higher education
& training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

Co -funded by the
European Union

CURRICULUM FRAMEWORK
for
INDUSTRY/WORKPLACE-BASED
WORK-INTEGRATED LEARNING
for
qualifications for lecturers
in
Technical and Vocational Education and Training

Compiled by

Andre van der Bijl, Cape Peninsula University of Technology
and
Vanessa Taylor, Swiss South African Cooperation Initiative

Curriculum framework for industry/workplace-based work-integrated learning for qualifications for lecturers in technical and vocational education and training.

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http://www.ivylinepublishers.co.za

5 Cachetpark, Potchefstroom, 2522

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Email: info@ivylinepublishers.co.za

Printed and bound by:

Ivyline Technologies, Cachetpark, Potchefstroom,

Tel no: 018 294 8879, **Web:** http://www.ivyline.co.za

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Acronyms

ACET	Adult and Community Education and Training
Adv Dip	Advanced Diploma
B Ed	Bachelor of Education
CBO	Community based organisation
CETC	Community Education and Training College
CHE	Council for Higher Education
CPUT	Cape Peninsula University of Technology
DHET	Department of Higher Education and Training
Dip	Diploma
DUT	Durban University of Technology
ECSECC	Eastern Cape Socio-Economic Consultative Council
ETDP SETA	Education, Training and Development Practices Sector Education and Training Authority
IBSS	International Bibliography of the Social Sciences
MRTEQ	Policy on the Minimum Requirements for Teacher Education Qualifications
NGO	Non-governmental organisation
NMU	Nelson Mandela University
NPDE: FET	National Professional Diploma In Education: Further Education and Training
PDP	Professional Development Programme
SSACI	Swiss South African Cooperation Initiative
TIPS	Teacher Industry Placement Scheme
TLDCIP	Teaching and Learning Development Capacity Improvement Programme
TUT	University of Technology
TVET	Technical and Vocational Education and Training
TVT	Technical and Vocational Teaching
UCT	University of Cape Town
UFH	University of Fort Hare
UFS	University of the Free State
UJ	University of Johannesburg
UKZN	University of Kwa-Zulu Natal
UL	University of Limpopo
UP	University of Pretoria
UNISA	University of South Africa
UWC	University of the Western Cape
VEOP	The Vocational Educators' Orientation Programme
VET	Vocational education and training
VUT	Vaal University of Technology
VVOB	Flemish Association for Development Cooperation and Technical Assistance
WIL	Work-Integrated Learning
Wits	University of the Witwatersrand
WSU	Walter Sisulu University

Contents

SECTION 1:

INTRODUCTION, POLICY REQUIREMENTS AND BACKGROUND

1. Introduction

This curriculum framework was developed between October 2017 and March 2019 through a collaborative process that included academics from universities, technical and vocational education and training (TVET) colleges, community education and training colleges (CETCs) and individuals representing adult and community education and training concerns, and the Department of Higher Education and Training (DHET) officials. The development took place under the auspices of the Work-Integrated Learning (WIL) for Lecturers Development Project, a project of the DHET's Teaching and Learning Development Capacity Improvement Programme's (TLDCIP) College Lecturer Education Project (CLEP), which was funded by the European Union.

The WIL for Lecturers' Development Project was managed by the Cape Peninsula University of Technology (CPUT) and jointly implemented by CPUT and the Swiss South African Cooperation Initiative (SSACI). The project aimed to develop knowledge, competency and resources for providers (university faculties of education) of the industry WIL component of TVET and Adult and Community Education and Training (ACET) educators' professional qualifications. This industry WIL curriculum framework is one of the outputs of this project.

The Initial qualifications in the *Policy on Professional Qualifications for Lecturers in Technical and Vocational Education and Training* (South Africa, 2013) and the *Policy on Minimum Requirements for Programmes Leading to Qualifications for Educators and Lecturers in Adult and Community Education and Training* (South Africa, 2015) require students to complete a period of WIL, both in a classroom and an industry/workplace-based setting. Providers of these qualifications must 'arrange WIL opportunities for students' in line with policy requirements and ensure that the WIL workplace-based component is 'structured, supervised and integrated into the learning programme, spread across the learning programme and formally assessed' (South Africa, 2013:15).

The policy frameworks for qualifications for TVET lecturers (South Africa, 2013) and ACET educators (South Africa, 2015) are new. They draw on international trends and evolving national practice. In drawing on international trends and practices the policy frameworks provide for the formalisation of workplace/industry-based WIL within educator qualifications that is potentially an international precedent.

This curriculum framework has been developed to support providers when implementing the industry/workplace-based WIL component of the TVET lecturer qualifications.

2. Overview of policy requirements for industry/workplace-based WIL in TVET lecturer qualifications

Before the promulgation of the *Policy on Professional Qualifications for Lecturers in Technical and Vocational Education and Training* (South Africa, 2013), TVET lecturer training was regulated through the *Minimum Requirements for Teacher Education Qualifications* (MRTEQ) (South Africa, 2011). Both the MRTEQ (South Africa, 2011) and the policy framework for TVET lecturer qualifications (South Africa, 2013) require the application and use of work-integrated learning (WIL). In these policies, WIL is regarded as both a 'type of learning' within programmes as well as the 'in practice' element of the programmes.

The MRTEQ (South Africa, 2011:8) notes that

> **Work Integrated Learning (WIL)** takes place in the workplace and can include aspects of learning from practice (e.g. observing and reflecting on lessons taught by others) and learning in practice (e.g. preparing, teaching and reflecting on lessons oneself). Practical learning is an important condition for the development

of tacit knowledge, an essential component of learning to teach (South Africa, 2011:8).

In the MRTEQ policy, the workplace is understood to be a school or other teaching context.

Like the MRTEQ (South Africa, 2011), the policy framework for TVET lecturers (South Africa, 2013) stipulates that '***Practical learning*** or ***Work-Integrated Learning (WIL)***, involves learning in and from practice' (South Africa, 2013:10). However, while the MRTEQ limits WIL to teaching practice, in the policy framework for TVET lecturers (South Africa, 2013), 'the notion of *practice* includes both learning to teach and learning the skills, techniques and practices – related to the subject they are teaching – that are applied in the workplace or industry' (South Africa, 2013:10). 'The learning-in-practice workplace-based component' of TVET lecturer qualifications thus 'takes place in two types of settings: in teaching settings (e.g. classrooms/lecture rooms/laboratories/college workshops) and in industry-based settings (e.g. factory, work sites, offices etc.)' (South Africa, 2013:15).

The requirements for the industry/workplace WIL practice component are further clarified in the TVET policy as follows:

> …all TVET college lecturers need to have up-to-date knowledge of the application and, in relevance to, the workplace of the subjects they teach. Therefore exposure to, and time spent in structured experience in workplace/industry settings, are crucial components of TVET lecturer qualifications. For lecturers who teach practical or workshop components of vocational or technical subjects, WIL also encompasses learning the technical skills associated with the subject and how to teach it. Lecturers/aspirant lecturers of the vocational or technical courses mostly first learn the technical expertise through their prior qualifications and through substantial experience in the workplace. However, there is a need to keep this component of practical learning constantly updated to match developments in the field (South Africa, 2013:10).

3. Response to the inclusion of industry/workplace-based WIL in TVET lecturer qualifications

The response to the policy framework by potential providers of TVET lecturer qualifications has been positive, primarily because it is accepted that TVET lecturers need to have industry-related competencies. Evidence of support for the inclusion of industry-based-WIL in the TVET lecturer qualifications by providers can be found in the curriculum framework for the Advanced Diploma in Technical and Vocational Teaching, which was collaboratively developed by universities in 2015. This, it notes, is 'in keeping with a curriculum that "faces both ways" and with TVET educators' roles as a "bridge" between learning and work' (Blom, 2016: 25).

4. Background to the development of TVET lecturer qualifications in South Africa and the industry-based WIL element of these

The *Policy on Professional Qualifications for Lecturers in Technical and Vocational Education and Training* (South Africa, 2013) was not developed in a vacuum. Historically, TVET lecturer training was regulated through the qualification frameworks established for school teachers. A response to the need for dedicated TVET lecturer qualifications led to the development of the *Draft National Policy Framework for Lecturer Qualifications and Development in FET Colleges in South Africa* (South Africa, 2008a). This draft policy and a number of other initiatives, which are discussed below, provided the basis for the inclusion of industry WIL in the *Policy on Professional Qualifications for Lecturers in Technical and Vocational Education and Training* (South Africa, 2013).

a. 2008 draft policy framework for lecturer qualifications

While the *Draft National Policy Framework for Lecturer Qualifications and Development in FET Colleges in South Africa* (South Africa, 2008a) did not include industry WIL as an element of the proposed qualifications ll the qualifications included an entry requirement of three years of prior general work experience (2008a:16). The 2008 draft framework identifies lecturer industry placement as a component of continuing professional development under the heading 'Employer-led initiatives', which could, for example, include 'placement of lecturers in workplaces for refreshment of knowledge and workplace procedures/processes; job-shadowing opportunities; subsidisation of places for college lecturers on in-company or external training programmes' (South Africa 2008a:22).

b. The Vocational Education Orientation Programme

The Vocational Education Orientation Programme (VEOP) was developed and implemented between 2009 and 2014 in response to the *Draft National Policy Framework for Lecturer Qualifications and Development in FET Colleges in South Africa* (South Africa, 2008a). The 2008 draft framework (South Africa, 2008a:18) required all TVET (then referred to as FET) college lecturers to complete the VEOP, which could contribute 30 credits toward other qualifications in the framework. This led to two VEOP development collaborations, which included universities and TVET colleges. One was coordinated by the University of the Western Cape (UWC) and the Eastern Cape Socio-Economic Council (ECSECC) and the other by Wits University.

While the VEOP did not require TVET lecturers to complete industry WIL, it included a focus on the workplace and WIL or, what was then referred to as workplace-based experience (WBE), for college students. For instance, one of the four UFS VEOP modules, which was developed by SSACI, required lecturers to visit industry to research student WBE opportunities with potential host employers.

The VEOP was offered by universities in various ways. It was presented as a stand-alone programme by UFS in the Free State and NMU in the Eastern Cape. On the other hand, in the Western Cape, it was offered collaboratively by UWC and CPUT and incorporated into the NPDE:FET, a programme registered for the professional qualification of TVET college lecturers. UFS later contracted a private provider to offer the VEOP nationally. The VEOP is no longer being offered as it was not maintained as an element in the final 2013 policy framework for TVET lecturer qualifications (South Africa, 2013).

c. UFS/VVOB-supported TVET lecturer diploma and curriculum development project

Between 2012 and 2013, the UFS and Flemish Association for Development Cooperation and Technical Assistance (VVOB) coordinated a series of workshops that developed a curriculum framework for the diploma initially included in the *Draft National Policy Framework for Lecturer Qualifications and Development in FET Colleges in South Africa* (South Africa, 2008a) and later in the *Policy on Professional Qualifications for Lecturers in Technical and Vocational Education and Training* (South Africa, 2013).

These workshops resulted in the VVOB/UFS FET conference*, Competent Lecturers in a Skilled Society*, held in September 2013, and a draft curriculum for the Diploma in Technical and Vocational Teaching, which was developed within the framework of documents required by UFS for its registration process (University of the Free State, N.D.). The proposed programme did not include an industry workplace-based WIL element. Discussions at the meetings, however, did include considerations of industry-based WIL and contributed to the decision by UFS to later offer an unaccredited WIL for lecturers' programme for TVET colleges in the Free State province, which is discussed further in the next section.

d. SSACI-ETDP SETA-supported WIL-for-lecturers initiatives

The Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA) funded the WIL for Lecturers Project, which was implemented by SSACI between 2014 and 2016 at 28 TVET colleges nationally. By means of this project, more than 500 lecturers, teaching a range of college programmes, completed two to 15 days of WIL in an industry workplace (Smith, 2017). The summative evaluation of the WIL for - Lecturers Project found that lecturers experienced 'substantial benefits' and 'integrated WIL into their classroom practice' (Smith, 2017:7). The benefits of the project were found to 'directly address the principal challenges facing the TVET college sector, namely poor linkages between colleges and potential employers, and difficulties lecturers have linking theory and practice' (Smith, 2017:9).

The SSACI-ETDP SETA's WIL for Lecturers' Project was preceded by SSACI's 2012-2013 Lecturer Workplace Exposure (LWE) Project, which included 10 colleges and 100 lecturers. An approach to providing workplace exposure for college lecturers was researched and piloted through this project, as were the programme and materials that were developed for use in the WIL for Lecturers' Project.

A significant amount of knowledge about the implementation of industry placements for TVET college lecturers in South Africa has been accumulated through these initiatives. In addition to three independent evaluations of the WIL for Lecturers' Project, two articles have been published in peer reviewed journals, Industry and Higher Education (Van der Bijl & Taylor, 2016), and the Journal of Vocational and Adult and Continuing Education and Training (Van der Bijl & Taylor, 2018). SSACI has also produced a report on lecturer learning during industry placements based on an analysis of 264 portfolios submitted by lecturers who participated in the WIL for Lecturers' Project (Taylor, Mogane & Akoobhai, 2018). Furthermore, SSACI has made its WIL for Lecturers Programme materials (SSACI, 2014b) available to universities to support the development of the industry WIL component in the TVET lecturer qualifications.

e. UFS-ETDP SETA supported WIL for Lecturers' initiative

Following the development of the curriculum framework for the Dip (TVT) through the UFS/VVOB supported process (discussed above), the UFS piloted an ETDP SETA-funded WIL for lecturers' programme with 89 lecturers from two Free State (FS) and two Kwa-Zulu Natal (KZN) TVET colleges between 2014 and 2015. While the programme was offered as an unaccredited skills programme that included three weeks in a workplace, the intention was to incorporate it into the Dip (TVT) once the university began to offer this.

This project has also generated valuable knowledge for the implementation of WIL for TVET college lecturers and has shed light on the implementation arrangements that a university would need to make to offer this element of the qualification. An important lesson from the project was that negotiating and managing placements with employers and lecturers take a considerable amount of time. To cope with the work load, the university had to appoint additional staff, which inflated the cost of the project beyond what was originally planned (Huysamer, 2015a: 11).

The project produced student WIL materials and two ETDP SETA project reports (Huysamer, 2015a and 2015b). Some of the student WIL materials developed have been made available for use by universities implementing the new TVET lecturer qualifications (University of the Free State, N.D.).

f. WITS-coordinated, ETDP SETA-funded Adv Dip (TVT) curriculum development project

Between 2014 and 2016, Wits University coordinated the development of a curriculum framework for the Adv Dip (TVT) through a series of workshops. The project was supported by the DHET and funded by the ETDP SETA. The development process included participants from universities across South Africa and SSACI. The project produced a detailed curriculum framework for the Adv Dip (TVT) (Blom, 2016).

This project was significant in that it was the first collaborative curriculum-development project that unpacked and developed the curriculum component of the industry WIL element of one of the qualifications in the policy. SSACI and the UFS were also able to bring their experience of implementing industry WIL with TVET college lecturers into the development process. The work done in this project on conceptualising industry WIL within the Ad Dip (TVT), as well as the outcomes developed for this, have thus strongly informed this curriculum framework for industry-based WIL in the TVET lecturer qualifications.

5. Research framework and process used to develop the WIL curriculum framework

This curriculum framework for industry/workplace-based WIL in TVET lecturer qualifications is one of two curriculum frameworks developed through the DHET TLDCIP WIL for Lecturers' Development Project. The second framework focuses on workplace-based WIL in ACET educator/lecturer qualifications. Each curriculum framework includes the policy requirements for workplace-based WIL in the qualifications; a literature review; WIL outcomes, student activities, assessment and materials; and guidelines for implementation. The project was executed by representatives of the institution commissioned to conduct the research required (CPUT) and its strategic partner (SSACI).

When the DHET commissioned the project, most university education faculties within the country were deliberating whether or not to offer TVET and ACET educator/lecturer programmes. As a result, a snowball research approach was applied to the development of the curriculum framework. The research commenced with a review of state policy and international literature, and an analysis of the TVET lecturer professional development exercises conducted by SSACI and funded by the ETDP SETA. As literature was developed, it was tested through the peer review process. Peer reviewed publications were produced in 2015 and 2016, and again in 2018. Conference papers were produced throughout the project's life, with each paper focussing on elements of the implementation of the project's outcomes at institutional level.

The specific body of knowledge that evolved incorporated policy requirements, national and international literature and practice, and existing knowledge within South African universities and the TVET and ACET community. Information was generated during five focus group exercises attended by members of university faculties responsible for TVET or ACET matters, as well as representatives of TVET and ACET colleges. The composition of the focus groups changed as more role-players became involved in TVET and ACET lecturer/educator development. The first focus group consisted mainly of representatives from universities who had been active in TVET lecturer development. As more universities became involved, and the division of labour evolved, the focus groups increased in size and their composition changed to include an increasing proportion of newly employed academic staff, many of whom had been previously employed at TVET colleges. Later, focus groups also included more adult and community education specialists, balancing the dominance of academics with a TVET focus.

Data produced by focus groups were transcribed and incorporated into sections three, four and five, and for the addenda of this document. New content, acquired through the continual search of literature and revised interpretations of policy, was incorporated into chapters one and two.

The research process was driven by policy requirements and the realities of the implementation of WIL. A number of theoretical frameworks framed the development of the curriculum framework as it evolved. Initially Schüller and Bergami's (2006) approach to vocational teacher professional development through industry placement, which is based on the Communities of Practice (CoP) model developed by Lave and Wenger (1991), appeared useful. As the focus of Schüller and Bergami's model was on the development of knowledge from industry for the classroom, its application was augmented by an adaptation of Activity Theory (AT) developed by Engeström (1987). Like Schüller and Bergami, Engeström's work has its origins in the work of Lave and Wenger. However, Engeström's model, including the multiple activity system versions of this, has been widely used. The combination of the models served as a mechanism for differentiating between different forms of WIL and educator/lecturer skills development. To the CoP-based models was added the work of Shulman and Shulman (2004). While Shulman and Shulman's framework for 'conceptualizing teacher learning and development within communities and contexts' includes communities of practice, it also includes a focus on an individual level of learning and development of policy level implementation.

The three models framed the understanding of the levels at which educator learning should occur, the differing nature of work environments and the reason for workplace/industry- based WIL for TVET and ACET lecturers/educators.

Three versions of the curriculum framework were developed from the focus group exercises, namely the initial, conceptual and final draft. From the final draft, separate amended final drafts were produced for TVET and ACET respectively.

SECTION 2:

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Literature review and theoretical framework for industry-based WIL for TVET college lecturers

1. Introduction

Wheelahan and Moodie (2012:15-16) note an international trend 'towards professionalising the VET teaching workforce as many countries try to increase the qualifications of the VET workforce and improve CPD for teachers and trainers', which has resulted in an increase in demands placed on vocational educators and trainers. One of the strategies implemented is placing vocational educators at workplaces related to their field of teaching. Learning in a workplace is central to the philosophy of work-integrated learning (WIL).

This section starts with an overview of WIL theory and its applicability to TVET lecturers. It then outlines international practice with regard to educators' industry placement. The theories of Schüller and Bergami (2008; 2011), Tuomi-Gröhn and Engeström (2007) Tuomi-Gröhn, Engeström and Young (2007) and Shulman and Shulman (2004) are then presented as conceptual frameworks for understanding TVET lecturer learning through industry placement and how they incorporate this learning into teaching practice. Thereafter, TVET lecturer industry placement is considered in the context of the professional qualifications of educators. The section ends with a discussion on implementing and assessing WIL in the curriculum.

2. Understanding WIL and its application for TVET lecturers

According to Rowe (2017), WIL is 'an umbrella term used for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum' (Rowe 2017: 4). While WIL is often understood to be synonymous with workplace learning, in the higher education sector in South Africa, the definition of WIL is broader than this. As such, the Council on Higher Education publication, *Work-Integrated Learning: Good Practice Guide*, (CHE, 2011) defines WIL as:

> … an umbrella term to describe curricular, pedagogic and assessment practices, across a range of academic disciplines that integrate formal learning and workplace concerns. The integration of theory and practice in student learning can occur through a range of WIL approaches, apart from formal or informal work placements (CHE, 2011:4).

CHE (2011) notes that while the primary purpose of WIL is to 'enhance student learning', different WIL approaches have developed 'in response to concerns about graduateness, employability and civic responsibility' (CHE, 2011: 4). The CHE WIL guide (CHE, 2011: 16-21) focuses on four WIL modalities, namely:

- Work-directed theoretical learning,
- Problem-based learning,
- Project-based learning,
- Workplace learning.

The first three modalities involve a work-related approach to curriculum design and implementation. The fourth involves learning in a workplace. While teacher education in South Africa has required WIL-related learning associated with the CHE's fourth modality for decades, this has been restricted to teaching practice or WIL in the classroom. The policy framework for TVET lecturer qualifications now extends the practice requirement to include workplace learning both in a classroom and industry setting.

WIL is underpinned by theories that people learn through practical experience with Dewey being the formative theorist in this regard (Dewey, 1938, as cited in CHE 2011:7). Theorists after Dewey, like Kolb (1984), Biggs (1999) and Schön (1983) developed this theory further, adding that experience on its own is insufficient to produce learning. Reflection on experience and theorising are also necessary for learning to occur. Furthermore, learning through experience requires 'a knowledge base, motivational context, learning activities and interaction' (CHE 2011:7). Later theorists have stressed that for learning to extend beyond information-gathering, it also needs to involve critical thinking and students taking an active responsibility for their learning (CHE 2011:7). The importance of reflection and, especially, critical reflection, cannot be underestimated in WIL. CHE (2006) notes that:

> Through reflection, students analyse concepts, evaluate experiences and postulate theory. Critical reflection provides students with the opportunity to examine and question their beliefs, opinions and values; it involves observation, asking questions, and putting together facts, ideas and experiences to derive new meaning (CHE, 2006:58).

The workplace learning WIL modality is based on Kolb's learning cycle, or versions of this, which includes four stages (Kolb, 1984; Gosling & Moon, as cited in CHE 2011:19):

- Concrete experience: one cannot learn something simply by watching or reading about it; active involvement is necessary.
- Reflective observation: student attention should be focused on particular elements of the experience. This means taking time out of doing and pausing to consider what has just taken place.
- Abstract conceptualisation: through a process of inductive reasoning, the students analyse observations, explain them, and integrate them into logically sound theories.
- Active experimentation: the students consider how they are going to put what they have learnt into practice

According to CHE (2011: 19-20), the effectiveness of workplace learning as a strategy is compromised if some stages of the learning cycle are not included or the student is unable to deal with any of them. Another challenge that affects student learning is when the workplace does not have structures and systems to support this.

Billet (2001) also provides important insights into the process of workplace learning. He notes that two core factors determine possible learning: the learning opportunities provided by the workplace and how a learner engages in these. Billet (2001:209) states:

> The readiness of the workplace to afford opportunities for individuals to engage in work activities and access direct and indirect support is a key determinant of the quality of learning in workplaces. This readiness can promote individuals' engagement. However, this engagement remains dependent on the degree by which individuals wish to engage purposefully in the workplace.

Conclusions that can be drawn from Billet (2001) are that workplaces that are able to provide the learning required need to be identified and students need to be capacitated to engage effectively during WIL placements.

For all students, the integration of formal and workplace learning has the aim of preparing them for the world of work. For TVET lecturers, however, a dual aim exists. One aim is to develop their knowledge and skills in the employment sector with which their expertise is aligned. The second is to prepare them for the role of expert educators. Irrespective of the nature and extent of specific industry or workplace requirements, an expert lecturer must be able to apply his/her knowledge and skills in the classroom. According to van der Bijl & Taylor (2016: 104), this is the

primary distinguishing feature between students who complete WIL as part of their subject discipline and TVET lecturers/student lecturers, as is illustrated in the diagram below.
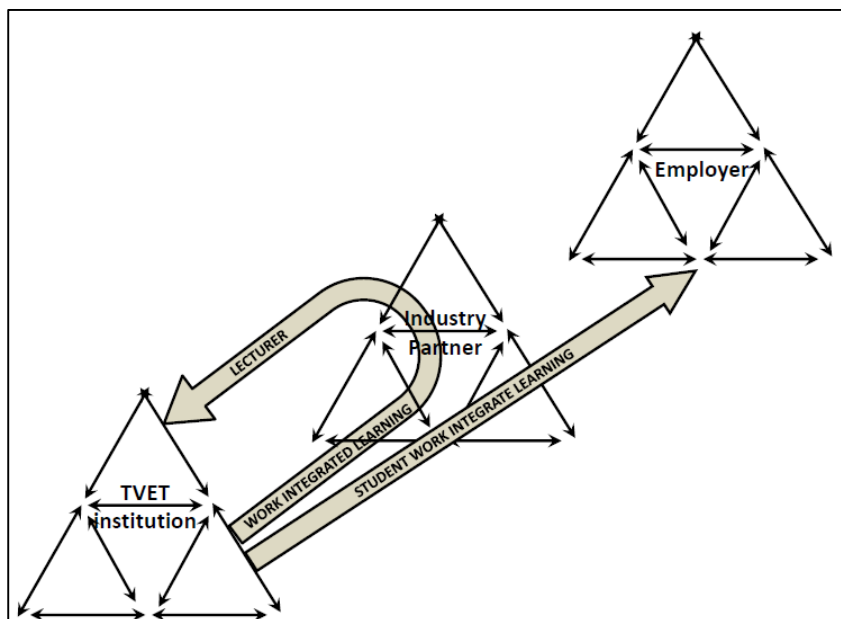
Student workplace experience versus lecturer workplace experience (Van der Bijl & Taylor, 2016: 104).

3. International practice in teacher-industry placement

The value of industry-based experience for vocational educators has been promoted internationally for some time and is also accepted by the DHET and TVET colleges in South Africa. Internationally, the primary purpose of educator-industry placement is to develop their industry knowledge and skills and particularly the 'currency' of these (Wilson, Pirrie & McFall, 1996; Ireland, Golden & Spielhofer, 2002; Clayton, Fisher & Hughes, 2005; Schüller & Bergami, 2008; Toze & Tierney, 2010;;). Clayton, Fisher & Hughes (2005) and Toze and Tierney (2010:4) (as cited in Taylor, Mogane & Akoobhai, 2018) note:

> The term 'industry currency' is used to describe 'the maintenance of a trainer's vocational technical skills and knowledge. Industry currency enables trainers to deliver and assess vocational training relevant to current industry practices'. This currency can also include widening competence, where the lecturer needs to learn new knowledge and skills to be optimally functional in the field.

Teacher-industry placement', which is also sometimes referred to as release to industry, is widespread across Australia and has been analysed in a number of reports and peer-reviewed articles. Schüller and Bergami (2011:134) note that the Australian VET system has a strong focus on:

> … educating students about current industry processes to facilitate their entry into the workforce upon completion of their studies. This requires teachers to possess knowledge of contemporary business processes (currency), so they may, in turn, use this knowledge to educate students. An effective means of acquiring currency is for educators to participate in industry placements.

To encourage VET teachers and trainers in Australia to complete industry placements, a Teacher Industry Placement Scheme (TIPS) was established which required the completion of 10 days in one or more workplaces. The TIPS programme could either be completed as a stand-

alone professional development activity or as a training package of the Certificate in Training and Assessment, registered on the Australian qualifications framework.

According to Clayton, Fisher and Hughes (2005), there is little research on what counts as industry currency but duration and frequency of placement are used as benchmark standards of this in the literature (Taylor, Mogane & Akoobhai, 2018:6). When it comes to professional development of practicing educators, the length of placements varies from a few days to one year but the majority of lecturer placements are five days or fewer (Wilson, *et al*, 1996; Ireland, Golden & Spielhofer, 2002; Toze & Tierney, 2010).

In the United Kingdom, the practice of teachers completing short placements in industry to gain experience of the 'world of work' goes back to the 1970s (Wilson, *et al*, 1996:18). While initially, only involving 'a handful' of teachers, over time the number increased and a Teacher Placement Service was established to support the process (Wilson, *et al*, 1996:18-19). Responsibility for teacher placement then shifted to the Learning Skills Council, whose responsibilities were outlined in the 1999 *Learning to Succeed White Paper* (Ireland, *et al*, 2002: 2-3). Later the term 'teacher placement' was changed to 'professional development placements' (PDPs), which shifted the understanding of this from being a once-off event to being part of teacher CPD (Ireland, *et al.*, 2002: 3).

In an analysis of literature on PDPs in the United Kingdom, Ireland, *et al* (2002:2) found that most of placements were 'undertaken by science and technology teachers and teachers of vocational courses' and that these occurred in a broad range of business and industry sectors with most in the 'leisure, tourism, finance, manufacturing and retail'. According to Ireland, *et al* (2002:3-5), PDPs had a positive impact on teachers, schools, students and employers, which included:

Teachers:

- Gained confidence in own abilities, which increased levels of motivation and self-esteem;
- Increased technical knowledge;
- Supported the development of learning materials and resources;
- Useful for exchanging teaching-related ideas and making contacts, particularly when placed in groups;
- Gained hands-on experience of a particular industry;
- Developed management and leadership skills, particularly in longer placements;
- Improved teaching.

At schools/educational institutions, the following occurred:

- Dissemination of new skills learned during placement when back at the institution, but this required time and management support;
- Creation of school–business working relations if contact was maintained with employers post-placement.
- New management techniques learned during placement were implemented in schools.

Students received:

- Improved learning materials;
- Better teaching;
- Accurate career information.

For host employers/industry, there was:

- Cost-effective staff development resulting from inputs made by teachers;
- Cost-effective consultancy through using teachers placed to carry out projects or consultancy work;
- Development of new management skills through working with school managers;
- Improved business image in the local community;
- The opportunity to influence education in the long term and improve the calibre of the future employee pool.

In Australia, similar benefits have been derived from teacher industry placements, which the Australian TIPS Information Handbook (VET in Schools, 2012:4) notes are:

For academic staff:

- Gaining relevant vocational skills;
- Using the experience to provide a more relevant curriculum;
- Developing industry and community links;
- Obtaining relevant industry and career knowledge;
- Gaining an understanding of industry and community requirements in terms of skills, competencies and attitudes.

For educational institutions, the benefits were:

- Staff with recent industry experience;
- The profile of institution developed in its broader community;
- Improved understanding of skills, competencies and attitudes required by employers and local community.

For host employers/industry, there was:

- Increased understanding of vocational education;
- Increased opportunity to provide inputs into education programmes;
- Improved understanding of the skills and practices developed by education providers;
- Knowledge of current issues and practices in education and training increased.

While educator-industry placement potentially brings benefits to all parties, Ireland et al.'s (2002: 5-6) review also identified several challenges regarding the planning and implementation of PDPs. The most common ones are:

- Placement length. Longer placements were found to be more effective than shorter ones.
- Timing of placements. Placement can disrupt teaching and there are costs associated with replacing teachers during term time.
- Long placements can cause re-entry problems as some teachers became unsettled and were uncertain about returning to school.
- Teachers not being able to implement changes after placements due to time constraints or insufficient support from school management.
- Lack of commitment or time from employers during placements affected the value of these.
- Placements can cause teachers to reconsider their profession and some do not return to the school after industry placement.

