

The Impact Of Classroom And Work Integrated Learning Assessments In Technical And Vocational Education And Training Colleges

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ABSTRACT

The impact of classroom and Work Integrated Learning (WIL) assessments may only be positive if the qualities related to self-employment, or entrepreneurship are assessed. The current study investigates the extent to which the classroom and WIL assessments help in determining the required quality of knowledge and skills to establish self-employment or entrepreneurship. The main investigative question that was posed was: ‘What is the impact of classroom and WIL assessments in the Technical and Vocational Education and Training (TVET) colleges? To respond to this question, the study used both the quantitative and the qualitative research methodologies in a mixed-methods approach. The purpose of the study was to ascertain whether the classroom and the WIL assessments impact self-employment or entrepreneurship opportunities. The data was statistically and narratively analysed from a purposeful and convenient sample of four TVET colleges. The findings revealed that the WIL assessments have an impact on self-employment, employability, and on the entrepreneurial abilities because they allow the students to apply what they have learned in the classroom to a real-life situation. The findings also revealed that the classroom assessments do not enable the students to apply the knowledge that is gained during the teaching and learning process to the challenging real-life situations. The study recommended that both the WIL and the classroom assessments should assess equal knowledge and skills pertaining to addressing the real-life situations. There are still unanswered questions in the literature on the correlation between the WIL and classroom assessments when evaluating self-employment, employability, and entrepreneurial skills.

KEYWORDS : Work integrated learning; classroom; assessment; TVET colleges; knowledge; skills.

I. Introduction

The vocational education systems in some countries have failed to offer the much-needed competent graduates to the labour market. The majority of the TVET graduates around the world are unemployed (Marimo, 2020). The industries view the TVET graduates as being incompetent for the entry-level employment positions. The TVET graduates’ incompetencies limit the students’ ability to develop self-employment

skills to enable them to gain access to jobs or entrepreneurial skills. Most of the TVET graduates find it difficult to acquire work and become entrepreneurs (McLuhan, 2020). The poor classroom and WIL assessments have a significant impact on the growing number of incompetent graduates (Munishi & Emmanuel, 2016). The assessments should play a vital role in assessing employability and the entrepreneurial skills in learning institutions such as the TVET

colleges (Ylmazer & Zkan, 2017). The classroom and the work assessments share a common theme, which is to impact the graduates' employability and entrepreneurial skills. It is necessary to investigate the lecturer assessment practices, specifically the impact of the classroom and the WIL assessments that are used to assess knowledge and skills.

The Internal Continuous Assessments (ICASS) and the Integrated Summative Assessment Tasks (ISAT) should cover the whole scope of a subject's curriculum themes. In the classroom, the tasks such as the tests and the assignments are used to assess the knowledge levels, whereas the projects are used in the WIL assessments to assess the practical abilities that are related to career or employment choice (Lowden, Hall, Elliott, & Lewin, 2011). According to the National Certificate Vocational (NCV) Policy, the students must meet the required minimum in both the external and the internal assessment components to be considered competent. However, most of the TVET students who are deemed competent and are awarded certificates after completion of the NCV program are unable to apply their knowledge and skills to create employment equivalents in the labour market (Yew, Jen, Dawood & Hoay, 2018). As a result, it appears that the classroom and the WIL assessment tasks differentiate between the quality of knowledge and the created skills to find work. In support of the previous argument, if the acquired knowledge and the skills do not appear to be related to the industries or to the labour market, the Department of Higher Education and Training (DHET) should review the moderation and the implementation of the ICASS at campuses to improve the classroom and the WIL assessment methods (Yigzaw, Ayalew, Kim, Gelagay, Dejene, Gibson & Stekelenburg, 2015).

The South African TVET colleges, like those in any other developing country, struggle to assess

the knowledge and the skills that are required for self-employment and for the integration into the labour market (Kruss, Petersen, Fongwa, Tele & Rust, 2017). The learning and teaching resources, the equipment, and the infrastructure on the TVET college campuses in Limpopo, South Africa, have never been better. The situation makes it difficult for the lecturers to effectively apply the assessments for assessing the relevant knowledge and the skills that are required to start or to create jobs. The Department of Higher Education is attempting to provide the TVET colleges with funding and professional development programmes so that the lecturers can make the most use of the existing resources, the equipment, and the infrastructure to assess the students' knowledge and skills. This implies that the TVET is a viable option that can assess the students' employability and the entrepreneurial skills that are needed to create jobs in their fields of study (Edokpolor & Owenvbiugie, 2017). Throughout this article, the term "self-creation of work chances" refers to how the TVET graduates use their knowledge and skills to help to develop odd jobs in the informal sector, such as handyman services (Irungu, 2015). Perhaps the TVET colleges in the Limpopo Province of South Africa should reconsider their approach to assessing the relevant knowledge and the skills that enable the graduates to develop jobs for themselves and fit into the labour market. According to Statistics South Africa, the unemployment among the TVET graduates is high, and the country suffers from a severe skills shortage, which exacerbates unemployment. Furthermore, the TVET colleges are failing to meet their obligations to provide the students with the essential information and the abilities to develop self-employment and work in the industries (Adams, 2019). These South African TVET colleges in the Limpopo Province should prioritise their classroom and WIL assessment methods to assess and produce competent graduates who can work for themselves (Choy, Wärvik & Lindberg, 2018).

