

Training Impact Assessment of the Elsenburg Agricultural Training Institute Learnership Programme

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ABSTRACT

The study assessed the impact of the Elsenburg Agricultural Training Institute Learnership Programme in terms of the knowledge, skills, employability and empowerment of graduates. A structured questionnaire captured responses from 46% of graduates of the National Certificate in Animal or Plant Production Learnership Programme in the Overberg region of the Western Cape on their perception of the impact of theoretical (in-class) and practical (on-the-job) training on their knowledge, skills and employability. A limited number of interviews with farmers who hosted the graduates provided an industry perspective on the skills and employability of the graduates. The findings revealed that graduates were satisfied with the theoretical and practical components of the Learnership Programme and agreed that the programme equipped them with skills and knowledge that could be applied in the workplace. Responses from farmers and farm managers were more ambivalent in confirming that in-class training sufficiently prepared learners for the workplace, and they proposed that skills be taught on the job during the practical component. The study concluded that the Learnership Programme contributed to learners' personal and professional development and recommended that the modules' practical and theoretical content and timing be better aligned with the industry's expectations.

Keywords: Employability, Empowerment, Learnership Programme, Student Perspective

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1. INTRODUCTION

Chapter 9 of the National Development Plan reiterates the vital need for an improved further education and training and skills development system (Republic of South Africa, 2021) that provides training opportunities for learners who did not complete their schooling or obtained a lower National Senior Certificate pass mark. The Elsenburg Agricultural Training Institute (EATI) supports education and training in the agricultural sector through programmes at various levels of the National Qualifications Framework, including the Bachelor's Degree in Agriculture, the Diploma in Agriculture, Equine studies and Agricultural Skills Development. The National Certificate in Animal and Plant Production learnership programme that is the focus of this study resorts under the Agriculture Skills Development programme and offers theory, practical experiments and workplace-integrated learning over the course of one year (Western Cape Department of Agriculture, 2021). The Learnership Programme is accredited by the Agricultural Sector Education Training Authority (AgriSETA), and the curriculum consists of various unit standards (modules) with specific outcomes (AgriSETA, 2020). The Learnership Programme offers contact theory classes and workplace-integrated learning every alternative month, with students placed on farms of their choice. The agreement with host employers expects that students will be exposed to farming activities. The programme aims to equip graduates with the necessary knowledge and skills to continue their educational journey or become employable in the agricultural sector.

This study served as a follow-up on a prior evaluation conducted in 2014 to determine whether the Learnership Programme equipped students with the appropriate knowledge and skills to render them more empowered and employable.

2. THE IMPACT OF EDUCATION AND TRAINING

The word 'education' derives from the Latin word 'educatum', which means to bring out the gifts, talents and qualities of any individual or student by any method necessary, which refers to formal, informal or non-formal methods (Lewis, 1956). The potential employability of students as a result of education has played a defining role in shaping the content and purpose of educational programmes (Teichler, 2015). Learning new skills and obtaining new knowledge cannot be limited to a formal learning environment, as effective learning needs to be part of the work process. By learning within the workplace, learners experience real-life challenges and are part of finding a solution (Fischer, 2000). Technical Vocational Education

and Training are generally accepted as the educational environment where academic theory is combined with the transfer of practical, technological skills, generally in a workplace environment or simulation. Similarly, workplace-integrated learning programmes expect students registered at formal training institutions to complete part of their training in the workplace (Department of Higher Education and Training, 2014).

The fundamental measurement of the effectiveness of any training programme is to determine whether the objectives of that specific training programme have been met. The Kirkpatrick learning evaluation model evaluates the outcomes of a training programme on four levels: reaction, learning, behaviour and results. Reaction tests the degree to which participants reach favourably to the learning event; learning tests the acquirement of knowledge and skills; behaviour tests the application of such learning in the workplace while results focus on the improvement as a result of the learning intervention (The-RunningMan, 2014).