In other literature, concerns are also raised that industry placement is not always the best strategy for up-dating the industry knowledge and skills of educational staff and may not be feasible in some industries, or under some conditions. According to Clayton (2012: 28, as cited in Van der Bijl & Taylor, 2016:100-101):

> … research found that while employers would like teachers to keep current, they did not think it feasible especially where industry trends and technological changes were constantly impacting on workplaces. Strategies that were considered useful in keeping teachers current were strong management support for ongoing training, collaborative learning in the workplace, targeted professional development activities and networking with industry. The research also identified the need to establish and maintain an organisational climate that supports updating of industry skills while offering continuing professional development that encompasses the full range of updating approaches. Also highlighted was the need to adopt a strategic approach to the maintenance of industry currency, particularly where technology and technical knowledge were constantly being superseded. As new knowledge emerges and skill requirements change, TVET teachers in the areas of change need to be provided with specific training to keep them abreast of the changes. Importantly the research also highlights the need to introduce innovative approaches to upskilling that not only offer formal and structured learning but also informal and incidental collaborative learning opportunities that inevitably arise during the conduct of day-to-day work.

There is also the challenge of educators not using what they learn during industry placement in their teaching. As noted above, time constraints and poor institutional support are factors in this. But the cause of the problem extends beyond these factors to a broader challenge of transferring learning from one site of practice to another, which van der Bijl & Taylor (2016:101) draw attention to. Transfer of learning is discussed further below.

4. Theoretical framework for industry-based WIL for vocational educators

Much of the research on lecturer-industry placement is concerned with the development of communities of practice. Studies by Schüller, Bergami and a number of associates (Schüller & Bergami, 2008:201; Bergami, Schüller & Cheok 2009:53; Bergami, Schüller & Vojtko, 2010:110-112; and Schüller & Bergami, 2011:136-137) on teacher-industry placement provide insight into the nature of the learning that teachers undergo before, during and after workplace-based placements. This has been captured in Schüller and Bergami's (2008; 2011) cyclical and linear model of teacher-industry placement, which is based on Lave & Wenger's (1991) Community of Practice (CoP) model.

The Schüller and Bergami model provides an account of a development trajectory starting with an industry placement that develops industry experience and skills. This is followed by theory development during which the teacher re-theorises what they know by comparing this with what they have learned in the workplace. The next step involves bringing industry learning and examples into classroom teaching and, the final step, putting theory back into industry practice, which concerns testing new theories developed during placement in the classroom and then pursuing the adoption of effective ones with industry (Schüller & Bergami, 2011:136-137). The model postulated by Schüller and Bergami is depicted diagrammatically as follows:
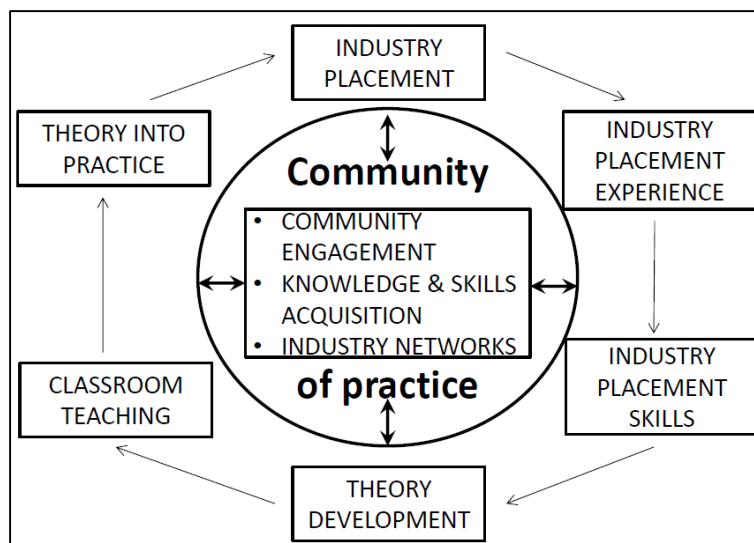
Figure 2: Teacher Industry Placement Cycle (Schüller & Bergami, 2011:134, as cited in Van der Bijl & Taylor, 2016: 101).

The ultimate purpose of lecturers spending time in industry is to make them better educators. The assumption is that they will translate what they learn in industry into teaching and learning that links the curriculum to current industry practice and requirements. However, transferring learning from one context to another is a highly complex process. Van der Bijl and Taylor (2016:101) note that:

> Lecturers do not simply go to a site in industry, pick up new experiences, integrate them into the curriculum and adapt their teaching practice. The relationship between industry and education is not a simple or linear one, nor is the relation between vocational institutions and their staff, on the one hand, and local business, on the other. The transfer of learning between industry and college is complex, requiring a detailed analysis of its mechanisms and manifestations.

The complexity of the industry-based WIL experience is addressed by Tuomi-Gröhn, Engeström and Young (2007). Tuomi-Gröhn and Engeström (2007) use the activity theory concept of 'boundary crossing' to describe learning that crosses social systems like an education system and a business system. Van der Bijl & Taylor (2016:101-102) provide the following explanation of the process:

> Boundary-crossing is broadly conceptualised by Tuomi-Gröhn, Engeström and Young (2007) as a conceptual place where transfer of learning between activity systems takes place. Involved in boundary-crossing are 'brokers', 'boundary zones' and 'boundary objects'. A broker is a mediator who is able to make connections across communities of practice, facilitate coordination and open possibilities for new meanings. A boundary zone is described by Konkola (2001) as 'a 'no-man's land', free from prearranged routines or rigid patterns' (Tuomi-Gröhn, Engeström & Young, 2007:5). In a boundary zone, both communities of practice are present. Boundary objects emerge and can be adapted to suit various local needs but maintain a common identity across sites.

For Van der Bijl and Taylor (2016: 101-102), activity theory and the concept of boundary-crossing provide useful tools for understanding how college lecturers navigate 'the no-man's land' between vocational education institutions and industry. According to Van der Bijl & Taylor (2016:102), to properly understand lecturer industry-based learning, an analysis is needed of

'… the influence of one activity system (the workplace) on another (the college), as well as the reciprocal influence that a subject (lecturer) and the activity system (the workplace) exert on each other during the workplace experience' (Van der Bijl & Taylor, 2016: 102).

The communities of practice and activity system models provide useful frameworks for understanding the nature of lecturer-industry placement and learning transfer between activity systems. While a focus on the development and maintenance of communities of practice is important in understanding industry WIL for TVET lecturers, this is an educator development strategy and hence involves more than merely preparing new lecturers to be part of communities of practice. Shulman and Shulman's (2004:268) framework for 'conceptualizing teacher learning and development within communities and contexts' provides a useful model for understanding lecturer learning, hence the facilitation of this, at a variety of levels, including the individual, communities of practice and policy/resource levels, as shown in the figure 3 below.

Figure 4. Levels of analysis: individual, community, and policy.
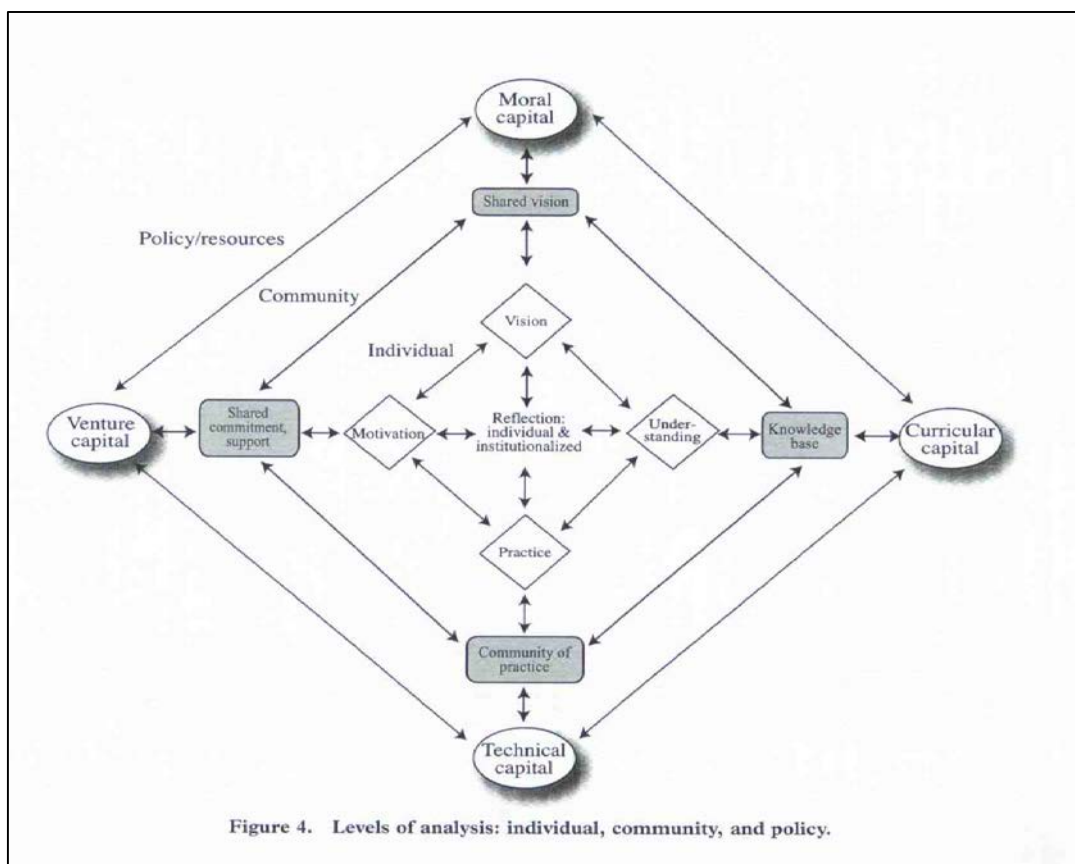
Figure 3: Levels of analysis: Individual, community and policy (in Shulman & Shulman, 2004:268)

At each level, certain characteristics need to be in place for effective lecturer learning and development to occur. These are described as follows:

- Individual level of learning and development

  For individual learning to occur, lecturers must be 'ready to teach … [and have] developed a vision of a particular kind of student learning and understanding' of a process of learning in disciplinary and interdisciplinary terms, and of a classroom in which a range of activities are engaged (Shulman & Schulman, 2004:260-261). Individual learning, according to Shulman and Shulman (2004:260-264), requires a lecturer who is:

- Ready to teach;
- Willing and motivated;
- Able to understand what must be taught and how to teach it;
- Able to engage in appropriate performance;
- Able to learn from experience through reflection

Applying the Shulman and Shulman framework to an analysis of learning through industry WIL for individual learning to occur, lecturers need a vision for and motivation to participate in workplace WIL. This will create a readiness for learning. Lecturer reflection on their leaning in the workplace also provides the basis for future practice in the classroom.

- Communities of practice level

  Communities of practice, which occur when more than one group exists, learn through sharing visions, commitments, knowledge and sets of rituals and practice (Shulman & Schulman, 2004:265-267).

  Van der Bijl and Taylor (2018:131) note that while student school teachers and student TVET lecturers may encounter a relatively homogenous community of practice during teaching practice, student TVET lecturers completing industry WIL will be confronted with a divergent variety of types of communities of practice. A student TVET lecturer with a hospitality specialisation who is assigned to the kitchen of a fast food business, is likely to encounter a type of community of practice different to one assigned to the kitchen at a five star hotel. When assigned to workplace WIL experiences, student TVET lecturers will, and arguably should, be exposed to a number of communities of practice, each of which is likely to have a different influence on them.

  For learning to occur through industry WIL for lecturers at a communities of practice level, a shared vision for and commitment to TVET lecturer/college-industry learning and collaboration is needed in the practice community. This will provide the basis for knowledge and skills sharing and, ultimately, the development of shared rituals of practice. However, communities of practice develop over time and grow out of regular and mutually beneficial interaction and exchange. While once-off lecturer-industry placements are unlikely to be sufficient on their own to build functioning communities of practice, they could provide an impetus that starts or reinforces an existing collaboration.

- Level of policy implementation

  The outer level of the Shulman and Shulman framework is the policy or resources level. 'Accomplished learning and teaching depend on the provision of adequate resources such as mentoring, staff development, curriculum and associated materials, instruments and models of assessment, additional personnel, computers, physical space for groupings and rotations etc.', according to Shulman and Shulman (2004:267). This, they argue, is the provision of *capital*.

  At the policy level, the motivation for lecturers to complete industry WIL thus needs to be supported by funding and resources to enable its implementation, and a curriculum which accommodates educators, bringing new material into the classroom and which is periodically updated to include new industry developments and requirements.

The Shulman and Shulman framework recontextualises educator learning as more than 'a concern with individual teachers and their learning to a conception of teachers learning and

developing within a broader context of community, institution, policy and profession' (Shulman & Shulman 2004: 269). Reflection is a key element in the Shulman and Shulman framework and provides the foundation for learning and development at each level. Reflection is thus central to the process of learning through WIL. An industry or workplace-related WIL endeavour therefore needs to provide education students with industry and workplace-based environments that provide adequate learning capital. The environments must also provide opportunities to engage with a variety of communities of practice, to practice and to reflect on own practice as well as practices of the identified communities.

5. Understanding industry-based WIL in the context of TVET educator qualifications

Van der Bijl & Taylor (2018) note that, while industry currency is a requirement for TVET educators internationally, initial VET teacher qualifications generally do not include industry placement as an element. Prior industry experience is usually an entry requirement to vocational educator qualifications instead (Van der Bijl & Taylor, 2018:129-130). As such, the literature is largely concerned with industry placement for the professional development of practising rather than for trainee educators.

In their review of an earlier draft of this curriculum framework, Fannon, Pop, and Pretti (2018: 6) note that different conceptual frameworks may be needed for these two groups of educators. There is clearly a difference between the needs of educators who visit industry to up-date prior industry experience and educators who do not have industry experience, hence the shape that an industry placement might take for these two groups. A key issue is the length of time educators spend in industry as this determines the learning that is possible.

In the policy on TVET lecturer qualifications (South Africa, 2013), the advanced diploma differs from the bachelor of education and the diploma in terms of knowledge and skills to be gained through industry placement. The advanced diploma assumes students have already gained industry expertise in their subject field through prerequisite qualifications and previous work experience and, as a result, industry-based WIL is a small element of the qualification. The policy implies that in this qualification, pre-exiting industry knowledge and skills will be updated through WIL and realigned from a practice-oriented context to one that is pedagogically oriented.

In contrast to the advanced diploma, both industry and pedagogic expertise must be certified for bachelor of education and diploma graduates. As a result, work-based placements for these two qualifications must align workplace learning and pedagogic knowledge, and a longer time period of nine and 16 weeks, respectively, is thus provided for industry-based WIL.

Although the policy assumes that advanced diploma students will have prior industry expertise, this will not always be so as is the case with a significant number of lecturers currently employed at TVET colleges (Van der Bijl & Oosthuizen, 2019). At this stage, some subject discipline undergraduate diplomas and degrees, even ones that are vocationally oriented, do not include an industry experience component. Unless industry experience is stipulated as an entry requirement for the advanced diploma, it is likely that there will always be some students who enter without this.

A key question is how much time education students need to spend in the workplace to develop sufficient industry expertise. The extent of industry expertise required by TVET lecturers is widely debated and differs in terms of sector and professional requirements. What constitutes an expert TVET educator is thus determined by a number of factors. In some sectors, for example electrical work or hair care, certification is an important expertise prerequisite. For others, computer programming or marketing for example, general industry knowledge and skills suffice.

Fannon, Pop, and Pretti (2018: 8) propose a minimum period of six weeks of industry in the TVET lecturer qualifications, regardless of the prior experience of students. This proposal is based on a review of the outcomes of a six-week industry placement that formed part of a technical and vocational teacher education programme at the Winneba University of Education in Ghana. The review found that six weeks was sufficient for trainee teachers to apply and strengthen existing skills as well as learn about new technologies and machinery (Donkor, Nsoh & Mitchual, 2009: 7-9).

While six weeks may be sufficient for lecturers with prior industry experience to refresh and update their skills, this may be insufficient for lecturers that have not worked in industry before. Even the longer period of nine and 16 weeks of industry WIL included in the diploma and bachelor of education, may not be enough time to develop expertise. Gela (2004:8, as cited by Bergami, Schüller and Vojiko, 2010: 111) notes that '[w]here the academic is venturing into a new industry or a new area of study, a longer term placement may be required, as "deep learning often proceeds slowly"'. Lucas, Spencer and Claxton (2012:48) note that '[a]cquiring any kind of practical expertise requires time and practice' and that Ericsson, Krampe and Tesch-Römer (1993, as cited in Lucas, Spencer & Claxton 2012:48) have suggested that 'typically it takes 10,000 hours to become an expert'.

Rowe (2017) unpacks the notion of work experience and particularly what this means in the context of WIL. Drawing on human resources research and practice, he notes that while time is the most significant measure of work experience, another important factor is the frequency or number of times a task is practised. According to Rowe (2017), work experience obtained during WIL is thus influenced both by the time spent in the workplace and the nature of the task performed. However, in WIL, '[n]ot only are time periods variable, but also the total length of time spent in WIL positions can vary to a great extent' (Rowe, 2017:10). Furthermore, during WIL, 'students may have many opportunities to practice various tasks, or few, and the opportunity to experience several occupations or one' (Rowe, 2017:10). Rowe (2017:6-13) also draws attention to other factors that affect work experience, like the type of organisation, type of work, timing of the experience, prior knowledge and skills, and supervision. As such, according to him, work experience is multidimensional. He thus suggests more research is needed to understand how to structure WIL programmes so that they produce the desired outcomes.

A key issue in the implementation of workplace learning is the extent to which students should be expected to master basic skills in the workplace. For CHE (2011: 32), '[t]he workplace is a place where students can learn from experts, not where they go to practice basic-level skills'. This is especially so when the effort to place students is considerable. Basic skills, according to CHE (2011: 32), are best developed in dedicated health and safety-compliant university workshops and laboratories. In the workplace, students will learn through observing experts in their field and carrying out tasks under their supervision (CHE, 2011: 32). This needs to be borne in mind when designing the curricula for the different qualifications.

The collaboratively developed Ad Dip (TVT) curriculum framework document provides an analysis of the industry-based WIL element in this qualification. Extracts from the framework are included below to illustrate how this element has been interpreted in a curriculum framework developed for one of the qualifications, according to Blom, 2016: 26-27:

> As in the case of vocational education pedagogies, much must still [has to] be learnt about how people 'learn through work', specifically within the context of this curriculum framework. While many scholars have long supported the notion that exposure to and engagement with work enhances the learning experiences of students …. to ensure that the potential of workplace-based learning will be

realised, we should (Evans, *et al*, 2011:153[1]) … explore the intersection of work-based pedagogies that originate from research into how people learn in, for and through work with the further and higher education pedagogies in which the subject-dominant starting point is applied to people at work.

Short placement, as is required for the Adv Dip TVT is thus more about application and enhancement of existing skills than development of new skills (SSACI, 2015), and to translate their exposure to their teaching.

With this in mind, this curriculum framework proposes the following key elements of WIL in relation to the pedagogic practice, which is supported by time spent in the workplace (SSACI, 2015):

- Industry-based WIL involves exposure to work/workplaces through structured learning in workplace/industry settings (e.g. factories, worksites, offices, etc.);
- Real workplaces become the primary site of learning and the medium of work, the primary learning strategy;
- The overarching purpose of industry-based WIL for educators in TVET is to achieve currency of knowledge and skills, i.e. update these in line with developments in their field; in order to improve the relevance of what they are teaching and its links to actual industry practice, technology and systems; and
- To prepare their students for the demands of the workplaces within which they will find themselves.

For the purposes of the Adv Dip TVT, work exposure is a minimum requirement for preparing competent TVET educators (2 weeks, 8 credits). Such exposure should therefore ideally be followed up by cycles of Continuing Professional Development (CPD).

Nevertheless, work exposure must minimally result in (SSACI, 2015):

- The identification and critical analysis of the similarities and differences between the curriculum taught and the practices, technology and systems of workplaces visited.
- A critical reflection on and evaluation of own WIL experience in terms of its relevance to personal needs, value with regard to the development of required knowledge and skills and how it can be used in teaching.
- The ability to prepare and teach lessons that link the subject taught to current industry application, practices and technology through incorporating relevant industry examples and knowledge and skills.

6. Implementing and assessing workplace-based WIL in the curriculum

Programmes that include workplace-based WIL should provide students with an opportunity to learn from authentic practice, link this to formally learned knowledge and skills and translate their learning into future practice (CHE 2011: 6, 15 & 19). To enable this process, the four stages of Kolb's (1984) learning cycle, should be included in the design of a WIL programme, as follows (CHE 2006:18-19; CHE 2011:19):

- Concrete experience in the form of expert observation and supervised practice;

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[1] In Malloch, M., Cairns, L., Evans, K. & O'Connor, B.N. (Eds). *The SAGE Handbook of Workplace Learning*. London: SAGE.

- Reflective observation through reviewing and reflecting on the elements of the experience and what it means;
- Abstract conceptualisation by interpreting the experience and relating it to other knowledge and theory; and
- Active experimentation through considering the implications of what has been learned and how this could be put into practice and, if possible, testing understandings and ideas in different situations.

The learning process encapsulated in Kolb's (1984) learning cycle facilitates the complex process of transferring learning from one situation to another (Johnston, 2017: 29). While 'most humans do not readily or easily transfer what they know and can do, even between situations that appear to be quite similar', when learners are prompted and supported they will be more likely to transfer what they know between contexts (Johnston, 2017: 23). Critical reflection, which requires thinking about thinking or metacognition, is '[k]ey to developing a learner's propensity for skill and knowledge transfer' and 'involves processes such as review, deliberation, and reflection – both descriptive (what did I do?) and critical (how and why did I do that?)' (Johnston, 2017: 28).

Reflection is at the heart of the WIL learning process and the assessment of this (CHE 2006; Swanepoel, 2006; CHE 2011). Swanepoel (2006) notes that reflection is necessary in learning assessment because '… the experience of work is not enough in itself. It is the learning that comes from it that is important' (Harvey, 1999, cited by Swanepoel, 2006:2). As students do not necessarily make the link between their WIL experience and broader learning programme, they can be guided to do this through a carefully planned structured reflection process (CHE 2006:59).

CHE (2006:66) recommends that reflection happens before, during and after a WIL experience. Reflection before WIL is helpful in preparing students for this, while reflection during WIL helps them engage with the experience and grapple with issues as they arise. Reflection after WIL assists students to connect their WIL learning experience with theory and plan for future application. Assessment methods that facilitate reflection include (CHE 2006:63-64):

- Journals. Journals are used to record events and reflect on the meaning and significance of these. They can be unstructured or structured. Structured journals include prompts or questions that direct students to address particular issues and to connect their experience to their subject knowledge and skills and the learning objectives of the programme.
- Portfolios. A portfolio is a compilation of materials relevant to a student's WIL experience. It can include timesheets, journals, assignments completed, pictures and items collected or created during WIL.
- Presentations. Presentations by students on their WIL experience and learning could be done at the host organisation or back at the institution or they could be submitted as video recordings and included in portfolios.

Like all other forms of assessment, WIL assessment should be appropriate, valid, reliable and authentic (CHE, 2011: 41, Swanepoel, 2006: 3). Workplace-based WIL, however, poses a number of assessment challenges. One of these is that each student's experience will be different as this is determined by the organisation hosting them, the tasks and activities they are exposed to during their placement, and the extent to which they are allowed to participate in these (Swanepoel, 2006: 3; Taylor, Mogane & Akoobhai, 2018).

Another challenge is that while credits are linked to hours of study, ''[i]t is difficult to link workplace activities with formal study time formally because learning in a workplace is different from learning in a classroom or from texts' (CHE 2011:27).

A further challenge is how students provide evidence of their learning. Traditionally, logbooks and portfolios have been used to show what students have experienced and learned during WIL, as well as their critical thinking and problem solving skills in relation to this. However, these paper-based forms are less adequate in demonstrating mastery of skills or complex practice (CHE, 2011:43). Assessing complex performance in the workplace is the most challenging area of WIL assessment. Methods typically used in institutions to assess this, usually require students to calculate, take readings, use equipment, carry out instructions or follow procedures, and include assessment forms like 'demonstrations, role-play, video-diaries, poster presentation, laboratory reports, preparation of an illustrated manual on using the equipment for a particular audience, and a report on observation of real or simulated professional practice' (CHE, 2011:45). However, not all of these methods translate well in a workplace learning environment. One assessment form that has been successfully used to assess complex practice in the workplace is the video diary (CHE 2011:43).

Taking the above into account, assessment forms that are considered appropriate for workplace learning include student diaries or journals, portfolios, progress files, video diaries, presentations and any other ways that enable students to document, review and report on their workplace learning and this links to their pre-existing knowledge and skills as well as the implications for their future practice (CHE, 2011:48; CHE, 2006:63-64). To ensure fair and transparent assessment, the requirements of the WIL learning and assessment tasks to be completed need to be made clear to students as well as the criteria against which these will be assessed. Assessment rubrics that relate to the assessment criteria are helpful in indicating to students what will be required of them and how their work will be judged (CHE, 2011:45).

SECTION 3:

CURRICULUM REQUIREMENTS

1. Introduction

Section 1 of this curriculum framework provided an overview of the purpose and requirements of industry/workplace-based WIL in the TVET lecturer qualification framework (South Africa, 2013). Section 3 clarifies this further and fleshes out the specific requirements for each qualification. It also includes the proposed industry/workplace-based WIL outcomes for each qualification.

2. Purpose of industry / workplace WIL in TVET qualifications

The policy on TVET lecturer qualifications (South Africa, 2013:8) takes the following into account:

- Lecturers who teach TVET courses need to be competent in both the theoretical and practical aspects of the courses that they teach.
- A strong workplace component must be built into lecturer qualification programmes for programmes that prepare lecturers to teach the practical or workshop-based components of programmes, in order that lecturers are able to prepare learners for the demands and requirements of the workplace.
- Curriculum offerings in institutions that offer TVET change as workplace demands change – for example, in response to the development of new technologies – and qualification programmes must also be able to respond flexibly and dynamically to industry change.

This understanding of the requirements of qualifications for TVET lecturers has informed the purpose of industry/workplace WIL in the policy, which can be summarised as follows (South Africa, 2013):

- To provide lecturers, including those teaching vocational or technical and general or academic subjects, with 'up-to-date knowledge of the application in, and relevance to, the workplace of the subjects they teach' (South Africa, 2013:10).
- To enable lecturers who teach the practical components of vocational and technical subjects to learn 'the technical skills associated with the subject' (South Africa, 2013:10).

While the development of technical skills is a policy purpose of industry WIL, the policy assumes that vocational and technical lecturers will 'mostly first learn the technical expertise through their prior qualifications and through substantial experience in the workplace' (South Africa, 2013:10). As such, the primary focus of industry WIL in the policy is up-dating skills in line with new developments in the field.

It is important to note that the expectation that TVET student lecturers will have gained expertise through prior qualifications and work, is further clarified by the policy in relation to each qualification. What becomes clear is that this expectation primarily applies to the students who register for the Ad Dip (TVT) and to a lesser extent to Dip (TVT) students.

In its submission on the Dip (TVT), CPUT extended the understanding of the purpose of the industry-based WIL component in the policy further in its explanation of the purpose of this in the qualification, which is described as follows:

> It applies theories and concepts learnt in the classroom. It builds on conceptual practice-based knowledge and skills developed in teaching practice. Industry-based WIL adds to learning acquired in other contexts by providing experience gained from industry exposure. Along with other learning components, and exposure to learning contexts, industry-based WIL is aimed at preparing

students for the challenges of a dynamic and diverse teaching and learning environment, as well as to sensitise them to inclusive practices in education and training.

This explanation makes the following clear about the purpose of industry WIL:

- It puts theory into practice.
- It builds on knowledge and skills developed in teaching practice.
- It provides industry experience.
- It exposes student lecturers to different learning contexts.
- It prepares student lecturers to teach in dynamic and diverse environment.

Ultimately, TVET lecturers participate in industry WIL so that they are better able to prepare their students for work in their vocational or occupational field. In its discussion of vocational pedagogy, the collaboratively developed Ad Dip (TVT) curriculum framework document, notes that TVET teaching needs to incorporate the following elements when learning for and through work (Evans *et al.*, 2011: 155, cited in Blom, 2016:21:

- Enculturation – 'learning how we do things here';
- Building competence – 'learning to achieve the occupational standard';
- Improving practice, innovation and renewal – 'learning to contribute to the organisation';
- Fitting in – 'learning about the ethics, professional practice and social context of workplaces';
- Understanding the field – 'learning about the professional and/or occupational field' for career development;
- Shaping an identity – 'learning about the identity of the vocation/profession', and coming to identify with it.

These elements should thus inform the focus of TVET lecturers' learning during industry WIL and thereby capacitate them to better prepare college students for the world of work.

3. Broad aims for industry WIL in the Dip (TVT), B Ed (TVT) and Ad Dip (TVT)

Taking policy requirements and national and international experience into account, the curriculum aims for industry/workplace-based WIL are for students to:

- Learn about the application of their subject specialisation in an industry workplace, including work processes, systems, technology and standards used;
- Learn about the structure, staffing, culture and rules of an industry workplace that practises in their subject field;
- Identify employer requirements and expectations of employees who work in their subject field with regard to knowledge, skills and attributes;
- Update and improve their subject knowledge and skills;
- Identify how the college curriculum is similar and different to current industry practice and requirements;
- Reflect on how to teach their subject in a way that it adequately prepares college students for the requirements of work;
- Reflect on the benefits of collaboration between colleges and industry.

The specific requirements for the industry/workplace WIL component of each qualification and the proposed outcomes, follow.

4. Industry/workplace based WIL requirements and exit-level outcomes for each qualification

a. Diploma in Technical and Vocational Teaching (Dip (TVT)

The policy framework explains the purpose and characteristics of the Dip (TVT) as follows:

> The purpose of the diploma is to develop lecturers who can demonstrate focused knowledge and skills in lecturing a particular subject or field taught at a TVET college. Typically they will have gained experience in applying such knowledge and skills in the context of the workplace and lecturing at an institution offering TVET programmes. The qualification requires a depth of specialisation of knowledge, together with practical skills and experience in workplace settings and vocational education sites. The diploma may include workplace-based learning up to a maximum of 120 credits (South Africa, 2013:16).

The policy document stipulates that the WIL element of the Dip (TVT) must include:

> … 18-24 weeks of structured, supervised and assessed WIL in appropriate teaching settings and specialised workplace settings, as follows:
> - The teaching (e.g. classroom) settings component should be a minimum of 9 weeks.
> - The specialised workplace (e.g. industry) settings component should be a minimum of 9 weeks for lecturing specialisations that are technical/vocational in nature, and a minimum of 2 weeks for lecturing specialisations that are general/academic in nature (South Africa, 2013:18).