The students in the TVET colleges studying the engineering subjects on the NCV program should rely on the assessment methods to assess the skills that are needed to generate and obtain jobs for themselves (Baleni, 2015). As a result, the purpose of the study was to ascertain whether the WIL and the classroom assessments impact self-employment or entrepreneurship. Therefore, this study was trying to answer the research question, 'what is the impact of classroom and WIL assessments in the TVET colleges?' The sections below describe the background preparation for this study.

2. Background Preparation

The TVET lecturers who took part in this study were between the ages of 20 and 50, with a wide range of experience spanning from 4 to 20 years. As a result, their understanding of the impact of classroom and WIL assessments is seen as a cross-section of personal experiences. The concept of "classroom assessments" has been employed to acquire an understanding of the students' theoretical learning in the classroom. In general, the classroom assessments are seen as a source of theory development for the students' associated courses (Andrade & Brookhart, 2016). These classroom assessments have been used to measure knowledge and skills for a long time, and their use has increased over the twentieth century (Nichols, 2016). In practice, the lecturers assess the build-up theory that is associated with a particular subject matter using various tasks which include but are not limited to assignments, tests, quizzes, and presentations from their past studies (Burniske & Meibaum, 2012; Ferguson & Danielson, 2014; Kane, McCaffrey, Miller & Staiger, 2013). The learning tools such as computers and mathematical skills are integrated into the learning of the engineering subjects. The students gain confidence and a variety of problem-solving skills when they are employed, thereby creating employment, or creating

entrepreneurs as a result of their computer and mathematics knowledge and skills (Wood, 2022). Although the fairness of these classroom assessments is important, the balancing of diverse questions in learning tasks is also important when evaluating the students (Newton & Shaw, 2014). Several studies have already proven that properly balanced classroom assessments can significantly improve the students' knowledge acquisition and academic progress (Black & Wiliam, 2010; Pellegrino & Quellmalz, 2010). Mohamed and Wei (2017) believe that the students learning content should be able to apply what they have learned when they are assessed. The students become more efficient and flexible in reflecting on what they have learnt and assessed in the classroom as a result of its impact (Al-Matrafi, 2014).

Work integrated learning is viewed as a method for assessing the students' knowledge and skills to boost graduate employability and the entrepreneurial skills in the workplace (Rowe & Zegwaard, 2017). Employability and the entrepreneurial skills show that each TVET graduate is competing with the other graduates with similar qualifications and education to find or create work (Clinkard, 2018). Although the WIL assessment is difficult since it entails integrating the learning activities given by various institutions with the students' major topics trained during the practise (Ajjawi, Tai, Huu Nghia, Boud, Johnson & Patrick, 2020). The engineering learning tasks in the TVET colleges include, among other things, the construction drawings, welding, fitting, and machining, depending on the learning goal the students should achieve by completing the work (Reuter, Jahn, Figas, Bartel, Mottok & Hagel, 2018). These learning engineering tasks usually focus on the task's outcome, such as whether or not their learning task was successful, rather than on achieving the employability and the entrepreneurial skills, which can assist in

developing or obtaining jobs (Malkiewich & Chase, 2019). The performance of the learning activities should start in the classroom through the tests and the assignments, whereas the WIL assessment is done through projects or practical assessments in the workshops. The WIL assessment is provided in the form of experiential learning, which allows the students to learn through hands-on experience and practical skills, thereby enhancing their readiness for the workplace (Jackson & Collings, 2018). However, experiential learning assists the students in applying and relating to the knowledge and skills that are learned during the teaching and learning process (Dean & Hubbell, 2012). It also helps to provide practice for any subject knowledge that is learnt or assessed during the classroom assessments (Van der Scheer, Bijlsma & Glas, 2019).

Research into the impact of classroom and WIL assessments in the TVET colleges is needed in South Africa. The WIL programmes have been the subject of little research. Rambe (2018), for example, did research on the use of the WIL programmes as a strategy for broadening the academic and the occupational competencies. While Govender and Wait (2017) looked into the advantages of WIL for student career prospects, Matoti, Odora, and Junqueira (2011) investigated the self-efficacy beliefs of the pre-service teachers before and after work-integrated learning. The classroom and the WIL assessments do not provide the students with the required skills to meaningfully engage them in a real-world setting (Biamba, Chidimma, Chinwe, Kelechi & Chinyere, 2021). There has not been much research done on the impact of the classroom and the WIL assessments in the TVET colleges. As a result, there is a need to investigate the impact of the classroom and the WIL assessments in the TVET colleges.

3. The impact of classroom assessment

The impact of the classroom assessments on the concepts of employability and entrepreneurial skills is an important component of the TVET programmes. Kgomotsego and Washington (2017) as well as Bruno and Dell'Aversana (2018) emphasise the use of classroom assessments to determine the strengths and the weaknesses of the students' employability and entrepreneurial understanding of a specific learning content. The aim is to understand the usefulness of the knowledge that could lead to the formation of self-employment or to the discovery of relevant occupations (Jackson & Collings, 2018, Rowe & Zegwaard, 2017). The classroom assessment procedures when appropriately implemented, are thought to boost the students' employability and their entrepreneurial knowledge, thereby helping them in the work readiness and the self-creative employment approach (Ritter, Small, Mortimer &

Doll, 2018; Bae & Darche, 2019). It also helps the lecturers to assess the relevant employability and the entrepreneurship skills that are required for a certain curriculum (Jose, Patrick & Moseley, 2017).

