CONDUCTING TRACER STUDIES TO ASSESS WORK-INTEGRATED LEARNING PROGRAMS

Gerrit van der Waldt *, David J. Fourie **, Cornel Malan ***

* North-West University, Potchefstroom, South Africa

** Corresponding author, School of Public Management and Administration, Faculty of Economics and Management Sciences, University of Pretoria, Pretoria, South Africa

Contact details: School of Public Management and Administration, Faculty of Economics and Management Sciences, University of Pretoria, 0001 Pretoria. South Africa

*** School of Public Management and Administration, Faculty of Economics and Management Sciences, University of Pretoria,

Pretoria, South Africa



How to cite this paper: van der Waldt, G., Fourie, D. J., & Malan, C. (2024). Conducting tracer studies to assess work-integrated learning programs. *Corporate Governance* and *Organizational Behavior Review*, 8(1), 232–242.

https://doi.org/10.22495/cgobrv8i1p20

Copyright ${\small ©}$ 2024 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). https://creativecommons.org/licenses/by/ 4.0/

ISSN Online: 2521-1889 ISSN Print: 2521-1870

Received: 19.06.2023 Accepted: 26.02.2024

JEL Classification: D83, J21, J24, G18, I20 **DOI:** 10.22495/cgobrv8i1p20

Abstract

Tracer studies are research investigations that are designed to track the outcomes and experiences of participants in learning programs. In the case of work-integrated learning (WIL) programmes, tracer studies can be used to probe the perception of learners who have completed the programs (Dela Cruz, 2022; Winborg & Hägg, 2023). Following a qualitative research design using a questionnaire as a data collection method, a cohort of learners (n = 179) who have completed Energy and Water Sector Education and Training Authority (EWSETA) WIL programmes were used to gauge the perceived strengths and weaknesses of these programs, including the skills and knowledge they gained, the quality of the training, and the overall impact of the programs on their career development. It was established that WIL programmes generally lead to benefits such as increased employability, gaining of work-related skills, greater job retention, career advancement, continuous learning, and improved self-esteem. WIL programs are, however, hampered by employer-related factors such as limited mentorship and career guidance, financial limitations, and poor working conditions.

Keywords: Tracer Studies, Work-Integrated Learning (WIL), Education and Training, Energy and Water Sector Education and Training Authority (EWSETA), Employment Impact, Study Program Relevance

Authors' individual contribution: Conceptualization — G.v.d.W., D.J.F., and C.M.; Methodology — G.v.d.W.; Validation — G.v.d.W. and D.J.F.; Formal Analysis — G.v.d.W. and C.M.; Investigation — D.J.F. and C.M.; Resources — D.J.F. and C.M.; Data Curation — D.J.F. and C.M.; Writing — Original Draft — G.v.d.W.; Writing — Review & Editing — G.v.d.W. and D.J.F.; Visualization — G.v.d.W. and C.M.; Supervision — D.J.F.; Project Administration — D.J.F.; Funding Acquisition — D.J.F.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

Acknowledgements: This survey was supported by the Energy and Water Sector Education and Training Authority (EWSETA). The sponsor did not partake in the preparation of the article, the study design, the collection, analysis and interpretation of data, in the writing of the report, and in the decision to submit the article for publication. The Authors also would like to acknowledge the contribution of the EWSETA by making access to their learner databases possible.

VIRTUS

1. INTRODUCTION

The demand for the provision of formalised practical work exposure for graduates has increased exponentially (Helyer & Lee, 2014; International Labour Organization [ILO], 2020). It is generally accepted that such exposure dramatically increases learners' chances of finding suitable employment (O'Higgins, 2017; Ra et al., 2019). The averseness towards employment of graduates with no or limited work experience compounds the unemployment challenges faced by many graduates (Baldry, 2016; Koyana & Mason, 2018). In the case of South Africa, Statistics South Africa (Stats SA, 2022) indicates that in the second quarter of 2022, the total number of unemployed graduated youth increased by 2.0% (or 92,000) to 4,800,000 from Q1 2022, while there was a noticeable increase of 7.2% (or 370,000) in the number of employed youth during the same period. This resulted in a decrease in the youth unemployment rate by 1.3% to 46.5% in Q2 2022 (Stats SA, 2022). Of importance to this study, is the drop in employment numbers within the energy and water sector, from 62,000 in June 2018 to 59,000 in June 2022 (Stats SA, 2022).

The mandate of the respective Sector Education and Training Authorities (SETAs) in South Africa is to facilitate skills development, education and training, especially for young people. This is because they can provide youth with the necessary skills that could lead to a range of employment and entrepreneurial opportunities. The Energy and Water Sector Education and Training Authority (EWSETA), as one of the 21 SETAs, was established in accordance with Section 9 of the Skills Development Act 97 of 1998 (South African Government, 1998). It is mandated to facilitate skills development within the energy, renewable energy, gas and water services sector, as determined by the Minister of Higher Education and Training in terms of Section 9(2) of the Act. In this respect, the EWSETA has several work-integrated learning (WIL) programs for the sector. Tracer studies are mandated by the Department of Higher Education and Training (DHET) to include learners who have completed WIL programs (DHET, 2020). WIL tracer studies could facilitate identifying long-term trends in employment and the workplace productivity of higher education graduates. The results from graduate tracer studies are being increasingly used to provide nuanced information about graduate employment, career pathways and the graduate labour market (Kraak, 2015; Senekal & Munro, 2019).