In line with the understanding developed in this curriculum framework of industry-based WIL for TVET lecturers, as well as the requirements specified in the policy, the following exit-level outcomes and assessment criteria for the industry WIL component are proposed for the Dip (TVT):

	Learning Outcomes	Persons credited with this outcome are able to:
1.	Demonstrate knowledge of the current application, requirements and relevance of specialised subject fields in associated workplaces	i. Show knowledge of current application of the subject fields in workplaces, including work processes, technology and standards ii. Identify and describe organisational and cultural aspects in particular workplaces applicable to subject fields, including organisational structure, rules and regulations, employment and training practices iii. Identify and review employer requirements of employees that work in specialised subject fields with regard to knowledge, core and soft skills, and personal and professional attributes
2.	Demonstrate practical skills developed in subject specialisation in associated workplaces and reflect on relevance for teaching and learning	i. Demonstrate practical skills developed in subject specialisation in the workplace ii. Review extent of practical skills developed in the workplace and relevance to the teaching of subject specialisations
3.	Reflect on workplace knowledge and skills requirements in specialised subject fields and the implications for the curriculum, teaching and learning	i. Reflect on core knowledge and skills requirements in specialised subject fields in associated workplaces ii. Compare the curriculum with prevailing practices and requirements in the workplace and discuss the implications for teaching and learning iii. Identify and discuss strategies for incorporating current industry requirements and practices in the curriculum, teaching and learning
4.	Reflect on industry WIL experiences depicting lessons learnt for teaching of subject specialisation and the benefits of college-workplace collaboration	i. Review and report on lessons learnt and their applicability to teaching the subject ii. Review benefits of college-workplace collaboration

b. Bachelor of Education Technical and Vocational Teaching (B Ed TVT)

The policy framework explains the purpose and characteristics of the B Ed (TVT) as follows:

> The Bachelor of Education in Technical and Vocational Teaching has the primary purpose of providing well-rounded education that equips graduates with the required subject content knowledge, educational theory and methodology that will enable them to demonstrate competence and responsibility as academically and professionally qualified TVET lecturers … The degree requires a specific depth and specialisation of knowledge, together with practical skills and workplace experience … (South Africa, 2013:19).

The policy document stipulates that the WIL element of the B Ed (TVT) must include:

> … 32-40 weeks of structured supervised and assessed WIL in appropriate teaching settings and specialised workplace settings, as follows:
> - The teaching settings component should be between 16 and 20 weeks.
> - The specialised workplace (e.g. industry) settings component should be between 16 and 20 weeks for lecturing specialisations

that are technical/vocational in nature, and a minimum of 4 weeks for lecturing specialisations that are general/academic in nature (South Africa, 2013:21).

The policy warns that developing the industry skills required in the B Ed (TVT) could present challenges. The policy document notes:

> The B Ed qualification does not easily lend itself to the development of the industrial workplace-based practice and skills that lecturers of this component will need. Providers of B Ed programmes designed to prepare lecturer who teach the practical subject in TVET curricula will need to establish strong relationships with industry partners in order to ensure that the students are provided with adequate development in these areas (South Africa, 2013:14).

In line with the understanding developed in this curriculum framework of industry-based WIL for TVET lecturers, as well as the requirements specified in the policy, the following exit level outcomes and assessment criteria for the industry WIL component are proposed for the B Ed (TVT):

	Learning Outcomes	*Persons credited with this outcome are able to:*
1.	Demonstrate knowledge of the current application, requirements and relevance of specialised subject fields in associated workplaces	i. Show knowledge of current application of the subject fields in workplaces, including work processes, technology and standards ii. Identify and describe organisational and cultural aspects in particular workplaces applicable to subject fields, including organisational structure, rules and regulations, employment and training practices iii. Identify and review employer requirements of employees that work in specialised subject fields with regard to knowledge, core and soft skills, and personal and professional attributes
2.	Demonstrate practical skills developed in subject specialisation in associated workplaces and review relevance for teaching and learning	i. Demonstrate practical skills developed in workplace to teach practical components of subject specialisation ii. Review extent of practical skills developed in the workplace and relevance to the teaching of subject specialisations
3.	Analyse and reflect on workplace knowledge and skills requirements in specialised subject fields and the implications for the curriculum, teaching and learning	i. Analyse and reflect on core knowledge and skills requirements in specialised subject fields in associated workplaces ii. Analyse and compare the curriculum in subject fields with prevailing practices and requirements in the workplace and determine the implications for teaching and learning iii. Identify and discuss strategies for incorporating industry requirements and practices in the curriculum, teaching and learning
4.	Critically reflect on industry WIL experiences depicting lessons learnt for teaching the subject specialisation and the benefits of college-workplace collaboration	i. Critically appraise and report on lessons learnt and their applicability to teaching the subject ii. Critically reflect on benefits of college-workplace collaboration

c. Advanced Diploma in Technical and Vocation Teaching (Ad Dip TVT)

The policy framework explains the purpose and characteristics of the Ad Dip (TVT) as follows:

> The Advance Diploma in Technical and Vocational Teaching offers entry-level professional preparation of graduates who wish to develop focused knowledge and skills as lecturers in a particular TVET field or subject. For this reason, the qualification requires a specific depth and specialisation of knowledge, assumed to have been developed in prior qualifications, together with practical and workplace experience … (South Africa, 2013:22-23).

The policy document stipulates that the WIL element of the Ad Dip (TVT) must include:

> … a minimum of 10 weeks and a maximum of 12 weeks of structured, supervised and assessed WIL in appropriate teaching settings and specialised workplace settings, as follows:
> - The teaching settings component should be a minimum of 8 weeks, of which at least 4 should be consecutive.
> - The specialised workplace settings component should be a minimum of 2 weeks (South Africa, 2013:16).

In line with the understanding developed in this curriculum framework of industry-based WIL for TVET lecturers, as well as the requirements specified in the policy, the following exit level outcomes and assessment criteria for the industry WIL component are proposed for the Ad Dip (TVT):

	Learning Outcomes	Persons credited with this outcome are able to…
1.	Demonstrate knowledge of the current application, requirements and relevance of specialised subject fields in associated workplaces	i. Show knowledge of current application of the subject fields in workplaces, including work processes, technology and standards ii. Identify and describe organisational and cultural aspects in particular workplaces applicable to subject fields, including organisational structure, rules and regulations, employment and training practices iii. Identify and review employer requirements of employees that work in specialised subject fields with regard to knowledge, core and soft skills, and personal and professional attributes
2.	Analyse and reflect on workplace knowledge and skills requirements in specialised subject fields and the implications for the curriculum, teaching and learning	i. Analyse and reflect on core knowledge and skills requirements in specialised subject fields in associated workplaces ii. Analyse and compare the curriculum in subject fields with prevailing practices and requirements in the workplace and determine the implications for teaching and learning iii. Identify and discuss strategies for incorporating industry requirements and practices in the curriculum, teaching and learning
3.	Critically reflect on industry WIL experiences depicting lessons learnt for teaching the subject specialisation and the benefits of college-workplace collaboration	i. Critically appraise and report on lessons learnt and their applicability to teaching the subject ii. Critically reflect on the benefits of college-workplace collaboration

SECTION 4:

ACTIVITIES, ASSESSMENT AND MATERIALS

1. Introduction

The industry WIL programme for the three TVET qualifications is structured around the following core activities:

- Prepare for industry/workplace WIL placement;
- Complete Assignment 1: Subject topic checklist, daily register, activity log and journal;
- Complete Assignment 2: Workplace research;
- Complete Assignment 3. Observation of job/work task or function;
- Complete Assignment 4: Host employer evaluation of student lecturer;
- Complete Assignment 5: WIL reflection report, presentation and portfolio submission.

While the core activities are similar for the Dip (TVT), B Ed (TVT) and Ad Dip (TVT), the focus and time spent on each activity, as well as the depth of learning and level of analysis required, differ for each qualification. The differences are based on:

- The qualification entry level;
- The qualification exit level;
- The length of the qualification programme and hence the amount of time students will spend in the workplace;
- Which year of the Dip (TVT) or B Ed (TVT) students are completing.

Ad Dip (TVT) students will enter with a diploma or degree in their teaching subject(s) and will thus be at a higher level than Diploma and B Ed students in terms of their subject knowledge and skills. More can thus be expected of them. In addition, the Ad Dip (TVT) is at NQF level 7 and students will be expected to analyse and report on their learning and experience at this level.

The B Ed (TVT) is also a level 7 qualification and, as such, in the final year of the programme, the same level of analysis will be required of B Ed (TVT) and Ad Dip (TVT) students. The expectations of Dip (TVT) students in their final year will be commensurate with a level 6 qualification.

In terms of time spent in the workplace, Ad Dip (TVT) students will complete two weeks in the workplace. On the other hand, Dip (TVT) and B Ed (TVT) students will complete three and four weeks a year over three and four years respectively. More learning and greater depth is thus possible during the Dip (TVT) and B Ed (TVT). While this is so, as Ad Dip (TVT) students enter with a higher level of knowledge and experience, more can thus be expected of them in the shorter time they have in the workplace.

The learning in the Dip (TVT) and B Ed (TVT) will be scaffolded from year to year to allow students to build up their knowledge and experience and develop their reflection and analytical skills. Students will be provided with materials that guide their completion of WIL programme activities as they progress through the programme. They will also be required to submit a portfolio of evidence at the end of each year of the programme, which will provide the basis of their assessment for that year. Student portfolios will be assessed with the use of a rubric.

2. Overview of WIL programme activities, assessment and materials

The tables below provide an overview of the WIL programme activities, assessment and material required per qualification.

a. Diploma in Technical and Vocational Teaching (Dip (TVT))

	Activities	YEAR	Materials required[2]	Assessment[3]
1.	**Assignment 1:** Subject checklist, daily register, activity log and journal	YEAR 1, 2 & 3	• Template 1: Subject topic checklist • Template 2: Daily attendance register • Template 3: Daily activity log and weekly reflective journal	• Included in portfolio • Assessed by using a rubric • Percentage weighting of Assignment 1 = 30%
2.	**Assignment 2:** Workplace research	YEAR 1 YEAR 2 YEAR 3 YEAR 3	• Template 1: Overview of host employer • Template 2: Jobs/roles in subject field • Template 3: Industry changes or developments in subject field • Template 4: Workplace resources to use in teaching	• Included in portfolio • Assessed by using a rubric • Percentage weighting of Assignment 2 = 15%
3.	**Assignment 3:** Observation of job/work task or function	YEAR 1, 2 & 3	• Template: Observation of job/work task or function	• Included in portfolio • Assessed by using a rubric • Percentage weighting of Assignment 3 = 10%
4.	**Assignment 4:** Host employer evaluation of student lecturer	YEAR 1, 2 & 3	• Template: Host employer evaluation of student	• Included in portfolio • Assessed by using a rubric • Percentage weighting of Assignment 4 = 5%
5.	**Assignment 5:** WIL reflection report, presentation and portfolio submission	YEAR 1, 2 & 3	• WIL reflection report • PowerPoint slides on WIL experience • Presentation on WIL experience • Compilation and submission of portfolio	• Included in portfolio • Assessed by using a rubric • Percentage weighting of Assignment 5 = 40%

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[2] See attachment 1 for student materials.
[3] Assessment rubric included in student materials.

b. Bachelor of Education Technical and Vocational Teaching (B Ed (TVT))

	Activities	**YEAR**	**Materials required[4]**	**Assessment[5]**
1.	**Assignment 1:** Subject checklist, daily register, activity log and journal	YEAR 1, 2, 3 & 4	• Template 1: Subject topic checklist • Template 2: Daily attendance register • Template 3: Daily activity log and weekly reflective journal	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 1 = 30%
2.	**Assignment 2:** Workplace research	YEAR 1	• Template 1: Overview of host employer	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 2 = 15%
		YEAR 2	• Template 2: Jobs/roles in subject field	
		YEAR 3	• Template 3: Industry changes or developments in subject field	
		YEAR 3	• Template 4: Workplace resources to use in teaching	
		YEAR 4	• Template 5: Personal research question	
3.	**Assignment 3:** Observation of job/work task or function	YEAR 1, 2, 3 & 4	• Template: Observation of job/work task or function	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 3 = 10%
4.	**Assignment 4:** Host employer evaluation of student lecturer	YEAR 1, 2, 3 & 4	• Template: Host employer evaluation of student	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 4 = 5%
5.	**Assignment 5:** WIL reflection report, presentation and portfolio submission	YEAR 1, 2, 3 & 4	• WIL reflection report • PowerPoint slides on WIL experience • Presentation on WIL experience • Compilation and submission of portfolio	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 5 = 40%

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[4] See attachment 1 for student materials.

[5] Assessment rubric included in student materials.

c. Advanced Diploma in Technical and Vocation Teaching (Ad Dip (TVT))

	Activities	Materials required[6]	Assessment[7]
1.	**Assignment 1:** Subject topic checklist, daily register, activity log and journal	• Template 1: Subject topic checklist • Template 2: Daily attendance register • Template 3: Daily activity log and weekly reflective journal	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 1 = 25%
2.	**Assignment 2:** Workplace research	• Template 1: Overview of host employer • Template 2: Jobs roles in subject field • Template 3: Industry changes or developments in subject field • Template 4: Workplace resources to use in teaching • Template 5: Personal research question	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 2 = 20%
3.	**Assignment 3:** Observation of job / work task or function	• Template: Observation of job/ work task or function	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 3 = 10%
4.	**Assignment 4:** Host employer evaluation of student lecturer	• Template: Host employer evaluation of student	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 4 = 5%
5.	**Assignment 5:** WIL reflection report, presentation and portfolio submission	• WIL reflection report • PowerPoint slides on WIL experience • Presentation on WIL experience • Compilation and submission of portfolio	• Included in portfolio • Assessed by means of a rubric • Percentage weighting of Assignment 5 = 40%

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[6] See attachment 1 for student materials.
[7] Assessment rubric included in student materials.

SECTION 5:

GUIDELINES FOR IMPLEMENTATION

1. Introduction

The policy makes institutions that offer the TVET lecturer qualifications responsible for arranging WIL placements for student lecturers. They must also ensure that the WIL provided is appropriately structured, properly supervised and formally assessed (South Africa, 2013:15). Implementing WIL successfully requires careful planning and the management of a range of activities over the course of an academic year. The management and implementation process also requires staff and financial resources which need to be planned and budgeted for.

Some guiding principles for implementing industry WIL are:

- Good planning and preparation are necessary to ensure the effectiveness of WIL. This should involve the university, the student lecturer and the employer to ensure that all parties are clear about the requirements of the WIL programme and what will be required of them (SSACI, 2014a:15).
- WIL should bring clear benefits to all parties involved – student lecturers, universities and employers – to ensure their buy-in and continued support. The expected benefits should be made explicit at the start of the programme and should be periodically reviewed (SSACI, 2014a:15).
- The effectiveness of industry-based WIL depends on a good match between the work of the host employer and the student lecturer's subject specialisation; careful selection of employers is therefore essential (SSACI, 2014a:15).
- While the institution has overall responsibility for arranging WIL placements, each student lecturer must take responsibility for ensuring that the employer they are placed with meets their requirements and that the placement is effective (SSACI, 2014a:15).
- WIL is ultimately meant to improve lecturers' teaching practice, but they need support with this. This support should happen when preparing for WIL and in the post-WIL phase. Trainee lecturers need to understand why they are doing WIL and how they are meant to incorporate their experience into teaching. After completing WIL they also need assistance with linking what they have learned in the workplace to their subject and translating this into lesson plans and class activities.

2. The WIL implementation cycle

Implementing WIL is a process that involves the management of many activities over the course of an academic year (SSACI, 2014a:16). The process can be illustrated as a cycle as the same activities need to be implemented with each round of student-lecturer placements. The cycle comprises four phases, namely, planning, preparation, placement and post-placement.
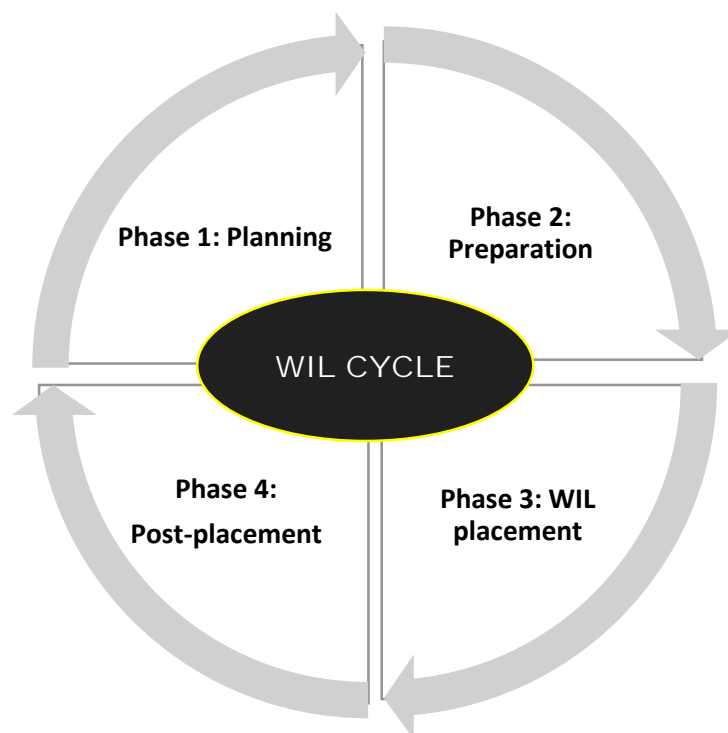
The WIL Cycle (adapted from SSACI, 2014a:16)

Specific activities in each phase of the WIL cycle are as follows (SSACI, 2014a: 16-17):

ACTIVITIES IN INDUSTRY / WORKPLACE WIL FOR LECTURERS CYCLE	
PHASE	*ACTIVITY*
PHASE 1: **PLANNING**	1. Develop/revise policy and procedure framework for industry / workplace WIL for student lecturers
	2. Plan and budget for WIL implementation in current academic year
PHASE 2: **PREPARATION**	3. Identify student lecturers that need to be placed for WIL in current academic year
	4. Prepare student lecturers to participate in WIL, including clarifying programme requirements and assessment, rules and arrangements for the WIL placement, and how to behave in the workplace
	5. Recruit employers and plan for the implementation of the programme with them
	6. Match student lecturers to suitable employers
	7. Plan and coordinate WIL-placement arrangements and logistics
PHASE 3: **WIL PLACEMENT**	8. Student lecturers spend time in the workplace, engaging in activities as per programme requirements and plans
	9. Student lecturers work on their WIL portfolios, gathering information needed and recording and reflecting on their experience
	10. Workplace mentors supervise and mentor student lecturers during WIL
	11. University lecturers monitor and supervise student lecturers during WIL and assist to resolve problems

PHASE 4: POST-PLACEMENT	12. Facilitate student lecturer completion and submission of WIL portfolio for assessment
	13. Review WIL placements with student lecturers and provide an opportunity for them to reflect on and share their experience
	14. Facilitate student lecturer integration of workplace learning and experience into teaching practice
	15. Review student lecturer WIL placements with host employers and distil lessons for future implementation
	16. Review the faculty/department's implementation of student lecturer WIL placements and distil lessons for future implementation
	17. Report on completed industry/workplace WIL and the implementation of this in the current academic year

Key planning, preparation and implementation activities are elaborated below.

3. Developing a policy framework for the industry/workplace WIL function

The faculty/department offering the qualifications needs to establish an appropriate policy and procedure framework to manage the implementation of the industry/workplace WIL component. This needs to be located within the broader institution WIL policy and procedure framework.

The WIL policy framework should address issues like:

- Qualification requirements for industry WIL for student lecturers;
- The South African legal framework for industry WIL;
- Roles of key players in the implementation of the industry WIL component of the qualifications, including the DHET, employers, the university (WIL office and faculty/department), student lecturers and TVET colleges;
- Management of the industry/workplace WIL function in the faculty/department;
- Roles and responsibilities of staff members in the faculty/department in implementing the WIL function;
- Funding and resourcing the WIL function;
- The nature of the WIL programme to be completed by student lecturers including portfolios and assessment;
- Timetabling and integration of industry WIL into the broader programme;
- WIL participation rules and code of conduct for student lecturers participating in WIL;
- Health, safety and insurance during WIL;
- Procedure for working with host employers, including the criteria for their selection, the employer recruitment process, how placements will be planned, arranged and formalised with employers and the establishment and maintenance of placement partnerships.

4. Planning and staffing the industry WIL function

Faculties/departments need to plan how the industry/workplace WIL function will be managed within the structure of the faculty/department. Staff also need to be allocated to the function and their roles and responsibilities determined. There needs to be an overall coordinator – this role could be allocated to an existing staff member or a coordinator could be appointed. Functions that need to be staffed include:

- Recruitment of employers and making placement arrangements with them;
- WIL curriculum, materials and assessment and link to teaching practice and broader programme;
- Monitoring, supervision and support of student lecturers;

- Administration and record keeping.

5. Implementing industry WIL as an integrated element of the broader qualification programme

Industry-based WIL is not an element of a programme that stands alone. Like any other form of WIL, it involves 'curricular, pedagogic and assessment practices … that integrate formal learning and workplace concerns' (CHE, 2011:4). As such, it is a policy requirement that the industry-based WIL element be integrated and spread across qualification programmes (South Africa, 2013:15). Adequate preparation of students' knowledge, skills and attitudes, prior to placement, mentoring and guidance during placement, and reflection and assessment on completion, are integral elements of a single process.

TVET lecturer qualification programmes need to include WIL both as a core approach to vocational education that educators need to be able to implement, as well as the practical learning component of the programme that they must complete as students. The collaboratively developed Ad Dip (TVT) curriculum framework (Blom, 2016:11-14), which used a generic subject-area framework to group education-related knowledge, provides an illustration of how WIL can be incorporated into qualification programmes. This is discussed below.

- Foundations of education

  Foundations include subjects like educational philosophy, sociology, psychology and history, as well as comparative education. The growth and development of WIL as an element of education could be included in one or more of these subject.

- General pedagogy

  Subjects related to education practice in general could include WIL-related principles and practices. For instance, an outcome and related assessment criterion developed for this subject in the Ad Dip (TVT) curriculum framework (Blom, 2016: 12) that is applicable is:

Exit level outcomes	Assessment criteria
2.2 Demonstrate an understanding of students, vocational education and training, learning, curriculum and general instructional and assessment strategies	iii. Plan lessons and other learning experiences, including preparing students for workplace learning, by selecting appropriate teaching and learning strategies;

- Specialised pedagogy

  Education practice in specific subjects or subject areas could include WIL-related principles and practices.

Outcomes and related assessment criteria developed for this subject in the Ad Dip (TVT) curriculum framework (Blom, 2016: 12) that address workplace or WIL concerns are:

Exit level outcomes	Assessment criteria	
3.1 Demonstrate an understanding of concepts, methods, rules and practices of a TVET subject or field in order to create appropriate learning opportunities for students	i.	Apply concepts, methods, rules and practices in relevant fields of knowledge, which underpin the subject/learning fields of specialisation;
	iii.	Plan lessons and other learning experiences, including preparing students for workplace learning, by selecting appropriate teaching and learning strategies;
3.4 Apply the technical and workplace knowledge and skills associated with the subject field or area to enhance teaching and learning	i.	Engage with the world of work as related to a field of learning in relation to how students learn in, for and through work;
	ii.	Incorporate relevant workplace knowledge and skills into teaching and learning;
3.5 Prepare students for learning and work in real-life workplace environments	i.	Equip students for entry into workplace learning and participation in the world of work;

- Learning to teach and Learning from work

Teaching practice and industry-placements involve the placement of students in appropriate education and work-related settings. For this, students require placement, preparation for placement and post-placement activities. Students also require resources and assistance prior to, during and after placements.

In the Ad Dip (TVT) curriculum framework, the 'learning to teach' element of the programme incorporates learning from the 'learning from work' element in the following way (Blom, 2016: 13):

Exit level outcomes	Assessment criteria	
4.1 Demonstrate an understanding of teaching practices across a variety of technical and vocational education and training contexts, including classroom and workshop/laboratory practice; and in authentic workplaces and simulated environments	ii.	Apply teaching principles across a variety of contexts, including classrooms, workshops, laboratories and simulated environments;
	v.	Prepare and teach lessons that link the subject taught to current industry application, practices and technology through incorporating relevant industry examples and knowledge and skills;
4.2 Manage classrooms/workshops/ laboratories/simulated work environments	i.	Apply appropriate management and administration procedures in respect of classrooms, workshops, laboratories and simulated work environments;

- Contextual studies

Contextual studies involve the development of knowledge specific to a context. Contextual studies would commonly include vocational studies, adult education, community-based education, etc. The nature and dynamics of work would commonly be included in such subjects and, as a result, contribute towards WIL placements by providing theory or project-based work-related learning, and serve as a WIL modality.

Outcomes and related assessment criteria developed for this subject in the Ad Dip (TVT) curriculum framework (Blom, 2016: 13) that address WIL are:

Exit level outcomes	Assessment criteria
6.2 Demonstrate an understanding of the diverse challenges faced by technical and vocational education and training students	i. Apply health and safety measures appropriate to classrooms, workshops, laboratories and simulated workplaces;
6.3 Engage with professional peers in a community of practice to enhance the development of the profession and professional identities	i. Demonstrate the ability to work in teams, groups and organisations to the benefit of the TVET professions and professionals;

- Fundamental studies

  Fundamental studies include 'literacies'. Communication and computer literacy could include work-related exercises and serve as a WIL modality.

- Subjects involving the development of knowledge and skills

  'Content' subjects were not addressed in the exercise coordinated by Blom (2016). These subjects, however, form one of the core elements of a B Ed or Dip programme. Continually connecting subject content to practice is a WIL modality and serves to prepare students for placement.

In this way, the foundation for the industry-WIL element is laid down in other subjects and its integration back into the broader programme post-WIL is facilitated. Of core importance is the integration of workplace WIL into teaching practice (classroom WIL).

6. Providing for recognition of prior learning (RPL) for work experience in TVET lecturer qualifications

Each institution will need to determine if and how they will implement RPL for students with prior industry experience. The policy notes that students who enter qualification programmes might have gained teaching experience through work at a college and/or industry experience though prior qualifications or work in the field. It thus makes provision for the recognition of 'substantial' prior teaching and industry experience. In this regard, the policy states that prospective students 'can present themselves for **assessment of prior learning (APL)** against learning outcomes stipulated in the qualification for which they wish to register' (South Africa, 2013:14).

7. The placement period and timetabling

The implementation of the WIL function takes place throughout the year. Planning and preparation activities will take place at the beginning of the year and post-placement activities towards the end of the year. The placement could either take place in one block or could be spread over a few months in the year. The timeframe for the placement needs to be planned in relation to the other programme and implementation activities including when teaching practice will take place and how the teaching practice and industry WIL components of the qualification link with each other. For instance, it would be of value if student lecturers were able to incorporate some of their learning in the workplace into their lessons during teaching practice.

8. Identifying suitable host employers and building placement partnerships

A central function in the implementation of WIL is securing suitable host employers for student lecturers. Employers who can provide the required exposure and experience need to be identified and placement arrangements need to be made.

Criteria which can be used to identify employers for student lecturers are (SSACI, 2014a:33):

- Is the employer able to provide the kind of workplace exposure and experience sought?
- Is the employer able to provide a safe and healthy work environment?
- Can the employer provide appropriate on-site supervision and mentoring during WIL?
- Is the employer accessible to the student lecturer?
- Is the employer located in a safe area?

Once host employers have been identified, programme implementation plans need to be developed with them. According to SSACI (2014a:34):

> The value and benefits of a WIL engagement are directly proportional to how well it has been planned for with the host-employer concerned. The better the preparation, the better the chances that benefits will accrue to all participants.

Pre-WIL planning with employers is necessary to clarify expectations, programme requirements, what learning employers will be able to provide and how the experience will be structured. The rules and regulations for the placement need to be determined and health, safety and insurance-related issues addressed.

Arrangements also need to be made for the workplace to supervise and mentor student lecturers during their placement as well as for faculty staff member visits to observe or assess them in the workplace. It is advisable that WIL plans and arrangements are captured in formal agreements between the institution and employer (SSACI, 2014a:34).

The effectiveness and sustainability of WIL placement depends on the building of good employer relationships that could develop into long term partnerships.

9. Preparation of students for WIL

The success of workplace-based WIL depends on students being adequately prepared for it. Students need to understand the arrangements made for their placement, what will be expected of them in the workplace, how they should record their learning, how they will be assessed and what to do if there are problems (CHE, 2011:38). Orientations by the institution prior to placement and workplace inductions are helpful in preparing students (Gosling & Moon, 2001, cited in CHE, 2011: 38; Dippenaar & Carvalho-Makenkane, 2013:94).

10. Monitoring, evaluation and reporting on WIL for lecturers

The plan for implementing WIL for lecturers should include monitoring, evaluation and reporting on progress and achievements. Systematic planning, monitoring, evaluation and reporting promote good management, quality assurance and accountability. The monitoring, evaluation and reporting function needs to be set up to ensure that useful information is captured and that accurate and timely reports are sent to internal and external partners. Very importantly, lessons from each round of implementation need to inform the following next round.

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ATTACHMENT 1

Student Materials and Guide: Industry Work-Integrated Learning (WIL)

for the

Diploma AND Bachelor of Education in Technical and Vocational Teaching

Diploma AND Bachelor of Education
in
Technical and Vocational Teaching

STUDENT MATERIALS AND GUIDE

Industry/Workplace Work-Integrated Learning (WIL)

May 2019

Developed by

Vanessa Taylor,
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and

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Cape Peninsula University of Technology

through a university collaborative process
funded by the Department of Higher Education and Training

Writing and development

These student materials were developed to support universities implement the workplace/ community organisation/site WIL curriculum framework for the Diploma in Technical and Vocational Teaching and the Bachelor of Education in Technical and Vocational Teaching.

The Swiss South African Cooperation Initiative was contracted by the Cape Peninsula University of Technology to develop the materials and the development was funded by the DHET through the Teaching and Learning Development Capacity Improvement Programme (TLDCIP). The materials were written by Vanessa Taylor and Andre van der Bijl led and managed the development process and provided writing support.

The curriculum framework and student materials were developed through a collaborative process that included academics from universities, Technical and Vocational Education and Training (TVET) colleges, Community Education and Training Colleges (CETCs) and individuals representing adult and community education and training concerns, and Department of Higher Education and Training (DHET) officials. Inputs were made through a series of workshops held in 2017 and 2018. Participants who contributed to the development of the curriculum and student materials are:

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Materials referenced

These materials incorporate ideas from a variety of South African and international WIL student materials. They were strongly informed by SSACI's WIL for Lecturers Programme Portfolio of Evidence and include elements adapted from this. The full set of materials consulted in the development process are listed in the table below.

