
Exploring the role of a work integrated learning programme in enhancing graduate employment in the Agricultural sector within the Mpumalanga Province, South Africa

Mamogoto Leutle*, and Nico Schutte** and Nicolene Barkhuizen**

*Southern Business School, South Africa **

*GIFT Research Niche Area, North-West University, South Africa ***

Abstract: The past two decades have seen the current South African government trying to transform its economy to access to higher education to better respond to the skills needs of the country. Despite these efforts high levels of unemployment among graduates prevail. Higher education institutions in particular are criticised for producing graduates that are not workplace ready. As a result work integrated learning programmes are implemented in an effort to enhance the employability of graduate interns. This study explored the perceptions of the graduates and the employers on how work integrated learning programmes enhance graduate employment in the agricultural sector (employers) within in a rural area in South Africa. This research followed a quantitative research approach with surveys distributed to graduates (N=150) and employers (N=150) who participated in work integrated learning programmes in the agricultural sector. The findings showed that work integrated learning programmes are relevant in the agricultural sector and promoted the generic employability skills of graduates. The majority of employers and graduates reported that work integrated learning programmes have a positive effect on the academic performance of the students. Both samples perceived work integrated learning to have a positive effect on the general work performance of students after graduation.

Keywords: *Agriculture, Employability, Graduates Internships, Work integrated learning*

Introduction

South Africa has undergone fundamental economic, social, political and educational changes since 1994. The past two decades have seen the current government trying to transform its economy including education to better respond to the skills needs of the country. The largest proportion of the population in South Africa resides in the rural provinces (Statistics SA, 2016). The government has tried to redefine its role in the rural economy through the National Development Plan 2030 (2011). However, what seem to have not changed are incidences of poverty, inequality and unemployment particularly in the rural provinces of the country, Mpumalanga being one of them. In this Province the majority of the people are unemployed, unskilled and affected by low levels of education (Statistics SA, 2016). In addition high levels of youth unemployment prevail. This implies that youth are not acquiring requisite knowledge, experience and skills required by the current and future economy of South Africa (Mtembu & Govender, 2015).

For graduates to compete in the highly competitive agricultural sector, institutions of higher learning are expected to expose their students to effective work integrated learning (WIL) programmes in order to meet the skills requirements of the industry. The idea of

entrenching graduate virtues through tertiary education has been receiving much attention in the academic setting in the past 10 year in order to enhance graduates employability (Greenbaun and Rycroft, 2014). While this is critical, Bohloko (2012) warned that there is a tendency by the industry to reduce practice to practical experiences which poses a danger of weakening WIL's value and positioning it outside the curriculum and the pedagogical radar. The result of this reduction process is that WIL may not have direct contribution to knowledge production, professional community and academia.

There is a persistent view that the graduate training does not provide sufficient and required skills demanded by the sector. This view is reinforced by the Council on Higher Education (2011) that work-integration learning is ineffective, inconsistent within and across institutions of higher learning, and is often ad-hoc and poorly structured, assessed and moderated. Therefore, this study seeks to investigate the current perceptions on work integrated learning programmes in enhancing graduate employment in the agricultural sector within the Mpumalanga Province.

Literature Review

Work integrated learning

Work integrated learning is a combined effort between the industry and institutions of higher learning to improve and uplift student learning experiences by integrating theoretical knowledge acquired into practice (Bates, 2011, Billet, 2011 & Yorke, 2011). According to Orrell, (2011) WIL is designed to develop students' ability, knowledge and skills for employment at workplace. The popular forms of WIL are those that are designed to accommodate students at workplace for a particular period of time to learn practice in their areas of specialised fields (Phillips, 2014). WIL programmes are special in the sense that it provide students with a definite edge in the competitive graduate employment market (Wilton, 2012), while also providing a mechanism by which the world of work can contribute to curriculum development to keep programmes in line with and the relevant to the real world (CHE, 2011).

Graduate employability has become an important aspect of institutional and academic planning since there are benefits to be gained by higher education institutions (HEIs), employers and graduate themselves (Nel & Neale-Shutte, 2013). The key benefits of WIL are to enable the industry to create of a talented pool of graduates from which the sector can recruit from in the near future (Phillips, 2014). In essence WIL programmes allow and provide employers with an opportunity to interact with prospective employees whilst creating a pool of skilled personnel before recruiting them (Virolainen, Stenstrom & Kantola, 2011.) For students the benefits of WIL includes increased exposure to workplace, employment and the enhancement of generic and employability skills, (Dressler and Keeling (2011; Jackson 2013; Smith, Ferns, Russell, & Cretchley, 2014).

Graduate employment capacities and attributes

Graduate attributes are increasingly been acknowledged to be critical for students to develop in tertiary education to enhance the graduate employability prospect. This has come about mainly because of the pressure on tertiary institutions to prepare students to attain the requisite conceptual business acumen, attitudes at the workplace and to develop attributes needed for critical citizenship (Bozalek & Watters, 2014).

