions

- That, as per the stipulations of Gazette DHET 004, of 8 January, 2016 you observe the standard ethics governing the conducting of research and that the conducting of the research does not impact adversely on your duties at the campus.
- And, further that the permission does not imply leave of absence from work.

I wish you well with your research

Sincerely

Dan L Nkosi
Principal

Faculty of Education

**CONSENT FORM**

**Voluntary participation in Master's degree research project – University of Pretoria**

I, Dan L. Nkosi the principal of South West Gauteng TVET College situated at Koma & Molefe Sts, MOLAPO, SOWETO

agree to the participation of my college in the University of Pretoria's research project entitled "The preparation of national certificate vocational learners by work integrated learning" to be conducted by Mrs Alucia Mabunda; currently enrolled for the M.Ed. degree at the University.

I understand that my college's participation is dependent on the granting of permission for our participation by the Department of Higher Education and Training.

I further declare that I understand, as they were explained to me by the researcher, the aim, scope, purpose, possible consequences and benefits and methods of collecting data proposed by the researcher, as well as the means by which the researcher will attempt to ensure the confidentiality and integrity of the information collected.

Principal Signature

11/06/2018
Date

College Stamp

SOUTH GAUTENG COLLEGE
HEAD OFFICE
30-12-2019
OFFICE OF THE PRINCIPAL