AUTHOR	YEAR	MATERIALS
SSACI	2016 & 2018	SSACI WIL for Lecturers Programme Portfolio of Evidence
SSACI	2008 - 2015	Work-Based Experience (WBE), NCV student logbooks and task books (2008-2015) for: engineering programmes (electrical and mechanical); business programmes (office administration, finance, management, marketing, transport and IT) and services programmes (hospitality and tourism)
SSACI	2016	N6 Log Books: Financial Management N6 Internship Workplace Log Book (2016) and Hospitality and Catering Workplace Learning Log Book (2015)
UFS	2014	WIL materials for TVET lecturers (2014), including civil engineering, human resource management, mechanical engineering, marketing, electrical and financial management
CPUT, Faculty of Education	2012 & 2016	Teaching Practice Portfolios for: PGCE: FET (2012) and B Ed: FET (2016)
CPUT, Department of Chemical Engineering	2014	Experiential Learning Guide
CPUT, Department of Horticultural Sciences	2012	Horticulture practice subject guide
CPUT / Wolf	2016	WIL activity log sheet materials for mechanical engineering in Wolf. 2016. Multidisciplinary Assessment Engineering. A community-of-practice approach to WPL assessment.
UJ, Dep of Mechanical Engineering Technology	2006	Experiential Learning Guideline: National Diploma Mechanical Engineering (in Shifting Spanner or Shifting Expectations – An appeal to Engineering Companies, SASCE 2006 International Conference, Vanderbijlpark)
Martin & Hughes	2009	How to make the most of work-integrated learning: a guide for students, lectures and supervisors, Massey University, New Zealand
Hrabec, M.	2011	Teacher Industry Placement. Methodology prepared by Hospitality Training Institute, Mikulov, Czech Republic
NBI on behalf of JIPSA	2009	Professional Development Placement Programme for NC(V) Hospitality Studies Lecturers, Industry Release Programme
Government of Western Australia	2012	VET in Schools, Creating Opportunities. Teacher Industry Placement Scheme: Information Handbook; Teacher's Daily Journal; and Evaluation Form

Acronyms

Adv Dip	Advanced Diploma
B Ed	Bachelor of Education
CPUT	Cape Peninsula University of Technology
DHET	Department of Higher Education and Training
Dip	Diploma
DUT	Durban University of Technology
NGO	Non-government organisation
NMU	Nelson Mandela University
NPDE: FET	National Professional Diploma In Education: Further Education and Training
SSACI	Swiss South African Cooperation Initiative
TIPS	Teacher Industry Placement Scheme
TLDCIP	Teaching and Learning Development Capacity Improvement Programme
TUT	Tshwane University of Technology
TVET	Technical and Vocational Education and Training
TVT	Technical and Vocational Teaching
UCT	University of Cape Town
UFH	University of Fort Hare
UFS	University of the Free State
UJ	University of Johannesburg
UKZN	University of Kwa-Zulu Natal
UL	University of Limpopo
UNISA	University of South Africa
UWC	University of the Western Cape
VET	Vocational education and training
VUT	Vaal University of Technology
WIL	Work-Integrated Learning
Wits	University of the Witwatersrand
WSU	Walter Sisulu University

Contents

Section 1: Programme overview and preparing for WIL

1.1. Introduction

Welcome to the industry/workplace work-integrated learning (WIL) programme of the Diploma (TVT) and the B Ed (TVT).

The industry/workplace WIL element requires you to spend time in a workplace that is relevant to your subject specialisation. Depending on the subject, the workplace in which you complete your WIL could be a factory, office or other work site. The time requirement and credit value of this component of your diploma or B Ed course is as follows.

SUBJECT SPECIALISATION	DIPLOMA (TVT)		B ED (TVT)	
	Time in workplace	**Credits**	**Time in workplace**	**Credits**
Technical or vocational	• Total: 9 weeks/45 days • Per year: 3 weeks/15 days	36	• Total: 16-12 weeks • Per year: 4-5 weeks	64-80
General or academic	• Total: 2 weeks/10 days • Per year: 3-4 days	8	• Total: 4 weeks • Per year: 1 week/5 days	16

The industry/workplace WIL programme forms part of the practical component of the diploma (TVT) and B Ed (TVT), which includes both learning to teach through teaching practice at a college and learning about the application of your subject in a workplace. The university is responsible for arranging and supervising the completion of both your teaching practice and industry WIL and facilitating the links between these two forms of practice.

As a TVET lecturer, you need to prepare your students for work. Linking the teaching of your subject to actual workplace practice and requirements will facilitate this by making student learning more meaningful and relevant and producing more employable graduates. You will thus be expected to incorporate what you learn through your industry WIL into the teaching of the subject during teaching practice.

This guide has been prepared to support you to complete the requirements of the industry/workplace WIL programme of the Diploma (TVT) and the B Ed (TVT).

Section 1 provides **information on the programme and what it requires** from you, how you will be supported and how to prepare for WIL.

Section 2 includes the **WIL assignments** you need to complete to meet the requirements of the programme.

Section 3 provides an **outline for your WIL portfolio** and includes the **assessment rubric** that will be used to assess it.

Section 4 includes subject topic lists that you can refer to when developing a subject checklist in assignment 1.

1.2. Programme overview and outcomes

TVET colleges are expected to produce work-ready, employable graduates. In order to do this, TVET lecturers must:

- Be competent in the theoretical and practical aspects of the subjects they teach;

- Have up-to-date knowledge of the application in, and relevance to, the workplace of the subjects they teach, including new industry technologies, trends and developments; and

- Be able to prepare learners for the demands and requirements of the workplace.

A basic competence included in the government's policy on professional qualifications for TVET lecturers, is thus:

> Professionally qualified lecturers must be knowledgeable about the demands that will be made on their learners in the workplace, and able to use the subject they are teaching to help equip their learners to meet these demands (South Africa, 2013: 40).

The aims of the industry/workplace work-integrated learning (WIL) programme for the Dip (TVT) and B Ed (TVT) are for you to:

1. Learn about the application of your subject specialisation in an industry workplace, including work processes, systems, technology and standards used.

2. Learn about the structure, staffing, culture and rules of an industry workplace that practises in your subject's field.

3. Identify employer requirements and expectations of employees who work in your subject's field with regard to knowledge, skills and attributes.

4. Update and improve your subject knowledge and skills.

5. Identify how the college curriculum is similar and different to current industry practice and requirements.

6. Reflect on how to teach your subject in a way that it adequately prepares college students for the requirements of work.

7. Reflect on the benefits of collaboration between colleges and industry.

The outcomes for the industry/workplace WIL programme of the Diploma (TVT) are:

	Learning Outcomes	Persons credited with this outcome are able to:
1.	Demonstrate knowledge of the current application, requirements and relevance of specialised subject fields in associated workplaces	i. Show knowledge of current application of the subject fields in workplaces, including work processes, technology and standards ii. Identify and describe organisational and cultural aspects in particular workplaces applicable to subject fields, including organisational structure, rules and regulations, employment and training practices iii. Identify and review employer requirements of employees that work in specialised subject fields with regard to knowledge, core and soft skills, and personal and professional attributes

2.	Demonstrate practical skills developed in subject specialisation in associated workplaces and reflect on relevance for teaching and learning	i.	Demonstrate practical skills developed in subject specialisation in the workplace
		ii.	Review extent of practical skills developed in the workplace and relevance to the teaching of subject specialisations
3.	Reflect on workplace knowledge and skills requirements in specialised subject fields and the implications for the curriculum, teaching and learning	i.	Reflect on core knowledge and skills requirements in specialised subject fields in associated workplaces
		ii.	Compare the curriculum with prevailing practices and requirements in the workplace and discuss the implications for teaching and learning
		iii.	Identify and discuss strategies for incorporating current industry requirements and practices in the curriculum, teaching and learning
4.	Reflect on industry WIL experiences depicting lessons learnt for teaching of subject specialisation and collaboration between colleges and industry	i.	Review and report on lessons learnt and their applicability to teaching the subject
		ii.	Review benefits of college-workplace collaboration

The outcomes for the industry/workplace WIL programme of the B Ed are:

	Learning Outcomes		*Persons credited with this outcome are able to:*
1.	Demonstrate knowledge of the current application, requirements and relevance of specialised subject fields in associated workplaces	i.	Show knowledge of current application of the subject fields in workplaces, including work processes, technology and standards
		ii.	Identify and describe organisational and cultural aspects in particular workplaces applicable to subject fields, including organisational structure, rules and regulations, employment and training practices
		iii.	Identify and review employer requirements of employees that work in specialised subject fields with regard to knowledge, core and soft skills, and personal and professional attributes
2.	Demonstrate practical skills developed in subject specialisation in associated workplaces and review relevance for teaching and learning	i.	Demonstrate practical skills developed in workplace to teach practical components of subject specialisation
		ii.	Review extent of practical skills developed in the workplace and relevance to the teaching of subject specialisations
3.	Analyse and reflect on workplace knowledge and skills requirements in specialised subject fields and the implications for the curriculum, teaching and learning	i.	Analyse and reflect on core knowledge and skills requirements in specialised subject fields in associated workplaces
		ii.	Analyse and compare the curriculum in subject fields with prevailing practices and requirements in the workplace and determine the implications for teaching and learning
		iii.	Identify and discuss strategies for incorporating industry requirements and practices in the curriculum, teaching and learning

| 4. | Critically reflect on industry WIL experiences depicting lessons learnt for teaching the subject specialisation and the benefits of college-workplace collaboration | i. | Critically appraise and report on lessons learnt and their applicability to teaching the subject |
| | | ii. | Critically reflect on benefits of college-workplace collaboration |

The WIL programme is structured around the following core activities:

1. Prepare for industry/workplace WIL placement;
2. Complete Assignment 1: Subject topic checklist, daily register, activity log and journal;
3. Complete Assignment 2: Workplace research;
4. Complete Assignment 3. Observation of job/work task or function;
5. Complete Assignment 4: Host employer evaluation of student lecturer;
6. Complete Assignment 5: WIL reflection report, presentation and portfolio submission;
7. Submit all assignments in a WIL portfolio.

1.3. Responsibilities, supervision and mentoring

ROLES AND RESPONSIBILITIES

Industry/workplace WIL includes three main role players: the institution providing the qualification, you, the student lecturer, and the host employer. The successful implementation of industry WIL and the achievement of the expected outcomes depend on each role player fulfilling his or her responsibilities. These are outlined below.

Responsibilities of the university

1. To develop policy, plans and regulations that support your completion of the workplace/community WIL requirements of the qualification.
2. To provide you with a structured and assessed industry/workplace WIL programme.
3. To ensure that you are fully informed about the requirements of the programme.
4. To recruit suitable employers to host you for industry/workplace WIL.
5. To brief the host employers on the requirements of the WIL programme and plan for its implementation with the organisation, including the host organisation's mentoring function.
6. To inform you about the implementation plan and arrangements made with host employers and their requirements with regard to work activities, working hours, dress, health and safety, confidentiality and other rules.
7. To supervise you and support you to complete the requirements of the industry/workplace WIL programme.
8. To assist you to resolve any problems that might arise during your work placement.

Responsibilities of the student lecturer

1. To comply with the university's rules and requirements for your participation in industry/workplace WIL.
2. To comply with the requirements of the industry/workplace WIL programme of your qualification.
3. To plan and prepare for industry/workplace WIL placement in consultation with the university supervisor.
4. To liaise with the university supervisor on the recruitment of a suitable host employer for you.
5. To prepare for the placement by finding out about the host employer and familiarising yourself with the requirements of the WIL programme and assignments to be completed.
6. During the placement:
   a) To behave professionally and responsibly and adhere to the host employer's rules and requirements, including working hours, health and safety procedures, management procedures, time-keeping, dress code, etc.;
   b) To adhere to instructions from the workplace supervisor and to complete all work activities as required;
   c) To report any problems that arise to your institution and the employer immediately, and to try to resolve these timeously; and

d) To complete the required documentation and obtain the necessary authorisation.

7. To reflect on your WIL experience and learning and to identify lessons for teaching and future WIL placements.

8. To provide feedback to the host employer and institution on the placement.

9. To incorporate the learning that takes place during the industry/workplace WIL into your teaching practice.

10. To complete your WIL assignments and the portfolio as required and submit for assessment.

Responsibilities of the host employer

1. In consultation with the university and you, the student lecturer, to plan a programme of workplace activities that will address your WIL programme learning requirements.

2. To appoint a staff member to supervise, mentor and guide you during your work placement.

3. To brief company staff who will work with you with regard to the requirements of the WIL programme and the plan for its implementation in the workplace.

4. To induct you into the workplace and its work, operations, technology, systems, procedures and rules.

5. To allow you to carry out the activities in the plan as agreed with the university.

6. To ensure that your work experience conditions comply with the Occupational Health and Safety Act (OHSA) and other relevant legislation and that you are not exposed to unnecessary risks.

7. If possible, to provide you with copies of workplace documents relating to your subject and allow you to take photographs.

8. To allow university representatives to visit the workplace to monitor and assess you.

9. To report problems or concerns related to you or to the placement to the university and to assist with the resolution thereof.

10. To confirm your completion of the agreed activities by completing and signing the relevant documents.

11. To provide feedback to the university on your completion of WIL and the implementation of the placement.

SUPERVISION AND MENTORING

The university will appoint a staff member to support and supervise your completion of the industry/workplace WIL programme and your host employer will appoint a supervisor/mentor to oversee and support your learning in the workplace. The responsibilities of the university supervisor and host employer mentor are as follows:

University supervisor

- To ensure that you understand the requirements of the industry/workplace WIL programme and what needs to be done before, during and after the placement.
- To ensure that the employer with whom you have been placed is able to provide the exposure and experience required.

- To ensure that the host employer is clear about the requirements of the WIL programme and has a plan on how to structure the placement on a day-to-day basis.
- To brief you on the host employer's expectations, requirements, rules and plan for the placement.
- To advise and support you on the completion of the WIL programme, as necessary.
- To monitor and visit you in the workplace during the placement.
- To inform you about the university's policy and procedure for dealing with problems that arise during WIL and assist you with resolving any problems you may experience.
- To liaise with the workplace mentor, as necessary.

Workplace supervisor/mentor

- To ensure that you are properly inducted into the workplace and are briefed about the expectations, requirements, rules and the plan for the placement.
- To supervise, guide and support you during the placement.
- To ensure that you are given an opportunity to obtain the exposure and experience required, as per the agreed plan. If necessary, this will involve liaising with and arranging for you to be placed with particular staff in different departments.
- To answer all your questions, provide input on the activities and requirements of the workplace, and give you feedback on your participation, behaviour and performance.
- To ensure that the employer completes and signs the required WIL documents.
- To inform you about how problems and difficulties that arise should be dealt with and assist to resolve any problems.
- To liaise with the university supervisor, as necessary.

1.4. Dealing with problems during WIL

Various problems can arise during a WIL placement. These commonly include:

- The employer not providing the required workplace exposure or experience, either owing to being a poor match for your subject requirements or by not providing suitable learning and exposure opportunities;

- You not being able to attend during the agreed dates owing to illness or other factors;

- Communication or personal difficulties between you and the workplace mentor or with other company employees;

- You being required to participate in or complete activities that are either totally irrelevant to your learning needs or which might be dangerous, unethical or problematic in some other way;

- Sexual or other forms of harassment or abuse of you in the workplace.

You should report any problems you are experiencing to your workplace mentor and university supervisor. If the problem is with the workplace supervisor and you feel unable to address it directly with him/her, you should first speak to your university supervisor about it and agree on how to proceed.

It is the responsibility of your university supervisor and workplace mentor to identify and deal with problems that arise. This can be done telephonically, via email or during meetings. A record of problems and steps taken to resolve them should be kept. If a university supervisor and workplace mentor are unable to resolve a problem, they should escalate it to a higher level in the university and workplace.

Each university will have its own specific policy and procedure for dealing with problems that arise during WIL, which might differ slightly from what is described above. You must make sure that you are familiar with the details of the university's policy and procedure before you start with the work placement and that you deal with problems that arise accordingly.

1.5. The WIL process

The completion of WIL is a process that includes a number of activities that fall into three broad implementation phases, as illustrated in the diagram below. You will be supported through each phase of the industry/workplace WIL process by the university.

The main activities to be completed in each phase of the WIL process are listed below, as well as who has overall responsibility for their completion.

Before WIL: Planning and preparation for WIL placement

	ACTIVITIES	RESPONSIBLE	STUDENT MATERIALS
1.	Student lecturers are briefed about the programme and familiarise themselves with the requirements and materials/assignments to be completed	Student lecturer (with input from university supervisor)	• Student lecturer materials and guide
2.	Student lecturers register for the WIL programme and complete the indemnity form	Student lecturer (with input from university supervisor)	• Section 1: Student lecturer registration form • Section 1: Indemnity form
3.	Student lecturers identify subject topics to focus on during their WIL placement	Student lecturer (with support of university subject lecturer(s) and supervisor)	• Section 2, Assignment 1: Subject topic checklist
4.	Suitable organisations are identified and recruited to host student lecturers	University (with input from student lecturer)	• Student lecturer materials and guide, section 1
5.	Host organisations are briefed and placement plans are developed with them	University (with input from student lecturer)	• Student lecturer materials and guide, section 1

During WIL: Completion of WIL placement

	ACTIVITIES	RESPONSIBLE	STUDENT MATERIALS
1.	Student lecturers complete the WIL placement activities and materials, as required	Student lecturer (supported by host organisation supervisor)	• Section 1: Host workplace induction • Section 2, Assignment 1: Subject topic checklist, daily register, activity log and journal • Section 2, Assignment 2: Workplace research • Section 2, Assignment 3. Observation of job/work task or function
2.	Student lecturers are guided and supervised during their placement	University supervisor (supported by host organisation supervisor/mentor)	• Student lecturer materials and guide
3.	Host organisation completes and signs required placement documents	Student lecturer (supported by host organisation supervisor/mentor)	• Section 2, Assignment 1: daily register • Section 2, Assignment 4: Host employer evaluation of student lecturer

After WIL: Complete post-WIL placement activities

	ACTIVITIES	RESPONSIBLE	MATERIALS
1.	Student lecturers finalise all assignments completed during the WIL placement and then complete the final assignment (assignment 5)	Student lecturer (supported by university supervisor)	• Section 2, Assignment 1: Subject topic checklist, daily register, activity log and journal • Section 2, Assignment 2: Workplace research • Section 2, Assignment 3. Observation of job/work task or function • Section 2, Assignment 5: WIL reflection report, presentation and portfolio submission • Section 3: Submit all assignments in a WIL portfolio
2.	Student lecturers provide feedback at the university on their WIL placement and learning	Student lecturer (supported by university supervisor)	• Section 2, Assignment 5: WIL reflection report, presentation and portfolio submission
3.	The host organisation is thanked and feedback is provided on the student lecturer's WIL placement and experience	Student lecturer and university supervisor	• None
4.	Student lecturers plan for their integration of learning from industry/workplace WIL into teaching practice	Student lecturer (supported by university supervisor)	• Section 2, Assignment 2: Workplace research, Template 4: Workplace resources to use in teaching • Section 2, Assignment 5: WIL reflection report, presentation and portfolio submission

1.6. Recruitment of host organisation and preparing and registering for WIL

IDENTIFYING A SUITABLE HOST EMPLOYER FOR WIL

While the university has overall responsibility for arranging your WIL placement, you also need to take responsibility for ensuring that the employer identified, meets your learning and exposure requirements, which are determined by your subject specialisation and prior industry knowledge and experience. The effectiveness of your industry WIL depends on there being a good match between your learning needs and the nature of the host employer's business. An employer that operates in your subject field and engages in activities in which your industry learning and exposure requirements are greatest, thus needs to be identified.

The following criteria are important when selecting a host employer:

- Can the employer provide the kind of workplace exposure and experience sought?
- Can the employer provide a safe and healthy work environment?
- Can the employer provide appropriate on-site supervision and mentoring during WIL?
- Is the employer geographically accessible to the student lecturer?

You need to think about and make input into the process of identifying your host employer to ensure that the placement meets your WIL needs. A starting point is to find out about different employers who operate in your subject field that could be potential hosts for you. A good way to do this is through an internet search.

It is possible that you already have one or more employers in mind with whom you would like to complete WIL. The university might also have a database of employers that operate in your subject field that you could choose from.

If you prefer to complete your WIL at a particular employer, you need to communicate this to the university industry WIL supervisor. The university might already have a relationship with this employer, which would make it easier to arrange the placement.

STUDENT LECTURER REGISTRATION AND PROFILE FORM

Complete the student lecturer registration and profile form. The profile will be used to provide potential host organisations with information on you and your subject requirements during the recruitment and planning process with them.

PERSONAL INFORMATION				
Full name				
Contact details	Cell			
	Email			
Residential address				
ID number			Age	
Medical aid			Number	
Prior work experience				

TEACHING SUBJECT(S) AND WORKPLACE EXPOSURE/EXPERIENCE NEEDED	
Name(s) of relevant subject(s)	
Workplace exposure and experience needed	

STUDENT INDEMNITY FORM

Complete the indemnity form below.

Industry WIL indemnity form

I _____ (full name and surname), hereby

indemnify _____ (name of temporary host employer),

its employees and agents against any claims of any nature whatsoever which may be

brought against them by me, the trainee, _____

(full name and surname of the trainee) or any third party or other person claiming on my

behalf or arising from my death or injury or loss of or damage to my property as a result of

entering into and remaining on the premises of _____

(name of temporary host employer)'s whether the claim is based on the negligence of

_____ (name of temporary host employer) or on the

negligence of any of the employees or agents for which they may be liable.

_____   _____
Name (full name and surname)   Designation (trainee)

_____   _____
Signature   Date

1.7. Host workplace induction

A workplace induction provides essential information about the organisation, what it does, its structure, premises, policies, procedures, rules and requirements for staff or trainees. Inductions are either done before the start of a WIL placement during an orientation visit or on the first day of the placement.

Use the checklist below as a guide for the information that should be obtained during your induction. Request that the host organisation gives you a tour of its premises and facilities as part of your induction.

WORKPLACE INDUCTION CHECKLIST	✓ Information obtained / activity completed
1. Workplace plan and procedure for placement	
2. Workplace/organisation supervisor/mentor and any other managers or staff members that will work with the student lecturer during placement	
3. Organisation vision, mission and values	
4. Organisational structure	
5. Organisation premises and facilities	
6. Working hours and breaks	
7. Location of parking, bus stop, train station or taxi rank (as applicable)	
8. Health, safety, security and confidentiality requirements	
9. Dress code and personal protective equipment (as applicable)	
10. Procedure to follow if the student lecturer cannot attend on any day or will be late	
11. Any other rules and requirements to follow during placement	
12. Code of conduct and disciplinary procedure	
13. Any important policies or procedures for work area(s) related to the student lecturer's subject field	
14. Tour of premises and facilities	

Section 2: WIL assignments

2.1 Introduction

This section contains the assignments that need to be completed and submitted as part of your WIL portfolio. The table below provides an overview of the elements of each assignment and in which year of the Diploma or B Ed programme each should be completed.

Diploma: Year 1 – 3

ASSIGNMENT	ELEMENTS	YEAR TO COMPLETE
1. **Assignment 1:** Subject checklist, daily register, activity log and journal	• Template 1: Subject topic checklist	YEAR 1, 2 & 3
	• Template 2: Daily attendance register	
	• Template 3: Daily activity log and weekly reflective journal	
2. **Assignment 2:** Workplace research	• Template 1: Overview of host employer	YEAR 1
	• Template 2: Jobs/roles in subject field	YEAR 2
	• Template 3: Industry changes or developments in subject field	YEAR 3
	• Template 4: Workplace resources to use in teaching	YEAR 3
3. **Assignment 3:** Observation of job/ work task or function	• Template: Observation of job/work task or function	YEAR 1, 2 & 3
4. **Assignment 4:** Host employer evaluation of student lecturer	• Template: Host employer evaluation of student lecturer	YEAR 1, 2 & 3
5. **Assignment 5:** WIL reflection report, presentation and portfolio submission	• WIL reflection report	YEAR 1, 2 & 3
	• PowerPoint slides on WIL experience	
	• Presentation on WIL experience	
	• Compilation and submission of portfolio	

B Ed: Year 1 – 4

ASSIGNMENT	ELEMENTS	YEAR TO COMPLETE
1. **Assignment 1:** Subject checklist, daily register, activity log and journal	• Template 1: Subject topic checklist	YEAR 1, 2, 3 & 4
	• Template 2: Daily attendance register	
	• Template 3: Daily activity log and weekly reflective journal	
2. **Assignment 2:** Workplace research	• Template 1: Overview of host employer	YEAR 1
	• Template 2: Jobs/roles in subject field	YEAR 2
	• Template 3: Industry changes or developments in subject field	YEAR 3
	• Template 4: Workplace resources to use in teaching	YEAR 3
	• Template 5: Personal research question	YEAR 4
3. **Assignment 3:** Observation of job/ work task or function	• Template: Observation of job/work task or function	YEAR 1, 2, 3 & 4
4. **Assignment 4:** Host employer evaluation of student lecturer	• Template: Host employer evaluation of student lecturer	YEAR 1, 2, 3 & 4
5. **Assignment 5:** WIL reflection report, presentation and portfolio submission	• WIL reflection report	YEAR 1, 2, 3 & 4
	• PowerPoint slides on WIL experience	
	• Presentation on WIL experience	
	• Compilation and submission of portfolio	

You must **familiarise yourself with the requirements and elements of each assignment thoroughly** before the start of your WIL and complete all the pre-placement components. The ease with which the assignments are completed depends on your being well prepared.

2.2 Assignment 1: Subject topic checklist, daily register, activity log and journal

ELEMENTS OF ASSIGNMENT 1

1. Template 1: Subject topic checklist
2. Template 2: Daily attendance register
3. Template 3: Daily activity log and weekly reflective journal

INSTRUCTIONS FOR COMPLETING ASSIGNMENT 1

- This assignment includes three templates:

- **Template 1, is a checklist of subject topics** that you will be expected to focus your WIL learning on in the workplace.

  o *Before the start of your WIL*, create a topic checklist for your subject specialisation based on the college curriculum. Your checklist should include topics you would like to receive exposure to during WIL. The appendix to this guide includes some subject checklists which can be used as a guide when creating the checklist. If a checklist is not included for your subject, refer to the college curriculum for that subject. Consult your university subject lecturer to assist with the development of your checklist.

  o *At the end of your WIL*, tick off the areas in which you obtained exposure or experience and the extent of this. You and the workplace supervisor/mentor must also comment on the extent to which you were able to develop the required knowledge and skills. The completed checklist must be signed by you and the workplace supervisor/mentor. It is **your responsibility** to ensure that the checklist is fully completed and signed by the supervisor/mentor.

- **Template 2, the daily register**, needs to be completed and signed by you and the workplace supervisor/mentor. If you complete WIL at more than one workplace/organisation, a register needs to be completed for each of them. It is **your responsibility** to ensure that it is signed by the workplace supervisor/mentor.

- **Template 3 is a daily activity log and weekly reflective journal**. You should complete the activity log every day while your WIL experience is fresh and the weekly reflective journal at the end of each week. The activity log and journal must be completed as fully and thoughtfully as possible.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

TEMPLATE 1: SUBJECT TOPIC CHECKLIST

NAME OF SUBJECT:					
Subject topics or outcomes in which exposure or experience sought	**Confirmation of WIL exposure and experience gained in each content area** (to be completed by student lecturer and approved by host organisation supervisor/ mentor)				
	NONE ✔	RATING EXPOSURE ✔		RATING EXPERIENCE ✔	
	Gained no exposure or practical experience	Gained some exposure (mostly through observation)	Gained good exposure (mostly through observation)	Gained some practical experience (through assisting with work activities OR practice in in-house workshop or training facility)	Gained good practical experience (through supervised completion of work activities OR practice in in-house workshop or training facility)
SUBJECT KNOWLEDGE AND SKILLS CONTENT AREAS (add rows as necessary)					
Topic 1					
Topic 2					
Topic 3					
Topic 4					
Topic 5					
Topic 6					
Topic 7					
Topic 8					
Topic 9					
Topic 10					
Topic 11					
Topic 12					
Topic 13					
Topic 14					
Topic 15					
Topic 16					

SIGNATURES AND COMMENTS	
Student Lecturer	Workplace supervisor/mentor
Name	Name
Signature	Signature
Comment on extent of subject knowledge and skills developed	Comment on extent of subject knowledge and skills developed

TEMPLATE 2: DAILY ATTENDANCE REGISTER

Name of student lecturer			
Name of host organisation			
Address of host organisation			
Name of supervisor/mentor			
Job/role of supervisor/mentor			
Duration and dates of placement	Total days	Start date	End date
Confirmation that the WIL placement register is correct			
Student lecturer signature		Date	
Supervisor/mentor signature		Date	

Complete the daily attendance register in full **for each day spent** in the workplace.

Date (insert the date for each day)	Time in	Time out	Student lecturer signature per day	Workplace representative's signature per day	
				Name	**Signature**
WEEK 1					
Day 1: _____ (date)					
Day 2: _____ (date)					
Day 3: _____ (date)					
Day 4: _____ (date)					
Day 5: _____ (date)					
WEEK 2					
Day 6: _____ (date)					
Day 7: _____ (date)					
Day 8: _____ (date)					
Day 9: _____ (date)					
Day 10: _____ (date)					

TEMPLATE 3: DAILY ACTIVITY LOG AND WEEKLY REFLECTIVE JOURNAL
(Complete each year of Diploma and B Ed)

DAILY ACTIVITY LOG

INSTRUCTIONS FOR COMPLETING DAILY ACTIVITY LOG
• *Complete a daily log entry **for each day or part-day** of your placement. Describe what you did, saw and learned. Include drawings, if applicable.*   • *A new template needs to be used for each day.*

DAILY ACTIVITY LOG	Day number		Date	
Work area(s) or department(s) visited or placed in				
Describe and comment on the activities you observed or participated in and what you learned				

WEEKLY REFLECTIVE JOURNAL

INSTRUCTIONS FOR COMPLETING WEEKLY REFLECTIVE JOURNAL
• *At the end of each week, complete a reflective report on your learning and experience during the week and how you can apply what you learned to the teaching of your subject.*   • *A new template needs to be used for each week.*

WEEKLY REFLECTIVE JOURNAL	Start date		End date	
List knowledge, skills and personal/professional attributes exposed to or developed				
Subject knowledge and skills		Personal/professional soft skills, attributes and attitudes		
Reflection: What were the most important things you learned and why? What challenges did you experience and how did you resolve these?				
How can you apply what you learned to the teaching of your subject?				

2.3 Assignment 2: Workplace research

Elements of assignment 2

1. Template 1: Overview of host employer
2. Template 2: Jobs/roles in subject field
3. Template 3: Industry changes or developments in subject field
4. Template 4: Workplace resources to use in teaching
5. Template 5: Personal research question (only for B Ed)

Instructions for completing assignment 2

- Assignment 2 includes 5 templates.

- Template 5 is only for B Ed students.

- Complete each template as fully as possible.

- The table below specifies which templates you should complete for assignment 2 in each year of your programme.

Diploma: Templates to be completed in each year		
YEAR 1	YEAR 2	YEAR 3
• Template 1: Overview of host employer	• Template 2: Jobs/roles in subject field	• Template 3: Industry changes or developments in subject field • Template 4: Workplace resources to use in teaching

B Ed: Templates to be completed in each year			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
• Template 1: Overview of host employer	• Template 2: Jobs/roles in subject field	• Template 3: Industry changes or developments in subject field • Template 4: Workplace resources to use in teaching	• Own research question

- Template 1 needs to be completed for each organisation you complete a placement with. It is intended that you complete it in year 1 of the programme. However, if you visit a different organisation in any of the other years of the programme, you need to complete template 1 again for that organisation and submit it in the applicable year.