Coetzee (2014) describes employability capacities as those generic skills and virtues that are essential in preparing graduates to perform in the workplace. Graduates with the right skills and virtues will make a meaningful contribution towards the industry and support

employers to succeed in their business ventures (Daniels & Brooker, 2014). Del Corso (2013) further emphasised that graduates must be dynamic, innovative and be willing to learn, acquire new skills and be critical thinkers in order to be updated with changes in the world and the sector. In addition Coetzee (2014) emphasized the importance of portable soft skills and attributes. Naturally, employers expect graduates to demonstrate the ability to have an open mind and persistence to achieve set milestones within work-place environment (Froehlich, Beusaert, Segers and Gerken, 2014) and show in depth transferable generic capacities (Rocha, 2012).

Impact of WIL on graduate employability

WIL is regarded to enhance graduate employment in various ways. According to Billet (2011) WIL enhances the acquired capabilities of the students in their professional fields. According to Brookfield (2012), it explores professional relations, raises awareness and contribute actively to professional practice. In this regard, WIL provide a platform for professional development that enhances students` observation skills of the workplace. Wilton (2012) points to a greater alignment between job positions to acquired qualifications of the students who participated in WIL programmes. A study by Brooks (2012) showed that students were more likely to be employed based on their competency and 25% would be kept in their host organisations immediately after graduation. The Agricultural sector as part of the competitive and global markets is increasingly driven by requirements of graduate requisite skills and knowledge (Tran, 2013). Wilton (2012) support the view that stakeholders broadly should start recognising the role of WIL in this sector.

Research design

Research Approach

A quantitative exploratory research approach was followed using surveys to elicit data from the respondents. Exploratory research is useful in exploring and investigating an area of which little is known (Kumar, 2005). This research involved a cross-sectional research design in that a particular phenomenon was studied at a particular point in time.

Sampling

The survey consisted of employers and graduates who participated in a WIL programme in the agricultural sector. A total of 150 graduate interns and 150 employers participated in the study. Most of the employers in this study were male (75%), aged between 31-40 years (49%) and representative of the Black ethnic group (69%). Most of the employers were either in possession of a Diploma (30%) as highest level of education or an Honours Degree/ BTech (29%) and running their own business (67%). The majority of graduates in this sample were male (51%), aged between 20-30 years of age (95%) and representative of the black ethnic groups (95%). The graduates were primarily in possession of a Diploma as their highest level of education (65%) and unemployed (53%).

Measuring instrument

A questionnaire was developed to assess the various components of the WIL programme. The first section of the questionnaire included three items that assessed perceptions of graduates and employers relating to the WIL programme itself. The second part of the questionnaire consisted of 11 items and measured the extent to which specific WIL factors contribute to the graduate employability. The last section of the questionnaire focused on the extent to which employers considered employing graduates after completion of the graduate internship programme and whether graduate interns accepted employment.

Responses for Sections one and three were collected on a five-point likert scale ranging from Strongly Disagree (1) and Strongly Agree (5). The respondents were required to answer either “Yes” or “No” for Section two.

Statistical analysis

The data was analysed using SPSS.24 (SPSS, 2017). Descriptive statistics (i.e. means, standard deviations and frequencies) were applied.

Results

Work integrated learning, skills acquisition and transfers

Table 1 reports the results of some general perceptions of work integrated learning from both employers and graduates. From the mean scores it was evident that both employers and graduates were in agreement that learning takes place outside the formal academic setting through work integrated learning and that WIL programmes promote the generic skills of students prior to real time employment. Employers and graduates differed in terms of their perceptions of the ability of students to transfer skills from higher education to the workplace. Graduates were more in disagreement that that they experienced difficulties in applying knowledge and skills acquired from their higher educational qualifications to the workplace.

Table 1: General statements relating to WIL, skills acquisition and transfer

Statements	Employers		Graduates	
	Mean	SD	Mean	SD
Learning takes place outside the formal academic setting?	4.06	1.018	3.77	1.011
WIL promotes generic skills in agriculture prior to real time employment?	4.35	.906	4.23	.906
Students experience difficulties in transferring the skills learnt at their institutions of higher learning to the work placement?	3.30	1.268	2.85	1.262

Results: Contribution of WIL to Graduate Employability

Table 2 presents the results on the contribution of a variety of WIL factors to graduate employability.

