THE ROLES OF WORK-INTEGRATED LEARNING IN ACHIEVING CRITICAL CROSS-FIELD OUTCOMES IN A HOSPITALITY MANAGEMENT PROGRAMME

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Abstract

Work-Integrated Learning (WIL) is a form of Experiential Learning (EL) which implies learning by experience. This article represents the findings of a study regarding the roles of WIL and how such roles can be quantified when measured against the achievement of Critical Cross-Field Outcomes (CCFOs). The study was based on an empirical mixed-method triangulation, which allowed the researchers to use both qualitative and quantitative methods to address the research problem. The sample size is 35, constituting the third and fourth-year groups in the Hospitality Management programme at a higher education institution in South Africa. The results of the quantitative study indicate that the students have identified various roles for WIL whereas the quantitative investigation revealed that students are of the opinion that WIL contributes significantly towards the achievement of CCFOs. WIL therefore contributes to skills development in general and to the attainment of skills and attributes as represented by the CCFOs in particular. Recommendations regarding the implications of the study are made for curriculation purposes as well as for credit values to be attached to WIL.

Keywords: Work-Integrated Learning, Critical Cross-Field Outcomes, Hospitality Management Programme, higher education, deep and surface learning

1. BACKGROUND

Universities are under increasing pressure to produce employable, work-ready graduates who are able to cope in a rapidly changing work environment (Leong & Kavanagh 2013:1). Richardson, Jackling, Henschke & Tempone (2013:28) add to the contemporary debate in stating that: “…graduates must come to workplaces ready to ‘hit the ground running’”. Consequently, universities are including WIL in their learning programmes to afford students the opportunity to gain business acumen and real world experience. The prevalence of WIL in programmes of higher education institutions has increased, with greater consideration being given to providing students with opportunities to link theoretical knowledge with practice (Sutherland & Symmons 2013:295).

In becoming an integral part of many degree programmes, WIL’s considerable potential has been realised (Papakonstantinou, Charlton-Robb, Reina & Rayner, 2013:59) through equipping graduates with critical analytical skills and independent thinking to support a highly productive and professional
Yet, it still needs to be determined how successful WIL is in equipping students with skills and competencies.

Within the South African context, the policy of the South African Qualifications Authority (RSA SAQA 2001: 23-24) calls for the holistic development of learners to demonstrate certain life skills, which will not only enhance their learning, but will also ensure the application of these skills in their daily lives. The SAQA policy refers to these transferable skills as generic abilities which may be expressed as critical cross-field outcomes (CCFOs). The following CCFOs must be included and assessed in each qualification:

CCFO 1: Identify and solve problems with responses which display that responsible decisions, using critical thinking, have been made.

CCFO 2: Work effectively with others as a member of a team, group, organisation or community.

CCFO 3: Organise and manage oneself and one's activities responsibly and effectively.

CCFO 4: Collect, analyse, organise and critically evaluate information.

CCFO 5: Communicate effectively, using visual, mathematical, and/or language skills in the modes of written and/or oral presentation.

CCFO 6: Use science and technology effectively and critically, showing responsibility towards the environment and the health of others.

CCFO 7: Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.

CCFO 8: Contribute to the full personal development of each learner and the social and economic development of the society at large, by making it the underlying intention of any programme of learning to create awareness in individuals about the importance of:

i) reflecting on and exploring a variety of strategies to learn more effectively;

ii) participating as responsible citizens in the life of local, national and global communities; and

iii) being culturally and aesthetically sensitive across a range of social contexts. (RSA SAQA, 2001:24)

Mahlomaholo and Bohloko (2008: 369-377) found that WIL prepares students differently in terms of purpose and outcomes.
While their findings correspond with those of Snyman (n.d.: 144), neither clarify the roles of WIL in achieving CCFOs.

The following questions therefore need to be answered: How can WIL be defined? What roles do WIL play in achieving predetermined outcomes such as CCFOs? How can these roles be quantified and measured?

2. INTRODUCTION

During the literature review, it was found that various terms are used to refer to WIL, namely Cooperative Education (Engelbrecht, 2003; Churton & Tanaka, 2008; Drysdale & McBeath, 2014), Experiential Learning (CTM, 2000; Wessels, 2005; Zegwaard & McCurdy, 2014), workplace learning (Biggs & Tang, 2007; McEwen & Trede, 2014), sandwich placements (Baxter & Burden, 2008), practicum (Coll & Eames, 2008; Gardner & Bartkus, 2014), practice-based learning (Cannan, 2008), work-based learning (Cara, 2008; Williams, 2010) and internships (Crump, 2008; Hynie, Jensen, Johnny, Wedlock, & Phipps, 2011; Gardner & Bartkus, 2014).