- Template 5 must be completed in the final year of the B Ed programme. At the start of this year, identify a research question to investigate in the workplace in consultation with your university supervisor or subject lecturer.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

TEMPLATE 1: OVERVIEW OF HOST EMPLOYER
(Complete template 1 for each organisation visited in year 1 of the Diploma and B Ed)

1. What type of employer are you visiting?

Government department		Education institution	
Government organisation		Non-profit organisation	
Private company		Other	

2. What is the size of the organisation?

Large		Medium		Small		Micro	

3. Approximately how many employees are there?

4. What economic or development sector does the employer belong to?

5. What is the core business of the workplace? Name some of its main products and services.

6. Who does the organisation serve: clients, customers or community and what needs are being met by the products or services provided?

7. What is the culture and ethics of the workplace including dress code and code of conduct?

8. Describe or draw the organisational structure. Include the following, where applicable: board, CEO/manager/owner, main work areas or departments and their function(s).

9. Name **three** key jobs/roles in the company. Indicate in which work area or department these jobs are performed. Indicate the level of each job.

Name of job/role	Work area or department	Level of job ✓		
		Junior	Middle	Senior
1.				
2.				
3.				

10. What are the top **two to three** health, safety, environmental or security risks in the workplace and how are each of these managed?

Top health, safety environmental or security risks	How managed

11. What is the background of the employer? When and how did it start and how long has it been in existence?

12. What factors enable an organisation like your host employer to start, grow and succeed?

13. Name two other organisations that provide similar products or services to your host employer.

TEMPLATE 2: JOBS / ROLES IN SUBJECT FIELD
(Complete one template for all organisations visited in year 2 of Diploma and B Ed)

1. Entry level jobs / roles in subject field

Identify and provide an overview of **THREE jobs/job types/roles** (entry level) that college graduates in your subject field could do in workplaces similar to those you are visiting.

1. NAME OF JOB / ROLE							
Main requirements and expectations							
• *Main duties to be performed*							
• *Core knowledge and skills required*							
• *Important soft skills, personal/professional attributes and attitudes*							
• *Work conditions, e.g. work hours, employment contract, level of noise or danger, etc.*							
Level of job/role pressure ✓		High		Mid		Low	
• *Main pressures*							
Career/progression path in this type of job/role							

2. NAME OF JOB/ROLE							
Main requirements and expectations							
• *Core tasks to be performed*							
• *Core knowledge and skills required*							
• *Important soft skills, personal/professional attributes and attitudes*							
• *Work conditions, e.g. work hours, employment contract, level of noise or danger, etc.*							
Level of job/role pressure ✓		High		Mid		Low	
• *Main pressures*							
Career/progression path in this type of job/role							

3. NAME OF JOB/ROLE						
Main requirements and expectations						
• *Core tasks to be performed*						
• *Core knowledge and skills required*						
• *Important soft skills, personal/professional attributes and attitudes*						
• *Work conditions, e.g. work hours, employment contract, level of noise or danger, etc.*						
Level of job/role pressure ✓	High		Mid		Low	
• *Main pressures*						
Career/progression path in this type of job/role						

2. Training provided by the organisation

Is in-house or external training provided for staff members performing these jobs/roles in any of the workplaces/organisations you visited? Provide details.

3. Opportunities for employment in the organisation

What employment opportunities are there in your subject field at the workplace(s)/ organisation(s) you visited (or similar organisations) and how are staff recruited? Provide details.

TEMPLATE 3: CHANGES OR DEVELOPMENTS IN YOUR SUBJECT FIELD
(Complete one template for all workplaces visited for WIL)

In the table below, **list three key developments or changes that have taken place in industry in your subject field** in the last 5-8 years. For instance, have there been changes in products and services, technology and work processes, staffing and management, or government and industry regulations? Note the factors that have driven each change and indicate if you saw evidence of the change at your host organisation(s).

Important developments or changes in industry in subject field	Key factors that have driven this development change in the sector	✓ Evidence of this change at your host organisation(s)
1.		
2.		
3.		

TEMPLATE 4: WORKPLACE RESOURCES TO USE IN TEACHING
(Complete one template for all workplaces visited for WIL)

1. Identify and collect workplace documents and resources, including photographs or videos that could be used in the teaching of your subject to improve its relevance to actual practice and requirements. If it is not possible to get a copy of a document, take a photograph of it. **First get permission from the organisation to take and use photographs or organisational documents or materials.**

Documents and resources collected or photographs or videos taken could include:		
• Vison and mission statement • Organogram • Brochures, pamphlets or information booklets • Forms and checklists • Meeting agendas and minutes • Reports • Business plan • Financial statements • Instructions or job cards	• Policies, procedures or operating manuals • Conditions of employment • Code of conduct • Job advertisements or descriptions • Menus • Itineraries • Tool, equipment or utensil lists • Engineering drawings or circuit diagrams	• Pieces of equipment that are broken or not used, for instance an old circuit board or motor • Videos of employees performing procedures • Photographs of machines or equipment not found at college • Photographs or videos of the layout of a room or workshop • Training videos

2. List **TEN** documents or resources you collected, including photographs or videos taken. If the organisation was not willing to provide you with documents or allow you take photographs, list actual documents, objects, images or situations that you were exposed to which you think would be useful to take into your classroom.

    …………………..……………………………………………………………………………………………..

    …………………..……………………………………………………………………………………………..

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    …………………..……………………………………………………………………………………………..

    …………………..……………………………………………………………………………………………..

    …………………..……………………………………………………………………………………………..

3. Now complete the table below based on **FOUR** of the resources you obtained (or observed if you were not given permission to take photographs or resources):

Names of FOUR workplace/organisation resources/photographs you obtained (or observed if permission not given)	Did you obtain a copy of resource?		Suggest one way you could use each resource to improve the relevance of the curriculum to workplace practice and requirements
	Yes	No	
1.			
2.			
3.			
4.			

Include samples of workplace resources you obtained or copies of photographs you took in your portfolio.

TEMPLATE 5: PERSONAL RESEARCH QUESTION
*(Complete in year 4 – **only for B Ed students**)*

Identify a research question related to real-world application in your subject field and gather information about this during your placement. Draw conclusions for the teaching of your subject.

Research question	
Main findings	
Conclusion (implications for teaching)	

2.4 Assignment 3: Observation of job/work task or function

Elements of assignment 3

- Template: Observation of job/work task or function

Instructions for completing assignment 3

- This assignment includes one template.

- If you complete your WIL at more than one workplace/organisation, decide on which organisation you want to complete assignment 3.

- Assignment 3 requires you to observe, record and reflect on the completion of **one** task or function that is related to your subject specialisation. You first need to identify a suitable task or function to observe. The task or function should be core to your subject specialisation and should be substantial enough for you to complete all the questions below on it. It should also preferably be one that allows you to observe its completion from beginning to end. Depending on the task or function, it might have taken a few hours to complete or a number of days. If you are unable to observe all aspects of the completion of the task, find out what happened in the steps you did not observe and record these.

- Once you have identified a task or function to observe, complete the questions in the assignment template below as fully as possible.

- Assignment 3 must be completed in each year of the Diploma and B Ed. Choose a different task or function to observe and report on each year.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

TEMPLATE: OBSERVATION OF JOB/WORK TASK OR FUNCTION

1. Name of task or function observed.

2. Time taken to complete the task.

3. Name the work area or department in which the task or function was carried out.

4. Name the jobs/roles of **one or two** people who are central to the completion of the task or function. Indicate the main function and level of seniority of each job/role.

Name of job / role	Main function	Level of job ✓		
		Junior	Middle	Senior

5. Provide an overview of the **work process** for the task or function from start to finish. Use a flow chart to illustrate this.

6. What resources, technology (tools, equipment or machines) or systems were used to do the work?

7. What information and documents were used for the completion of this task?

8. How was the work managed?

9. Were any specific health, safety, security, environmental or legal precautions taken during the completion of the task? If yes, indicate which ones and why?

10. What, if any, approach was used to ensure that the completed task met with a high standard of accuracy or quality?

11. What core knowledge and skills were needed to complete the task?

12. What job-related and personal qualities are expected of individuals who work on a task or function like this? For instance, work independently, work well in a team, work safely, work quickly, pay close attention to detail, work accurately, be friendly and respectful to customers/clients/community members, etc.

13. Rate the level of work pressure that goes with this task or function. Then briefly describe the main pressures that go with the work.

Level of work pressure	Low		Average		High		Very high	
Main pressures that go with the work								

14. How effectively was the task carried out? Did any problems occur during its implementation and how were these resolved? Do you think the way the task was carried out could have been improved? Motivate your answer.

15. What did you learn about this task or function and its completion that is applicable to the teaching of your subject?

2.5 Assignment 4: Host employer evaluation of student lecturer

ELEMENTS OF ASSIGNMENT 4

- Template: Host employer evaluation of student lecturer

INSTRUCTIONS FOR COMPLETING ASSIGNMENT 4

- This assignment includes a single template that must be completed and signed by your workplace supervisor/mentor.

- If you completed your WIL at more than one organisation, an evaluation must be completed for each of them.

- It is **your responsibility** to ensure that the evaluation is fully completed and signed.

- There is a space on the template for the organisation's stamp. Please ensure that the template is stamped. If an organisation does not have a stamp, it is acceptable for the template to be submitted without it.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

TEMPLATE: HOST EMPLOYER EVALUATION OF STUDENT

1. **Information on host employer, student lecturer and work placement**

Name of host employer	
Name of student lecturer	

Number of days in organisation		Dates of placement	

Key areas in which exposure and experience were provided	

2. **Rating of student lecturer**. Circle the number that best applies in each case where 1 = very poor, 2 = poor, 3 = fair, 4 = good and 5 = very good.

ITEM BEING RATED	RATING				
Attendance and punctuality. The student lecturer attended daily & was punctual.	1	2	3	4	5
Initiative and sense of responsibility. The student lecturer helped to direct his/her experience in the organisation, looked for work to do and acted voluntarily.	1	2	3	4	5
Performance of tasks. The student lecturer performed the tasks given with good will, attention to detail and to the best of his/her ability.	1	2	3	4	5
Understanding and skills. The student lecturer demonstrated good knowledge in his/her subject field and adequate practical skills.	1	2	3	4	5
Interest. The student lecturer asked questions and showed an interest in the work of the organisation and what he/she was learning.	1	2	3	4	5
Communication. The student lecturer communicated appropriately and well.	1	2	3	4	5
Learning. The student lecturer was willing to learn, engaged thoughtfully and achieved new understandings and/or skills.	1	2	3	4	5
Teamwork and cooperation. The student lecturer got along with and worked well with others.	1	2	3	4	5
Attitude, willingness and friendliness. The student lecturer had a good attitude, participated willingly and was polite, friendly and appreciative of others' time given.	1	2	3	4	5

3. **Overall comments** on the student lecturer's interaction and performance during the placement.

……………………………………………………………………………………………………..…………

……………………………………………………………………………………………………..…………

……………………………………………………………………………………………………..…………

……………………………………………………………………………………………………..…………

4. **Suggestions on how the student lecturer might improve his/her experience and learning** in the workplace during future WIL placements.

……………………………………………………………………………………………………..…………

……………………………………………………………………………………………………..…………

………..…

Name ………………………………….……………………..………

Role/position…………………………..……………………………..

Signature....…………………………………..………………..

Date..........……………………..……………………………………

Insert organisation stamp (if available)

2.6 Assignment 5: WIL reflection report, presentation and portfolio submission

Elements of assignment 5

1. WIL reflection report
2. PowerPoint slides on WIL experience
3. Presentation on WIL experience
4. Compilation and submission of portfolio

INSTRUCTIONS FOR COMPLETING ASSIGNMENT 5

- Assignment 5 includes four elements: a report, slides, a presentation and the submission of your full WIL portfolio.

- This assignment must be completed and submitted in each year of the Diploma and B Ed.

- An outline is provided for your reflection report and the PowerPoint slides you should prepare for your presentation.

- The information you collect and what you learn will change from year to year. Use the report outline included flexibly to accommodate these differences when you prepare your report and presentation on the programme each year.

- You will be required to either do your presentation for your class or record yourself doing the presentation and submit the recording.

- Once you have completed all your assignments for the year, include them in a single portfolio as per the instructions in section three.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

OUTLINE FOR WIL REFLECTION REPORT AND PRESENTATION

COVER

- Student lecturer name
- Name(s) of subject specialisation(s)

INTRODUCTION

- Name(s) of host employer(s)/organisation(s) with whom WIL was completed
- Core business of the host employer(s)/organisation(s)
- Link between your subject specialisation and the work of the organisation(s) you visited
- Clients, customers or community(ies) served by the organisation(s)
- Length of placement and dates of completion (at each host employer/organisation)
- Focus of placement/experience (at each host employer/organisation)

BRIEF DESCRIPTION OF WIL PLACEMENT(S)

- Explain how your placement was arranged, including the identification of host employer(s)/organisation(s), the planning process and the logistical arrangements.
- Explain how your placement was structured on a daily/weekly basis including in which work areas or departments you were placed.
- Provide an overview of the main activities you were involved in.
- Describe how you were supervised and mentored during your placement and indicate whom you observed/worked with.

EVALUATION AND REFLECTION ON WIL PLACEMENT(S)

- Rate the value and relevance of your WIL experience and learning and give reasons for your rating:

RATING ✓		REASONS FOR RATING
Not that useful		
Useful		
Very useful		
Extremely useful		

- Summarise your key learnings from your WIL placement.
- How does what you learned relate to your prior knowledge, skills and experience?
- What important developments or trends were evident in your subject's field?
- Based on your experience, what core knowledge, skills and attitudes/attributes are required in your subject's field to perform the activities of the types of organisation(s) you visited adequately?
- Do you believe the college curriculum for your subject adequately prepares students to engage in workplace activities and, if not, what are the main gaps?
- What was your impression of the organisation(s) you visited?
- How effective was your interaction with your supervisor/mentor and others in your host organisation(s)?
- What were the main strengths of your placement(s)?
- What were the main weakness or challenges of your placement(s) and how could these be prevented or resolved in future?

APPLICATION OF LEARNING FROM PLACEMENT IN TEACHING

- What are your main lessons for the teaching of your subject from your industry/workplace WIL experience?
- Suggest teaching strategies for improving the relevance of subject topics to industry/workplace practice and requirements:

List **three** core curriculum subject topics in which you gained workplace exposure or experience	What were your key learnings about workplace practice and requirements in this topic area	Suggest a teaching strategy per topic to enhance relevance to workplace practice requirements. Your strategy could include the use of workplace resources
1.		
2.		
3.		

CONCLUSIONS AND RECOMMENDATIONS

- What is your overall assessment of your WIL placement and the extent to which it met the industry/workplace WIL learning objectives for your subject?
- Has your WIL experience changed you in any way or how you think about teaching your subject?
- What do you believe are the main benefits of TVET colleges and lecturers collaborating with industry?
- How could your placement experience and the support you received be improved?
- What additional industry/workplace exposure or experience would you find useful?
- What advice would you give another education candidate about participating in industry/workplace WIL?

Section 3: Portfolio submission and assessment

3.1 Portfolio contents

The assignments/assignment elements to be completed and submitted as part of your portfolio in each year of your Diploma or B Ed programme are included in the tables below:

Diploma: Year 1 – 3

ASSIGNMENT	ELEMENTS	YEAR TO COMPLETE
1. **Assignment 1:** Subject checklist, daily register, activity log and journal	• Template 1: Subject topic checklist • Template 2: Daily attendance register • Template 3: Daily activity log and weekly reflective journal	YEAR 1, 2 & 3
2. **Assignment 2:** Workplace research	• Template 1: Overview of host employer	YEAR 1
	• Template 2: Jobs/roles in subject field	YEAR 2
	• Template 3: Industry changes or developments in subject field	YEAR 3
	• Template 4: Workplace resources to use in teaching	YEAR 3
3. **Assignment 3:** Observation of job/ work task or function	• Template: Observation of job/work task or function	YEAR 1, 2 & 3
4. **Assignment 4:** Host employer evaluation of student lecturer	• Template: Host employer evaluation of student lecturer	YEAR 1, 2 & 3
5. **Assignment 5:** WIL reflection report, presentation and portfolio submission	• WIL reflection report • PowerPoint slides on WIL experience • Presentation on WIL experience • Compilation and submission of portfolio	YEAR 1, 2 & 3

B Ed: Year 1 – 4

ASSIGNMENT	ELEMENTS	YEAR TO COMPLETE
1. **Assignment 1:** Subject checklist, daily register, activity log and journal	• Template 1: Subject topic checklist • Template 2: Daily attendance register • Template 3: Daily activity log and weekly reflective journal	YEAR 1, 2, 3 & 4
2. **Assignment 2:** Workplace research	• Template 1: Overview of host employer	YEAR 1
	• Template 2: Jobs/roles in subject field	YEAR 2
	• Template 3: Industry changes or developments in subject field	YEAR 3
	• Template 4: Workplace resources to use in teaching	YEAR 3
	• Template 5: Personal research question	YEAR 4
3. **Assignment 3:** Observation of job/ work task or function	• Template: Observation of job/work task or function	YEAR 1, 2, 3 & 4
4. **Assignment 4:** Host employer evaluation of student lecturer	• Template: Host employer evaluation of student lecturer	YEAR 1, 2, 3 & 4
5. **Assignment 5:** WIL reflection report, presentation and portfolio submission	• WIL reflection report • PowerPoint slides on WIL experience • Presentation on WIL experience • Compilation and submission of portfolio	YEAR 1, 2, 3 & 4

3.2 Weighting of marks for assignments

The weighting of the marks for each assignment in your portfolio per year of the Diploma and B Ed programmes follows:

Diploma: Year 1 – 3

ASSIGNMENT	% WEIGHT	YEAR	ELEMENTS	% WEIGHT
1. **Assignment 1:** Subject checklist, daily register, activity log and journal	30	YEAR 1, 2 & 3	• Template 1: Subject topic checklist	8
			• Template 2: Daily attendance register	2
			• Template 3: Daily activity log and weekly reflective journal	20
2. **Assignment 2:** Workplace research	15	YEAR 1	• Template 1: Overview of host employer	15
		YEAR 2	• Template 2: Jobs/roles in subject field	
		YEAR 3	• Template 3: Industry changes or developments in subject field	
		YEAR 3	• Template 4: Workplace resources to use in teaching	
3. **Assignment 3:** Observation of job/work task or function	10	YEAR 1, 2 & 3	• Template: Observation of job/work task or function	10
4. **Assignment 4:** Host employer evaluation of student lecturer	5	YEAR 1, 2 & 3	• Template: Host employer evaluation of student lecturer	5
5. **Assignment 5:** WIL reflection report, presentation and portfolio submission	40	YEAR 1, 2 & 3	• WIL reflection report	25
			• PowerPoint slides on WIL experience	5
			• Presentation on WIL experience	5
			• Compilation and submission of portfolio	5

B Ed: Year 1 – 4

ASSIGNMENT	% WEIGHT	YEAR	ELEMENTS	% WEIGHT
1. **Assignment 1:** Subject checklist, daily register, activity log and journal	30	YEAR 1, 2, 3 & 4	• Template 1: Subject topic checklist	8
			• Template 2: Daily attendance register	2
			• Template 3: Daily activity log and weekly reflective journal	20
2. **Assignment 2:** Workplace research	15	YEAR 1	• Template 1: Overview of host employer	15
		YEAR 2	• Template 2: Jobs/roles in subject field	
		YEAR 3	• Template 3: Industry changes or developments in subject field	
		YEAR 3	• Template 4: Workplace resources to use in teaching	
		YEAR 4	• Template 5: Personal research question	
3. **Assignment 3:** Observation of job/work task or function	10	YEAR 1, 2, 3 & 4	• Template: Observation of job/work task or function	10
4. **Assignment 4:** Host employer evaluation of student lecturer	5	YEAR 1, 2, 3 & 4	• Template: Host employer evaluation of student lecturer	5
5. **Assignment 5:** WIL reflection report, presentation and portfolio submission	40	YEAR 1, 2, 3 & 4	• WIL reflection report	25
			• PowerPoint slides on WIL experience	5
			• Presentation on WIL experience	5
			• Compilation and submission of portfolio	5

3.3 Assessment rubric

Diploma: Year 1 – 3

ASSESSMENT CRITERIA	RATING SCALE						MARKS	
	Not done	Very weak	Weak	Acceptable	Good	Excellent	Maximum Marks	MARK
	0%	1 - 19%	20 - 39%	40 - 59%	60 - 79%	80 - 100%	100%	
Assignment 1: Subject checklist, daily register, and activity log and journal								
Template 1: Subject topic checklist • Completed in full and signed • Student lecturer and mentor comments included • Comments are applicable and had substance	0	1	2 - 3	4 - 5	6 - 7	8	**8**	
Template 2: Daily attendance register • A register included for each organisation where WIL completed • Register(s) fully and correctly completed • All signatures included	0	0	0.5	1	1.5	2	**2**	
Template 3: Daily activity log and weekly reflective journal • Included a log sheet per day and a journal sheet per week • Daily log and weekly journal templates completed in full • Activities engaged in concisely described in daily log • Weekly journal thoughtfully and well completed – showed analytical, reflective and critical thought and insight • Good ideas and insights on how to apply learning to teaching	0	1 - 4	5 - 8	9 - 12	13 -16	17 - 20	**20**	
ASSIGNMENT 1 TOTAL							30	
Assignment 2: Workplace research								
YEAR 1: Template 1: Overview of host employer • Template 1 completed for each organisation visited for WIL • Completed as fully as possible • Content included is appropriate and relevant • Questions concisely answered with sufficient detail • Responses to questions reflect specific context of host organisation • Showed analytical and critical thinking and insight	0	1 - 3	4 - 6	7 - 9	10 - 12	13 - 15	**15**	YEAR 1
YEAR 2: Template 2: Jobs/roles in subject field • Completed in full • Included **THREE** jobs or roles • Information included appropriate and relevant • Reflected jobs/roles found at organisations visited	0	1 - 3	4 - 6	7 - 9	10 - 12	13 - 15	**15**	YEAR 2
YEAR 3 Template 3: Industry changes or developments in subject field • Template completed in full • Included **THREE** changes or developments • Information included appropriate and relevant • Reflected changes and developments across organisations visited Template 4: Workplace resources to use in teaching • Listed **TEN** resources that could be used in teaching, which were either observed in the workplace or for which a copy was obtained • Indicated how **FOUR** of these resources could be used in teaching • Showed understanding of subject and insight into its teaching • Samples of resources or photographs included in portfolio (if these were obtained)	0	1 - 3	4 - 6	7 - 9	10 - 12	13 - 15	**15**	YEAR 3
ASSIGNMENT 2 TOTAL							15	

ASSESSMENT CRITERIA	RATING SCALE						MARKS	
	Not done	Very weak	Weak	Acceptable	Good	Excellent	Maximum Marks	MARK
	0%	1 - 19%	20 - 39%	40 - 59%	60 - 79%	80 - 100%	100%	
Assignment 3: Observation of job/work task or function								
• Completed as fully as possible • Content included is appropriate and relevant • Questions are concisely answered with sufficient detail • Responses to questions reflect specific context of host organisation • Analytical and critical thinking evident and showed insight	0	1-2	3-4	5-6	7-8	9-10	10	
ASSIGNMENT 3 TOTAL							10	
Assignment 4: Host employer evaluation of student lecturer								
• Completed in full and signed • Host organisation comments included	0	1	2	3	4	5	5	
ASSIGNMENT 4 TOTAL							5	
Assignment 5: WIL reflection report, presentation and portfolio submission								
WIL reflection report • Comprehensive coverage of report topics/questions • Provided a good synthesis of WIL experience and learning • Thoughtfully and well completed - showed analytical, reflective, and critical thought and insight • Showed understanding of subject and insight into its teaching	0	1-5	6-10	11-15	16-20	21-25	25	
PowerPoint slides on WIL experience • Slides adequately reflect the WIL reflection report • **10 - 15** slides are included • Slides are clear, concise and interesting	0	1	2	3	4	5	5	
Presentation on WIL experience • Adheres to a time allocation of **10 minutes** • Interesting, clearly and thoughtfully presented	0	1	2	3	4	5	5	
Compilation and submission of portfolio • Cover page includes student lecturer name and number, and name and code for qualification and course • Contains required content • Coherently organised, neatly presented and securely fastened	0	1	2	3	4	5	5	
ASSIGNMENT 5 TOTAL							40	
PORTFOLIO TOTAL								

B Ed: Year 1 – 4

ASSESSMENT CRITERIA	RATING SCALE						MARKS	
	Not done	Very weak	Weak	Acceptable	Good	Excellent	Maximum Marks	MARK
	0%	1 - 19%	20 - 39%	40 - 59%	60 - 79%	80 - 100%	100%	
Assignment 1: Subject checklist, daily register, and activity log and journal								
Template 1: Subject topic checklist • Completed in full and signed • Student lecturer and mentor comments included • Comments are applicable and had substance	0	1	2 - 3	4 - 5	6 - 7	8	**8**	
Template 2: Daily attendance register • A register included for each organisation where WIL completed • Register(s) fully and correctly completed • All signatures included	0	0	0.5	1	1.5	2	**2**	
Template 3: Daily activity log and weekly reflective journal • Included a log sheet per day and a journal sheet per week • Daily log and weekly journal templates completed in full • Activities engaged in concisely described in daily log • Weekly journal thoughtfully and well completed – showed analytical, reflective and critical thought and insight • Good ideas and insights on how to apply learning to teaching	0	1 - 4	5 - 8	9 - 12	13 -16	17 - 20	**20**	
ASSIGNMENT 1 TOTAL							30	
Assignment 2: Workplace research								
YEAR 1: Template 1: Overview of host employer • Template 1 completed for each organisation visited for WIL • Completed as fully as possible • Content included is appropriate and relevant • Questions concisely answered with sufficient detail • Responses to questions reflect specific context of host organisation • Showed analytical and critical thinking and insight	0	1 - 3	4 - 6	7 - 9	10 - 12	13 - 15	**15**	YEAR 1
YEAR 2: Template 2: Jobs/roles in subject field • Completed in full • Included THREE jobs or roles • Information included appropriate and relevant • Reflected jobs/roles found at organisations visited	0	1 - 3	4 - 6	7 - 9	10 - 12	13 - 15	**15**	YEAR 2
YEAR 3 Template 3: Industry changes or developments in subject field • Template completed in full • Included THREE changes or developments • Information included appropriate and relevant • Reflected changes and developments across organisations visited Template 4: Workplace resources to use in teaching • Listed TEN resources that could be used in teaching, which were either observed in the workplace or for which a copy was obtained • Indicated how FOUR of these resources could be used in teaching • Showed understanding of subject and insight into its teaching • Samples of resources or photographs included in portfolio (if these were obtained)	0	1 - 3	4 - 6	7 - 9	10 - 12	13 - 15	**15**	YEAR 3
YEAR 4: Template 5: Personal research question • Relevant and appropriate research question • Information included relevant to question • Question clearly answered and included sufficient detail to contextualise and back up assertions • Analytical and critical thinking evident and showed insight	0	1 - 3	4 - 6	7 - 9	10 - 12	13 - 15	**15**	YEAR 4

ASSESSMENT CRITERIA	RATING SCALE						MARKS	
	Not done	Very weak	Weak	Acceptable	Good	Excellent	Maximum Marks	MARK
	0%	1 - 19%	20 - 39%	40 - 59%	60 - 79%	80 - 100%	100%	
ASSIGNMENT 2 TOTAL							15	
Assignment 3: Observation of job/work task or function								
• Completed as fully as possible • Content included is appropriate and relevant • Questions are concisely answered with sufficient detail • Responses to questions reflect specific context of host organisation • Analytical and critical thinking evident and showed insight	0	1-2	3-4	5-6	7-8	9-10	10	
ASSIGNMENT 3 TOTAL							10	
Assignment 4: Host employer evaluation of student lecturer								
• Completed in full and signed • Host organisation comments included	0	1	2	3	4	5	5	
ASSIGNMENT 4 TOTAL							5	
Assignment 5: WIL reflection report, presentation and portfolio submission								
WIL reflection report • Comprehensive coverage of report topics/questions • Provided a good synthesis of WIL experience and learning • Thoughtfully and well completed - showed analytical, reflective, and critical thought and insight • Showed understanding of subject and insight into its teaching	0	1-5	6-10	11-15	16-20	21-25	25	
PowerPoint slides on WIL experience • Slides adequately reflect the WIL reflection report • **10 - 15** slides are included • Slides are clear, concise and interesting	0	1	2	3	4	5	5	
Presentation on WIL experience • Adheres to a time allocation of **10 minutes** • Interesting, clearly and thoughtfully presented	0	1	2	3	4	5	5	
Compilation and submission of portfolio • Cover page includes student lecturer name and number, and name and code for qualification and course • Contains required content • Coherently organised, neatly presented and securely fastened	0	1	2	3	4	5	5	
ASSIGNMENT 5 TOTAL							40	
PORTFOLIO TOTAL								

Section 4: Appendix – Subject topic checklists

4.1.Business programmes and subjects

4.1.1. Office Administration

Business Practice	Office Practice	Personal Assistance	Office Data Processing
• Personal and professional behaviour in a business environment • Health, safety and security in the workplace • Structure of a workplace organisation • Work processes • Employment relations • Resolve conflict in workplace • Induction of new staff • Organisational ethics • Cultural awareness in dealing with customers and colleagues • Efficient time management • Work as a project team member	• Answer customer enquiries • Receive and direct visitors and monitor visitor satisfaction • Maintain and monitor reception • Process calls and use effective telephone etiquette • Operate & care for equipment • Mail function • Create evidence and maintain confidentiality • Document filing and systems • Plan, monitor and control an information system • Control office supplies • Handling of petty cash • Manage a diary • Co-ordinate meetings, minor events and travel arrangements • Assist in planning an event • Create business reports • Manage people information • Ensure customer satisfaction	• Plan and conduct meetings • Liaise with a range of customers of business • Handle customer complaints • Identify factors that influence productivity and improve productivity at a workstation • Identify expertise and resources	• File management • Create business documents • Word processing • Email communication • Spreadsheets • Database • Presentations

4.1.2. Finance, Economics and Accounting

Applied Accounting	Economic Environment	Financial Management	New Venture Creation
• Administer payments and expenses • Administer credit sales transactions • Administer credit purchase transactions • Prepare general ledger accounts and initial trial balance • Financial year end procedures • Financial year end profit or loss calculations • Financial statements	• The international trading environment • Financial markets and economic indicators • Current affairs related to a specific business sector (physical, socio-political, economical, technological and institutional) • International trade calculations • Macro-economic principles as applied to South African business environment • Economic concepts central to local economic development in South Africa • Environment of local economic development in South Africa • Requirements of import and export factoring for discounting	• Manage finances in a small business or new venture • Perform basic calculations in retail or wholesale practices • Basic financial transactions • Basic business calculations (income statement, shrinkage) • Calculate and record VAT • Prepare salaries and wages • Petty cash system • Compile reconciliation statements • Administer non-current assets • Financial planning and control functions for a small business • Interpret financial statements • Apply budget function in a business unit • Calculate tax payable by a small business	• Investigate possibilities of establishing a small business • Investigate markets and needs for a new business venture • Determine financial requirements of a new business • Identify internal and external stakeholders • Organisational structure of new venture • Apply HR principles in a new venture • Implement an action plan for business operations • Finance a new venture • Comply with organisational ethics • South African law and the regulation of risk management • Apply principles of costing and pricing to a business venture