Table 2: Summary of work integrated learning responses by the employers and graduates

Item	Graduates				Employers			
	Yes	%	No	%	Yes	%	No	%
Do you think Work Integrated learning is relevant to the agricultural sector	158	99	2	1	157	98	3	2
Do you believe involvement in work placement programmes enhances the employment prospects of the graduate’s students?	144	96	6	4	149	99	1	1
Do you think undergraduate students should be held accountable for the work they do during work integrated learning placement.	62	41	88	59	129	86	21	14
Do you think supervision is appropriate for the undergraduate’s	134	89	16	11	143	95	7	5

student during work integrated learning placement?								
How would you rate the guidance given from mentor, supervisor and visiting lecturer regarding what is expected from the work experience scheme?	110	73	40	27	122	81	28	19
Should there be a change to make the guidance more effective?	48	32	102	68	31	21	119	79
Do you see any merit in forming a partnership between staff, students and employers to ensure that work placement is based on common vision	143	95	7	5	149	99	1	1
Do you see any merit in the use of a learning contract that states the role and responsibilities of the students and employers during work placement?	138	92	12	8	147	98	3	2
Do you think the duration (One Year) of the work placement is appropriate?	135	90	15	10	98	65	52	35
Do you think that the work placement has an effect on student academic performance?	141	94	9	6	147	95	3	5
Do you think that the work placement has an effect on student performance after graduation?	140	93	10	7	144	96	6	4

As shown in table 2, graduates and employers answered mostly in favour of WIL programmes. Significant was the affirmation by graduates (96%) and employers (99%) that WIL programmes do enhance employment prospects for graduates in the agricultural sector. However, graduates rated very low (41%) that students should be held accountable during work integrated learning programme whilst employers rated 86% for the same. Interestingly, both the graduates (89%) and employers (95%) perceived supervision of the students as critical. The rating in favour of guidance was high for both the graduates (73%) and employers (81%). Strong indication was noted for the review of guidance provided to students.

Both the graduates (95%) and employers (98%) perceived greater merits in forming partnership between staff, students and employers to ensure that work placement was based on a common vision. Further, the same was expressed for learning contract that states the role and responsibilities of the students and employers during work placement. The rating was high for both the graduates (92%) and employers (98%). However, employers rated to a lesser extent (65%) the duration of WIL as being an appropriate time-frame for the programme whilst graduates (90%) rated it highly. Both the graduates (94%) and employers (96%) rated placement highly as having effect on students' academic

performance. The same applied to the impact of WIL performance after graduation. Both the graduates and employers rated it highly at 93% and 96% respectively.

Graduate Employment based on WIL programmes

Table 3, present the results of graduates who were employed after the completion of the work integrated learning programmes in the same organization where they practiced their WIL.

Table 3: Summary of responses from employers on graduate employment based on WIL

Item				
	Yes	%	No	%
Did you employ any graduate (s) after the completion of the Work Integrated Learning Programme	30	20	120	80
Did any graduate(s) reject an offer of employment after the completion of the Work Integrated Learning Programmes	5	3	145	97

The results in Table 3 show that employers only considered employing 20% of the graduates after completion of the WIL programmes. The results furthermore showed that 97% of graduates did not reject any offer for employment after the completion of WIL programmes.

Discussion

The objective of this study was to determine the extent to which work integrated learning programmes enhance graduate employment in the agricultural sector. The majority of graduates and employers recognised that work integrated learning programmes were relevant to the agricultural sector. Both the graduates and employers have experienced work integrated learning and have better appreciation on how the programme compliment theory to practice in the agricultural sector. Graduates and employers believed that learning can take place outside the formal academic setting. This suggests that work integrated learning programme provide learning platform that supports formal academic programme offered by institutions of higher learning in a practical way in the field. Further, they believed work integrated learning promote generic skills in agriculture prior to real time employment (Rocha, 2012).

In line with the views of Del Corso (2013) the participants in this study also believed that graduates must be dynamic, innovative and up-to-date with their domain of technical knowledge such as agricultural technical skills in farming. Noted were greater benefits of WIL for students in small and start up agricultural organizations than larger ones, as students were given more responsibilities and provided with more diverse challenges and a broader range of problems for analysis and solving.

Both the employers and graduates perceived students' involvement in work placement programmes to enhance employment prospects of the graduates. WIL was attributed to have enhanced employment skills in undergraduates (Wilton, 2012). This was a significant finding that work integrated learning programmes enhance prospects for graduates' employment in the agricultural sector.

Limitations and recommendations

This research had some limitations. First a cross-sectional research approach was followed which limited the research in terms of making cause and effect inferences over a longer period of time. Secondly the sample was only limited to the agricultural sector. Consequently the results cannot be generalised to other contexts. Finally the sample was only limited to employers and graduates who participated in the WIL programme. Future studies should include academic higher educational stakeholders to obtain a more holistic view of WIL programmes in the agricultural sector.

Conclusion

This study contributed knowledge on how work integrated learning programmes enhance graduate employment in the agricultural sector. The results of the study should be shared with institutions of higher learning to solve issues such as duration of student placement, curriculum revision to assist students in transferring their skills more effectively to the workplace, preparations of students for placement and work integrated learning policy development.

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