Although similar tracer studies were undertaken in South Africa (Brits & Steyn, 2019; Duncan, 2017; Nhlabathi, 2020; Senekal & Smith, 2021; van der Bijl & Taylor, 2018; Wedekind, 2016), not a single recent study focusing on WIL programs in the energy and water sector could be found. There is thus a significant knowledge gap regarding the perceived successes and failures of WIL programs in these sectors. The purpose of the article is to reflect on the findings of an empirical survey (i.e., tracer study) conducted to probe the perceptions of learners who completed EWSETA WIL programs regarding the perceived benefits and weaknesses associated with these programs to gain access to the labour market. Following a qualitative research design, an online questionnaire was used to obtain data from sampled respondents (i.e., learners who completed WIL programs). ATLAS.ti (version 22) was used to thematically dissect the responses obtained.

The structure of this article is as follows. Section 2 reviews the relevant literature. Section 3 analyses the methodology that has been used to conduct empirical research on WIL programs. Section 4 presents analyses of the results and Section 5 contains the discussion and interpretation of the results. Section 6 concludes the article.

2. LITERATURE REVIEW

Work-integrated learning can be regarded as learning that occurs in a work environment, through participation in work practice and process (Batholmeus & Pop, 2019; Wedekind, 2016). WIL is typically a pedagogical approach for enhancing student employability. If well-planned and effectively implemented, students' employability skills are enhanced and students generally become more rapidly work-ready upon completion of their formal studies (Litster et al., 2021; van der Bijl & Taylor, 2018).

WIL programs offered by educational institutions typically comprise a range of activities in which the curriculum is closely aligned with the work environment (Barends & Nel, 2017; Ruthanam, 2023). This is done through specifically designed learning outcomes and student engagement and assessment exercises (Duncan, 2017; Lubbe & Svensson, 2022). It usually serves as a foundational element of vocational education and training systems facilitated apprenticeships, traineeships, internships, bv simulation, industry projects and work-oriented institutional training (Govender et al., 2022; Winborg & Hägg, 2023). However, an increased emphasis on WIL in university education is emerging (Atkinson, 2016; Baldwin & Rosier, 2017).

Tracer studies in higher education generally refer to research studies that track the employment and career paths of graduates of higher education institutions (Dela Cruz, 2022; Cuadra et al., 2019). These studies help institutions understand the effectiveness of their educational programs, curriculum, and career services in preparing students for the workforce (Nguyen, 2023). Tracer studies typically involve collecting data from graduates after they complete their qualifications (Cuadra et al., 2019; Nhlabathi, 2020; Ruthanam, 2023). The data collected may include information on employment status, job title, salary, industry, and geographic location (Mubuuke et al., 2014). This information can be used to evaluate the career outcomes of graduates and identify areas where improvements can be made to better prepare students for the workforce (Senekal & Smith. 2021).

Tracer studies are important for SETAs since they provide valuable information that can be used to improve skills development programs and career advancement services (Albina & Sumagaysay, 2020; Brits & Steyn, 2019; Senekal & Munro, 2019). By tracking the career paths of graduates, institutions can identify trends in the job market and adjust their programs to meet the changing needs of employers (Baldry, 2016; Batholmeus & Pop, 2019). They can also use the data to identify areas where graduates may need additional support in finding employment or advancing their careers (Barends & Nel, 2017; Romadlon & Arifin, 2021). WIL tracer studies also provide information regarding typical career trajectories, employment impact, as well as study program relevance, based on the reflections

and evaluations of the educational experiences and employment activities of graduates of SETA-funded programs (Brits & Steyn, 2019; Casado-Aranda et al., 2021).

Given the high levels of unemployment in South Africa, and particularly among the youth, understanding the match between training and employment is crucial. The National Skills Development Strategy III concluded on March 31, 2020, to make way for the National Skills Development Plan (NSDP) 2030 which launched on April 1, 2020. WIL is explicitly supported in both. In addition, WIL is also promoted by the Skills Development Act 97 of 1998 (South African Government, 1998), National Development Plan: Vision 2030 the (National Planning Commission, 2011), the SETAs Workplace-Based Learning Program Agreements Regulations (DHET, 2018), the Youth Employment Accord (Economic Development Department, 2013), and the Human Resource Development for the Public Service: Strategic Framework Vision 2015 (Department of Public Service and Administration, 2015).

3. RESEARCH METHODOLOGY

The primary objective of the study was to conduct a tracer study of learners who enrolled in or have completed EWSETA WIL programs to ascertain their perceptions of these programs and their impact on their employment status. A qualitative research design was followed using an online questionnaire as a data collection method. Following an extensive literature review, the questionnaire was designed comprising open and closed-ended (Likert-style) questions. The questionnaire was divided into a biographical and demographical section to obtain personal details regarding the respondents as well as a section dealing with their experiences regarding WIL programs. The questionnaire was pre-tested (piloted) with a small sample of the respondents to confirm the validity and reliability thereof. Alternative methods that would be suitable for conducting the research include face-to-face semistructured interviews or focus groups. However, given the limited availability of respondents, the geographical spread of the target population, and the significant cost and time implications for arranging such interviews, an online questionnaire was deemed more suitable. Stratified sample groups from the energy and water subsectors, which are listed on the management information system endto-end enterprise resource planning system during the period of 2020/2021 were accessed to obtain information regarding learners. Contact details of learners captured on the database were verified to confirm their suitability for inclusion in the purposively sampled group to be representative of both energy and water sectors. Table 1 provides a summary of the data collected and analysed.

