Engaging Students in Work Integrated Learning: Drives and Outcomes [Bandaranaike & Willison]

ABSTRACT: Whilst there are numerous methods of assessing Work Integrated Learning (WIL), finding one which delivers effective feedback is critical to motivate students. Much current WIL assessment is textual and does not permit dialogue between student and assessor. The aim of this paper is to present a technique that will facilitate a two way discourse on performance and learning experiences and create awareness to adaptation, in the workplace. The drive or motivation to engage in WIL was trialled in this study from formative feedback received via face-to-face interviewing. The Work Skills Development Framework (Bandaranaike & Willison) was used to model the interview content, and feedback gathered from a total of 84 students and employers over a period of 10 months. Based on the results of the interviews, the paper articulates the need for lifelong learning outcomes beyond the immediate work-based experience through a practice based learning model of WIL designed on the Prochaska and DiClemente's five stage Model of Change (1982). The study noted the value of face-to-face assessment in achieving validity, reliability and contextual authenticity in work-based learning research. The research also demonstrates the need for students to reflect beyond the work-based learning experience and project towards future challenges thus bridging the gap between tacit and explicit learning.

[KEY WORDS: Work Integrated Learning, Feedback, Motivation, Interview, Assessment]

INTRODUCTION

Motivation is the key to student engagement and defined as "a student's willingness, need, desire and compulsion to participate in, and be successful in, the learning process" (Bomia et al, 1997). It is driven by critical reflection (Ebrall et al, 2008) and formative feedback (van Rensburg & Danaher, 2009; Nicol & McFarlane-Dick, 2006) leading to preferred lifelong learning outcomes (Kolb, 1984). "Students become engaged when they are involved in their work; [they] persist despite challenges and obstacles" (Schlechty, 1994; Klein,1989). This paper presents a study of career development learning and draws on face-to-face interviews to provide data which highlights the pedagogic value of motivational feedback.

Feedback via assessment in Work Integrated Learning (WIL) varies from remote surveys (Richardson et al, 2009) to employer views of desirable competencies (Zegward & Coll, 2003) to online questionnaires (McIlveen et al, 2009) to portfolios (Challis et al, 1996; Challis 1999) and more recently, electronic methods like wikis and blogs and many more, but the effect on student engagement remains unknown. Patrick et al (2008) in a National Scoping study of WIL, states WIL placement experiences are dependent amongst other things on "authentic assessment". Cumming & Maxwell (1997) stress the need for authentic assessment to

be contextualised through a coherent learning, teaching and assessment domain. For long, a major focus of WIL has been on experiential learning, but experiential learning makes sense only through critical reflection (Raelin,1997) and thinking about what happened and what they are learning from the experience (King, 2004). This study utilised a highly discursive feedback method framed around six facets of work skills (Work Skills Development Framework in Bandaranaike & Willison, 2009, 2010] together with a practice-based model of career development to authenticate the learning experiences of WIL students.

The study testifies the motivational drive for student engagement is structured on specific feedback. A sample of student responses from in-depth interviewing in the research was analysed to assess the level of motivation and learning outcomes. The research highlights the importance of two-way feedback**,** the directness of student response not always elicited in WIL feedback, and the confidence building and in depth motivation made possible through the face-to-face interviewing technique.

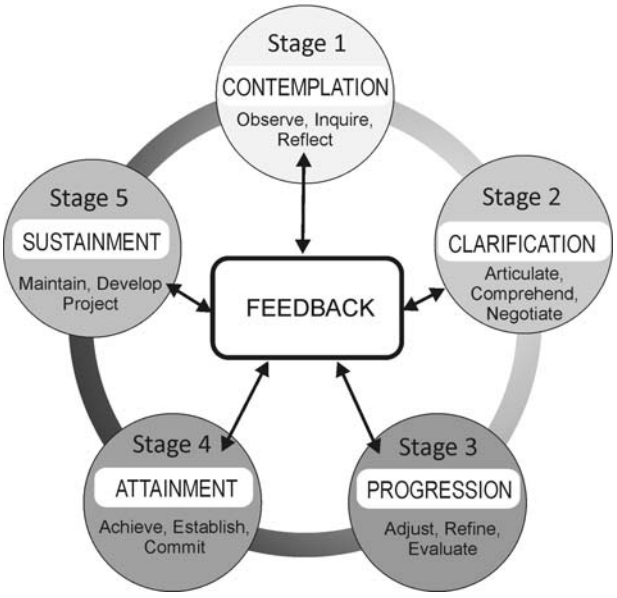
BACKGROUND

The Career Development Cycle (Fig. 1) in this study was adapted from The Transtheoretical Model (TTM) of Prochaska & DiClemente (1982), which provides a comprehensive theory of change. To date most applications of TTM are based on behavioural change from the negative to the positive (McNamara, 1992, 1998). A key construct of the TTM is that behavioural changes are perceived as occurring as a progression through a series of 5 stages - Pre-Contemplation, Contemplation, Preparation, Action and Maintenance.