While the first two levels focus on the perception and knowledge change of the trainee, the last two levels focus on the demonstrated abilities and value added to the workplace as a result of the training.

3. STUDY METHODOLOGY

The study focussed on the Agricultural Skills Development sub-programme implemented in 2005, with an annual intake of approximately 60 students. The population for the study was the 241 registered students for the National Certificate programmes from 2015 to 2019, and the sample frame was the 54 graduates of the National Certificate in Animal or Plant Production Learnership Programme from the Overberg region as the only geographic region where students enrolled for all five focus areas of the programme. All 54 graduates were included in the sample and comprised six graduates of the National Certificate: Animal Production: Large and Small Stock, 29 graduates of the National Certificate: Plant Production: Pomology, three graduates of the Learnership in Plant Production: Vegetables, three graduates of the Learnership in Plant Production: Viticulture and 13 graduates of the Learnership in Animal Production: Aquaculture.

A structured questionnaire comprising predominantly closed-ended questions was designed and piloted to measure the perception of the NQF 4 level graduates against statements relating to all four levels of Kirkpatrick's learning evaluation model. Due to the COVID-19 restrictions

and a low response rate to emailed questionnaires, the questionnaire was administered telephonically in December 2020. The data collection was hampered as many graduates' contact details had changed and could not be reached.

A response rate of 46% (25 of 54 questionnaires) was obtained. While the response rate was low, data analysis showed internal consistencies and patterns that reflected students' perceptions in the programme. Questionnaire data was supplemented by five telephonic interviews with farmers who had offered the enrolled students learnerships on the five focus areas of the programme. These interviews explored the perception of farmers on the student's mastery of relevant knowledge and skills as observed during the learnership, alignment of such knowledge and skills with industry requirements, and recommendations for improving the Learnership Programme.

4. RESULTS AND DISCUSSION

Regarding the first level of impact, namely *reaction* to the Learnership Programme, study participants agreed that the programme allowed previously disadvantaged students to improve their education. Most respondents (17 of 25) strongly agreed that the programme content was relevant and balanced theoretical knowledge and practical exposure well. Respondents agreed that the infrastructure and equipment available in theoretical classes were in good order and sufficient to conduct contact theory classes successfully. Relating to the knowledge of lecturers, most respondents (23 of 25) agreed that the lecturers exhibited a high level of theoretical knowledge, with a slightly lower agreement (19 of 25) on the level of practical experience exhibited by lecturers. Open-ended questions confirmed respondents' perception of limited practical exposure while on the EATI Bredasdorp campus. Respondents instead indicated that most of their practical experience was gained on the farms as part of the workplace-integrated learning component of the programme.

The reaction of the farmers and/or farm managers was positive when asked about their working relationship with the EATI. The farmers were also satisfied with the students who completed the workplace-integrated learning component of the programme on their farms and expressed their passion and commitment to partake in the education and training of agricultural students.

Relating to the second level of impact, namely the *learning* of students, the average throughput rate throughout the study period (2015–2019) was 87.46%, with the lowest throughput rate in

2017 (76.19%) and the highest in 2016 (98.18%). The throughput rate indicates that most learners demonstrate competence regarding the prescribed outcomes as determined by the AgriSETA, which sets the quality assurance standards for the programme.

Figure 1 captures the respondent's feedback on a five-point rating scale, with responses ranging from 5 (strongly agreed) to 3 (neutral) and 1 (strongly disagreed) on whether a particular management skill has been acquired through the programme. Twenty-two (22) respondents strongly agreed that they had gained entrepreneurial skills, while nineteen (19), twenty-one (21) and sixteen (16) respondents respectively agreed that they gained business management, financial management and organisational skills. Seventeen (17) respondents provided only a neutral indication of gaining meeting management skills, with a further eight (8) either disagreeing or strongly disagreeing with the statement, indicating a possible shortcoming in the current programme offering to transfer meeting management skills. Most responses lean towards the positive side of the rating scale, with only a few respondents neutral or disagreeing that the programme transferred financial, business, entrepreneurial and organisational skills, indicating that the programme contributed positively to improving the learners' skills in these aspects.