Table 1. Data collected from EWSETA-funded WIL learners

Data collection details	Database numbers
Total possible energy and water respondents with traceable contact details	5176
Representative sample ($n = 381$), total number of questionnaires distributed as per traceable contact details	381
Total number of completed questionnaires received (response rate 93.7%)	357
Incomplete responses (data clean-up)	-166
Complete questionnaires analysed	191
Learners who completed the EWSETA WIL program	179

From the 381 questionnaires distributed, 357 responses were received. From these 166 were incomplete, making further analysis obsolete. From the remaining 191 responses only 179 completed EWSETA WIL programs. This represents 46.98% of the original sample size. ATLAS.ti (version 22) software was used to analyse the responses obtained. This enabled a thematic analysis of open-ended question responses.

Confidentiality agreements were signed and ethical clearance was obtained from the Institutional Research Review Board of the University of Pretoria. After completing the data collection phase, the results were collated and analysed, as reported below.

4. RESEARCH RESULTS

Section A of the questionnaire was aimed at soliciting personal details as well as the employment status of learners. There was an almost even split between male (48.69%) and female (51.31%) respondents. This is in line with the national gender distribution and also reflects the unemployment demographics. Also, the racial demographics of the respondents to a large degree reflect the demographics of the larger South African youth population.

As far as the age profile is concerned, Table 3 provides insight into the responses.

Table 2. Biographical profile of learners

Race	Percentage (%)
African	85.86
Coloured	8.38
Indian	1.05
White	4.71
Total	100

Table 3. The age profile of learners

Age group	Percentage (%)
18–35 years old	71.73
36–50 years old	26.18
51–64 years old	2.09
Total	100

The age distribution of the respondents reveals an interesting phenomenon namely that of "adult" learners over the age of 35 years old (28.24%) with 2.09% over the age of 51 years old, who have participated in WIL programs during the review period. The largest portion of the respondents (71.34%) are as expected, within the "youth" grouping between the ages of 18 to 35 years old.

In terms of provincial distribution, the largest portion of the respondents are from Gauteng (33.51%), which is in line with the national statistics in terms of the economically active population.



Table 4. Provincial distribution of learners

Province	Percentage (%)
Eastern Cape	9.95
Free State	9.42
Gauteng	33.51
KwaZulu-Natal	10.99
Limpopo	6.81
Mpumalanga	15.71
Northern Cape	2.09
Northwest	5.24
Western Cape	6.28
Total	100

The urban-rural distribution of respondents is broadly in line with the overall distribution of the population of South Africa, and when considering the location of energy and water operations, a lower percentage in the rural areas (38.22%) than in urban areas (61.78%) was to be expected.

Section B of the questionnaire was aimed at obtaining responses to questions about EWSETA WIL programs. In response to the question: Have you completed your EWSETA learning program, i.e., a learnership, apprenticeship or internship, almost 94% of the respondents indicated that they have completed the learning program for which they have enrolled during the review periods (see Table 5). This is an extremely high success rate.

Table 5. Completion of the EWSETA program

Response	Percentage (%)
No	6.28
Yes	93.72
Total	100

Responses to the highest qualification vary from Matric (National Qualifications Framework — NQF level 4) to Bachelor degrees (NQF level 7), as well as WIL-related qualifications.

 Table 6. Highest qualification before completing the EWSETA learning program

Qualification	Percentage (%)
Matric Certificate (NQF 4)	60.34
Higher Certificate (NQF 5)	15.64
Diploma/Advanced Certificate (NQF 6)	9.5
Bachelor's degree/Advanced diploma (NQF 7)	1.12
WIL related qualification	2.23
Other	11.17
Total	100

The majority of respondents indicated that they had a Matric Certificate (60.34%), which reveals that the learners were therefore largely inexperienced in terms of post-school education. This also indicates a focus on entry-level learners who do not have tertiary education and therefore require additional skills for entry-level jobs. This contrasts with the low level of learners with a Bachelor's degree or higher, typically in demand for the technical nature of jobs in the energy and water sector.

The majority of respondents (70.95%) completed a learnership program, which aligns with the previous question relating to the current level of education when starting the WIL program. The 3.91% of respondents who completed an internship also again correlates with the low level of graduates who participated in the EWSETA learning programs. This reveals a smaller cohort of participants in those programs towards a position which requires a tertiary education qualification, inclusive of work-placed learning, or which requires practical experience.

Table 7. Type of EWSETA learning program
completed

Learning program type	Percentage (%)
Apprenticeship	18.99
Internship	3.91
Learnership	70.95
Other	6.15
Total	100

The majority of respondents indicated that they took longer than 18 months to complete their specific learning program, even though 41% took 18 months or less.

 Table 8. Period it took to complete the learning program

Period	Percentage (%)	Total
1-3 months	2.23	
4-6 months	2.79	41.33
7-12 months	25.7	41.55
13-18 months	10.61	
19-24 months (also if exactly 2 years)	11.17	
Between 2 and 3 years (also if exactly 3 years)	38.00	58.67
Between 3 and 5 years (also if exactly 5 years)	9.5	
Total	100	

These results could be encouraging for various reasons. In the first instance, this could be seen as creating an income (stipend) for mostly unemployed youth for at least between 19 months up to 5 years in some cases. Secondly, it could also be viewed as providing more than 18 months' worth of experience to the learners which improves employability and level of experience, when competing for jobs. It could also be indicative of the type of programs provided which require longer study periods.

The table below provides insight into the different funding options posed to respondents.

Table 9. Funding of learning program

Who funded?	Percentage (%)
A private company	15.64
Another SETA (not EWSETA)	1.68
Both a private company and EWSETA	17.88
Both a private company and myself	1.12
Both EWSETA and myself	0.56
EWSETA	46.37
I paid for myself	7.82
Other	7.26
DHET	1.68
Total	100

In response to the question about funding of the learner's program, respondents indicated that almost 47% of their funding was from EWSETA only. When adding funding by other SETAs, a private company and EWSETA as well as funding by the DHET to the basket, 68.17% of respondents were funded by the DHET or a SETA, and 31.84% were privately or self-funded.