The implication is that these terms need to be analysed for similarities and differences to determine an appropriate definition and terminology relevant for this study.

3. RESEARCH PROBLEM

It is not clear what the roles of WIL, as a form of EL, entail and how such roles can be quantified when measured against predetermined outcomes such as CCFOs. In an attempt to clarify the roles of WIL and to quantify such roles, the following objectives were set:

- To provide an overview of the theory of EL within whose context the value of WIL could be explored as a form of EL.
- To conduct a qualitative survey to determine stakeholders' views regarding the roles of WIL in achieving CCFOs.
- To determine the roles of WIL in achieving CCFOs quantitatively.
- To explore strategies for the improved functioning of WIL, draw conclusions and make recommendations based on the results of the study.

4. RESEARCH DESIGN AND METHODOLOGY

The study used an empirical mixed-method triangulation design, which allowed the researchers to use both qualitative and quantitative methods to address the research problem. Qualitative research was used since it is concerned with the why and not the how of its topic through the analysis of unstructured information, for example, interview transcripts, notes, feedback forms and videos.
It does not only rely on statistics or numbers, which are the domain of quantitative researchers (Ereaut, 2007: 2). Qualitative research is therefore applicable if the purpose is to gain insight into people’s attitudes, behaviours, concerns and motivations, since this type of research is concerned with collecting in-depth information and samples tend to be smaller compared to quantitative projects, which include much larger samples (DJS Research Ltd, 2009: 1). The former research should thus be undertaken to achieve a deep understanding of the issues, when one needs to trade detail for generalisability and to generate new theories or hypotheses (Trochim, 2006: 1-4).

A qualitative study was thus important in determining participants’ views regarding the roles of WIL in achieving CCFOs before an attempt was made to quantify possible roles that could have been identified. The emphasis therefore was on “understanding through looking closely at people’s words, actions and records”, as described by Maykut and Morehouse (1994: 92). The aim was to create descriptive analyses that emphasise a deep and interpretive understanding of the subject under investigation (Henning, van Rensburg and Smit, 2004: 21).

Quantitative data was also collected to quantify and measure the roles of WIL which have been identified. Hara (1995) describes quantitative research as an endless pursuit of facts and Golafshani (2003: 597) explains it as “a positivistic approach to test hypotheses and emphasise the measurement and analysis of causal relationships between variables”. It is important to determine what one intends to achieve through a quantitative study, since it is about determining the relationship between variables, i.e. independent and dependent variables. In this case, the independent variable is WIL and the dependent variable the CCFOs. The result of quantitative research is thus a collection of numbers that can be used and analysed to produce results. It is relevant to this research, since findings are presented in numerical format and questions require a choice between definite answers (Cohen et al., 2007: 5-26).

A questionnaire with closed questions (using a 5-point Likert scale) was used for the collection of quantitative data as it provides structured and often numerical data, as described by Kerlinger (in Cohen et al., 2007: 317). It thus enabled the researchers to quantify and measure the roles of WIL and apply statistical data analysis using ordinal data to produce descriptive statistics (Cohen et al., 2007:501-506). Open-ended questions were used for the qualitative investigation, because it provides rich and personal data, possible answers are unknown and, according to Cohen et al. (2007:206, 321), it is exploratory (as a prelude to the quantitative study) and therefore appropriate to solicit stakeholders’ views.

The target population consisted of students at the Central University of Technology, Free State (CUT) who have completed WIL and the target group
was the Hospitality Management programme with a sample size of 35, constituting the third and fourth-year groups that have WIL. Convenience sampling as a form of non-probability sampling was used because of the researchers' involvement with the programme and the accessibility of the subjects.

The reliability of the research is enhanced by employing mixed-method triangulation to investigate the research problem. The use of open-ended questions also promotes the notion of descriptive validity (Cohen et al., 2007:134).

5. THEORETICAL OVERVIEW

Looking at the diverse range of terms mentioned above, to refer to WIL, the starting point is to look for similarities to determine an appropriate definition and terminology relevant for this study.