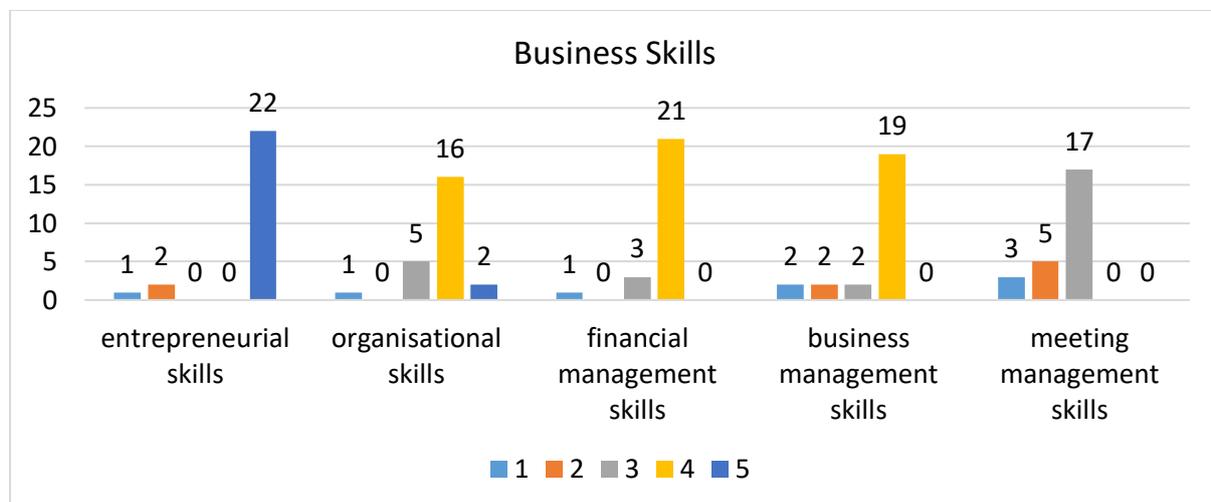


FIGURE 1: Business Skills

Figure 2 captures reflections related to numerical, analytical and research skills. Most respondents (20) agreed that they had gained relevant numerical, analytical and research skills through the programme. Responses for leadership skills were slightly lower (19 respondents), while agreement on gaining managerial skills was significantly lower (14 respondents).

The results show that respondents perceive knowledge and skills gaps in their leadership, management and supervisory skills that can be further strengthened in the curriculum by providing more opportunities for practising these skills.