In line with the age grouping of the respondents, their highest qualification and the type of learning program attended, it is expected that almost 62% of

VIRTUS 235

the respondents were unemployed when they started their learning programs. This reaffirms to focus on employment creation and the drive to alleviate unemployment whilst increasing skills levels.

Table 10. Employment status before commencing with the learning program

Employment status	Percentage (%)
No	61.45
Yes	38.55
Total	100

As per respondents' feedback, only 15.45% were able to gain employment whilst completing their learning programs. The reasons for such will be unpacked in the next line of questions.

Table 11. Employment status during the completion of the learning program

Gain employment?	Percentage (%)
No	84.55
Yes	15.45
Total	100

It is heartening to note that almost 91% of those who were able to gain employment, were able to remain employed, however when considering the responses to this question together with responses to the previous questions, (only 14% of respondents were able to gain employment) the actual rate to remain employment is very low. It should however be taken into consideration that the intention of learning programs is not per se to provide employment but to increase skills and employability of learners.

Table 12. Employment status whilst completingthe learning program

Remain employed?	Percentage (%)
No	9.3
Yes	90.7
Total	100

 Table 13. Reason for not remaining employed whilst completing your learning program

Reasons	Percentage (%)
Lack of determination	12.5
Personal reasons	12.5
The company closed	12.5
The contract expired	37.5
The learning program required me to study full-time	12.5
N/A	12.5
Total	100

When considering the responses provided, it is clear that 50% of respondents lost their jobs as a result of either the contract not being renewed or the employer closing down, 25% of respondents became unemployed due to personal factors or lack of determination, whilst 12.5% could not complete the full-time studies.

The responses received indicate that more than 85% of learners were employed for 19 months or longer before completing their programs, 24.43% were employed for 18 months or less, and 45.35% were employed for more than 5 years.

Table 14. Employment period before completing
the learning program

Employment period	Percentage (%)	Total
Less than 6 months	3.49	
6-12 months	10.47	24.43
13-18 months	10.47	
19 months-2 years (also if exactly 2 years)	11.63	30.23
Between 2 and 5 years (also if exactly 5 years)	18.6	50.25
More than 5 years	45.35	45.35
Total	100	

This is encouraging as it means that the learners were gainfully employed for a period exceeding 18 months, and probably attended learnerships which exceeded 18 months or attended more than one training initiative during their employment period. It is however concerning that almost a quarter of the respondents were not able to retain employment for longer than 18 months.

Almost 70% (69.77%) of respondents were employed full-time, either on a contract basis or fulltime, whilst almost 25% (24.42%) were employed on a part-time basis, and less than 2% were selfemployed.

Table 15. Employment type whilst completing the learning program

Employment type	Percentage (%)
Part-time (on contract)	22.09
Part-time (permanent)	2.33
Full-time (on contract)	13.96
Full-time (permanent)	55.81
Self-employed	1.16
Other	4.65
Total	100

With regards to payment received, it is interesting to note that almost 24% indicated that they did not receive any payment for employment during the training period.

Table 16. Payment for employment whilst completing the learning program

Payment	Percentage (%)
No	23.26
Yes	76.74
Total	100

Analyses of the current employment status responses from respondents indicate that more than half (54.2%) are currently employed in some form, whilst 43.57% are unemployed. The 2.23% responses indicating "other" are in all probability currently in training.

Table 17. Current employment status

Employment status	Percentage (%)	Total
Employed, part-time (on contract)	5.59	
Employed, part-time (permanent)	2.24	
Employed, full-time (on contract)	6.7	54.2
Employed, full-time (permanent)	36.32	
Self-employed	3.35	
Unemployed, but not looking for work	3.91	43.57
Unemployed, but seeking employment	39.66	43.37
Other	2.23	2.23
Total	100	



When considering the methods used to gain current employment, only 7.41% made use of the SETA portal or recruitment agencies respectively. The largest portion indicated "other" as an option, which includes Word of Mouth, recruitment drives by companies and recruitment during attendance of a learning intervention. Almost 20% contacted their employer directly, whilst the remainder either found jobs via local newspaper advertisements or other career websites including LinkedIn.

Table 18. Methods followed to find current job

Methods	Percentage (%)
SETA career portal	7.41
Other career websites	13.89
Advertisements in the local newspaper	16.67
Recruitment agencies	7.41
I directly contacted an employer	19.44
Other	35.19
Total	100

In terms of the period after completion of the learning program to gain employment, the majority (56.4%) were already employed after completion. It is also positive to note that the largest portion (12.87%) obtained employment in less than 6 months thereafter, but 11.88% were unemployed for more than 2 years, which does not reflect positively on the drive to ensure gainful employment.

 Table 19. Period seeking employment after completing the learning program

Time frame	Percentage (%)
Less than 6 months	12.87
6-12 months	4.95
13-18 months	4.95
19-24 months	8.91
More than 2 years	11.88
I was already employed by the time I completed my learning program	56.44
Total	100

Respondents were asked whether they were employed whilst completing their learning program and whether they were still employed at the same company. This question was important since it gives an indication of the employability and perceived value-adding aspects of the skills and knowledge that learners provide to employers. When considering that almost 56% of respondents are still employed by the same company, the increase in income could be justified, especially for those who have been employed for longer periods.

Table 20. Employment status whilst completing
the learning program

Response	Percentage (%)
No	19.8
Yes	57.43
I was not employed while completing my learning program	22.77
Total	100

Half of the respondents (50.8%) thought that the skills obtained during the learning program had assisted to a large or even very large degree towards obtaining a job.