The TVET colleges and the other vocational learning institutions deliver a classroom assessment method that focuses solely on testing practical knowledge and practice. The classroom assessment should have a positive impact on the knowledge that is gained during the teaching and learning process, thereby allowing the students to apply their employability and the entrepreneurial skills that are learned in the classroom to the workplace or in the real world (Rowe & Zegwaard, 2017). The other scholars view classroom assessments as a vital process for preparing the students' understanding of how to enter the workplace, which is pertinent to the TVET institutions' learning courses (Huq & Gilbert, 2013; Lester & Costley, 2010). The mystery of classroom assessment is that once the students are assessed and certified as competent, many of them continue to struggle to find self-employment, while the others remain unemployed or are deemed incompetent by the industries (Smith, Meijer & Kielly-Coleman, 2010; Nagarajan & McAllister, 2015). Several studies have shown that the students around the world are still unable to use their knowledge to develop a profession or find work in their associated subject of study (Gribble & Blackmore, 2012; Hawthorne, 2010; Blackmore, Gribble & Rahimi, 2017). Furthermore, their unwillingness to put what they have learned to work raises the unemployment rate and it creates a skills shortage around the world (Jackson, 2015).

4. The impact of work-integrated learning assessments

A WIL program exists in the South African TVET system, and it aims to expose the students

to practice employability skills in the industrial settings. This WIL program can be implemented in a variety of ways, including "internships" and "experiential learning," but the basic idea is that it exposes the students to the workplace practices (Haynes, 2011; Clinton & Thomas, 2011). However, the connection between the classroom and the WIL assessments is assigned as employability and entrepreneurial skills, which every student needs to have while entering the work environment (Bowman, 2010; Siddiqui & Meshram, 2018). Besides joining the work environment, the students would possess limited experience that is obtained during the program, which provides the opportunities for employability and entrepreneurial skills (Tinning, Jenkins, Collins, Rossi & Brancato, 2012). The bottom line is that the students' level of employability and entrepreneurial skills would derive from the WIL assessment, thereby confirming their competency in the different fields of study (Wesselink, Jong & Biemans, 2009; Nirmala & Kumar, 2018). There is no agreement among the studies as to whether the WIL assessment that are administered either in the TVET colleges or in the field of work has a positive impact on the graduates. To date, the Limpopo Province is still seeing and experiencing a high number of unemployed TVET graduates, and some are deemed as incompetent after undergoing the WIL assessment. In other words, the TVET graduates are unemployed and most of them are unable to use their knowledge and skills to create self-employment. The research questions show the value of the lecturers' perceptions in providing information about the impact of classroom and WIL assessments in the TVET colleges.

5. Research methodology

The positivist paradigm was applied in this study which used a mixed-method case study methodology. The researcher is placed within the positivist universe to answer the research topic,

which is based on the idea that there is a single concrete reality that can be understood qualitatively and that can be measured quantitatively (Park, Konge & Artino, 2020). As a result, rather than relying on a single strategy, this study employed a mixed-method approach to gather and present the evidence of the study (Rubin & Babbie, 2016). This technique was beneficial since it tried to evaluate and interpret the impact of classroom and WIL assessments in the TVET institutions from the lecturers' perspective.

quickly by utilising the participants who were available at the time.

5.1 Population and sampling

The term "population" refers to the group of people who will be the source of information in the study (Wiid & Diggins, 2013). The population was chosen by the researcher because they were experienced with agricultural programmes. In South Africa, there are 51 TVET colleges that are scattered throughout the nine provinces. The population of this study was seven public TVET colleges which comprise of 130 lecturers. The study involved 50 lecturers that are teaching NCV engineering programmes at four TVET college campuses in the Limpopo Province. The study's participants were selected because they were lecturers for the NCV engineering programmes, thereby making their participation both purposeful and convenient. Purposeful sampling was used because the participants were experienced in engineering programmes, whereas convenience sampling was used because the participants were available at the correct position and time to share their experience. Convenient sampling, according to Etikan, Musa and Alkassim (2016) uses the participants who are more easily accessible and available to share information. During the research process, the researcher patiently waited for the participants who happened to be accessible. The researcher was able to obtain data

5.2 Data-collection Instruments

A questionnaire with 50 engineering lecturers and structured interviews with four engineering lecturers from four TVET colleges in the Limpopo Province were used to collect data for this study. The instruments were developed and tested by the expert to ensure that they would measure the elements for which they were intended. According to Zohrabi (2013), the biggest benefit of employing a questionnaire was the ability to catch a large number of people and collect data from the field areas. The questionnaire was divided into two sections: Section A was for biographical information; and Section B was for a question about the agricultural instructors' competency, with five Likert-type items to answer from 1=Strongly Disagreed (SD), 2=Disagree (D), 3=Neutral (N), 4=Agreed (A) and 5=Strongly Agreed (SA). In addition, the data was collected from the participants using a structured interview approach. The research questions were validated using face validity. The structured interview method was used in this study because it enables probing and the gathering of detailed information from the subjects (Johnson & Turner, 2003). The participants were made aware of the requirement for voice and video recording for ethical reasons. The participants were also fully informed about the research protocols prior to data collection, including the fact that participation in the study was voluntary and that there would be no force or threat of punishment if they opted out (Vanclay, Baines & Taylor, 2013). Digital recordings, transcriptions, and evaluations of each interview were done to look for any patterns.