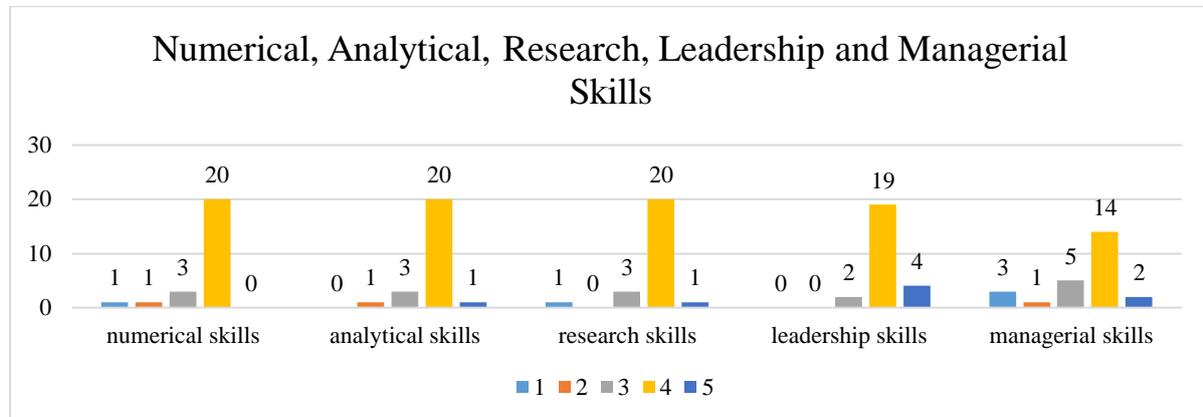


FIGURE 2: Numerical, Analytical, and Research Skills

Relating to the third level of impact, namely *behaviour* or demonstration of skills, respondents were more reserved in confirming their improvement in skills. On the five-point scale, improvements in computer skills were rated highest, with 18 respondents agreeing and one strongly agreeing that they have gained such skills through the programme. Three respondents provided a neutral rating, and a further three strongly disagreed. Seventeen respondents agreed that they had gained harvesting skills, with three more strongly agreeing. However, five respondents either disagreed or strongly disagreed with the statement. Ten respondents agreed that they had gained pruning skills, 12 respondents disagreed or strongly disagreed, and three opted not to respond. Seven respondents agreed, three strongly agreed that they had gained planting skills, 13 disagreed or strongly disagreed, and two opted not to respond. There was a strong disagreement that the programme transferred tractor driving skills, a component not included in the curriculum, with 19 strongly disagreeing and two disagreeing. Although two indicated that they had gained this skill, which might have occurred during the workplace-integrated learning component of the programme. These results are depicted in Figure 3.

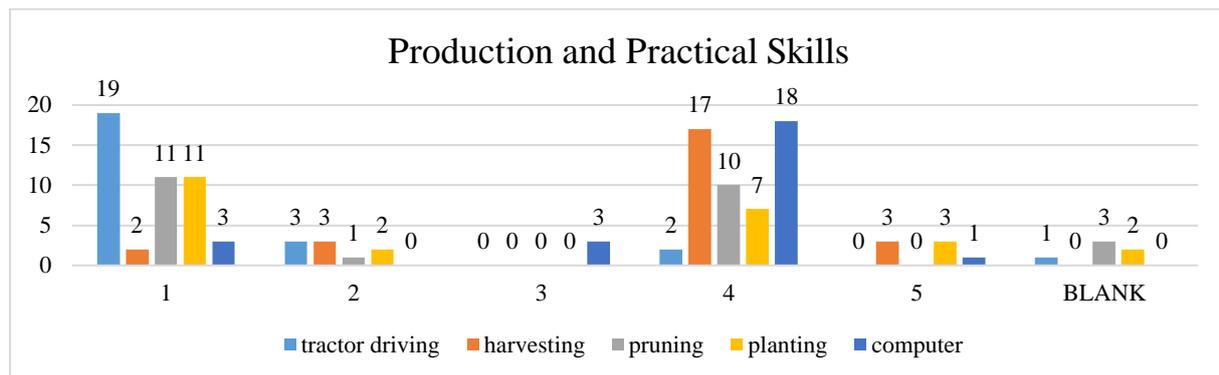


FIGURE 3: Production and Practical Skills

The individual responses on specific skills resonate with the overall response to whether the respondents felt prepared for the workplace. Only 11 of the participants strongly agreed that they were ready for the workplace. When this response is compared to the demographic section of the questionnaire, it is shown that these 11 respondents are currently employed in the agricultural sector. Thirteen respondents selected the ‘not applicable’ option to this question. When this response is compared to the demographic section, it can be seen that these respondents are continuing their studies, are employed outside of the agricultural sector or are currently unemployed. One person indicated a perception of not yet being ready for the workplace. Similarly, in a follow-up question, the 11 respondents in the agricultural sector agreed or strongly agreed that they offered a valuable contribution to their workplace, one respondent disagreed, and 13 indicated a ‘not applicable’ response. It can be concluded that the graduates who were employed in the agricultural sector perceived the knowledge and skills gained as relevant and appropriate to their current work.