VIRTUS

Table 21. Rating of the extent to which skills
obtained have helped to obtain a job

Skills obtained	Percentage (%)
To a very small extent	11.73
To a small extent	13.41
To a moderate extent	24.02
To a large extent	27.37
To a very large extent	23.46
Total	100

In a similar manner as the previous question, 48.6% indicated that the skills obtained had contributed large or even very largely towards retaining their job.

 Table 22. Rating of the extent to which skills

 obtained assisted in job retention

Skills obtained	Percentage (%)
To a very small extent	11.17
To a small extent	13.97
To a moderate extent	26.26
To a large extent	24.58
To a very large extent	24.02
Total	100

More than 60% of respondents felt that the content of the learning program was largely or even very largely related to a career in the energy and water sector, however, 13.4% felt that the content had a very small or small relationship.

Table 23. Relationship between content of learning programs and a career in the energy and water sector

Relationship	Percentage (%)
To a very small extent	3.91
To a small extent	9.5
To a moderate extent	25.14
To a large extent	29.61
To a very large extent	31.84
Total	100

Sadly, 32.4% of respondents indicated that they are currently unemployed. Of the remainder, 35.2% indicated that the learning program content was largely or even very largely related to the content of their current jobs.

Table 24. Relationship between the content of
the learning program and current job

Relationship	Percentage (%)
To a very small extent	7.821
To a small extent	6.145
To a moderate extent	18.44
To a large extent	13.97
To a very large extent	21.23
I am currently unemployed	32.4
Total	100

In response to a follow-up question about whether respondents think that they need additional training to adequately perform their current job, the highest number of responses focused on being unemployed, however, it is important to note that the same percentage felt that additional training was required. This could be an indication that the respondents felt that even though they were employed and that the content was related to their current jobs, more training would be beneficial. Respondents were further probed regarding the degree to which they agreed with particular statements. The first statement was whether the learning program adequately relates theory to practice. More than 95% of respondents either agreed or strongly agreed. The second statement concerned the importance of attendance and participation to successfully complete the program. More than 98% of respondents viewed attendance and participation as vital for the successful completion of the learning program. Furthermore, all the respondents agreed to the statement that maintaining strong determination and a positive attitude contributed to their successful completion of the learning program.

In response to a question about whether respondents received adequate mentorship and guidance from a mentor or coach whilst completing the learning program, the overwhelming support for mentoring and coaching received is evident in the 91% agreement rate. Only 2.2% strongly disagree that they received mentoring and coaching.

Table 25. Availability of mentorships and guidance

Response	Percentage (%)
Strongly agree	50.28
Agree	41.34
Disagree	6.145
Strongly disagree	2.235
Total	100

More than 95% of the respondents indicated their satisfaction with the knowledge and quality attained from the learning program. Furthermore, respondents were asked whether completing the learning program has improved their chances of finding a new or better job. Responses to this question about improving chances of finding a job were slightly less positive with almost 19% not agreeing to the statement. This could be indicative of the overall economic situation where high levels of unemployment also include skilled young people, and thus the feeling could be that having some form of qualification will not provide job certainty in all cases. The majority (more than 75%) were still in agreement with more than 36% strongly agreeing.

In a follow-up question about whether completing the learning program positively contributes to your level of income when employed, the responses also carry a somewhat negative feeling in that 22.9% do not agree that the learning program will contribute to the level of income. This should however be investigated more as the type of learning program should also be taken into account. Overall, 77% did however agree with this statement.

More than 95% of respondents felt that they were inspired to pursue further training, which could be for various reasons, such as to gain some form of employment whilst in training, as well as in income, even if very little, but also to improve their career prospects going forward. In a follow-up question of whether completing the learning program improved their ability to contribute to the economy and/or society, 86% of respondents agreed that the learning program improved their ability to make a contribution to the economy and/or to society. This is an important aspect as it also reveals a very positive impact in terms of improved self-esteem.

Respondents were further asked to choose the 2 most important statements as suggestions to further improve the assistance of the learning programs of the EWSETA. In response to the statements provided, the statement favoured the most by respondents relates to increased visibility by listing learner details on a database/ portal. Two other statements relating to improved accessibility and level of career guidance received the same support. This indicates the need for learners to be visible to potential employers for possible job opportunities, as well as to be able to make informed career decisions going forward.

Table 26. Suggestions to further improve EWSETA learning programs

Possible improvement	Percentage (%)	
Increase visibility to employers by listing my details on a database/portal	34.12	
Improve accessibility to career guidance	20.88	
Improve level of career guidance support offered to me	20.88	
Update learning programs	19.41	
Other	4.706	
Total	100	

In addition, respondents were requested to reflect on the perceived strengths of WIL programs. Individual responses from respondents were analysed and 5 main themes were identified, as being reflective of the EWSETA learning program strengths as shown in Table 27.

Table 27. Perceived strengths of WIL programs

Strengths	Details	Frequency (%)
Personal development/experience	 Assists in personal development Development of professional behaviour Development of the ability to work efficiently while under pressure Encourages adaptability Encourages teamwork Improved motivation 	19
EWSETA support and expertise	Competence of EWSETA Overall, it is a good program	15
Enhanced skills	Development of communication skills Development of creative thinking	3
Program relevance to the industry	 Good advertisement of program opportunities Increased employment opportunities Quick placement The program offers opportunities to gain practical experience 	11
Program design and content	 Good facilities and equipment Good mentorship Learning material and certificates are given on time Useful and relevant theoretical and practical content 	52
Total		100

VIRTUS

Similarly, respondents were asked to indicate the perceived weaknesses of the EWSETA learning program(s) they completed. The responses in terms of perceived weaknesses of the EWSETA learning program were analysed and four themes were identified. Table 28 provides detailed weaknesses per theme.