5.3 Data Analysis

Using the MS Excel spreadsheet software, the data that was acquired through the questionnaires was presented and statistically analysed. The

percentage results of the lecturers' responses to each item of the questionnaire were used to conduct the analysis. The results were analysed and displayed in the form of figures to help better understand the impact of the WIL assessments in the TVET colleges. The other data was acquired through a structured interview to explore the impact of classroom assessments. All of the interviews were digitally recorded, transcribed, and narratively analysed. In this study, the interview data was narratively analysed, and it involved making sense of the interview respondents' individual stories from answering a question. Narrative analysis is a type of qualitative data analysis technique that is frequently employed in narrative inquiry (Butina, 2015). There are no standard procedures for narrative analysis, but several narrative researchers have published guidelines and processes for doing so. The type of analysis that is used to highlight the important aspects of research findings that resonate with responses is narrative analysis. The process of narrative analysis consists of five stages: (a) Organisation and preparation of the data, (b) Obtaining a general sense of the information, (c) The coding process, (d) Categories or themes, and (e) Interpretation of the data Creswell & Creswell (2017).

The organisation and preparation of the data stage started immediately with the transcription of the interview recordings. During the transcription process, the researcher noted the patterns in the responses to the interview questions. The patterns from the transcripts were organised by the associated responses, and each participant in the article was assigned a participant number (e.g., Lecturer 1). The next stage was the coding process, in which the data was manually coded and analysed. The researcher was aware of the software programs for qualitative analysis but decided to go with manual analysis. The coding process was followed by a process of obtaining a

general sense of the information from the participants' responses. According to Glesne (2006), "coding" is defined as a progressive process of sorting and defining those small pieces of collected data with the purpose of obtaining a meaningful sense from the participants' responses. During the coding process, the researcher reads the transcripts again, looking for relatively common words, concepts, or patterns in the data that could make sense to the study (Patton, 2002). The codes were then organised into logical items (e.g., items 10 to 13), each of which described some patterns or ideas that are related to the research question posed to the participants. The items reflected the themes that emerged, and the responses underneath represented the study's major findings. The final stage of narrative analysis was data interpretation, which aimed to make meaningful sense of the data. The data was interpreted by looking at the categories and corresponding codes to see if there were any underlying themes that are associated with the research question that was asked. The narrative-generated themes resulted in a better understanding of the impact of classroom assessments. The validity, reliability, and the trustworthiness of the data collection instruments were used to verify the study's credibility, while validity was ensured by using a peer reviewer (Creswell, 2013). Peer debriefing was used in this study, where a colleague or colleagues with strong knowledge were requested to examine the study for credibility (McMillan & Schumacher, 2010). The interview participants indicated that the interpretation of the data accurately reflected their opinions. As indicated above, the outcomes of the collected data from the engineering instructors were discussed.

Table 1. the lecturers' biographical data.

6. The results and discussion

The results from the two data collection instruments were brought together to answer a question probing the impact of the classroom and the WIL assessments in the TVET colleges when presenting and discussing the data from the qualitative and the quantitative approaches. The researchers employed triangulation to measure and increase the reliability of their findings when presenting the qualitative and the quantitative results. The initial display is the biographical data from the lecturers in Section A from the questionnaire:

6.1 Lecturers' biographical data

This study included a total of 50 participants. A total of 40 male lecturers (80%) and ten female lecturers (20%) were among the respondents. In terms of their age group, there were ten respondents aged 20-30years, 14 respondents aged 31-40years, 24 respondents aged 41-49 years old, and two respondent aged over 50 years old. Only 20 lecturers (40%) of those who teach NCV, 14 (28%) of those who teach NATED, and 16 (32%) of lecturers who did not identify which program they teach. In terms of the engineering teaching experience, 14 respondents (28%) had 0-2 years of experience, 14 respondents (28%) had 3-5 years of experience, 20 respondents (40%) had 6-10 years of experience, and two respondents (4%) had more than 20 years of experience. Table 1 shows the lecturers demographic statistics.