Agrawal (2013:16) concurs that various terms have been used over time to describe elements within the field of vocational education and training. Gardner & Bartkus (2014:37) state that despite the multitude of terminologies: “…their underlying logic is largely the same: to enhance the value of the learning experience through an integration of work and education.” Leong & Kavanagh (2013:3) found that despite its long history of existing under different names: “…WIL is a range of work-related activities and experiences built into a student’s study programme”. The conclusion is made by Rampersad & Patel (2014:2) that: “…the term work-integrated learning (WIL) is used to describe experiential learning strategies for combining classroom studies with learning through work experiences”. WIL can therefore be regarded as a form of EL which necessitates a closer look at what EL entails.

Kolb (1984: 38) defines EL as “the process whereby knowledge is created through the transformation of experience” and he emphasises the following four critical aspects of the learning process as viewed from an experiential perspective:

- The emphasis is on the process of adaptation and learning.
- Knowledge is a transformation process which is continuously created and recreated.
- Learning transforms experience in both its objective and subjective forms.
- To understand learning we must understand the nature of knowledge and vice versa.

Kolb’s EL cycle (1984) seems to indicate that students will be actively engaged in the learning process. Within a South African context, the effectiveness of this engagement becomes evident when applied competence (as stated by RSA SAQA 2001: 11) as a combination of practical, foundational and reflexive competence, is achieved.
These competencies are described by RSA SAQA (2001: 11) as follows:

- Practical competence is the demonstrated ability to perform a set of tasks and actions in authentic contexts (situations).
- Foundational competence is the demonstrated understanding of what we are doing and why we are doing it.
- Reflexive competence is the ability demonstrated to integrate our performances with our understanding so that we are able to adapt to changed circumstances and explain the reason behind these adaptations.

In order to achieve applied competence, surface learning needs to be avoided and deep learning encouraged, as proposed by Biggs and Tang (2007: 22-25). Surface learning is described by them as skating along the surface of the learning content by using low, cognitive-level activities when higher-level activities are required to do the task properly. Deep learning, by contrast, is about engaging the task appropriately and meaningfully through the use of appropriate cognitive activities. Learning is all about wanting to know more about underlying meanings, ideas and successful applications in order to see and understand the big picture.

From the discussions above it is evident that WIL is a form of EL but not limited to EL or workplace learning in itself. For the purpose of this study, WIL will be regarded as a form of EL and as an educational programme of applied learning in the workplace that involves achievable and credit-bearing learning outcomes, which are structured, monitored and assessed at the appropriate NQF level to ensure integration with the curriculum outcomes of the whole qualification.

6. A QUALITATIVE AND QUANTITATIVE ANALYSIS OF THE FINDINGS

In analysing the data it had to be borne in mind that the aim was to identify possible roles for WIL in achieving CCFOs. The responses to the open-ended questions of the qualitative investigation were captured verbatim on a matrix. These responses to the different questions were then analysed to identify commonalities and trends. The commonalities and trends identified per question were then labelled as themes. These themes represent the roles identified by students for WIL. A calculation was then done to determine how many responses per question could be grouped under the various themes identified to determine the relative importance of each theme or role identified.

The Likert-scale statements had required students to rate the statements that WIL does contribute towards the achievement of the CCFOs. The following scale was used: 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree.
These responses were analysed to determine the importance and rating students attached to WIL in achieving each CCFO.

### 6.1 Qualitative Analysis

A summary of the qualitative analysis described above and roles identified for WIL are presented below in table 1.

**Table 1: Roles identified for WIL**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Roles Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 What do you think are the main reasons for including WIL as part of</td>
<td>Experience of and preparation for industry</td>
</tr>
<tr>
<td>Hospitality Management?</td>
<td>(31)</td>
</tr>
<tr>
<td>1.2 What have you learned from WIL?</td>
<td>Skills Development</td>
</tr>
<tr>
<td></td>
<td>(21)</td>
</tr>
<tr>
<td>1.3 What do you value most about the WIL you have completed?</td>
<td>Knowledge and experience</td>
</tr>
<tr>
<td></td>
<td>(32)</td>
</tr>
<tr>
<td>1.4 Describe the effect (if any) that WIL has had in your understanding</td>
<td>See the application of theory</td>
</tr>
<tr>
<td>the course content of Hospitality Management.</td>
<td>(19)</td>
</tr>
<tr>
<td>1.5 What can you observe about yourself that is different than before</td>
<td>Improved self-confidence</td>
</tr>
<tr>
<td>you were involved in WIL?</td>
<td>(27)</td>
</tr>
<tr>
<td>1.6 What advice would you give to other students regarding WIL?</td>
<td>Display maturity</td>
</tr>
<tr>
<td></td>
<td>(30)</td>
</tr>
<tr>
<td></td>
<td>Enhanced maturity</td>
</tr>
<tr>
<td></td>
<td>(11)</td>
</tr>
<tr>
<td></td>
<td>More responsible</td>
</tr>
<tr>
<td></td>
<td>(9)</td>
</tr>
</tbody>
</table>