Weakness	Details	Frequency (%)
EWSETA support and expertise	 Incompetent facilitators Negligence of EWSETA Stipend not paid on time 	12
Program relevance to the industry	 Lack of assistance in finding employment Unable to obtain a promotion even after completing the learning program 	18
Program design and content	 Duration of the program Lack of mentorship Not receiving learning material and certificates on time Poor practical components and facilities Poorly packaged learning material Program content is not up to standard 	66
Employment conditions	 Conflict with colleagues Lack of relevant technology in companies Lack of transport opportunities Poor working conditions 	4
Total	· •	100

VIRTUS

In response to the weaknesses identified, respondents were asked to make suggestions to further improve the content of the WIL program(s) of EWSETA. The possible improvements were analysed in line with the identified themes:

1) enhanced skills:

– equip learners for self-employment;

2) EWSETA support and expertise:

- assist learners in finding employment;

decrease the number of stakeholders involved;
 encourage high school learners to complete

the program;

– increase program awareness;

make youth facilitators available to learners;

– monitor learner progress;

– offer more financial assistance;

- remove age restrictions;

3) program design and content:

– extend the duration of the practical work exposure of the learning program;

– improve learning material and the program standard;

– increase the number of programs;

– provide course material and certificates on time;

– provide in-depth practical and real-life explanations of processes, their role or functions as well as the maintenance and operation of these processes and the challenges encountered;

– reduce the duration of the theory of the learning program;

4) program relevance to the industry:

- improve practical components of the program;

- increase exposure to various industries;

– providing a well-rounded and up-to-date current industry practices program that can have an impact on the quality of lives in the long run of the students should be prioritized.

5. DISCUSSION

It should be noted that the intention of WIL programs is not to provide employment per se but to increase the skills and employability of learners in the sector.

Almost 62% of the learners were unemployed when they started their learning programs and only 15.45% were able to gain employment whilst completing their learning programs of which almost 91% were able to remain employed; 85% of these learners were employed for 19 months or longer before completing their programs. It is also positive to note that the largest portion of those who are employed, obtained employment in less than 6 months thereafter. Similar results were obtained in the research undertaken by Govender et al. (2022), albeit in a different economic sector.

It is concerning that half of the respondents lost their jobs as a result of either contracts not being renewed or the employer closing down. A quarter of respondents became unemployed due to personal factors or lack of determination, whilst 12.5% could not complete their full-time studies.

As far as the content of WIL programs is concerned, employed respondents felt that the content is related to their current jobs but more training would be beneficial. Half of the respondents (50.8%) believed that the skills obtained during the learning program had assisted to a large or even very large degree towards obtaining and retaining a job. The majority also felt that the learning programs contributed to personal growth and improved confidence and self-worth. This confirms the results of similar studies conducted by Nguyen (2023), Senekal and Smith (2021), and Winborg and Hägg (2023).

More than 95% of respondents felt that they were inspired to pursue further training, which could be for various reasons, such as to gain some form of employment whilst in training, to gain some income, and to improve their career prospects. It is interesting to note that more than 43% of respondents have completed two or more EWSETA learning programs. As alluded to earlier, this could be one of the reasons for the relatively high employment rate of learners but also does not add value in terms of creating a large pool of skilled youth. It could be indicative of employers using the funded learning programs as a way in which to augment their income for low-level occupations.

It is evident that more should be done to promote EWSETA program awareness among both prospective students and employers. Increase the visibility of learners by listing learner details on a centralised database or portal. Increased awareness at the high school level will also encourage more scholars to apply for such programs. Youth facilitators could be made available to learners to monitor learner progress and satisfaction. It is also recommended that age restrictions on certain programs be removed to improve adult learning and access to employment opportunities. As confirmed by Cuadra et al. (2019) and Dela Cruz (2022), improved coordination and partnerships between relevant companies for WIL programs and placement of learners will provide a more holistic approach and could result in an industry pool of learners for employment considerations. To ensure greater alignment with industry needs, it is recommended that the duration of the theoretical period is reduced, and the practical work-exposure period of learning programs is extended. This will provide for more in-depth practical and real-life explanations of processes, their role or functions as well as the maintenance and operation of these processes and the challenges encountered. Learner feedback should be used to improve the programs and to ensure that the quality of the lives of the learners should be prioritised in the long run. The EWSETA should ensure that learning programs are relevant to the latest specifications and regulations applicable to the discipline. More awareness should be created with training service providers and companies to include updated technology and new skills requirements.

6. CONCLUSION

The aim of the article was to reflect on the findings of a survey conducted among WIL learners to ascertain the perceived strengths and weaknesses of EWSETA programs. Learners were probed regarding their perceptions of the design and content of the program, including the skills and knowledge they gained, the quality of the training, and the overall impact of the program on their career development.

It was found that tracer studies can be a valuable tool for evaluating the effectiveness of WIL programs and identifying areas for improvement. It is further evident that by gathering feedback from program participants, the EWSETA and employers in the sector can make informed decisions about how to optimise WIL programs to better meet the needs of learners and industry. A concerning factor in this regard is the fact that only 22.9% of respondents believed that completing learning programs would positively contribute to their level of income when employed. It is therefore essential that the content of programs fully relates to sector-specific job content and that theory aligns with practice. The importance of mentorship and coaching in guiding learners was accentuated and could help to make learning content more work-relevant.