Gender	Frequency	Percentages %
Male	40	80%
Female	10	20%
Age group		
20-30	10	20%
31-40	14	28%
41-49	24	48%
Above 50	2	4%
Program		
NCV	20	40%
NATED	14	28%
Blanks	16	32%
Work experience		
0-2	14	28%
3-5	14	28%
6-10	20	40%
20 more	2	4%

The next section presents and discusses the qualitative data that was generated through the interviews from item 1 to 4:

6.2 The impact of classroom assessment

This section presents and discusses the results of the data analysis that was conducted through the structured interviews. The interviews were conducted to learn more about the engineering lecturers' perspectives on the impact of the classroom assessments at the TVET campuses. The responses from the engineering lecturers were read and sorted by the researcher. Many responses were gathered from the interview questions, but the researcher chose the responses listed below for each question. The data was presented analytically to respond to the questions, starting with the verbatim responses from the interviews regarding the impact of the classroom assessments. The responses of the participants to item 1 to 4 under each question were used to generate the study's findings from the interviews. The section that follows highlights some of the

respondents' verbatim answers from the interview regarding the impact of the classroom assessments.

Item 1: How are the students' classroom assessments used to assess the general content that is relevant to the real-life situations?

Most of the respondents indicated that they assess the students on how to use the learning equipment, including the computers. During the design process, the engineering students use the computers more extensively to control the manufacturing equipment and the robots.. All these skills can also be assessed during the classroom assessments, and these are the lecturers' responses:

Lecturer 3: According to my subject, I assess students, on how to use a computer, how to apply the menu scripts sign on how to proofread so if the students know their sign, they can apply.

They don't apply those mathematics skills anywhere.

The lecturer's response is an example of how to transmit the knowledge that should be applied in a real-life setting. According to Lecturer 3, the impact of assessment should help in the assessment of the designing process where the mathematical skills can be utilised in any way in a real-life setting. According to the results, the student assessments should be used in such a way that the knowledge and the skills are tested for their application to real-life circumstances. This finding is similar to that of Mohamed and Wei (2017), who concluded that the assessed learning content should help the students to apply what they have learned in the classroom to a real-world setting.

Item 2: How do the classroom assessment tasks help the students to know how to challenge life situations?

The classroom assessment tasks should help the students to know how to solve the challenges pertaining to a lack of self-employment, employability, and entrepreneurial skills. Those skills are meant to help challenge the real-life situation in cases of unemployment. Therefore, the lecturers were asked, "How do the classroom assessment tasks help the students to know how to challenge life situations?" The lecturer expressed their perspectives in the following responses:

Lecturers 1: Students are assessed on specific content they have been taught not on a real-life situation...

The impact of the classroom assessment tasks on the students' ability to challenge real-life situations in cases of unemployment is revealed in the passage above. According to Lecturer 1, the classroom assessment tasks assess the students only on specific content that is learned, and they

do not require them to use the skills learned to challenge a real-life situation. This study found that the classroom assessment does not enable the students to apply the knowledge that is gained during the teaching and learning process to challenging the real-life situations. This finding is in line with Biamba, Chidimma, Chinwe, Kelechi and Chinyere (2021), who discovered that the classroom assessment tasks do not provide students with the requisite knowledge to engage them in a real-world setting, but they help them to obtain the certificate.

Item 3: To what extent are you aware of what the classroom assessments assess the students for?

The generality of the responses indicates that the classroom assessments are for specific learning content. Creating questions based on the previously learned material will not prepare the students for real-life situations. When asked what classroom assessment evaluates students for, the lecturers gave the following response:

Lecturers 1 & 4: We give students assessments opportunity to come up with questions, in case they don't understand something learned before, and that's how we assess the subject.

The replies above were analysed to see how the lecturers explained what was being assessed in the classroom. According to the responses from Lecturers 1 and 4, the indication is that the classroom assessment focuses on what the students could recall about the learned content, unlike assessing the students' understanding to deal with real-life situations. The different tasks such as assignments, tests, quizzes, presentations, and other forms of assessments are used to assess the build-up theory that is associated with a particular subject matter that could help to deal with a real-life situation (Burniske & Meibaum,

2012; Ferguson & Danielson, 2014; Kane, McCaffrey, Miller & Staiger, 2013).

Item 4: How does your classroom assessment assess what the students have already been taught in the subject?

The participants referred to what the students have already been taught in the subject as the content to be assessed. What has been taught is not assessed in a problematised or scenario-based manner in which the students can consider how to solve real-life situations using the acquired knowledge and skills. The lecturers indicated that they must finish the learning content and draft the questions based on the content. The following is evidence from the responses:

Lecturers 2: We draft questions that are suitable to prepare students for the examination.

Lecturers 3: In three weeks there will be test one and I should be half book and in two weeks again I should finish the whole book then they write.

The responses above have been analysed to show how the lecturers prepare content that is already being taught to assess the students. Lecturers 2 and 3 indicated that they prepare questions that are taken from the learned content. Which means that the lecturers do not prepare problematic or scenario questions where the students could apply their learned knowledge and skills to solve the question in case the problem or scenario happens in a real-life situation. According to Ritter, Small, Mortimer and Doll (2018) as well as Bae and Darche (2019), problematic or scenario questions help the students to prepare for worse-case scenarios and increase their awareness of the importance of the knowledge to be tested, thereby preparing the students for work readiness and self-creative employment.

6.3 The impact of the Work Integrated Learning assessment

The next section presents and discusses the results from the statistical analysis of data that was gathered via a questionnaire. The goal of this survey was to find out how the engineering lecturers felt about the influence of the Work Integrated Learning assessment in the TVET colleges. Items 5 through 13 display the results as percentages in figures.