The Career Development Cycle also follows the key constructs of the TTM. However, while the TTM is applied to track remedial behavioural changes [drug addiction, smoking] and guide treatment and prevention programs, The Career Development Cycle is used as a positive model of change to motivate WIL students through their entire working career.

The objective of this model is to show that changes in learning outcomes in WIL can be monitored from inception (Stage 1) to completion (Stage 4). While textual feedback to the student is provided in Stages 2

Fig. 1 Career Development Cycle



and 3, valuable face-to-face feedback via interview assessment is given in Stages 1 and 4. Even though in Stage 4 the student has effectively completed the placement, the lifelong learning processes are carried through to Stage 5. Motivational interviewing ensures that students work through these processes, stating the problem and identifying long-term and short-term goals and action steps for themselves (McNamara, 1992).

Most models for assessment of work-based learning are linear (Zegward & Coll, 2003) and do not show the process of feedback or interaction with the student. This model visualises the stage by stage development in career development learning and emphasises the role of reflection through feedback. Boud et al (1984) appropriately commented on reflection as "those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciation".

METHODOLOGY

This research used motivational interviewing, delivered face-to-face, to engage the student in reflective thinking and discourse. The technique of motivational interviewing, originally developed by Miller & Rollnick (1991) is defined as "a person-centred directive method for enhancing an intrinsic motivation to change by exploring and resolving ambivalence". Motivational interviewing uses a guiding style to engage with individuals, clarify their strengths and aspirations, evoke their own motivations for change, and promote autonomy of decision making" (Stephen et al, 2010).

Opdenakker (2006) confirms face-to-face interviewing is successful where social cues of the interviewee are important information sources for the interviewer. A face-to-face interview does not bore a respondent and ensures full and accurate data check (Douglas, 1985) together with direct observation of non verbal cues

from the respondent to assess nervousness and sincerity in response. Also, the meanings of questions and responses are contextually grounded and jointly constructed by interviewer an interviewee (Fontana and Frey, 2005). This synchronous communication results in more spontaneous responses without an extended reflection (Wengraf, 2001). Despite the explosive growth of new communication forms, such as computer mediated communication, face-to-face interviews have long been a dominant technique in the field of qualitative research (Fontana & Frey, 2005) and are still functional.

This research is based on feedback from the WIL course conducted at James Cook University (Australia) in the School of Earth and Environmental Sciences where students are given the option of doing a 6-8 week industry placement. The students were assessed with a combination of textual and oral feedback at each stage in the Career Development Cycle. For example, in Stage 1, a face-to-face interview with the student explored the objectives of WIL and introduced the concept of the *Reflective Journal*. In Stage 2, the student cooperated with the employer/supervisor to negotiate his role and document in the *Placement Proposal.* In Stage 3, experiential learning outcomes and adjustments were evaluated in the *Progress Report*. At the end of the placement (Stage 4), a *Reflective Essay* was written analysing and synthesising the full placement. At stage 4, two face-to-face interviews were conducted. A ninety minute *Interview* with students to discuss their experience of the placement and a forty-five minute *Interview* with employers/supervisors to get feedback on the student. Both interviews incorporated a semi structured interview format (Foley & Valenzuela, 2005) to integrate open dialogue and personal narrative.

The Interview schedule had 44 questions divided into the six work skill facets of the WSD. The total number of students and employers sampled for this study was 84 with equal numbers in each and administered over a period of 10 months between 2010 and 2011. The students were mainly from the disciplines of Geology, Environmental Science and Urban Planning with placements done both within Australia and overseas.

RESULTS

This section discusses the feedback from the interviews and associated outcomes for each stage in the Career Development Cycle (Fig.1). Questions in the interview were grouped according to the six work skill facets

– Initiative, Technology, (Lifelong) Learning, Self Management, Problem Solving and Communication (Bandaranaike &Willison, 2009). Previous research (Bandaranaike &Willison, 2010) determined the effectiveness of the WSD to guide student self awareness and improvement in WIL and highlighted numerous advantages of utilising the framework. In this study, the focus is mainly on student responses and how that might input to student engagement.

The relationship between interview questions and the Career Development Cycle are presented in Table 1. For example, 37% of the questions (row total) focussed on how well the student established his role and adapted to the workplace [Initiative]. In responding to these questions, the student must reflect and clarify (Stage 2) strategies to overcome likely barriers. In the column totals, the major focus (55%) of the interview, as expected, was on responses to WIL training outcomes and experiences (Stage 4).