The analysis enabled the researcher to determine various roles for WIL qualitatively with regard to CCFOs and also to quantify and measure the roles. The roles that were valued most by students are (1) experience of the industry, (2) an enhanced understanding and application of theory as well as (3) personal development. Experience of the industry plays a major role as identified by 31 and 32 respondents with regard to questions 1.1 and 1.3 respectively. Maturity is also very important, as indicated by 30 out of 35 respondents.

It is interesting to note that questions 1.5 and 1.6 have produced the same roles, namely the importance of self-confidence, maturity and responsible behaviour. The implication is that what students have observed as different about themselves upon completing WIL (question 1.5), is the exact advice that they would give to other students regarding WIL (question 1.6). It is thus evident that the students have undergone personal development during their WIL experience and that they could reflect on their experiences to provide advice from a personal point of view.
6.2 Quantitative Analysis

A summary of the results is shown in figure 2, as well as table 2. This represents the overall rating of each CCFO. A maximum total of 175 per CCFO could be achieved, based upon the thirty five (35) respondents multiplied by 5-scale points as maximum score per question.

![Figure 2: Students' overall rating of WIL's contribution to CCFOs](image)

### Table 2: Students' overall rating of WIL's contribution to CCFOs

<table>
<thead>
<tr>
<th></th>
<th>Mode</th>
<th>Mean</th>
<th>Median</th>
<th>Std Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCFOs</td>
<td>5</td>
<td>4.37</td>
<td>4</td>
<td>0.70</td>
<td>0.48</td>
</tr>
</tbody>
</table>

Out of a possible total of 175 (figure 2), the highest score achieved was CCFO 2 (165 or 94.3%) and the lowest score achieved was CCFO 6 (140 or 80%). The high scores thus indicate that students are of the opinion that WIL does contribute significantly towards the achievement of CCFOs.

In terms of table 2, the mode score of 5 and the mean score of above 4 (4.37) indicates that most students strongly agreed that WIL contributes significantly towards the achievement of CCFOs. The standard deviation is reasonably small, which is an indication that the scores are closely dispersed around the mean (Cohen et al., 2007:512). The small standard deviation implies that students all had more or less the same view regarding the contribution of WIL towards the achievement of CCFOs. The individual rating of each CCFO is depicted below by table 3.
### Table 3: Individual scores for each CCFO

<table>
<thead>
<tr>
<th>CCFOs</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCFO 1</td>
<td>0%</td>
<td>0%</td>
<td>3%</td>
<td>51%</td>
<td>46%</td>
</tr>
<tr>
<td>CCFO 2</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>CCFO 3</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>CCFO 4</td>
<td>0%</td>
<td>0%</td>
<td>9%</td>
<td>51%</td>
<td>40%</td>
</tr>
<tr>
<td>CCFO 5</td>
<td>0%</td>
<td>6%</td>
<td>11%</td>
<td>46%</td>
<td>37%</td>
</tr>
<tr>
<td>CCFO 6</td>
<td>0%</td>
<td>3%</td>
<td>20%</td>
<td>51%</td>
<td>26%</td>
</tr>
<tr>
<td>CCFO 7</td>
<td>0%</td>
<td>3%</td>
<td>20%</td>
<td>46%</td>
<td>31%</td>
</tr>
<tr>
<td>CCFO 8</td>
<td>0%</td>
<td>0%</td>
<td>3%</td>
<td>31%</td>
<td>66%</td>
</tr>
</tbody>
</table>

The percentages achieved per individual CCFO vary between 77% (CCFO 6, CCFO 7) and 100% (CCFO 2, CCFO 3) in terms of agree and strongly agree. This is a clear indication that students are of the opinion that WIL does contribute significantly towards the achievement of each CCFO.