4.1.3. Management

Management Practices	Operations Management	Financial Management	Entrepreneurship and Project Management
• Basic Legislation • Business Ethics • Recordkeeping • Corporate culture • Strategic planning • Maintain an existing information system in a business environment • Apply of legislation in business operations • Human Resource Development • Management Functions and Activities • Change management • Team Motivation	• Functions of an Operations Manager • Implementation of Goals and Activities • Stakeholder Relationships and satisfaction analysis • Business systems, links between them and systems analysis • Planning and implementation of operational plans & mobilising resources • Implement risk management • Implement Total Quality Management system • Control business operations • Evaluate business operations	• Manage Finances for a New Venture • Perform Basic Calculations in Retail or Wholesale Practices • Conduct Basic Financial Transactions • Complete Basic Business Calculations (Income Statement, Shrinkage) • Calculate and record value added tax transactions • Prepare salaries: an introduction • Prepare wages: an introduction • The Petty Cash system • Compile reconciliation statements • Basic administration of non-current assets • Manage finances in a small business • Financial planning and control functions for a small business • Interpret basic financial statements • Apply the budget function in a business unit • Calculate tax payable by a small business	• Characteristics of a successful entrepreneur • Customer Relations and Marketing • Basic Finances • Manage Time and Work Processes • A Business Plan • Project Management tools and techniques • Project estimation and costing • Develop a project plan • Project administration • Projects are team initiatives • Project delivery strategies and operations • Develop schedules for project management • Supervise a project • Manage project risk • Review a project

4.1.4. Marketing

Marketing, Advertising and Promotions	Marketing Communication	Consumer Behaviour	Contact Centre Operations	Graphic Design	Wholesale and Retail
• Marketing & other functional areas in a company • Marketing component of business plan • Marketing plans and strategies • Marketing expertise & resources • Marketing performance standards • Processing marketing data • Advertising & media • Product range • Brand, product and service promotion • Legal requirements and implications • Professional behaviour of a marketing assistant • Functioning in a creative team	• Basic skills in customer service • Customer communication techniques • Respond to customer queries • Presentation communication • Plan and prepare meetings communications • Legal environment of marketing industry • Marketing stakeholders • Multicultural communication – dynamics & ethical considerations • Marketing work ethics • Develop & present marketing proposals • Develop marketing materials	• Identify customers of business • Handle queries • Information systems • Client verbal communication • Consumer composition • The market / target market • Basic research • Product positioning • Safety & security policies & procedures • Influence of branding, packaging and labelling • Liaise with range of customers • Take orders from customers • Handle customer complaints	• Identify customers of contact centres • Operate contact centre equipment • Apply in-bound and outbound operations • Operations in an emergency context • Service levels • Problem solving • Handle customer complaints in contact centres • Customer and market trends impacting on contact centres • Contact centre culture • Performance standards • Contact centre specific sales techniques	• Elements and principles of graphic design • Formal drawing and observation skills • Desktop publishing and digital design concepts • Layout and typography • Photographic manipulation • Three dimensional (3d) design • Multimedia • Presentation animation • Play-out and production	• Legal environment in wholesale & retail industry • Distribution in wholesale & retail • Building customer relations • Supervising customer service • Cashing up and banking • Stock control • Improving net profit of wholesale and retail outlet • Promoting and supervising sales and promotions

4.1.5. Information Technology and Computer Science

Systems analysis and design	Electronics & computer hardware & software	Computer programming	Data communication and networking	Multimedia
• Information processing in the business organisation • Data processing, IT, business support and control systems • Information systems departments in business organisations • Acquisition of computer technology • Information systems planning and strategy • Investigation in systems development life cycle • Ethics and professionalism for computer industry in South Africa • ICT risks and threat management • Information gathering techniques for computer systems development • Analysing information systems • Designing computer system inputs & outputs • Implementing and maintaining an information system • Concepts of artificial intelligence	• Electrical safety standards • Use of electrical test instruments • Soldering techniques • Basic electronic circuits • Basic programmable logic controllers (PLC) • Basic concepts of telecommunications • Types of computer systems, hardware configurations • Assemble a computer and peripherals into modules • Install software • Install peripherals • Test IT systems • Preventative maintenance & safety in a computer environment • Technical computer problems • Computer user's problems • Problem solving strategies • Repair a computer and peripherals to module level	• Computer program quality assurance and project viability • Program design • Database application development • Error handling in a computer environment • User interface and output design • Object oriented programming • Database application design • Principles of developing software for the internet • Design and build a website using simple HTML • Create multimedia, web-based applications with scripting	• Computer network architectures and standards • Computer network communication • Computer cabling • Install a local area network (LAN) • Install networked computer application software • Support a local area computer network • Compare WAN with LAN	• Rendering and typographic skills • Sound production and editing • Photographing techniques and editing • Desktop publishing and layout • Production and editing of 2d and 3d animation • Utilisation of design theory • Video production • Use of electronic publishing • Multimedia content and digital content • Networks and servers • Database management • Web design and programming • Internet security

4.2. Engineering programmes and subjects

4.2.1. Engineering and Related Design

Engineering Fundamentals, Processes, Practice and Maintenance	Engineering Technology and Materials	Engineering systems, Graphics and Design and Professional Practice	Fitting and Turning	Automotive Repair & Maintenance

• Health, safety and environment practices in engineering workplace
• Basic fire-fighting and first aid
• Systematic fault finding techniques
• Diagnosis mechanical and electrical faults
• Lubricants and lubrication systems
• Maintenance of plant and equipment
• Mechanical component service, dismantling and assembling
• Operate & monitor machinery used in cutting materials
• Component production using computer aided machining (CAM)
• Joining processes in materials technology
	• Engineering hand tools, power tools, measuring and marking off equipment
	• SI units of measurement
	• Basic engineering drawing
	• Metals and non-metals
	• Metal processing
	• Material testing
	• Construct structure prototype capable of bearing a point and/or distributed load
	• Incorporate functionally dependent mechanisms into a prototype of a technological solution
	• Incorporate control system into prototype of a technological solution
		• Engineering systems and their applications
		• Equipment control systems
		• Routine maintenance
		• Isometric drawings
		• Assembly drawings
		• Detailed drawings
		• Development and inter-penetration
		• Computer aided design
		• The engineering profession
		• Engineering design function, philosophy and process
		• Communication in engineering
		• Computation
			• Grinding and sharpening
			• Drilling machines
			• Hand threading and reaming
			• Keys and fasteners
			• Centre lathe
			• Milling machine
			• Bearings
			• Couplings
			• Brakes and clutches
			• Belt drives
			• Chain drives
			• Gear drives
			• Pipes and pipe fittings
			• Valves
			• Machinery during production/operation
			• Maintain fluid power / pneumatic systems
			• Produce complex components using lathes
			• Produce complex components using milling machines
			• Produce complex components by performing internal and external grinding operations
			• Write simple computer numerical controlled (CNC) programmes and set and operate a CNC machine
				• Health and safety
				• Automotive trade tools
				• Measuring equipment
				• Vehicle lifting equipment
				• Bearings
				• Batteries
				• Lubrication systems
				• Wheels and tyres
				• Cooling systems
				• Lights and automotive electrical systems
				• Service a vehicle
				• Fuel systems
				• Check & adjust steering geometry
				• Wheel balancing
				• Maintain and repair:
				  - Suspension systems
				  - Starter systems
				  - Charging systems
				  - Hydraulic brake systems
				  - Ignition systems
				• Perform condition test on engine
				• Remove & replace engine
				• Overhaul engine
				• Maintain & repair driveline & related components
				• Test, diagnose, and rectify faults in electronic fuel injection (EFI) system
				• Diagnose and repair:
				  - Induction & exhaust systems
				  - Hydraulic brake systems
				  - Cooling systems
				  - Manual transmissions
				  - Suspension systems
				  - Steering systems
				• Service and repair electronic ignition systems
				• Repair vehicle differentials
				• Recondition vehicle sub assembly
				• Test automatic transmission

4.2.2. Electrical Infrastructure Construction

Electrical Principles and Practice	Workshop Practice / Electrical Workmanship	Electrical Systems and Construction	Electronic Control and Digital Electronics
• Direct current (DC) and alternating current (AC) circuits • Circuit diagrams • Electrical materials, components and safety • Protection, measuring and testing instruments • Generation and supply of electricity • Earthing practices • Transformers • Electric machines	• Safety regulations and apply safety in the workplace • first aid • Engineering hand tools • Engineering power tools • Engineering testing, protection and measuring equipment • Worksite procedures and lifting techniques • Soldering • Trade practices • Maintenance and repair of domestic appliances and electric power tools • Installation of single-phase ac machines and control gear • Shielded metal arc welding (SMAW) • Typical electrical installations • Illumination • Electric machines and control gear	• Electrical circuits and systems • Low voltage cables and wire ways • Electric machines • Fault-finding and testing • Wiring, inspection and testing of a single-phase domestic installation • Fault-finding on alternating current (AC) and direct current (DC) systems • Low voltage networks • Lighting systems and energy efficiency • Electrical infrastructure • Construction of a three- phase circuit • Construction of a three- phase medium voltage overhead supply to domestic houses • Inspection of a three- phase industrial/commercial installation • Fault-finding and maintenance of three- phase voltage electric circuits • Renewable energy	• Construct basic electronic circuits and systems • Replace faulty components on a pc board • Assemble a personal computer and install software • Understand function and construction of transducers used in process control • Knowledge of PLCs and design and fault-find simple control circuits for these • Knowledge syncro-server motor

4.2.3. Civil Engineering and Building Construction

Construction Planning & Supervision	Materials	Plant and Equipment	Carpentry and Roof Work	Concrete Structures	Masonry	Roads
• Measuring, setting out and levelling • Foundations • International System (SI) units of measurement • Technical drawings • SA construction industry • Construction legislation and regulation • Construction contracts • Tenders and quotes • Quantities and costing • Planning and organising construction activities • Projections and cash flow • Supervision • Quality checks	• Masonry units (bricks and blocks) • Cement and concrete • Mortar, plaster, screeds and toppings • Timber • Metals • Steel construction • Understanding and combating corrosion of metals • Joining of metals by soldering, brazing and welding • Glass • Plastics • Elastomers • Adhesives • Paints, water repellents,	• Legislation and safety regulations • First aid • Hand tools • Ladders • Builder's trestles, access scaffolding and mobile towers • Lifting of heavy objects • Electric motors and internal combustion engines • Transmissions maintenance of vehicles • Small plant and power tool operation • Oxy-acetylene	• Roof construction • Gable roof construction • Hipped roofs • Erecting an L-shaped roof • Inspection of roof structures • Roof cladding • Installation of a geyser support deck • Installation of ceilings • Suspended timber floor construction • Doors and door furniture • Pre-manufactured cupboards, skirtings, shelving and panelling	• Erection of formwork and falsework. • Vertical stop ends, water stops and joints • Using release agents • Workmanship and detailing in concrete structures • Reinforcing documentation • Steelyard cutting, bending and identification of steel • Delivery, handling and storage of reinforcing steel • Installation of reinforcing steel • Checks before concreting	• Setting out masonry walls • Cavity wall construction • Basic masonry wall construction with hollow units • Advanced masonry wall construction • Plastering • Screeds and toppings • Tiling	• Road surveying • Soils, gravels and road-building materials • Road drainage • Earthworks • Layer work • Road surfacing • Road pavements • Road maintenance & rehabilitation

• Safety controls • Project management • Labour relations and legislation • Discipline and conflict management • Record keeping & admin	coatings and preservatives • Waterproofing of buildings, damp-proofing and vapour barrier installation. • Bitumen, tar and asphalt • Fasteners			• Placing and compacting concrete • Striking formwork, making good and finishing of concrete		

4.3. Other programmes and subjects

4.3.1. Hospitality

Client Service Human Relations	Food Preparation	Hospitality Generics	Hospitality Services
• Function in a business environment • Colleagues with special needs • Client service: cultural context • Health and safety legislation • Human relations requirements according to the various acts • Health and safety procedures in relation to clients & colleagues • Importance of staff development to human relations • The effect of solved problems on client care	• Clean food production areas, equipment and utensils • Knives and cutting equipment • Handle and store food • Fry, grill and bake food • Cook starch products • Fruit and fruit dishes • Vegetables & vegetable dishes • Hot & cold sandwiches & rolls • Assemble food for quick service • Prepare & present basic fish dishes • Prepare & present hot and cold soups, including stocks & sauces used in soups • Prepare and present basic cakes and biscuits • Prepare and present basic dough products • Prepare and present basic pastry dishes • Prepare food for cold presentation • Prepare and cook meat, poultry, game and offal dishes • Prepare, cook and finish complex vegetable dishes • Prepare, cook and finish hot and cold desserts • Prepare, cook and finish hot and cold sauces and dressings • Accept and store food deliveries	• Sectors of the tourism and hospitality industries • Teamwork • Personal health, hygiene and professional appearance • Food hygiene • Handle and dispose of waste • Clean, maintain and store equipment • Cleaning equipment and materials • Identify nutritional needs and plan and cost menus • Maintain hygiene in food preparation, cooking & storage • Operate a payment point and process payments • Handle and record refunds • Maintain a booking system. • Maintain effective working relationships • Monitor and maintain health, safety and security • Analyse & develop new menus • Manage own development • Source information about self-employment opportunities	• Glassware • Crockery and cutlery • Drinks machines & equipment • Function rooms • Counter service • Takeaway service • Drinks service • Beds, bed linen & coverings • Room service • Toilet and bathroom areas • Guest bedrooms • Floors and floor coverings • Public areas • Linen for external laundry • Incoming & outgoing calls • Maintain cellars and beverage storerooms • Provide a table drinks service • Provide a table service • Provide a counter service • Provide a take-away service • Maintain housekeeping supplies • Provide housekeeping services • Maintain a clean linen supply • Serve bottled wine • Prepare and serve cocktails • Provide a silver service • Maintain the drinks service • Maintain cleaning programme in area of responsibility • Plan and conduct meetings • Maintain the receipt, storage and issue of goods

4.3.2. Tourism

Client Service Human Relations	Science of Tourism	Sustainable tourism in SA	Tourism Operations
• Function in a business environment • Colleagues with special needs • Client service: cultural context • Health and safety legislation • Human relations requirements according to the various acts • Health and safety procedures in relation to clients & colleagues • Importance of staff development to human relations • The effect of solved problems on client care	• The tourism industry • The nature of tourists • Tourism dynamics • Career opportunities in industry • Tourism as a business • Processes and procedures required in a tourism business • Sourcing career opportunities in tourism industry • Wholesale and retail tourism, incorporating air travel • Tourism legislation	• Tourism in South Africa • Sustainability of tourism in South Africa • Conservation and heritage • South Africa and regional tourism • South Africa and international tourism • Evaluate tourism events with respect to sustainability	• Operate and maintain office equipment • Manage and store information • Use the telephone • Apply product knowledge and make reservations • Process payments • Tourism marketing • Tourism entrepreneurship • Basic foreign exchange transactions and conversions • The itinerary • Excursions and tours

4.3.3. Primary Health Care

Community Oriented Primary Health Care	Public Health	Human Body and Mind	The SA Health Care System
- Concept of community oriented primary care - Concept of community as individuals and families in time, space and place - Social stratification in the community - Origins & history of community oriented primary care - Organisations and institutions in the community - Relevance of community oriented primary care in SA - Application of community oriented primary care - Planning, monitoring and evaluation of community oriented primary care	- Health and wellness - Community factors that influence health and wellness - Public health - Infectious disease - Non-infectious, chronic disease - Reproductive health - Women's health - Infant and child health - Public health - Health of the elderly - Violence, abuse and injury / trauma - Mental health - Family health and wellness - Environmental health - Occupational health and safety - Waste management - Health and wellness: promotion and education - Elementary first aid	- Anatomy - Physiology - Psychology	- The SA health care system - The district health care system in SA - Stakeholders in the SA health care system - The for-profit health care system in SA - Traditional medicine in the SA health care system - Complementary medicine in the SA health care system - Civil society organisations in the SA health care system - Tertiary health care services in the SA health care system - Funding the SA health care system - The SA national health insurance (NHI)

4.3.4. Life Orientation

Personal wellbeing and development and working with others	Using business computing skills
- Personal goal setting, planning and development and factors that affect this, including ethics and morals, attitudes, values and skills - Health and wellness: hygiene, healthy eating, infectious diseases, HIV/Aids & STIs, drug abuse/addictions, diet stress and coping with this, and physical and mental wellness in relation to work productivity - Career planning, applying for jobs, interviews, and commitment and responsivity at work - Positive living: human rights, community support services and resources - Team work - Leadership - Managing diversity - Research skills: conduct a needs analysis in relation to personal and community issues - Creative problem solving	- ITC in modern world, legal environment and preventative maintenance and safety - Use email and internet - Use a word processing programme - Create and edit graphs and charts - Capture date in a spreadsheet, insert and edit objects in a spreadsheet - Access databases - Plan a database, create a data entry to form a new database table, sort data in a database query, create a report for a data base table, perform advanced print options for a database - Design a presentation - Conduct research using a computer and present results

4.3.5. English

Listening and Speaking	Reading and Viewing	Writing and Presenting	Language in Practice
- Use strategies to deliver messages & reply appropriately - Distinguish between facts and opinions and main and supporting ideas - Participate in group discussions and use questions to obtain information and clarify meaning - Use assertive and persuasive strategies to manage discussions and conflict situations sensitively	- Determine meaning in written, visual, multimedia and non-verbal forms of communication - Identify socio-cultural values, beliefs and bias - Clarify meaning in texts - Read and respond to written, visual and multimedia texts - Interpret and explain instructions and directions - Identify and describe how language structures and	- Write for a specific audience, purpose and context and select appropriate layout and format - Produce writing that is grammatically correct, logical and coherent - Plan and write - personal & work letters - for meetings - for persuasive purposes - reports	- Record and present information and data in a logical and coherent manner - Plan and manage time - Identify roles and responsibilities in group learning activities to lead and function in a team - Access and use suitable resources to promote learning and communication

• Use non-verbal communication • Organise and present information and data in a focused and coherent manner in a workplace context • Provide feedback and evaluate oral interaction	features affect meaning and comprehension • Respond critically and sensitively	- texts for the media - creatively • Edit, proofread and evaluate own and others' writing critically to adapt drafts • Organise and critically present texts in a manner appropriate to the context	• Critically evaluate language usage in oral and written communication

4.3.6. Mathematical Literacy

Numbers	Patterns and relationships	Finance	Space, shape and orientation	Information communicated through numbers, graphs and tables
Calculate and measure in personal, familiar or workplace contexts • Use numbers when working with problems • Perform calculations correctly to solve problems • Identify and use appropriate measuring tools and techniques to solve problems *TOOLS* - Ruler / measuring tape; scale - Measuring jugs, cups, measuring cylinders, etc. - Thermometer - Trundle wheels and Vernier scales *PROBLEMS* - Read and set dials on instruments, tools and machines - Calculate area, volume, time, distance, other dimensions - Perform conversion rates, consumption rates, distance, time and speed rates, cost rates, mixing rates, etc.	Identify patterns and relationships between varying quantities in personal, familiar or workplace contexts • Identify and extend patterns for different relationships - Estimate and predict values based on trends - Increasing and/or decreasing values, maximum and minimum values • Identify and use information from different representations of relationships of patterns and relationships to solve problems • Translate between different representations of relationships - Tables - Graphs - Formulae and equations	Deal with finances in personal, familiar or workplace contexts • Manage finances - Identify, record and manage sources of income - Maintain records of income & expenses - List and manage expenses - Develop and maintain income/expenditure statements - Develop budgets - Explain variations between budgeted and actual income and expenditure • Read, interpret and act on financial information presented in documents - Pay slip - Receipt - Bank statement - Accounts - Cell phone rate tables - Transport rate tables - Service charges (e.g. water & electricity)	Read, interpret, make and use representations of the physical world in personal, familiar or workplace contexts • Perform space, shape and orientation calculations to solve problems (area, volume, time, distance) • Read, interpret and use representations to make sense of and solve problems (map, plans & diagrams) • Make physical and diagrammatic representations to investigate problems and/or illustrate solutions - Make 2-D and/or 3-D scale models of 3-D objects - Make maps, plans and diagrams to scale - Make flow diagrams to illustrate a proposed sequence of activities	Use information communicated through numbers, tables and graphs to make sense of and make predictions in personal, familiar or workplace contexts • Collect and organise information in order to answer questions • Critically interpret information presented (and misrepresented) in various forms • Interpret the implications of expressions of likelihood

ATTACHMENT 2

Student Materials and Guide: Industry Work-Integrated Learning (WIL)

for the

Advanced Diploma in Technical and Vocational Teaching

Advanced Diploma in Technical and Vocational Teaching

STUDENT MATERIALS AND GUIDE

Industry/Workplace Work-Integrated Learning (WIL)

May 2019

Developed by

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through a university collaborative process
funded by the Department of Higher Education and Training

Writing and development

These student materials were developed to support universities implement the industry/workplace WIL curriculum framework for the Advanced Diploma in Technical and Vocational Teaching.

The Swiss South African Cooperation Initiative was contracted by the Cape Peninsula University of Technology to develop the materials and the development was funded by the DHET through the Teaching and Learning Development Capacity Improvement Programme (TLDCIP). The materials were written by Vanessa Taylor, and Andre van der Bijl led and managed the development process and provided writing support.

The curriculum framework and student materials were developed through a collaborative process that included academics from universities, Technical and Vocational Education and Training (TVET) colleges, Community Education and Training Colleges (CETCs) and individuals representing adult and community education and training concerns, and Department of Higher Education and Training (DHET) officials. Inputs were made through a series of workshops held in 2017 and 2018. Participants who contributed to the development of the curriculum and student materials are:

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Materials referenced

These materials incorporate ideas from a variety of South African and international WIL student materials. They were strongly informed by SSACI's WIL for Lecturers Programme Portfolio of Evidence and include elements adapted from this. The full set of materials consulted in the development process are listed in the table below.

AUTHOR	YEAR	MATERIALS
SSACI	2016 & 2018	SSACI WIL for Lecturers Programme Portfolio of Evidence
SSACI	2008 - 2015	Work-Based Experience (WBE), NCV student logbooks and task books (2008-2015) for: engineering programmes (electrical and mechanical); business programmes (office administration, finance, management, marketing, transport and IT) and services programmes (hospitality and tourism)
SSACI	2016	N6 Log Books: Financial Management N6 Internship Workplace Log Book (2016) and Hospitality and Catering Workplace Learning Log Book (2015)
UFS	2014	WIL materials for TVET lecturers (2014), including civil engineering, human resource management, mechanical engineering, marketing, electrical and financial management
CPUT, Faculty of Education	2012 & 2016	Teaching Practice Portfolios for: PGCE: FET (2012) and B Ed: FET (2016)
CPUT, Department of Chemical Engineering	2014	Experiential Learning Guide
CPUT, Department of Horticultural Sciences	2012	Horticulture practice subject guide
CPUT / Wolf	2016	WIL activity log sheet materials for mechanical engineering in Wolf. 2016. Multidisciplinary Assessment Engineering. A community-of-practice approach to WPL assessment.
UJ, Dep of Mechanical Engineering Technology	2006	Experiential Learning Guideline: National Diploma Mechanical Engineering (in Shifting Spanner or Shifting Expectations – An appeal to Engineering Companies, SASCE 2006 International Conference, Vanderbijlpark)
Martin & Hughes	2009	How to make the most of work-integrated learning: a guide for students, lectures and supervisors, Massey University, New Zealand
Hrabec, M.	2011	Teacher Industry Placement. Methodology prepared by Hospitality Training Institute, Mikulov, Czech Republic
NBI on behalf of JIPSA	2009	Professional Development Placement Programme for NC(V) Hospitality Studies Lecturers, Industry Release Programme
Government of Western Australia	2012	VET in Schools, Creating Opportunities. Teacher Industry Placement Scheme: Information Handbook; Teacher's Daily Journal; and Evaluation Form

Acronyms

Adv Dip	Advanced Diploma
B Ed	Bachelor of Education
CPUT	Cape Peninsula University of Technology
DHET	Department of Higher Education and Training
Dip	Diploma
DUT	Durban University of Technology
NGO	Non-government organisation
NMU	Nelson Mandela University
NPDE: FET	National Professional Diploma In Education: Further Education and Training
SSACI	Swiss South African Cooperation Initiative
TIPS	Teacher Industry Placement Scheme
TLDCIP	Teaching and Learning Development Capacity Improvement Programme
TUT	Tshwane University of Technology
TVET	Technical and Vocational Education and Training
TVT	Technical and Vocational Teaching
UCT	University of Cape Town
UFH	University of Fort Hare
UFS	University of the Free State
UJ	University of Johannesburg
UKZN	University of Kwa-Zulu Natal
UL	University of Limpopo
UNISA	University of South Africa
UWC	University of the Western Cape
VET	Vocational education and training
VUT	Vaal University of Technology
WIL	Work-Integrated Learning
Wits	University of the Witwatersrand
WSU	Walter Sisulu University

Contents

Section 1: Programme overview and preparing for WIL

1.1. Introduction

Welcome to the industry/workplace work-integrated learning (WIL) programme of the Ad Dip (TVT).

This programme constitutes **8 credits** of the Ad Dip TVT and requires that you complete **10 days** in a workplace that is relevant to your subject specialisation. Depending on your subject, the workplace in which you complete your WIL could be a factory, office or other work site.

The industry/workplace WIL programme forms part of the practical component of the Ad Dip (TVT), which includes both learning to teach through teaching practice at a college and learning about the application of your subject in a workplace. The university is responsible for arranging and supervising the completion of both your teaching practice and industry WIL and facilitating the links between these two forms of practice.

As a TVET lecturer, you need to prepare your students for work. Linking the teaching of your subject to actual workplace practice and requirements will facilitate this by making student learning more meaningful and relevant and producing more employable graduates. You will thus be expected to incorporate what you learn through your industry WIL into the teaching of the subject during teaching practice.

This guide has been prepared to support you to complete the requirements of the industry/workplace WIL programme.

Section 1 provides **information on the programme and what it requires** from you, how you will be supported and how to prepare for WIL.

Section 2 includes the **WIL assignments** you need to complete to meet the requirements of the programme.

Section 3 provides an **outline for your WIL portfolio** and includes the **assessment rubric** that will be used to assess it.

Section 4 includes subject topic lists that you can refer to when developing a subject checklist in assignment 1.

1.2. Programme overview and outcomes

TVET colleges are expected to produce work-ready, employable graduates. In order to do this, TVET lecturers must:

- Be competent in the theoretical and practical aspects of the subjects they teach;

- Have up-to-date knowledge of the application in, and relevance to, the workplace of the subjects they teach, including new industry technologies, trends and developments; and

- Be able to prepare learners for the demands and requirements of the workplace.

A basic competence included in the government's policy on professional qualifications for TVET lecturers, is thus:

> Professionally qualified lecturers must be knowledgeable about the demands that will be made on their learners in the workplace, and able to use the subject they are teaching to help equip their learners to meet these demands (South Africa, 2013: 40).

The Ad Dip (TVT) qualification assumes trainee lecturers have already developed their technical expertise through prior qualifications and have also gained industry work experience in their subject field. However, as business and industry is constantly changing, TVET lecturers are expected to stay up-to-date with the changing technology, practices and trends in industry in their field so that they can ensure that what they teach is relevant to the requirements of industry.

The aims of the industry/workplace work-integrated learning (WIL) programme of the Ad Dip (TVT) are for you to:

1. Learn about the application of your subject specialisation in an industry workplace, including work processes, systems, technology and standards used.

2. Learn about the structure, staffing, culture and rules of an industry workplace that practises in your subject's field.

3. Identify employer requirements and expectations of employees who work in your subject's field with regard to knowledge, skills and attributes.

4. Update and improve your subject knowledge and skills.

5. Identify how the college curriculum is similar and different to current industry practice and requirements.

6. Reflect on how to teach your subject in a way that it adequately prepares college students for the requirements of work.

7. Reflect on the benefits of collaboration between colleges and industry.

The outcomes for the industry/workplace WIL programme of the Ad Dip TVT are included in the table below.

	Learning Outcomes	Persons credited with this outcome are able to:
1.	Demonstrate knowledge of the current application, requirements and relevance of specialised subject fields in associated workplaces	i. Show knowledge of current application of the subject fields in workplaces, including work processes, technology and standards ii. Identify and describe organisational and cultural aspects in particular workplaces applicable to subject fields, including organisational structure, rules and regulations, employment and training practices iii. Identify and review employer requirements of employees that work in specialised subject fields with regard to knowledge, core and soft skills, and personal and professional attributes
2.	Analyse and reflect on workplace knowledge and skills requirements in specialised subject fields and the implications for the curriculum, teaching and learning	i. Analyse and reflect on core knowledge and skills requirements in specialised subject fields in associated workplaces ii. Analyse and compare the curriculum in subject fields with prevailing practices and requirements in the workplace and determine the implications for teaching and learning iii. Identify and discuss strategies for incorporating industry requirements and practices in the curriculum, teaching and learning
3.	Critically reflect on industry WIL experiences depicting lessons learnt for teaching the subject specialisation and the benefits of college-workplace collaboration	i. Critically appraise and report on lessons learnt and their applicability to teaching the subject ii. Critically reflect on the benefits of college-workplace collaboration

The WIL programme is structured around the following core activities:

1. Prepare for industry/workplace WIL placement;
2. Complete Assignment 1: Subject topic checklist, daily register, activity log and journal;
3. Complete Assignment 2: Workplace research;
4. Complete Assignment 3. Observation of job/work task or function;
5. Complete Assignment 4: Host employer evaluation of student lecturer;
6. Complete Assignment 5: WIL reflection report, presentation and portfolio submission;
7. Submit all assignments in a WIL portfolio.

1.3. Responsibilities, supervision and mentoring

ROLES AND RESPONSIBILITIES

Industry/workplace WIL includes three main role players: the institution providing the qualification, you, the student lecturer, and the host employer. The successful implementation of industry WIL and the achievement of the expected outcomes depend on each role player fulfilling his or her responsibilities. These are outlined below.

Responsibilities of the university

1. To develop policy, plans and regulations that support your completion of the workplace/community WIL requirements of the qualification.

2. To provide you with a structured and assessed industry/workplace WIL programme.

3. To ensure that you are fully informed about the requirements of the programme.

4. To recruit suitable employers to host you for industry/workplace WIL.

5. To brief the host employers on the requirements of the WIL programme and plan for its implementation with the organisation, including the host organisation's mentoring function.

6. To inform you about the implementation plan and arrangements made with host employers and their requirements with regard to work activities, working hours, dress, health and safety, confidentiality and other rules.