The implications of the results include that due consideration should be given to expanding the period of SETA funding to be aligned to sector experiential needs, but also to consider making it compulsory to retain a percentage of learners after completion of these programs. It is evident that to create long-term economic growth and development, skills development needs to be enhanced and focused broader than simply on specialist skills as identified for each sector. The real challenge, other than ensuring that work-related skills are available, is creating a long-lasting and positive economic impact on unemployment in the country. In this regard, it is positive to note that more than 95% of respondents felt that they were inspired to pursue further training to enhance their knowledge and skills. However, more should be done to assist learners in finding employment, increase program awareness, monitor learner progress, as well as to increase the number of programs offered.

This survey was limited in scope and was further hampered by the relatively low response rate (only 191 of the distributed 381 questionnaires were adequately completed). Future research should therefore extend the sample size and number of sector cohorts to further probe issues related to job readiness, job retention, the suitability and relevance of program content, as well as the career advancement of successful WIL learners.

REFERENCES

- 1. Albina, A. C., & Sumagaysay, L. P. (2020). Employability tracer study of information technology education graduates from a state university in the Philippines. *Social Sciences & Humanities Open, 2*(1), Article 100055. https://doi.org/10.1016/j.ssaho.2020.100055
- 2. Atkinson, G. (2016). *Work-based learning and work-integrated learning: Fostering engagements with employers*. National Centre for Vocational Education Research (NCVER). https://files.eric.ed.gov/fulltext/ED568154.pdf
- 3. Baldry, K. (2016). Graduate unemployment in South Africa: Social inequality reproduced. *Journal of Education and Work, 29*(7), 788–812. https://doi.org/10.1080/13639080.2015.1066928
- 4. Baldwin, C., & Rosier, J. (2017). Growing future planners: A framework for integrating experiential learning into tertiary planning programs. *Journal for Planning Education and Research*, *37*(1), 43–55. https://doi.org/10.1177/0739456X16634864
- 5. Barends, Z., & Nel, C. (2017). Work-integrated learning within the reading literacy component of foundation phase teacher preparation programmes. *South African Journal of Childhood Education*, *7*(1), Article a435. https://doi.org/10.4102/sajce.v7i1.435
- 6. Batholmeus, P., & Pop, C. (2019). Enablers of work-integrated learning in technical vocational education and teacher education [Special issue]. *International Journal of Work-Integrated Learning*, *20*(2), 147–159. https://files.eric.ed.gov/fulltext/EJ1226181.pdf
- 7. Brits, H. J., & Steyn, C. (2019). Conducting a graduate tracer study at a University of Technology: A quest to enhance the learning experience. In *Proceedings of the 9th Balkan Region Conference on Engineering and Business Education and 12th International Conference on Engineering and Business Education* (pp. 10–18). Lucian Blaga University of Sibiu. https://www.researchgate.net/publication/341644973_Conducting_a_Graduate _Tracer_Study_at_a_University_of_Technology_a_Quest_to_Enhance_the_Learning_Experience
- Casado-Aranda, L.-A., Sánchez-Fernández, J., Montoro-Ríos, F. J., & Horcajadas, M. I. A. (2021). Evaluation of the work-integrated learning methodology: Teaching marketing through practitioner experience in the classroom. *Mathematics, 9*(17), Article 2164. https://doi.org/10.3390/math9172164