Responses from farmers and farm managers were more ambivalent in confirming that the theoretical component of the programme equipped students with the appropriate knowledge and skills needed by the industry. While some indicated that the knowledge and skills offered in the programme were aligned with their needs, others disagreed and instead proposed that skills development take place once students were placed on the farm. The farmers and farm managers indicated that the Learnership Programme did not sufficiently consider the seasonal demands of the agricultural sector. By way of illustration, responses indicated that while a generic plant production module was included annually in the programme, the needs of the industry would be better supported by a specialised planting course at the start of each commodity cycle. Similarly, fruit trees are pruned at different times of the year, and theoretical

knowledge sessions on pruning should be presented before that skill is needed on the farm. Due to limited human resources, the module on pruning was presented and facilitated only once a year and was, therefore, not aligned with the production cycles of different fruit trees.

All farmer respondents indicated that there was a strong relationship between industry and the EATI. There is an opportunity to leverage this relationship to ensure that the Learnership Programme responds to industry needs. Complete alignment of the Learnership Programme with the seasonal cycle of each commodity within the Western Cape Province would have guaranteed that a student obtained the theoretical knowledge during the exact time of the season of a specific commodity.

Relating to the final level of impact, namely the *programme results*, an important finding is the improvement in employment status for graduates. The study found that 14 of the 25 participants were employed, a further 6 participants were continuing their studies, one was enrolled in an internship, and four were unemployed. Of the 14 employed participants, 11 were employed within the agricultural sector, and one more had obtained an internship contract in the agricultural sector. The high employment rate amongst the graduates indicates that the programme contributes towards students' employability.

Graduates reacted positively to questions that related to gains in self-respect, respect for others, accountability, responsibility, a sense of freedom, independence and confidence (see Figure 4), with most respondents either agreeing or strongly agreeing that the programme offered these personal values gains, with most respondents providing a rating of five or four indicating their agreement or strong agreement with the statement

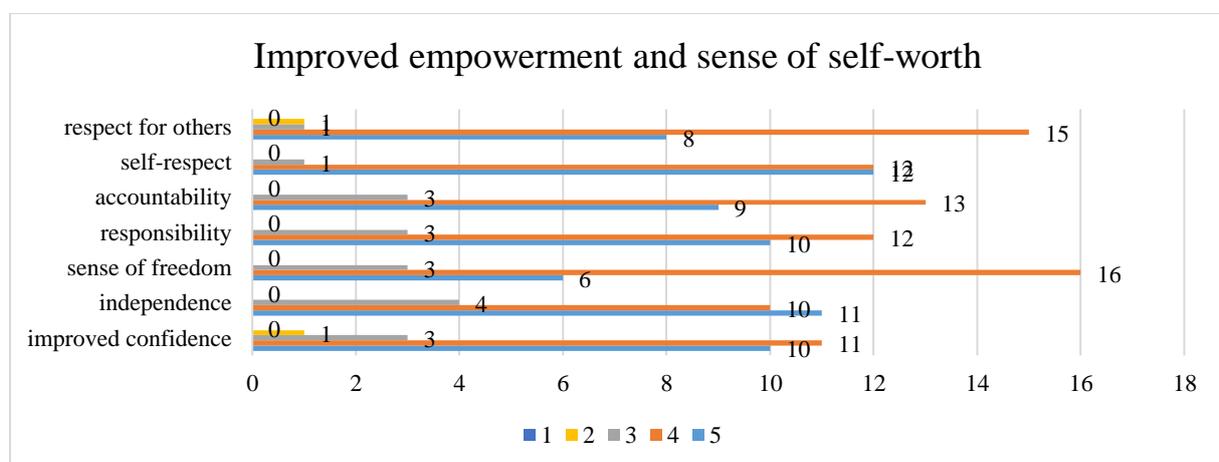


FIGURE 4: Improved Empowerment and Sense of Self-Worth

In addition, respondents indicated that the National Certificate in Animal or Plant Production led to subsequent income for those who had secured a job in the agricultural sector and offered an opportunity to break into the agricultural industry, which led to increased financial security, the ability to support others and contribute to the community, increased social status, new friendships, networking opportunities and self-actualisation. Six of the graduates continued their studies with subsequent degrees, providing evidence of empowerment and the eagerness for further development and growth after completing the Learnership Programme. It is thereby concluded that the graduates found the Learnership Programme empowering.