Item 5: Do the WIL assessments have an impact on a student's preparation to enter the workforce?

The lecturers were asked if the WIL assessments have an impact on a student's preparation to enter the workforce. The responses from the lecturers are depicted in Figure 1.

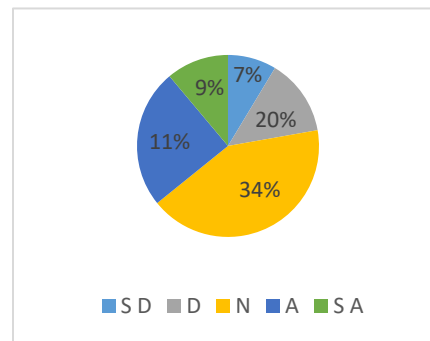


Figure 1: The WIL assessment affected their preparation for employment in the labour force

According to the results, 11% of the lecturers agreed and 11% strongly agreed that the WIL assessment influenced the student preparation for labour-force employment. However, 34% of the lecturers were undecided, 20% disagreed, and 7% strongly disagreed that the WIL assessment affected their preparation for employment in the labour force. This indicates that most of the lecturers were not sure that the WIL assessment influenced the students' preparation for the labour-force employment. The lectures who were not sure whether their teaching content can change the lives of the students or not, are likely

to bring positive changes that can impact the students positively. The results clearly show that both the immediate and the long-term changes to the classroom and the WIL assessment practices are required to assess the quality graduates who are workforce-ready in the engineering field (Rowe, Nay, Lloyd, Myton & Kraushaar, 2018).

Item 6: Does the WIL assessment evaluate the students' occupational readiness?

The WIL exams are used to determine whether the students are ready for the job. Figure 2 depicts the responses to the WIL assessment, which evaluates the students' occupational readiness.

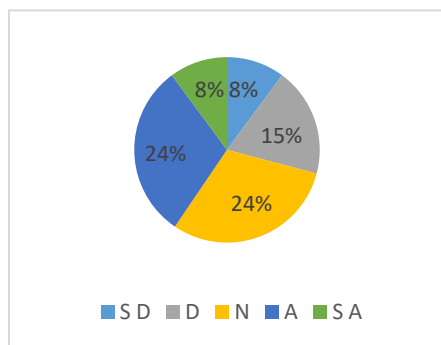


Figure 2: Work-integrated learning assessment of the students' occupational readiness

Figure 2 shows that 24% of the lecturers agreed and 8% strongly agreed that the WIL assessments evaluate the students' occupational readiness. However, 24% of the lecturers were undecided, 15% disagreed, and 8% strongly disagreed that the WIL assessment evaluates the students' occupational readiness for employment in the labour field. Most of the lecturers agreed that the WIL assessment measures the students' occupational readiness for engineering jobs. This is consistent with the findings of Ritter, Small, Mortimer and Doll (2018) as well as Bae and Darche (2019) that the WIL assessments must evaluate the abilities that prepare the students for

occupational expectations as well as for employer needs.

Item 7: Does the WIL assessment take into account what the students have already learned?

The lecturers were asked if the WIL assessments take into account what the students have already learned. Figure 3 depicts the lecturers' reactions to what the students have already practiced.

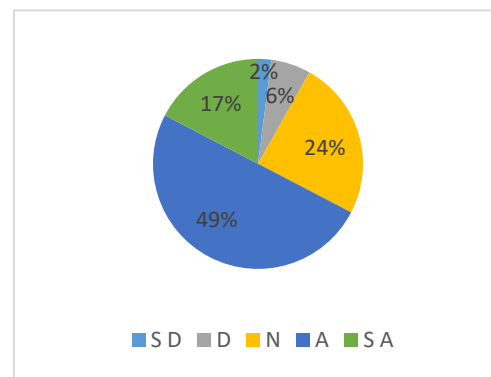


Figure 3: The WIL assessment take into account what the students have already learned

A total of 48% of the lecturers agreed, and 19% strongly agreed, that the WIL assessments take into account what the students have already learned. However, 21% of the lecturers were undecided, with 15% disagreeing and 3% strongly disagreeing that the WIL assessment takes into account what the students have already learned. The results show that a high percentage of the lecturers have agreed and strongly agreed that the WIL assessment takes into account what the students have already learned. Lowden, Hall, Elliot, and Lewin (2011) asserted that the WIL assessments should evaluate the degree of abilities that are acquired throughout learning and the practical skills that are also strongly tied to the choice of a job.

Item 8: Students are assessed to apply the skills that are related to what they have learned to the real-life situation?

The lecturers were asked whether the students are assessed to apply the skills that relate to what they have learned to a real-life situation. Figure 4 shows the responses about how the students are assessed to apply the skills that relate to what they have learned to the real-life situation.

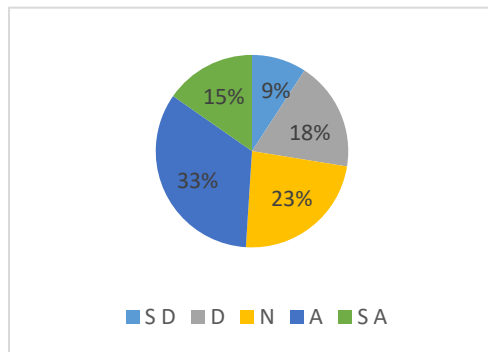


Figure 4: The WIL assessments help to apply the skills related to real-life situations.