7. To supervise you and support you to complete the requirements of the industry/workplace WIL programme.

8. To assist you to resolve any problems that might arise during your work placement.

Responsibilities of the student lecturer

1. To comply with the university's rules and requirements for your participation in industry/workplace WIL.

2. To comply with the requirements of the industry/workplace WIL programme of your qualification.

3. To plan and prepare for industry/workplace WIL placement in consultation with the university supervisor.

4. To liaise with the university supervisor on the recruitment of a suitable host employer for you.

5. To prepare for the placement by finding out about the host employer and familiarising yourself with the requirements of the WIL programme and assignments to be completed.

6. During the placement:

   a) To behave professionally and responsibly and adhere to the host employer's rules and requirements, including working hours, health and safety procedures, management procedures, time-keeping, dress code, etc.;

   b) To adhere to instructions from the workplace supervisor and to complete all work activities as required;

   c) To report any problems that arise to your institution and the employer immediately, and to try to resolve these timeously; and

    d) To complete the required documentation and obtain the necessary authorisation.

7. To reflect on your WIL experience and learning and to identify lessons for teaching and future WIL placements.

8. To provide feedback to the host employer and institution on the placement.

9. To incorporate the learning that takes place during the industry/workplace WIL into your teaching practice.

10. To complete your WIL assignments and the portfolio as required and submit for assessment.

Responsibilities of the host employer

1. In consultation with the university and you, the student lecturer, to plan a programme of workplace activities that will address your WIL programme learning requirements.

2. To appoint a staff member to supervise, mentor and guide you during your work placement.

3. To brief company staff who will work with you with regard to the requirements of the WIL programme and the plan for its implementation in the workplace.

4. To induct you into the workplace and its work, operations, technology, systems, procedures and rules.

5. To allow you to carry out the activities in the plan as agreed with the university.

6. To ensure that your work experience conditions comply with the Occupational Health and Safety Act (OHSA) and other relevant legislation and that you are not exposed to unnecessary risks.

7. If possible, to provide you with copies of workplace documents relating to your subject and allow you to take photographs.

8. To allow university representatives to visit the workplace to monitor and assess you.

9. To report problems or concerns related to you or to the placement to the university and to assist with the resolution thereof.

10. To confirm your completion of the agreed activities by completing and signing the relevant documents.

11. To provide feedback to the university on your completion of WIL and the implementation of the placement.

SUPERVISION AND MENTORING

The university will appoint a staff member to support and supervise your completion of the industry/workplace WIL programme and your host employer will appoint a supervisor/mentor to oversee and support your learning in the workplace. The responsibilities of the university supervisor and host employer mentor are as follows:

University supervisor

- To ensure that you understand the requirements of the industry/workplace WIL programme and what needs to be done before, during and after the placement.
- To ensure that the employer with whom you have been placed is able to provide the exposure and experience required.

- To ensure that the host employer is clear about the requirements of the WIL programme and has a plan on how to structure the placement on a day-to-day basis.
- To brief you on the host employer's expectations, requirements, rules and plan for the placement.
- To advise and support you on the completion of the WIL programme, as necessary.
- To monitor and visit you in the workplace during the placement.
- To inform you about the university's policy and procedure for dealing with problems that arise during WIL and assist you with resolving any problems you may experience.
- To liaise with the workplace mentor, as necessary.

Workplace supervisor/mentor

- To ensure that you are properly inducted into the workplace and are briefed about the expectations, requirements, rules and the plan for the placement.
- To supervise, guide and support you during the placement.
- To ensure that you are given an opportunity to obtain the exposure and experience required, as per the agreed plan. If necessary, this will involve liaising with and arranging for you to be placed with particular staff in different departments.
- To answer all your questions, provide input on the activities and requirements of the workplace, and give you feedback on your participation, behaviour and performance.
- To ensure that the employer completes and signs the required WIL documents.
- To inform you about how problems and difficulties that arise should be dealt with and assist to resolve any problems.
- To liaise with the university supervisor, as necessary.

1.4. Dealing with problems during WIL

Various problems can arise during a WIL placement. These commonly include:

- The employer not providing the required workplace exposure or experience, either owing to being a poor match for your subject requirements or by not providing suitable learning and exposure opportunities;

- You not being able to attend during the agreed dates owing to illness or other factors;

- Communication or personal difficulties between you and the workplace mentor or with other company employees;

- You being required to participate in or complete activities that are either totally irrelevant to your learning needs or which might be dangerous, unethical or problematic in some other way;

- Sexual or other forms of harassment or abuse of you in the workplace.

You should report any problems you are experiencing to your workplace mentor and university supervisor. If the problem is with the workplace supervisor and you feel unable to address it directly with him/her, you should first speak to your university supervisor about it and agree on how to proceed.

It is the responsibility of your university supervisor and workplace mentor to identify and deal with problems that arise. This can be done telephonically, via email or during meetings. A record of problems and steps taken to resolve them should be kept. If a university supervisor and workplace mentor are unable to resolve a problem, they should escalate it to a higher level in the university and workplace.

Each university will have its own specific policy and procedure for dealing with problems that arise during WIL, which might differ slightly from what is described above. You must make sure that you are familiar with the details of the university's policy and procedure before you start with the work placement and that you deal with problems that arise accordingly.

1.5. The WIL process

The completion of WIL is a process that includes a number of activities that fall into three broad implementation phases, as illustrated in the diagram below. You will be supported through each phase of the industry/workplace WIL process by the university.

BEFORE WIL PLACMENT
Plan and prepare for WIL placement

DURING WIL PLACEMENT
Complete placement and WIL assignments

WIL CYCLE

AFTER WIL PLACEMENT
Complete and submit WIL portfolio for assessment and integrate learning from WIL into teaching

The main activities to be completed in each phase of the WIL process are listed below, as well as who has overall responsibility for their completion.

Before WIL: Planning and preparation for WIL placement

	ACTIVITIES	RESPONSIBLE	STUDENT MATERIALS
1.	Student lecturers are briefed about the programme and familiarise themselves with the requirements and materials/assignments to be completed	Student lecturer (with input from university supervisor)	• Student lecturer materials and guide
2.	Student lecturers register for the WIL programme and complete the indemnity form	Student lecturer (with input from university supervisor)	• Section 1: Student lecturer registration form • Section 1: Indemnity form
3.	Student lecturers identify subject topics to focus on during their WIL placement	Student lecturer (with support of university subject lecturer(s) and supervisor)	• Section 2, Assignment 1: Subject topic checklist
4.	Suitable organisations are identified and recruited to host student lecturers	University (with input from student lecturer)	• Student lecturer materials and guide, section 1
5.	Host organisations are briefed and placement plans are developed with them	University (with input from student lecturer)	• Student lecturer materials and guide, section 1

During WIL: Completion of WIL placement

	ACTIVITIES	RESPONSIBLE	STUDENT MATERIALS
1.	Student lecturers complete the WIL placement activities and materials, as required	Student lecturer (supported by host organisation supervisor)	• Section 1: Host workplace induction • Section 2, Assignment 1: Subject topic checklist, daily register, activity log and journal • Section 2, Assignment 2: Workplace research • Section 2, Assignment 3. Observation of job/work task or function
2.	Student lecturers are guided and supervised during their placement	University supervisor (supported by host organisation supervisor/mentor)	• Student lecturer materials and guide
3.	Host organisation completes and signs required placement documents	Student lecturer (supported by host organisation supervisor/mentor)	• Section 2, Assignment 1: daily register • Section 2, Assignment 4: Host employer evaluation of student lecturer

After WIL: Complete post-WIL placement activities

	ACTIVITIES	RESPONSIBLE	MATERIALS
1.	Student lecturers finalise all assignments completed during the WIL placement and then complete the final assignment (assignment 5)	Student lecturer (supported by university supervisor)	• Section 2, Assignment 1: Subject topic checklist, daily register, activity log and journal • Section 2, Assignment 2: Workplace research • Section 2, Assignment 3. Observation of job/work task or function • Section 2, Assignment 5: WIL reflection report, presentation and portfolio submission • Section 3: Submit all assignments in a WIL portfolio
2.	Student lecturers provide feedback at the university on their WIL placement and learning	Student lecturer (supported by university supervisor)	• Section 2, Assignment 5: WIL reflection report, presentation and portfolio submission
3.	The host organisation is thanked and feedback is provided on the student lecturer's WIL placement and experience	Student lecturer and university supervisor	• None
4.	Student lecturers plan for their integration of learning from industry/workplace WIL into teaching practice	Student lecturer (supported by university supervisor)	• Section 2, Assignment 2: Workplace research, Template 4: Workplace resources to use in teaching • Section 2, Assignment 5: WIL reflection report, presentation and portfolio submission

1.6. Recruitment of host organisation and preparing and registering for WIL

IDENTIFYING A SUITABLE HOST EMPLOYER FOR WIL

While the university has overall responsibility for arranging your WIL placement, you also need to take responsibility for ensuring that the employer identified, meets your learning and exposure requirements, which are determined by your subject specialisation and prior industry knowledge and experience. The effectiveness of your industry WIL depends on there being a good match between your learning needs and the nature of the host employer's business. An employer that operates in your subject field and engages in activities in which your industry learning and exposure requirements are greatest, thus needs to be identified.

The following criteria are important when selecting a host employer:

- Can the employer provide the kind of workplace exposure and experience sought?

- Can the employer provide a safe and healthy work environment?

- Can the employer provide appropriate on-site supervision and mentoring during WIL?

- Is the employer geographically accessible to the student lecturer?

You need to think about and make input into the process of identifying your host employer to ensure that the placement meets your WIL needs. A starting point is to find out about different employers who operate in your subject field that could be potential hosts for you. A good way to do this is through an internet search.

It is possible that you already have one or more employers in mind with whom you would like to complete WIL. The university might also have a database of employers that operate in your subject field that you could choose from.

If you prefer to complete your WIL at a particular employer, you need to communicate this to the university industry WIL supervisor. The university might already have a relationship with this employer, which would make it easier to arrange the placement.

STUDENT LECTURER REGISTRATION AND PROFILE FORM

Complete the student lecturer registration and profile form. The profile will be used to provide potential host organisations with information on you and your subject requirements during the recruitment and planning process with them.

PERSONAL INFORMATION				
Full name				
Contact details	Cell			
	Email			
Residential address				
ID number			Age	
Medical aid			Number	
Prior work experience				

TEACHING SUBJECT(S) AND WORKPLACE EXPOSURE/EXPERIENCE NEEDED	
Name(s) of relevant subject(s)	
Workplace exposure and experience needed	

STUDENT INDEMNITY FORM

Complete the indemnity form below.

Industry WIL indemnity form

I _____ (full name and surname), hereby

indemnify _____ (name of temporary host employer),

its employees and agents against any claims of any nature whatsoever which may be

brought against them by me, the trainee, _____

(full name and surname of the trainee) or any third party or other person claiming on my

behalf or arising from my death or injury or loss of or damage to my property as a result of

entering into and remaining on the premises of _____

(name of temporary host employer)'s whether the claim is based on the negligence of

_____ (name of temporary host employer) or on the

negligence of any of the employees or agents for which they may be liable.

_____   _____
Name (full name and surname)   Designation (trainee)

_____   _____
Signature   Date

1.7. Host workplace induction

A workplace induction provides essential information about the organisation, what it does, its structure, premises, policies, procedures, rules and requirements for staff or trainees. Inductions are either done before the start of a WIL placement during an orientation visit or on the first day of the placement.

Use the checklist below as a guide for the information that should be obtained during your induction. Request that the host organisation gives you a tour of its premises and facilities as part of your induction.

WORKPLACE INDUCTION CHECKLIST	✓ Information obtained / activity completed
1. Workplace plan and procedure for placement	
2. Workplace/organisation supervisor/mentor and any other managers or staff members that will work with the student lecturer during placement	
3. Organisation vision, mission and values	
4. Organisational structure	
5. Organisation premises and facilities	
6. Working hours and breaks	
7. Location of parking, bus stop, train station or taxi rank (as applicable)	
8. Health, safety, security and confidentiality requirements	
9. Dress code and personal protective equipment (as applicable)	
10. Procedure to follow if the student lecturer cannot attend on any day or will be late	
11. Any other rules and requirements to follow during placement	
12. Code of conduct and disciplinary procedure	
13. Any important policies or procedures for work area(s) related to the student lecturer's subject field	
14. Tour of premises and facilities	

Section 2: WIL assignments

2.1 Introduction

This section contains the assignments that need to be completed and submitted as part of your WIL portfolio. The table below provides an overview of the elements of each assignment.

ASSIGNMENT	ELEMENTS / ACTIVITIES
1. **Assignment 1:** Subject checklist, daily register, activity log and journal	• Template 1: Subject topic checklist
	• Template 2: Daily attendance register
	• Template 3: Daily activity log and weekly reflective journal
2. **Assignment 2:** Workplace research	• Template 1: Overview of host employer
	• Template 2: Jobs/roles in subject field
	• Template 3: Industry changes or developments in subject field
	• Template 4: Workplace resources to use in teaching
	• Template 5: Personal research question
3. **Assignment 3:** Observation of job/work task or function	• Template: Observation of job/work task or function
4. **Assignment 4:** Host employer evaluation of student lecturer	• Template: Host employer evaluation of student lecturer
5. **Assignment 5:** WIL reflection report, presentation and portfolio submission	• WIL reflection report
	• PowerPoint slides on WIL experience
	• Presentation on WIL experience
	• Compilation and submission of portfolio

You must **familiarise yourself with the requirements and elements of each assignment thoroughly** before the start of your WIL and complete all the pre-placement components. The ease with which the assignments are completed depends on your being well prepared.

2.2 Assignment 1: Subject topic checklist, daily register, activity log and journal

ELEMENTS OF ASSIGNMENT 1

1. Template 1: Subject topic checklist
2. Template 2: Daily attendance register
3. Template 3: Daily activity log and weekly reflective journal

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INSTRUCTIONS FOR COMPLETING ASSIGNMENT 1

- This assignment includes three templates:

- **Template 1, is a checklist of subject topics** that you will be expected to focus your WIL learning on in the workplace.

  o *Before the start of your WIL*, create a topic checklist for your subject specialisation based on the college curriculum. Your checklist should include topics you would like to receive exposure to during WIL. The appendix to this guide includes some subject checklists which can be used as a guide when creating the checklist. If a checklist is not included for your subject, refer to the college curriculum for that subject. Consult your university subject lecturer to assist with the development of your checklist.

  o *At the end of your WIL*, tick off the areas in which you obtained exposure or experience and the extent of this. You and the workplace supervisor/mentor must also comment on the extent to which you were able to develop the required knowledge and skills. The completed checklist must be signed by you and the workplace supervisor/mentor. It is **your responsibility** to ensure that the checklist is fully completed and signed by the supervisor/mentor.

- **Template 2, the daily register**, needs to be completed and signed by you and the workplace supervisor/mentor. If you complete WIL at more than one workplace/organisation, a register needs to be completed for each of them. It is **your responsibility** to ensure that it is signed by the workplace supervisor/mentor.

- **Template 3 is a daily activity log and weekly reflective journal**. You should complete the activity log every day while your WIL experience is fresh and the weekly reflective journal at the end of each week. The activity log and journal must be completed as fully and thoughtfully as possible.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

TEMPLATE 1: SUBJECT TOPIC CHECKLIST

NAME OF SUBJECT:					
Subject topics or outcomes in which exposure or experience sought	**Confirmation of WIL exposure and experience gained in each content area** (to be completed by student lecturer and approved by host organisation supervisor/ mentor)				
	NONE ✔	RATING EXPOSURE ✔		RATING EXPERIENCE ✔	
	Gained no exposure or practical experience	Gained some exposure (mostly through observation)	Gained good exposure (mostly through observation)	Gained some practical experience (through assisting with work activities OR practice in in-house workshop or training facility)	Gained good practical experience (through supervised completion of work activities OR practice in in-house workshop or training facility)
SUBJECT KNOWLEDGE AND SKILLS CONTENT AREAS (add rows as necessary)					
Topic 1					
Topic 2					
Topic 3					
Topic 4					
Topic 5					
Topic 6					
Topic 7					
Topic 8					
Topic 9					
Topic 10					
Topic 11					
Topic 12					
Topic 13					
Topic 14					
Topic 15					
Topic 16					
SIGNATURES AND COMMENTS					

Student Lecturer	Workplace supervisor/mentor
Name	Name
Signature	Signature
Comment on extent of subject knowledge and skills developed	Comment on extent of subject knowledge and skills developed

TEMPLATE 2: DAILY ATTENDANCE REGISTER

Name of student lecturer			
Name of host organisation			
Address of host organisation			
Name of supervisor/mentor			
Job/role of supervisor/mentor			
Duration and dates of placement	Total days	Start date	End date
Confirmation that the WIL placement register is correct			
Student lecturer signature		Date	
Supervisor/mentor signature		Date	

Complete the daily attendance register in full **for each day spent** in the workplace.

Date (insert the date for each day)	Time in	Time out	Student lecturer signature per day	Workplace representative's signature per day	
				Name	**Signature**
WEEK 1					
Day 1: _____ (date)					
Day 2: _____ (date)					
Day 3: _____ (date)					
Day 4: _____ (date)					
Day 5: _____ (date)					
WEEK 2					
Day 6: _____ (date)					
Day 7: _____ (date)					
Day 8: _____ (date)					
Day 9: _____ (date)					
Day 10: _____ (date)					

TEMPLATE 3: DAILY ACTIVITY LOG AND WEEKLY REFLECTIVE JOURNAL

DAILY ACTIVITY LOG

INSTRUCTIONS FOR COMPLETING DAILY ACTIVITY LOG
- *Complete a daily log entry for each day or part-day of your placement. Describe what you did, saw and learned. Include drawings, if applicable.*
- *A new template needs to be used for each day.*

DAILY ACTIVITY LOG	Day number		Date	
Work area(s) or department(s) visited or placed in				
Describe and comment on the activities you observed or participated in and what you learned				

WEEKLY REFLECTIVE JOURNAL

INSTRUCTIONS FOR COMPLETING WEEKLY REFLECTIVE JOURNAL
- *At the end of each week, complete a reflective report on your learning and experience during the week and how you can apply what you learned to the teaching of your subject.*
- *A new template needs to be used for each week.*

WEEKLY REFLECTIVE JOURNAL	Start date		End date	
List knowledge, skills and personal/professional attributes exposed to or developed				
Subject knowledge and skills		Personal/professional soft skills, attributes and attitudes		
Reflection: What were the most important things you learned and why? What challenges did you experience and how did you resolve these?				
How can you apply what you learned to the teaching of your subject?				

2.3 Assignment 2: Workplace research

Elements of assignment 2

1. Template 1: Overview of host employer
2. Template 2: Jobs/roles in subject field
3. Template 3: Industry changes or developments in subject field
4. Template 4: Workplace resources to use in teaching
5. Template 5: Personal research question

Instructions for completing assignment 2

- Assignment 2 includes 5 templates.

- Complete each template as fully as possible.

- Template 1 needs to be completed for each organisation you complete a placement with.

- For template 5, you need to identify a research question to investigate in the workplace. Do this in consultation with your university supervisor or subject lecturer before the start of your WIL placement.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

TEMPLATE 1: OVERVIEW OF HOST EMPLOYER
(If you complete WIL at more than one organisation, complete template 1 for each of them)

1. What type of employer are you visiting?

Government department		Education institution	
Government organisation		Non-profit organisation	
Private company		Other	

2. What is the size of the organisation?

Large		Medium		Small		Micro	

3. Approximately how many employees are there?

4. What economic or development sector does the employer belong to?

5. What is the core business of the workplace? Name some of its main products and services.

6. Who does the organisation serve: clients, customers or community and what needs are being met by the products or services provided?

7. What is the culture and ethics of the workplace including dress code and code of conduct?

8. Describe or draw the organisational structure. Include the following, where applicable: board, CEO/manager/owner, main work areas or departments and their function(s).

9. Name **three** key jobs/roles in the company. Indicate in which work area or department these jobs are performed. Indicate the level of each job.

Name of job/role	Work area or department	Level of job ✓		
		Junior	Middle	Senior
1.				
2.				
3.				

10. What are the top **two to three** health, safety, environmental or security risks in the workplace and how are each of these managed?

Top health, safety environmental or security risks	How managed

11. What is the background of the employer? When and how did it start and how long has it been in existence?

12. What factors enable an organisation like your host employer to start, grow and succeed?

13. Name two other organisations that provide similar products or services to your host employer.

TEMPLATE 2: JOBS/ROLES IN SUBJECT FIELD
(Complete one template for all workplaces visited for WIL)

1. Entry level jobs/roles in subject field

Identify and provide an overview of **TWO jobs/job types/roles** (entry level) that college graduates in your subject field could do in workplaces similar to those you are visiting.

1. NAME OF JOB/ROLE						
Main requirements and expectations						
• *Main duties to be performed*						
• *Core knowledge and skills required*						
• *Important soft skills, personal/professional attributes and attitudes*						
• *Work conditions, e.g. work hours, employment contract, level of noise or danger, etc.*						
Level of job/role pressure ✓	High		Mid		Low	
• *Main pressures*						
Career/progression path in this type of job/role						

2. NAME OF JOB/ROLE						
Main requirements and expectations						
• *Core tasks to be performed*						
• *Core knowledge and skills required*						
• *Important soft skills, personal/professional attributes and attitudes*						
• *Work conditions, e.g. work hours, employment contract, level of noise or danger, etc.*						
Level of job / role pressure ✓	High		Mid		Low	
• *Main pressures*						
Career/progression path in this type of job/role						

2. Training provided by the organisation

Is in-house or external training provided for staff members performing these jobs/roles in any of the workplaces/organisations you visited? Provide details.

3. Opportunities for employment in the organisation

What employment opportunities are there in your subject field at the workplace(s)/ organisation(s) you visited (or similar organisations) and how are staff recruited? Provide details.

TEMPLATE 3: CHANGES OR DEVELOPMENTS IN YOUR SUBJECT FIELD
(Complete one template for all workplaces visited for WIL)

In the table below, **list three key developments or changes that have taken place in industry in your subject field** in the last 5-8 years. For instance, have there been changes in products and services, technology and work processes, staffing and management, or government and industry regulations? Note the factors that have driven each change and indicate if you saw evidence of the change at your host organisation(s).

Important developments or changes in industry in subject field	Key factors that have driven this development change in the sector	✓ Evidence of this change at your host organisation(s)
1.		
2.		
3.		

TEMPLATE 4: WORKPLACE RESOURCES TO USE IN TEACHING
(Complete one template for all workplaces visited for WIL)

1. Identify and collect workplace documents and resources, including photographs or videos that could be used in the teaching of your subject to improve its relevance to actual practice and requirements. If it is not possible to get a copy of a document, take a photograph of it. **First get permission from the organisation to take and use photographs or organisational documents or materials.**

Documents and resources collected or photographs or videos taken could include:		
• Vison and mission statement • Organogram • Brochures, pamphlets or information booklets • Forms and checklists • Meeting agendas and minutes • Reports • Business plan • Financial statements • Instructions or job cards	• Policies, procedures or operating manuals • Conditions of employment • Code of conduct • Job advertisements or descriptions • Menus • Itineraries • Tool, equipment or utensil lists • Engineering drawings or circuit diagrams	• Pieces of equipment that are broken or not used, for instance an old circuit board or motor • Videos of employees performing procedures • Photographs of machines or equipment not found at college • Photographs or videos of the layout of a room or workshop • Training videos

2. List **FIVE** documents or resources you collected, including photographs or videos taken. If the organisation was not willing to provide you with documents or allow you take photographs, list actual documents, objects, images or situations that you were exposed to which you think would be useful to take into your classroom.

   …………………..………………………………………………………………………………..
   …………………..………………………………………………………………………………..
   …………………..………………………………………………………………………………..
   …………………..………………………………………………………………………………..
   …………………..………………………………………………………………………………..

3. Now complete the table below based on **TWO** of the resources you obtained (or observed if you were not given permission to take photographs or resources):

Names of TWO workplace/organisation resources/photographs you obtained (or observed if permission not given)	Did you obtain a copy of resource?		Suggest one way you could use each resource to improve the relevance of the curriculum to workplace practice and requirements
	Yes	No	
1.			
2.			

Include samples of workplace resources you obtained or copies of photographs you took in your portfolio.

TEMPLATE 5: PERSONAL RESEARCH QUESTION

Identify a research question related to real-world application in your subject field and gather information about this during your placement. Draw conclusions for the teaching of your subject.

Research question	
Main findings	
Conclusion (implications for teaching)	

2.4 Assignment 3: Observation of job/work task or function

Elements of assignment 3

- Template: Observation of job/work task or function

Instructions for completing assignment 3

- This assignment includes one template.

- If you complete your WIL at more than one workplace/organisation, decide on which organisation you want to complete assignment 3.

- Assignment 3 requires you to observe, record and reflect on the completion of **one** task or function that is related to your subject specialisation. You first need to identify a suitable task or function to observe. The task or function should be core to your subject specialisation and should be substantial enough for you to complete all the questions below on it. It should also preferably be one that allows you to observe its completion from beginning to end. Depending on the task or function, it might have taken a few hours to complete or a number of days. If you are unable to observe all aspects of the completion of the task, find out what happened in the steps you did not observe and record these.

- Once you have identified a task or function to observe, complete the questions in the assignment template below as fully as possible.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

TEMPLATE: OBSERVATION OF JOB/WORK TASK OR FUNCTION

1. Name of task or function observed.

2. Time taken to complete the task.

3. Name the work area or department in which the task or function was carried out.

4. Name the jobs/roles of **one or two** people who are central to the completion of the task or function. Indicate the main function and level of seniority of each job/role.

Name of job / role	Main function	Level of job ✓		
		Junior	Middle	Senior

5. Provide an overview of the **work process** for the task or function from start to finish. Use a flow chart to illustrate this.

6. What resources, technology (tools, equipment or machines) or systems were used to do the work?

7. What information and documents were used for the completion of this task?

8. How was the work managed?

9. Were any specific health, safety, security, environmental or legal precautions taken during the completion of the task? If yes, indicate which ones and why?

10. What, if any, approach was used to ensure that the completed task met with a high standard of accuracy or quality?

11. What core knowledge and skills were needed to complete the task?

12. What job-related and personal qualities are expected of individuals who work on a task or function like this? For instance, work independently, work well in a team, work safely, work quickly, pay close attention to detail, work accurately, be friendly and respectful to customers/clients/community members, etc.

13. Rate the level of work pressure that goes with this task or function. Then briefly describe the main pressures that go with the work.

Level of work pressure	Low		Average		High		Very high	
Main pressures that go with the work								

14. How effectively was the task carried out? Did any problems occur during its implementation and how were these resolved? Do you think the way the task was carried out could have been improved? Motivate your answer.

15. What did you learn about this task or function and its completion that is applicable to the teaching of your subject?

16. What role did you play in the completion of this task or function? If you did more than observe, explain what you did.

2.5 Assignment 4: Host employer evaluation of student lecturer

ELEMENTS OF ASSIGNMENT 4

- Template: Host employer evaluation of student lecturer

INSTRUCTIONS FOR COMPLETING ASSIGNMENT 4

- This assignment includes a single template that must be completed and signed by your workplace supervisor/mentor.

- If you completed your WIL at more than one organisation, an evaluation must be completed for each of them.

- It is **your responsibility** to ensure that the evaluation is fully completed and signed.

- There is a space on the template for the organisation's stamp. Please ensure that the template is stamped. If an organisation does not have a stamp, it is acceptable for the template to be submitted without it.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

TEMPLATE: HOST EMPLOYER EVALUATION OF STUDENT

1. **Information on host employer, student lecturer and work placement**

Name of host employer	
Name of student lecturer	
Number of days in organisation	Dates of placement
Key areas in which exposure and experience were provided	

2. **Rating of student lecturer**. Circle the number that best applies in each case where 1 = very poor, 2 = poor, 3 = fair, 4 = good and 5 = very good.

ITEM BEING RATED	RATING				
Attendance and punctuality. The student lecturer attended daily & was punctual.	1	2	3	4	5
Initiative and sense of responsibility. The student lecturer helped to direct his/her experience in the organisation, looked for work to do and acted voluntarily.	1	2	3	4	5
Performance of tasks. The student lecturer performed the tasks given with good will, attention to detail and to the best of his/her ability.	1	2	3	4	5
Understanding and skills. The student lecturer demonstrated good knowledge in his/her subject field and adequate practical skills.	1	2	3	4	5
Interest. The student lecturer asked questions and showed an interest in the work of the organisation and what he/she was learning.	1	2	3	4	5
Communication. The student lecturer communicated appropriately and well.	1	2	3	4	5
Learning. The student lecturer was willing to learn, engaged thoughtfully and achieved new understandings and/or skills.	1	2	3	4	5
Teamwork and cooperation. The student lecturer got along with and worked well with others.	1	2	3	4	5
Attitude, willingness and friendliness. The student lecturer had a good attitude, participated willingly and was polite, friendly and appreciative of others' time given.	1	2	3	4	5

3. **Overall comments** on the student lecturer's interaction and performance during the placement.

…………………………………………………………………………………………………..…………

…………………………………………………………………………………………………..…………

…………………………………………………………………………………………………..…………

…………………………………………………………………………………………………..…………

4. **Suggestions on how the student lecturer might improve his/her experience and learning** in the workplace during future WIL placements.

…………………………………………………………………………………………………..…………

…………………………………………………………………………………………………..…………

…………………………………………………………………………………………………..…………

Name …………………………….…………………….………..………

Role/position……………………….…………………………..

Signature.....…………………….…………….………………..

Date..........…………………….…………………………………

Insert organisation stamp (if available)

2.6 Assignment 5: WIL reflection report, presentation and portfolio submission

Elements of assignment 5

1. WIL reflection report
2. PowerPoint slides on WIL experience
3. Presentation on WIL experience
4. Compilation and submission of portfolio

INSTRUCTIONS FOR COMPLETING ASSIGNMENT 5

- Assignment 5 includes four elements: a report, slides, a presentation and the submission of your full WIL portfolio.

- An outline is provided for your reflection report and the PowerPoint slides you should prepare for your presentation.

- You will be required to either do your presentation for your class or record yourself doing the presentation and submit the recording.

- Once you have completed all your assignments for the year, include them in a single portfolio as per the instructions in section three.

- **Refer to the rubric in section three of this book for the weighting of this assignment and the criteria against which it will be assessed.**

OUTLINE FOR WIL REFLECTION REPORT AND PRESENTATION

COVER

- Student lecturer name
- Name(s) of subject specialisation(s)

INTRODUCTION

- Name(s) of host employer(s)/organisation(s) with whom WIL was completed
- Core business of the host employer(s)/organisation(s)
- Link between your subject specialisation and the work of the organisation(s) you visited
- Clients, customers or community(ies) served by the organisation(s)
- Length of placement and dates of completion (at each host employer/organisation)
- Focus of placement/experience (at each host employer/organisation)

BRIEF DESCRIPTION OF WIL PLACEMENT(S)

- Explain how your placement was arranged, including the identification of host employer(s)/organisation(s), the planning process and the logistical arrangements.
- Explain how your placement was structured on a daily/weekly basis including in which work areas or departments you were placed.
- Provide an overview of the main activities you were involved in.
- Describe how you were supervised and mentored during your placement and indicate whom you observed/worked with.