Only four graduates who formed part of the study were unemployed at the time. These participants had all obtained the National Certificate: Animal Production: Aquaculture. The four unemployed participants indicated that there were not enough job opportunities within the agricultural sector, which could signify that the market at the time of the study within the specific region was saturated for graduates from this focus area. These four graduates indicated that they found it difficult to enter the aquaculture industry and that they did not have strong networks or connections with those already in the industry. There may be a need to support graduates of this programme with additional networking skills and opportunities to facilitate access to the industry.

5. CONCLUSIONS AND RECOMMENDATIONS

The impact assessment of the Learnership Programme reveals positive results at all levels, with the weakest results on Level 3 (behaviour change at the workplace).

Graduates reacted positively to the theoretical and practical components of the programme and the infrastructure and opportunities available. There was some indication that the practical experience of lecturers could be strengthened to support the learning aims of the programme. The throughput rate of the programme was high, with graduates demonstrating mastery of course outcomes as set by the AgriSETA. Graduates were mostly positive about improvement in their computer, business management and financial management skills. However, both graduates and farmers agreed that there were limitations in applied agricultural skills such as planting, pruning and harvesting. Farmers indicated that these skills were best developed on the job, supporting the importance of the workplace-integrated learning component of the Learnership Programme as implemented in 2015 as an opportunity to develop practical skills.

Farmers indicated that learning could be further strengthened by ensuring that the content and timing of the programme's theoretical component meet the industry's seasonal demands.

At the results level, the unemployment rate of graduates who partook in this study was low, with a substantial number of graduates employed in the agricultural sector or enrolled for further studies. The workplace-integrated learning component of the Learnership Programme provided students with networking and possible future employment opportunities in the agricultural sector. Farmers or farm managers typically hosted students from their communities and surroundings on the farms and offered them placement on the farm after supporting their learning. This may contribute to the high employment rate of graduates, and the findings for the National Certificate: Animal Production: Aquaculture indicate that these networking opportunities and alignment with available jobs in the sector are important factors for success.

The findings show that the Learnership Programme contributed positively to graduates' personal development and empowerment. Graduates reported increased personal attributes and appreciated the social and economic opportunities obtained through the Learnership Programme.

In terms of recommendations, the practical component of the Learnership Programme should be strengthened, including upskilling lecturers to better convey and equip students with practical application skills. The scheduling of practical components of the programme needs to be aligned with the expectations of the agricultural sector to ensure that the necessary knowledge and skills are transferred before the student is required to apply these in practice. While the academic year is short, there is a potential benefit in extending the time that students spend on the farms. Most respondents were not raised on a farm, and the time spent on farms offers previously disadvantaged students the opportunity to maximise their in-practice learning to compete with more privileged learners who grew up on a farm.

Communication with industry role players should be strengthened to maximise the workplace-integrated learning component of the Learnership Programme. A service-level agreement with industry partners may facilitate support by both industry partners and the EITA of shared objectives. This could be further strengthened through a structured policy and standard operating procedures that maximise the workplace-integrated learning component for both learners and the agricultural industry.

Opportunities to reflect on the training should be established for organising training needs analysis workshops to enable the industry to influence the training curriculum to identify emerging needs. Specifically, the EATI should strengthen networking with the aquacultural industry to involve these role players in the education and development of students. A final recommendation is to establish an alumni organisation that regularly updates the contact details of graduates. This will enable the EATI to track graduates in further training impact assessments or other research projects.

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