Most lecturers (33%) agreed, and 15% strongly agreed, that the WIL assessments assess the students' ability to the apply the taught skills in the classroom to real-life situations. However, 23% of the lecturers were neutral, while 18% disagreed, and 9% strongly disagreed that the students are judged on their ability to apply the skills that are taught in the classroom to real-life situations. The results show that most lecturers agreed, and some strongly agreed that the students are evaluated on their ability to apply skills taught in a real-life situation. The finding is in harmony with Dean and Hubbell (2012), who found that the assessments given to the students should assess their abilities that were learned during the teaching and learning process.

Item 9: Does the WIL assessment task help the students to challenge life with the skill learned?

When the lecturers were asked if the WIL assessment activities help the students to apply what they have learned in the classroom to the real-life situations, they agreed. Figure 5 depicts the replies to the WIL assessment tasks, which enable the students to apply what they have learned in the classroom to real-life situations.

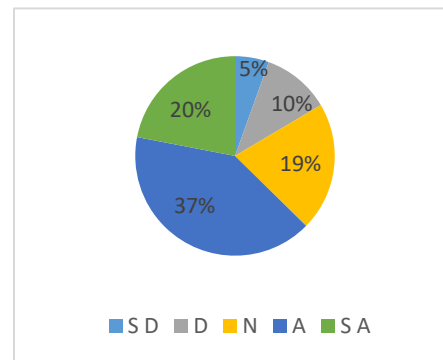


Figure 5: The WIL assessment tasks help the students to challenge life.

Figure 5 indicated that most lecturers (37%) agreed and 20% strongly agreed that the WIL assessment activities helped the students to apply what they had learned to real-life situations. However, 19% of the lecturers were undecided, 10% disagreed, and 5% strongly disagreed that the WIL assessment activities helped the students to apply what they had learned in real life. The results show that most lecturers indicated that the WIL assessment activities helped the students to apply what they have learned in real life. The finding is in line with Ritter, Small, Mortimer and Doll (2018); as well as Bae and Darche's (2019) findings that the WIL assessment activities prepare the students for workplace readiness and self-creative employment.

Item 10: Are the lecturers aware of what the WIL assessments assess the students for?

The lecturers were asked if they were aware of the criteria that is used in the WIL assessments. Figure 6 depicts the responses to the question of what the WIL exams evaluate the students for.

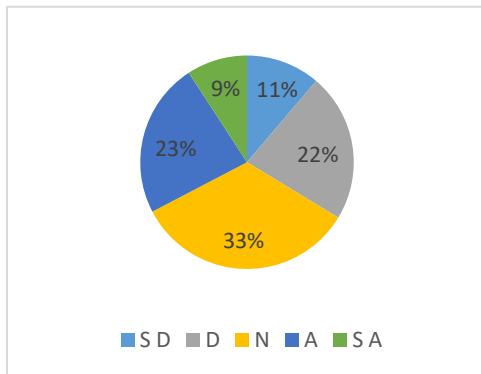


Figure 6: Lecturers are aware of what the WIL assessments assess for.

Figure 6 indicated that 23% of the lecturers agreed and 9% strongly agreed that the lecturers are aware of what the WIL assessments look for. However, 33% of the lecturers were undecided, 22% disagreed, and 11% strongly disagreed that the WIL assessment activities let the students challenge life with the skills they obtained during the teaching and learning process. The results show that most of the lecturers are not sure that they are aware of what the WIL assessments assess for. A lecturer who is not sure of what assessment practices are used for is most unlikely to notice the impact of what the WIL assessments are applied for. The finding is in harmony with Kgomotsego and Washington (2017) that the WIL assessment practice is used to check the students' strengths and weaknesses that are connected to their skills in specific learning content.

Item 11: Are the lecturers aware of the WIL assessment plan for the whole year?

The lecturers were asked if they were aware of the entire year's WIL assessment plan. Figure 7 depicts the replies to the question of whether the instructors are aware of the WIL assessment plan for the entire year.

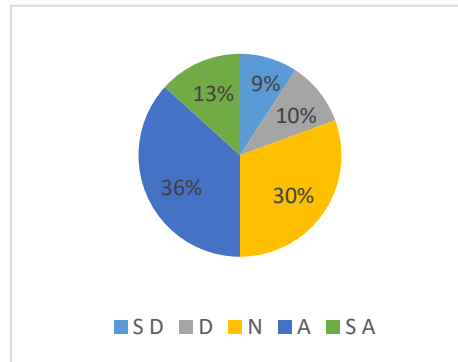


Figure 7: Lecturers are aware of the WIL assessment plan.