### 7. LESSONS LEARNT FROM THE STUDY

The identification of possible roles for WIL which could assist in achieving CCFOs was done by undertaking a qualitative study amongst third and fourth-year participants enrolled for the Hospitality Management programme at the Central University of Technology, Free State. Although students identified different roles for WIL they regarded experience of the industry, an enhanced understanding and application of theory and personal development as the most important. Students are inclined to a deeper understanding of theory if they are able to apply it outside the classroom in real world situations. Important skills such as problem solving are honed in real time and within real spaces. It is also clear that students highly value WIL’s contribution towards their personal development. Students’ observation of the changes (i.e. increased self-confidence, maturity and an increased sense of responsibility) they underwent after completing WIL is indicative of this.

In the quantitative part of the study students were asked to rate the extent of WIL’s contribution to the achievement of CCFOs, especially those CCFOs that could be linked to the identified roles. Descriptive analyses (see table 2 and figure 2) of the quantitative findings suggest that students rated WIL to be contributing significantly to the achievement of CCFOs thus suggesting that the integration of WIL into instructional programmes of higher education institutions afford students the opportunity not only to gain valuable experience about the workplace - experience that no textbook can offer - but also to develop those transferable skills that would make them work-ready.
The article investigated the roles of WIL, as a form of EL, and how such roles can be quantified when measured against predetermined outcomes such as CCFOs. From the above it is evident that various roles were identified for WIL by students. It was also possible to quantify and measure these roles against predetermined outcomes such as CCFOs.

The findings of this study indicate that WIL plays a role, in varying degrees, in achieving CCFOs. Universities are therefore vindicated for including WIL, in response to the demand of graduates to have a range of non-technical skills as indicated by Natoli, Jackling, Kaider & Clark (2013:75-76). Leong & Kavanagh (2013:3) assert that WIL is a vehicle for developing essential graduate attributes and for providing graduates with adequate skill sets as reported by Richardson, Jackling, Henschke & Tempone (2013:28).

Richards, Sweet & Billett (2013:251) also postulate that: “Educational experiences are only as effective as students' engagement with them...” An effective engagement has indeed been revealed by this study, as it has transpired from the investigation that WIL is an effective pedagogy that promotes applied competence. The concrete experience that WIL presented to students enabled them to reflect (think back) on their experiences and form abstract concepts (themes indicated like personal development – self-confidence, maturity and responsible behaviour) that can be applied in new situations (advice given to other students regarding WIL). These are all indicative of deep learning leading to applied competence. Moreover, this corresponds with Edgar, Francis-Coad & Connaughton’s (2013:147) view that WIL provides an ideal backdrop for reflection through exposure to real life incidents in the workplace and that: “WIL is now perceived as providing an important opportunity for improving the work-readiness of all graduates, even in areas not linked to clear employment outcomes” (Reddan, 2013:223).

It has also been established that the quantification of the roles does provide information that can be useful in planning future curricula for hospitality management, in particular which CCFOs can be achieved or best achieved through WIL. The identification of the impact of WIL with regard to each individual CCFO is an indication of the possible credit value that can be attached to it.

The recommendation is that WIL constantly be monitored and revised in terms of its effectiveness and structure. The reporting format for WIL needs to be revised and adapted to include visual and oral presentations, maybe to employers in the workplace in addition to reports that the students must write, so as to enhance WIL's contribution with regard to CCFO 5 (communicate effectively using visual, mathematical, and/or language skills in the modes of written and/or oral presentation).
This should be achievable since Fleming & Hickey (2013:209) describe the tripartite relationship of WIL as being expressed in terms of a partnership between employers, students and the university.

8.1 Limitations of the study

The sample size of 35 constitutes the third and fourth-year groups in the Hospitality Management programme. Of the 35 students 13 (37%) were third year students who had completed one 6 months period of WIL as opposed to the fourth year students who had completed two 6 months periods of WIL.

8.2 Areas for future research

Future research will be required to determine the reasons for the difference in ratings for the achievement of the various CCFOs and how individual ratings can be enhanced. A similar study can also be conducted with regard to the role of WIL in achieving the newly adopted graduate attributes at CUT.

9. REFERENCES


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