EVALUATION AND REFLECTION ON WIL PLACEMENT(S)

- Rate the value and relevance of your WIL experience and learning and give reasons for your rating:

RATING ✓		REASONS FOR RATING
Not that useful		
Useful		
Very useful		
Extremely useful		

- Summarise your key learnings from your WIL placement.
- How does what you learned relate to your prior knowledge, skills and experience?
- What important developments or trends were evident in your subject's field?
- Based on your experience, what core knowledge, skills and attitudes/attributes are required in your subject's field to perform the activities of the types of organisation(s) you visited adequately?
- Do you believe the college curriculum for your subject adequately prepares students to engage in workplace activities and, if not, what are the main gaps?
- What was your impression of the organisation(s) you visited?
- How effective was your interaction with your supervisor/mentor and others in your host organisation(s)?
- What were the main strengths of your placement(s)?
- What were the main weakness or challenges of your placement(s) and how could these be prevented or resolved in future?

APPLICATION OF LEARNING FROM PLACEMENT IN TEACHING

- What are your main lessons for the teaching of your subject from your industry/workplace WIL experience?
- Suggest teaching strategies for improving the relevance of subject topics to industry/workplace practice and requirements:

List **three** core curriculum subject topics in which you gained workplace exposure or experience	What were your key learnings about workplace practice and requirements in this topic area	Suggest a teaching strategy per topic to enhance relevance to workplace practice requirements. Your strategy could include the use of workplace resources
1.		
2.		
3.		

CONCLUSIONS AND RECOMMENDATIONS

- What is your overall assessment of your WIL placement and the extent to which it met the industry/workplace WIL learning objectives for your subject?
- Has your WIL experience changed you in any way or how you think about teaching your subject?
- What do you believe are the main benefits of TVET colleges and lecturers collaborating with industry?
- How could your placement experience and the support you received be improved?
- What additional industry/workplace exposure or experience would you find useful?
- What advice would you give another education candidate about participating in industry/workplace WIL?

Section 3: Portfolio submission and assessment

3.1 Portfolio contents

The assignments/assignment elements to be completed and submitted as part of your portfolio are included in the table below:

ASSIGNMENT	ELEMENTS / ACTIVITIES
1. **Assignment 1:** Subject checklist, daily register, activity log and journal	• Template 1: Subject topic checklist
	• Template 2: Daily attendance register
	• Template 3: Daily activity log and weekly reflective journal
2. **Assignment 2:** Workplace research	• Template 1: Overview of host employer
	• Template 2: Jobs/roles in subject field
	• Template 3: Industry changes or developments in subject field
	• Template 4: Workplace resources to use in teaching
	• Template 5: Personal research question
3. **Assignment 3:** Observation of job/work task or function	• Template: Observation of job/work task or function
4. **Assignment 4:** Host employer evaluation of student lecturer	• Template: Host employer evaluation of student lecturer
5. **Assignment 5:** WIL reflection report, presentation and portfolio submission	• WIL reflection report
	• PowerPoint slides on WIL experience
	• Presentation on WIL experience
	• Compilation and submission of portfolio

3.2 Weighting of marks for assignments

The weighting of the marks for each assignment in your portfolio is as follows:

ASSIGNMENT	% WEIGHTING	ELEMENTS	% WEIGHTING
1. **Assignment 1:** Subject checklist, daily register, activity log and journal	25	• Template 1: Subject topic checklist	8
		• Template 2: Daily attendance register	2
		• Template 3: Daily activity log and weekly reflective journal	15
2. **Assignment 2:** Workplace research	20	• Template 1: Overview of host employer	5
		• Template 2: Jobs/roles in subject field	5
		• Template 3: Industry changes or developments in subject field	3
		• Template 4: Workplace resources to use in teaching	2
		• Template 5: Personal research question	5
3. **Assignment 3:** Observation of job/work task or function	10	• Template: Observation of job/work task or function	10
4. **Assignment 4:** Host employer evaluation of student lecturer	5	• Template: Host employer evaluation of student lecturer	5
5. **Assignment 5:** WIL reflection report, presentation and portfolio submission	40	• WIL reflection report	25
		• PowerPoint slides on WIL experience	5
		• Presentation on WIL experience	5
		• Compilation and submission of portfolio	5

3.3 Assessment rubric

ASSESSMENT CRITERIA	RATING SCALE						MARKS	
	Not done	Very weak	Weak	Acceptable	Good	Excellent	Maximum Marks	MARK
	0%	1 - 19%	20 - 39%	40 - 59%	60 - 79%	80 - 100%	100%	
Assignment 1: Subject checklist, daily register, activity log and journal								
Template 1: Subject topic checklist • Completed in full and signed • Student lecturer and mentor comments included • Comments applicable and had substance	0	1	2 - 3	4 - 5	6 - 7	8	**8**	
Template 2: Daily attendance register • A register included for each organisation where WIL completed • Register(s) fully and correctly completed • All signatures included	0	0	0.5	1	1.5	2	**2**	
Template 3: Daily activity log and weekly reflective journal • Included a log sheet per day and a journal sheet per week • Daily log and weekly journal templates completed in full • Activities engaged in concisely described in daily log • Weekly journal thoughtfully and well completed – showed analytical, reflective, critical thought and insight • Good ideas and insights on how to apply learning to teaching	0	1 - 3	4 - 6	7 - 9	10 - 12	13 - 15	**15**	
ASSIGNMENT 1 TOTAL							25	
Assignment 2: Workplace research								
Template 1: Overview of host employer • Template 1 completed for each organisation visited for WIL • Completed as fully as possible • Content included appropriate and relevant • Questions concisely answered with sufficient detail • Responses to questions reflected specific context of host organisation • Showed analytical and critical thinking and insight	0	1	2	3	4	5	**5**	
Template 2: Jobs/roles in subject field • Completed in full • Included **TWO** jobs or roles • Information included appropriate and relevant • Reflected jobs/roles found at organisations visited	0	1	2	3	4	5	**5**	
Template 3: Industry changes or developments in subject field • Template completed in full • Included **THREE** changes or developments • Information included appropriate and relevant • Reflected changes and developments across organisations visited	0	1	1.5	2	2.5	3	**3**	
Template 4: Workplace resources to use in teaching • Listed **FIVE** resources that could be used in teaching, which were either observed in the workplace or for which a copy was obtained • Indicated how **TWO** of these resources could be used in teaching • Showed understanding of subject and insight into its teaching • Samples of resources or photographs included in portfolio (if these were obtained)	0	0	0.5	1	1.5	2	**2**	

ASSESSMENT CRITERIA	RATING SCALE						MARKS	
	Not done	Very weak	Weak	Acceptable	Good	Excellent	Maximum Marks	MARK
	0%	1 - 19%	20 - 39%	40 - 59%	60 - 79%	80 - 100%	100%	
Template 5: Personal research question • Relevant and appropriate research question • Information included relevant to question • Question clearly answered and included sufficient detail to contextualise and back up assertions • Analytical and critical thinking evident and showed insight	0	1	2	3	4	5	5	
ASSIGNMENT 2 TOTAL							20	
Assignment 3: Observation of job/work task or function								
• Completed as fully as possible • Content included appropriate and relevant • Questions concisely answered with sufficient detail • Responses to questions reflected specific context of host organisation • Analytical and critical thinking evident and showed insight	0	1-2	3-4	5-6	7-8	9-10	10	
ASSIGNMENT 3 TOTAL							10	
Assignment 4: Host employer evaluation of student lecturer								
• Completed in full and signed • Host organisation's comments included	0	1	2	3	4	5	5	
ASSIGNMENT 4 TOTAL							5	
Assignment 5: WIL reflection report, presentation and portfolio submission								
WIL reflection report • Comprehensive coverage of report topics/questions • Provided a good synthesis of WIL experience and learning • Thoughtfully and well completed - showed analytical, reflective and critical thought and insight • Showed understanding of subject and insight into its teaching	0	1-5	6-10	11-15	16-20	21-25	25	
PowerPoint slides on WIL experience • Slides adequately reflected the WIL reflection report • **10 - 15** slides were included • Slides were clear, concise and interesting	0	1	2	3	4	5	5	
Presentation on WIL experience • Adhered to a time allocation of **10 minutes** • Interesting, clearly and thoughtfully presented	0	1	2	3	4	5	5	
Compilation and submission of portfolio • Cover page included student lecturer name and number, and name and code for qualification and course • Contained required content • Coherently organised, neatly presented and securely fastened	0	1	2	3	4	5	5	
ASSIGNMENT 5 TOTAL							40	
PORTFOLIO TOTAL								

Section 4: Appendix – Subject topic checklists

4.1. Business programmes and subjects

4.1.1. Office Administration

Business Practice	Office Practice	Personal Assistance	Office Data Processing
• Personal and professional behaviour in a business environment • Health, safety and security in the workplace • Structure of a workplace organisation • Work processes • Employment relations • Resolve conflict in workplace • Induction of new staff • Organisational ethics • Cultural awareness in dealing with customers and colleagues • Efficient time management • Work as a project team member	• Answer customer enquiries • Receive and direct visitors and monitor visitor satisfaction • Maintain and monitor reception • Process calls and use effective telephone etiquette • Operate & care for equipment • Mail function • Create evidence and maintain confidentiality • Document filing and systems • Plan, monitor and control an information system • Control office supplies • Handling of petty cash • Manage a diary • Co-ordinate meetings, minor events and travel arrangements • Assist in planning an event • Create business reports • Manage people information • Ensure customer satisfaction	• Plan and conduct meetings • Liaise with a range of customers of business • Handle customer complaints • Identify factors that influence productivity and improve productivity at a workstation • Identify expertise and resources	• File management • Create business documents • Word processing • Email communication • Spreadsheets • Database • Presentations

4.1.2. Finance, Economics and Accounting

Applied Accounting	Economic Environment	Financial Management	New Venture Creation
• Administer payments and expenses • Administer credit sales transactions • Administer credit purchase transactions • Prepare general ledger accounts and initial trial balance • Financial year end procedures • Financial year end profit or loss calculations • Financial statements	• The international trading environment • Financial markets and economic indicators • Current affairs related to a specific business sector (physical, socio-political, economical, technological and institutional) • International trade calculations • Macro-economic principles as applied to South African business environment • Economic concepts central to local economic development in South Africa • Environment of local economic development in South Africa • Requirements of import and export factoring for discounting	• Manage finances in a small business or new venture • Perform basic calculations in retail or wholesale practices • Basic financial transactions • Basic business calculations (income statement, shrinkage) • Calculate and record VAT • Prepare salaries and wages • Petty cash system • Compile reconciliation statements • Administer non-current assets • Financial planning and control functions for a small business • Interpret financial statements • Apply budget function in a business unit • Calculate tax payable by a small business	• Investigate possibilities of establishing a small business • Investigate markets and needs for a new business venture • Determine financial requirements of a new business • Identify internal and external stakeholders • Organisational structure of new venture • Apply HR principles in a new venture • Implement an action plan for business operations • Finance a new venture • Comply with organisational ethics • South African law and the regulation of risk management • Apply principles of costing and pricing to a business venture

4.1.3. Management

Management Practices	Operations Management	Financial Management	Entrepreneurship and Project Management
- Basic Legislation - Business Ethics - Recordkeeping - Corporate culture - Strategic planning - Maintain an existing information system in a business environment - Apply of legislation in business operations - Human Resource Development - Management Functions and Activities - Change management - Team Motivation	- Functions of an Operations Manager - Implementation of Goals and Activities - Stakeholder Relationships and satisfaction analysis - Business systems, links between them and systems analysis - Planning and implementation of operational plans & mobilising resources - Implement risk management - Implement Total Quality Management system - Control business operations - Evaluate business operations	- Manage Finances for a New Venture - Perform Basic Calculations in Retail or Wholesale Practices - Conduct Basic Financial Transactions - Complete Basic Business Calculations (Income Statement, Shrinkage) - Calculate and record value added tax transactions - Prepare salaries: an introduction - Prepare wages: an introduction - The Petty Cash system - Compile reconciliation statements - Basic administration of non-current assets - Manage finances in a small business - Financial planning and control functions for a small business - Interpret basic financial statements - Apply the budget function in a business unit - Calculate tax payable by a small business	- Characteristics of a successful entrepreneur - Customer Relations and Marketing - Basic Finances - Manage Time and Work Processes - A Business Plan - Project Management tools and techniques - Project estimation and costing - Develop a project plan - Project administration - Projects are team initiatives - Project delivery strategies and operations - Develop schedules for project management - Supervise a project - Manage project risk - Review a project

4.1.4. Marketing

Marketing, Advertising and Promotions	Marketing Communication	Consumer Behaviour	Contact Centre Operations	Graphic Design	Wholesale and Retail
- Marketing & other functional areas in a company - Marketing component of business plan - Marketing plans and strategies - Marketing expertise & resources - Marketing performance standards - Processing marketing data - Advertising & media - Product range - Brand, product and service promotion - Legal requirements and implications - Professional behaviour of a marketing assistant - Functioning in a creative team	- Basic skills in customer service - Customer communication techniques - Respond to customer queries - Presentation communication - Plan and prepare meetings communications - Legal environment of marketing industry - Marketing stakeholders - Multicultural communication – dynamics & ethical considerations - Marketing work ethics - Develop & present marketing proposals - Develop marketing materials	- Identify customers of business - Handle queries - Information systems - Client verbal communication - Consumer composition - The market / target market - Basic research - Product positioning - Safety & security policies & procedures - Influence of branding, packaging and labelling - Liaise with range of customers - Take orders from customers - Handle customer complaints	- Identify customers of contact centres - Operate contact centre equipment - Apply in-bound and outbound operations - Operations in an emergency context - Service levels - Problem solving - Handle customer complaints in contact centres - Customer and market trends impacting on contact centres - Contact centre culture - Performance standards - Contact centre specific sales techniques	- Elements and principles of graphic design - Formal drawing and observation skills - Desktop publishing and digital design concepts - Layout and typography - Photographic manipulation - Three dimensional (3d) design - Multimedia - Presentation animation - Play-out and production	- Legal environment in wholesale & retail industry - Distribution in wholesale & retail - Building customer relations - Supervising customer service - Cashing up and banking - Stock control - Improving net profit of wholesale and retail outlet - Promoting and supervising sales and promotions

4.1.5. Information Technology and Computer Science

Systems analysis and design	Electronics & computer hardware & software	Computer programming	Data communication and networking	Multimedia
• Information processing in the business organisation • Data processing, IT, business support and control systems • Information systems departments in business organisations • Acquisition of computer technology • Information systems planning and strategy • Investigation in systems development life cycle • Ethics and professionalism for computer industry in South Africa • ICT risks and threat management • Information gathering techniques for computer systems development • Analysing information systems • Designing computer system inputs & outputs • Implementing and maintaining an information system • Concepts of artificial intelligence	• Electrical safety standards • Use of electrical test instruments • Soldering techniques • Basic electronic circuits • Basic programmable logic controllers (PLC) • Basic concepts of telecommunications • Types of computer systems, hardware configurations • Assemble a computer and peripherals into modules • Install software • Install peripherals • Test IT systems • Preventative maintenance & safety in a computer environment • Technical computer problems • Computer user's problems • Problem solving strategies • Repair a computer and peripherals to module level	• Computer program quality assurance and project viability • Program design • Database application development • Error handling in a computer environment • User interface and output design • Object oriented programming • Database application design • Principles of developing software for the internet • Design and build a website using simple HTML • Create multimedia, web-based applications with scripting	• Computer network architectures and standards • Computer network communication • Computer cabling • Install a local area network (LAN) • Install networked computer application software • Support a local area computer network • Compare WAN with LAN	• Rendering and typographic skills • Sound production and editing • Photographing techniques and editing • Desktop publishing and layout • Production and editing of 2d and 3d animation • Utilisation of design theory • Video production • Use of electronic publishing • Multimedia content and digital content • Networks and servers • Database management • Web design and programming • Internet security

4.2. Engineering programmes and subjects

4.2.1. Engineering and Related Design

Engineering Fundamentals, Processes, Practice and Maintenance	Engineering Technology and Materials	Engineering systems, Graphics and Design and Professional Practice	Fitting and Turning	Automotive Repair & Maintenance
- Health, safety and environment practices in engineering workplace - Basic fire-fighting and first aid - Systematic fault finding techniques - Diagnosis mechanical and electrical faults - Lubricants and lubrication systems - Maintenance of plant and equipment - Mechanical component service, dismantling and assembling - Operate & monitor machinery used in cutting materials - Component production using computer aided machining (CAM) - Joining processes in materials technology	- Engineering hand tools, power tools, measuring and marking off equipment - SI units of measurement - Basic engineering drawing - Metals and non-metals - Metal processing - Material testing - Construct structure prototype capable of bearing a point and/or distributed load - Incorporate functionally dependent mechanisms into a prototype of a technological solution - Incorporate control system into prototype of a technological solution	- Engineering systems and their applications - Equipment control systems - Routine maintenance - Isometric drawings - Assembly drawings - Detailed drawings - Development and inter-penetration - Computer aided design - The engineering profession - Engineering design function, philosophy and process - Communication in engineering - Computation	- Grinding and sharpening - Drilling machines - Hand threading and reaming - Keys and fasteners - Centre lathe - Milling machine - Bearings - Couplings - Brakes and clutches - Belt drives - Chain drives - Gear drives - Pipes and pipe fittings - Valves - Machinery during production/operation - Maintain fluid power / pneumatic systems - Produce complex components using lathes - Produce complex components using milling machines - Produce complex components by performing internal and external grinding operations - Write simple computer numerical controlled (CNC) programmes and set and operate a CNC machine	- Health and safety - Automotive trade tools - Measuring equipment - Vehicle lifting equipment - Bearings - Batteries - Lubrication systems - Wheels and tyres - Cooling systems - Lights and automotive electrical systems - Service a vehicle - Fuel systems - Check & adjust steering geometry - Wheel balancing - Maintain and repair: - Suspension systems - Starter systems - Charging systems - Hydraulic brake systems - Ignition systems - Perform condition test on engine - Remove & replace engine - Overhaul engine - Maintain & repair driveline & related components - Test, diagnose, and rectify faults in electronic fuel injection (EFI) system - Diagnose and repair: - Induction & exhaust systems - Hydraulic brake systems - Cooling systems - Manual transmissions - Suspension systems - Steering systems - Service and repair electronic ignition systems - Repair vehicle differentials - Recondition vehicle sub assembly - Test automatic transmission

4.2.2. Electrical Infrastructure Construction

Electrical Principles and Practice	Workshop Practice / Electrical Workmanship	Electrical Systems and Construction	Electronic Control and Digital Electronics
• Direct current (DC) and alternating current (AC) circuits • Circuit diagrams • Electrical materials, components and safety • Protection, measuring and testing instruments • Generation and supply of electricity • Earthing practices • Transformers • Electric machines	• Safety regulations and apply safety in the workplace • first aid • Engineering hand tools • Engineering power tools • Engineering testing, protection and measuring equipment • Worksite procedures and lifting techniques • Soldering • Trade practices • Maintenance and repair of domestic appliances and electric power tools • Installation of single-phase ac machines and control gear • Shielded metal arc welding (SMAW) • Typical electrical installations • Illumination • Electric machines and control gear	• Electrical circuits and systems • Low voltage cables and wire ways • Electric machines • Fault-finding and testing • Wiring, inspection and testing of a single-phase domestic installation • Fault-finding on alternating current (AC) and direct current (DC) systems • Low voltage networks • Lighting systems and energy efficiency • Electrical infrastructure • Construction of a three-phase circuit • Construction of a three-phase medium voltage overhead supply to domestic houses • Inspection of a three-phase industrial/commercial installation • Fault-finding and maintenance of three-phase voltage electric circuits • Renewable energy	• Construct basic electronic circuits and systems • Replace faulty components on a pc board • Assemble a personal computer and install software • Understand function and construction of transducers used in process control • Knowledge of PLCs and design and fault-find simple control circuits for these • Knowledge syncro-server motor

4.2.3. Civil Engineering and Building Construction

Construction Planning & Supervision	Materials	Plant and Equipment	Carpentry and Roof Work	Concrete Structures	Masonry	Roads
• Measuring, setting out and levelling • Foundations • International System (SI) units of measurement • Technical drawings • SA construction industry • Construction legislation and regulation • Construction contracts • Tenders and quotes • Quantities and costing • Planning and organising construction activities • Projections and cash flow • Supervision • Quality checks	• Masonry units (bricks and blocks) • Cement and concrete • Mortar, plaster, screeds and toppings • Timber • Metals • Steel construction • Understanding and combating corrosion of metals • Joining of metals by soldering, brazing and welding • Glass • Plastics • Elastomers • Adhesives • Paints, water repellents,	• Legislation and safety regulations • First aid • Hand tools • Ladders • Builder's trestles, access scaffolding and mobile towers • Lifting of heavy objects • Electric motors and internal combustion engines • Transmissions maintenance of vehicles • Small plant and power tool operation • Oxy-acetylene	• Roof construction • Gable roof construction • Hipped roofs • Erecting an L-shaped roof • Inspection of roof structures • Roof cladding • Installation of a geyser support deck • Installation of ceilings • Suspended timber floor construction • Doors and door furniture • Pre-manufactured cupboards, skirtings, shelving and panelling	• Erection of formwork and falsework. • Vertical stop ends, water stops and joints • Using release agents • Workmanship and detailing in concrete structures • Reinforcing documentation • Steelyard cutting, bending and identification of steel • Delivery, handling and storage of reinforcing steel • Installation of reinforcing steel • Checks before concreting	• Setting out masonry walls • Cavity wall construction • Basic masonry wall construction with hollow units • Advanced masonry wall construction • Plastering • Screeds and toppings • Tiling	• Road surveying • Soils, gravels and road-building materials • Road drainage • Earthworks • Layer work • Road surfacing • Road pavements • Road maintenance & rehabilitation

• Safety controls • Project management • Labour relations and legislation • Discipline and conflict management • Record keeping & admin	coatings and preservatives • Waterproofing of buildings, damp-proofing and vapour barrier installation. • Bitumen, tar and asphalt • Fasteners			• Placing and compacting concrete • Striking formwork, making good and finishing of concrete		

4.3. Other programmes and subjects

4.3.1. Hospitality

Client Service Human Relations	Food Preparation	Hospitality Generics	Hospitality Services
• Function in a business environment • Colleagues with special needs • Client service: cultural context • Health and safety legislation • Human relations requirements according to the various acts • Health and safety procedures in relation to clients & colleagues • Importance of staff development to human relations • The effect of solved problems on client care	• Clean food production areas, equipment and utensils • Knives and cutting equipment • Handle and store food • Fry, grill and bake food • Cook starch products • Fruit and fruit dishes • Vegetables & vegetable dishes • Hot & cold sandwiches & rolls • Assemble food for quick service • Prepare & present basic fish dishes • Prepare & present hot and cold soups, including stocks & sauces used in soups • Prepare and present basic cakes and biscuits • Prepare and present basic dough products • Prepare and present basic pastry dishes • Prepare food for cold presentation • Prepare and cook meat, poultry, game and offal dishes • Prepare, cook and finish complex vegetable dishes • Prepare, cook and finish hot and cold desserts • Prepare, cook and finish hot and cold sauces and dressings • Accept and store food deliveries	• Sectors of the tourism and hospitality industries • Teamwork • Personal health, hygiene and professional appearance • Food hygiene • Handle and dispose of waste • Clean, maintain and store equipment • Cleaning equipment and materials • Identify nutritional needs and plan and cost menus • Maintain hygiene in food preparation, cooking & storage • Operate a payment point and process payments • Handle and record refunds • Maintain a booking system. • Maintain effective working relationships • Monitor and maintain health, safety and security • Analyse & develop new menus • Manage own development • Source information about self-employment opportunities	• Glassware • Crockery and cutlery • Drinks machines & equipment • Function rooms • Counter service • Takeaway service • Drinks service • Beds, bed linen & coverings • Room service • Toilet and bathroom areas • Guest bedrooms • Floors and floor coverings • Public areas • Linen for external laundry • Incoming & outgoing calls • Maintain cellars and beverage storerooms • Provide a table drinks service • Provide a table service • Provide a counter service • Provide a take-away service • Maintain housekeeping supplies • Provide housekeeping services • Maintain a clean linen supply • Serve bottled wine • Prepare and serve cocktails • Provide a silver service • Maintain the drinks service • Maintain cleaning programme in area of responsibility • Plan and conduct meetings • Maintain the receipt, storage and issue of goods

4.3.2. Tourism

Client Service Human Relations	Science of Tourism	Sustainable tourism in SA	Tourism Operations
• Function in a business environment • Colleagues with special needs • Client service: cultural context • Health and safety legislation • Human relations requirements according to the various acts • Health and safety procedures in relation to clients & colleagues • Importance of staff development to human relations • The effect of solved problems on client care	• The tourism industry • The nature of tourists • Tourism dynamics • Career opportunities in industry • Tourism as a business • Processes and procedures required in a tourism business • Sourcing career opportunities in tourism industry • Wholesale and retail tourism, incorporating air travel • Tourism legislation	• Tourism in South Africa • Sustainability of tourism in South Africa • Conservation and heritage • South Africa and regional tourism • South Africa and international tourism • Evaluate tourism events with respect to sustainability	• Operate and maintain office equipment • Manage and store information • Use the telephone • Apply product knowledge and make reservations • Process payments • Tourism marketing • Tourism entrepreneurship • Basic foreign exchange transactions and conversions • The itinerary • Excursions and tours

4.3.3. Primary Health Care

Community Oriented Primary Health Care	Public Health	Human Body and Mind	The SA Health Care System
• Concept of community oriented primary care • Concept of community as individuals and families in time, space and place • Social stratification in the community • Origins & history of community oriented primary care • Organisations and institutions in the community • Relevance of community oriented primary care in SA • Application of community oriented primary care • Planning, monitoring and evaluation of community oriented primary care	• Health and wellness • Community factors that influence health and wellness • Public health • Infectious disease • Non-infectious, chronic disease • Reproductive health • Women's health • Infant and child health • Public health • Health of the elderly • Violence, abuse and injury / trauma • Mental health • Family health and wellness • Environmental health • Occupational health and safety • Waste management • Health and wellness: promotion and education • Elementary first aid	• Anatomy • Physiology • Psychology	• The SA health care system • The district health care system in SA • Stakeholders in the SA health care system • The for-profit health care system in SA • Traditional medicine in the SA health care system • Complementary medicine in the SA health care system • Civil society organisations in the SA health care system • Tertiary health care services in the SA health care system • Funding the SA health care system • The SA national health insurance (NHI)

4.3.4. Life Orientation

Personal wellbeing and development and working with others	Using business computing skills
• Personal goal setting, planning and development and factors that affect this, including ethics and morals, attitudes, values and skills • Health and wellness: hygiene, healthy eating, infectious diseases, HIV/Aids & STIs, drug abuse/addictions, diet stress and coping with this, and physical and mental wellness in relation to work productivity • Career planning, applying for jobs, interviews, and commitment and responsivity at work • Positive living: human rights, community support services and resources • Team work • Leadership • Managing diversity • Research skills: conduct a needs analysis in relation to personal and community issues • Creative problem solving	• ITC in modern world, legal environment and preventative maintenance and safety • Use email and internet • Use a word processing programme • Create and edit graphs and charts • Capture date in a spreadsheet, insert and edit objects in a spreadsheet • Access databases • Plan a database, create a data entry to form a new database table, sort data in a database query, create a report for a data base table, perform advanced print options for a database • Design a presentation • Conduct research using a computer and present results

4.3.5. English

Listening and Speaking	Reading and Viewing	Writing and Presenting	Language in Practice

• Use strategies to deliver messages & reply appropriately
• Distinguish between facts and opinions and main and supporting ideas
• Participate in group discussions and use questions to obtain information and clarify meaning
• Use assertive and persuasive strategies to manage discussions and conflict situations sensitively
	• Determine meaning in written, visual, multimedia and non-verbal forms of communication
	• Identify socio-cultural values, beliefs and bias
	• Clarify meaning in texts
	• Read and respond to written, visual and multimedia texts
	• Interpret and explain instructions and directions
	• Identify and describe how language structures and
		• Write for a specific audience, purpose and context and select appropriate layout and format
		• Produce writing that is grammatically correct, logical and coherent
		• Plan and write
		  - personal & work letters
		  - for meetings
		  - for persuasive purposes
		  - reports
			• Record and present information and data in a logical and coherent manner
			• Plan and manage time
			• Identify roles and responsibilities in group learning activities to lead and function in a team
			• Access and use suitable resources to promote learning and communication

• Use non-verbal communication • Organise and present information and data in a focused and coherent manner in a workplace context • Provide feedback and evaluate oral interaction	features affect meaning and comprehension • Respond critically and sensitively	- texts for the media - creatively • Edit, proofread and evaluate own and others' writing critically to adapt drafts • Organise and critically present texts in a manner appropriate to the context	• Critically evaluate language usage in oral and written communication	

4.3.6. Mathematical Literacy

Numbers	Patterns and relationships	Finance	Space, shape and orientation	Information communicated through numbers, graphs and tables
<u>Calculate and measure in personal, familiar or workplace contexts</u> • Use numbers when working with problems • Perform calculations correctly to solve problems • Identify and use appropriate measuring tools and techniques to solve problems *TOOLS* - Ruler / measuring tape; scale - Measuring jugs, cups, measuring cylinders, etc. - Thermometer - Trundle wheels and Vernier scales *PROBLEMS* - Read and set dials on instruments, tools and machines - Calculate area, volume, time, distance, other dimensions - Perform conversion rates, consumption rates, distance, time and speed rates, cost rates, mixing rates, etc.	<u>Identify patterns and relationships between varying quantities in personal, familiar or workplace contexts</u> • Identify and extend patterns for different relationships - Estimate and predict values based on trends - Increasing and/or decreasing values, maximum and minimum values • Identify and use information from different representations of relationships of patterns and relationships to solve problems • Translate between different representations of relationships - Tables - Graphs - Formulae and equations	<u>Deal with finances in personal, familiar or workplace contexts</u> • Manage finances - Identify, record and manage sources of income - Maintain records of income & expenses - List and manage expenses - Develop and maintain income/expenditure statements - Develop budgets - Explain variations between budgeted and actual income and expenditure • Read, interpret and act on financial information presented in documents - Pay slip - Receipt - Bank statement - Accounts - Cell phone rate tables - Transport rate tables - Service charges (e.g. water & electricity)	<u>Read, interpret, make and use representations of the physical world in personal, familiar or workplace contexts</u> • Perform space, shape and orientation calculations to solve problems (area, volume, time, distance) • Read, interpret and use representations to make sense of and solve problems (map, plans & diagrams) • Make physical and diagrammatic representations to investigate problems and/or illustrate solutions - Make 2-D and/or 3-D scale models of 3-D objects - Make maps, plans and diagrams to scale - Make flow diagrams to illustrate a proposed sequence of activities	<u>Use information communicated through numbers, tables and graphs to make sense of and make predictions in personal, familiar or workplace contexts</u> • Collect and organise information in order to answer questions • Critically interpret information presented (and misrepresented) in various forms • Interpret the implications of expressions of likelihood