Most lecturers (36%) and (13%), respectively, expressed agreement and strong agreement that they were aware of the WIL assessment plan. However, 30% of the lecturers were undecided, with 10% disagreeing and 9% strongly disagreeing that they were aware of the WIL assessment plan for the entire year. That means a large majority of the lecturers were informed of the WIL assessment plan for the entire year. The results show a high percentage of the lecturers who strongly agreed and agreed that they were aware of the WIL assessment plan. The lecturers who are aware of their WIL assessment plan are likely to know what the WIL assessments are for and their impact on the students. The finding is in line with Smith, Meijer and Kielly-Coleman (2010); as well as Nagarajan and McAllister (2015), who found that the WIL assessment evaluates the students' readiness to enter the working environment with the aim of articulating the employability and the entrepreneurial skills

that are assessed throughout the learning program.

Item 12: Did the lecturers give the students the WIL assessment tasks?

The lecturers were asked whether they gave the students the WIL assessment tasks. Figure 8 shows the responses to the students being given the WIL assessment tasks.

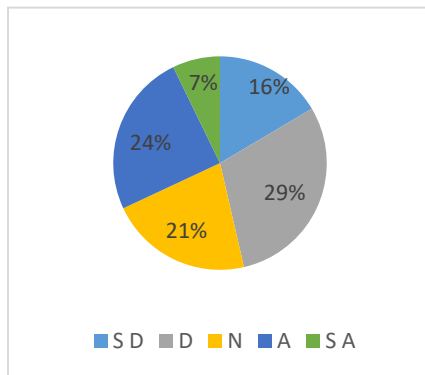


Figure 8: Students are given assessment tasks on the WIL assessment plan.

Figure 8 shows that 24% of the lecturers agreed and 7% strongly agreed that the students are given the assessment tasks on the WIL assessment plan. However, 21% of the lecturers were undecided, 29% disagreed, and 16% strongly disagreed that, on the WIL assessment plan, students are given assessment tasks. The results show that a high percentage of the lecturers disagree with the fact that the students are given the assessment tasks. The students who are given assessment tasks are likely to prepare the assessment in advance, and that can have a positive impact. According to Kane, McCaffrey, Miller and Staiger (2013) as well as Ajjawi, Tai, Huu Nghia, Boud, Johnson and Patrick (2020), the WIL assessment is complex and should include the aligned learning activities that are offered in the TVET workshops or in the different

industries that the students should be familiar with.

Item 13: Do the students know what the WIL assessment content is used to assess them for?

The lecturers were asked whether they know what the WIL assessment content is used to assess them for. Figure 9 shows the responses about the students knowing what the WIL assessment content is used to assess them for.

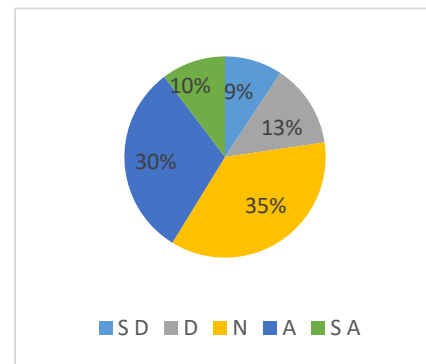


Figure 9: Students know the WIL assessment content

Most lecturers (10%) strongly agreed, and 30% agreed that the students understand the WIL assessment topic that is utilised to assess them. However, 35% of the lecturers were not sure, 13% disagreed, and 9% strongly disagreed that the students are aware of the WIL assessment content that is utilised to assess them. The results show that a high percentage of the lecturers indicated that the students are familiar with the WIL assessment topic that is used to evaluate them. The students who are given the WIL assessment content are more likely to perform well on their WIL assessment, which could benefit the students. The findings are in line with Mohamed and Wei (2017) as well as Kgomotsego and Washington (2017), who discovered that knowing the WIL assessment

content that is used in the assessments helped the students to apply the knowledge and the skills that are acquired about the specific topics.

7. Conclusion

The study investigated the impact of work-integrated learning and classroom assessments on the engineering modules in the TVET colleges in the Limpopo Province. Firstly, the study looked into the impact of classroom assessments. The interviews revealed that the classroom assessment does not enable the students to apply the knowledge that is gained during the teaching and learning process to challenge the real-life situations. For example, the lecturers indicated that they prepare questions that are taken from the learned content. The lecturers also indicated that the classroom assessment focuses on what the students could recall about the learned content, unlike assessing the students' understanding to deal with real-life situations. As a result, their capacity to generate self-employment, employability, and entrepreneurial abilities in a real-world setting is harmed. Secondly, the study looked into the impact of the WIL assessments. According to the questionnaire findings, it became clear that the WIL assessment impacts self-employment, employability, and the entrepreneurial abilities. Most of the lecturers indicated that the WIL assessment measures the students' occupational readiness for the engineering jobs. For example, most of the lecturers indicated that the students are evaluated on their ability to apply the skills that they have learned to a real-life situation. The results and the implications of this study suggest that while evaluating the engineering students, the relevant measures pertaining to self-employment, employability, and entrepreneurial abilities should be highlighted. The project-based assessments that may measure the students' knowledge and abilities that are connected to job development activities that can be practiced either in the institutions or in the different

industries should be increased at the TVET colleges. This will allow the TVET lecturers to assess the self-employment, employability, and the entrepreneurial abilities that are required in a certain industry. The engineering lecturers should be appropriately trained in evaluating self-employment, employability, and entrepreneurial abilities. Future research should look into the relationship between the classroom and the WIL assessments in terms of preparing for self-employment or integrating into the workforce.

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