VIRTUS 240

- 9. Cuadra, L. J., Aure, M. R. K. L., & Gonzaga, G. L. (2019). The use of tracer study in improving undergraduate programs in the university. *Asia Pacific Higher Education Research Journal*, *6*(1), 13–25. https://po.pnuresearchportal.org/ejournal/index.php/apherj/article/view/1315
- 10. Dela Cruz, J. L. (2022). Tracer study of graduate school graduates of a state higher education institution in the Philippines from 2016 to 2020. *International Journal of Education & Literacy Studies, 10*(2), 149–154. https://doi.org/10.7575/aiac.ijels.v.10n.2p.149
- 11. Department of Higher Education and Training (DHET). (2018). Sector Education and Training Authorities (SETAs) workplace-based learning program agreements regulations. *Government Gazette*, 641(42037). https://www.dhet.gov.za/gazetteTEST/Workplace%20Based%20learning%20Programme%20Agreement.pdf
- 12. Department of Higher Education and Training (DHET). (2019). *National skills development plan 2030*. https://www.merseta.org.za/wp-content/uploads/2021/04/Promulgation-of-the-National-Skills-Development-Plan.pdf
- 13. Department of Higher Education and Training (DHET). (2020). *Annual performance plan 2020/21*. https://www.dhet.gov.za/SiteAssets/DHET%20Annual%20Performance%20Plan%202020.pdf
- 14. Department of Higher Education and Training (DHET). (2020). *National skills development strategy III*. https://www.nationalskillsauthority.org.za/wp-content/uploads/2015/11/NSDSIII.pdf
- 15. Department of Public Service and Administration. (2015). *Human resource development for the public service: Strategic framework vision 2015*. https://www.dpsa.gov.za/dpsa2g/documents/hrds/3%20Strategic %20Framework.pdf
- 16. Duncan, K. (2017). Developing lecturers at VET institutions through engagements with industry: The South African experience. In F. Eicker, G. Haseloff, & B. Lennartz (Eds.), *Vocational education and training in sub-Saharan Africa: Current situation and development* (pp. 67–73). W. Bertelsmann Verlag.
- 17. Economic Development Department. (2013). *New growth path: Accord* 6 *Youth employment accord*. https://www.gov.za/sites/default/files/youth_employment_accord.pdf
- 18. Govender, D., Prakaschandra, D. R., & Mohapi, M. J. (2022). Student preparedness for work-integrated learning in biomedical technology: Student perspective. *The Journal of Medical Laboratory Science and Technology of South Africa, 3*(2), 65–71. https://doi.org/10.36303/JMLSTSA.2021.3.2.88
- 19. Helyer, R., & Lee, D. (2014). The role of work experience in the future employability of higher education graduates. *Higher Education Quarterly*, *68*(3), 348–372. https://doi.org/10.1111/hequ.12055
- 20. International Labour Organization (ILO). (2020). *Global employment trends for youth 2020: Technology and the future of jobs.* https://www.ilo.org/global/publications/books/WCMS_737648/lang--en/index.htm
- Koyana, S., & Mason, R. B. (2018). Transformation in the wholesale and retail sector in South Africa: The role of internships. *Journal of Business and Retail Management Research*, 12(4). https://doi.org/10.24052/JBRMR /V12IS04/ART-19
- 22. Kraak, A. (2015). The value of graduate destination survey data in understanding graduate unemployment: A focus on the universities of technology. *African Journal of Labour Relations*, *39*(1), 93–113. https://doi.org/10 .25159/2664-3731/5885
- 23. Litster, G., Hurst, A., & Pretti, T. (2021). Surveying design skill development in work-integrated learning experiences: A review of the literature. *Proceedings of the Design Society*, *1*, 2851–2860. https://doi.org/10.1017 /pds.2021.546
- 24. Lubbe, I., & Svensson, G. (2022). Work integrated learning (WIL) model A win-win process between university, postgraduate business students and industry. *The Independent Journal of Teaching and Learning*, *17*(1), 39–59. https://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2519-56702022000100003
- 25. Marijani, R., Katomero, J., Hayeshi, A., & Kajerero, J. (2023). The role of work-integrated learning in developing work readiness: Insights from Tanzania. *International Review of Education, 69*, 529–550. https://doi.org/10.1007/s11159-023-10007-z
- 26. Mubuuke, A. G., Businge, F., & Kiguli-Malwadde, E. (2014). Using graduates as key stakeholders to inform training and policy in health professions: The hidden potential of tracer studies. *African Journal of Health Professions Education*, *6*(1), 52–55. https://www.ajol.info/index.php/ajhpe/article/view/104917
- 27. National Planning Commission. (2011). *National development plan: Vision 2030*. https://www.nationalplanning commission.org.za/National_Development_Plan
- 28. Nguyen, T. N. H. (2023). Implementation of on-campus work-integrated learning activities in Vietnamese universities: "Don't rely on lecturers". *Journal of Further and Higher Education*, 47(8), 1124–1139. https://doi/org/10.1080/0309877X.2023.2217648
- 29. Nhlabathi, S. (2020). ETDP SETA track and trace evaluation study of bursaries, learnerships, internships and work integrated learning for TVET and UoT learners. Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA). https://www.etdpseta.org.za/etd/sites/default/files/2023-01 /Tracer%20Study%20Report%20-%2030%20July%202021%20-.pdf
- 30. O'Higgins, N. (2017). *Rising to the youth employment challenge: New evidence on key policy issues.* International Labour Organization (ILO). https://www.ilo.org/global/publications/books/WCMS_556949/lang--en/index.htm
- 31. Ra, S., Shrestha, U., Khatiwada, S., Yoon, S. W., & Kwon, K. (2019). The rise of technology and impact on skills. *International Journal of Training Research*, *17*(1), 26–40. https://doi.org/10.1080/14480220.2019.1629727
- 32. Romadlon, F. N., & Arifin, M. (2021). Improving graduate profiles through tracer studies at university. *KnE Social Sciences*, *5*(7), 34-44. https://doi/org/10.18502/kss.v5i7.9317
- 33. Ruthanam, M. (2023). Facing the unknown: Managing work integrated learning in the midst of COVID-19. In *Proceedings of the Focus Conference (TFC 2022)* (pp. 99–109). Atlantis Press. https://doi.org/10.2991/978-2-38476-006-0_9
- 34. Senekal, J. S., & Munro, N. (2019). Lessons learnt from two decades of graduate tracer research: Recommendations for the South African context. *South African Journal of Higher Education*, *33*(2), 230–248. https://doi.org/10.20853/33-2-2628
- 35. Senekal, J. S., & Smith, M. R. (2021). Assessing the employability and employment destinations of professional psychology alumni. *South African Journal of Psychology*, *52*(1), 11–22. https://doi.org/10.1177/00812463211025466
- 36. South African Government. (1998). Skills Development Act 97 of 1998. *Government Gazette, 401*(19420). https://www.gov.za/sites/default/files/gcis_document/201409/a97-98.pdf

VIRTUS

- 37. Statistics South Africa. (2022, August 23). *Quarterly labour force survey (QLFS) Q2:2022* [Press release]. https://www.statssa.gov.za/?p=15685
- van der Bijl, A., & Taylor, V. (2018). Work-integrated learning for TVET lecturers: Articulating industry and college practices. *Journal of Vocational, Adult and Continuing Education and Training, 1*(1), 126-145. https://journals.co.za/doi/pdf/10.14426/jovacet.v1i1.307
 Wedekind, V. (2016). Technical and vocational education and training (TVET) reform in South Africa:
- 39. Wedekind, V. (2016). Technical and vocational education and training (TVET) reform in South Africa: Implications for college lecturers, context and background. *SAQA Bulletin*, *15*(1), 1–29. https://www.saqa.org.za /wp-content/uploads/2023/02/SAQA-Bulletin-15.pdf
- 40. Winborg, J., & Hägg, G. (2023). The role of work-integrated learning in preparing students for a corporate entrepreneurial career. *Education + Training*, *65*(4), 674–696. https://doi.org/10.1108/ET-05-2021-0196

VIRTUS 242