Table 1: Content Analysis [%]: Stage in the Career Development Cycle, Work Skills (WSD), and Interview Question Tally

Stage 1 *Contemplation*	Stage 2 *Clarification*	Stage 3 *Development*	Stage 4 *Attainment*	Stage 5 *Sustainment*	WSD *Work skill*
18	**37**	9	27	9	Initiative [establishes role and adapts]
-	-	**60**	40	-	Technology [applies & generates data]
-	-	**50**	33	17	Learning [critically evaluates role}
33	17	17	**33**	-	Self Management [reflects & organises]
-	-	13	**75**	12	Problem Solving [synthesises and analyses]
-	-	-	**100**	-	Communication [understanding]
10	12	21	**55**	2	Column total [%] For Each Stage

Stage 1 – *Contemplation*

The degree of motivation to engage in WIL, being the primary focus of this study, elicited responses on how well the student observed, inquired and reflected in adjusting to the placement (Stage 1). The disclosure of the unknown when first entering the workforce was typically expressed by a student as: "*amidst the initial exhilaration and wonderment of being surrounded by experts, I saw the realities and frustrations of everyday work within a government department*".

One of the biggest limitations amongst WIL students was 88% of them [N=42] not having clear goals and career aspirations. For example, a student admitted very early on in the placement that his goals and long term visions "*changed every week. Sometimes I wanted to work overseas... sometimes I felt I was here for the wrong reasons"*. However, subsequently he confessed his understanding improved with time and currently he holds a position as a planner in the same institution. It is therefore clear that initially student's may find it difficult to be motivated in the absence of specific goals and formative feedback. This same lack of motivation to engage in WIL was expressed in a different context by another student as: "*I won't have time to do the placement and all of the assignments together. I'll defer till next semester"*. If these barriers are detected and discussed at an early stage in the placement, the raison d'être for apprehension can be addressed. Often the attitude is due to lack of confidence, stepping into the unknown and lack of information.

Other interview questions relevant to Stage 1 focussed on the motivation to take on WIL. Feedback indicated that for the majority, the desire to take on WIL was more the advantage of cash remuneration and/or completing their degree [credits] and less on a diligent commitment to a career. This is a significant finding in the context of WIL and reflects adversely on the pedagogy of WIL.

Stage 2 – Clarification

In this Stage, the student articulates, comprehends and negotiates outcomes. If they are unable to articulate and negotiate and clarify their role or seek assistance for clarification, for example, it could lead to de-motivation and loss of confidence, early. As the following quote indicates some students were self motivated and committed to change: *"[the placement] required the management of qualitative data which I had no previous exposure to. This initially scared me and affected my confidence. But I didn't let these feelings affect my enthusiasm or commitment to the placement*" (student comment*)*. Others required more motivation – "*I wasn't familiar with the actual [disaster management] Plans they were dealing with, and I hesitated to ask for help*" (student comment). Some others hesitant to seek help left it to be learnt with time rather than seek assistance: *"At first I just watched, listened and learned as much as I could. I was reading other*

assessment reports, to get a feel for what I was getting into and what would be required of me in the long term... The more I did this, the more I was starting to form a solid "role" in the company" (student comment). This student clearly shows the willingness and drive to engage in the placement.

Stage 3 – *Progression*

Typically at this Stage, students formulate short term goals to sustain their self-efficacy and motivation Bandura (1982). They are expected to have adjusted to their role, refined their skills and ready to evaluate learning outcomes. The study noted performance and progression were inhibited at times by a number of factors. Some of the impediments to progress were of a personal nature: "*I knew I wanted to come into university and fulfil my passion for land management [mining], but I had to compromise to get this goal. I had family and financial commitments to comply with first*" (student comment). Others faced personal conflicts with mentors that could possibly lead to setbacks and loss of confidence and engagement, as illustrated in the following quote: *"Couple of inquiries from Managers confused me ... didn't know what to do ...I sent it (report) to them and never had any feedback from them. I didn't feel confident to ask for feedback*" (student comment). These temporary setbacks can be identified through the interview process and redressed.

The interview format also encouraged students to talk about cultural barriers such as race, age, gender etc. For instance, an overseas non-English speaking background student commented on initial feelings of cultural displacement: *"I feel a bit reserved because I am working with white people*" (student comment). A few others commented on age discrimination, such as: "*he would always disregard my responses on the basis that I had no experience, too young*" (student comment). The face-to-face interview thus prompted impromptu responses and discussions with issues that may not have otherwise been revealed.

Stage 4 – *Attainment*

At this stage ideally students have achieved outcomes, established their roles and are committed. Being the final stage of the placement, they would reflect and report on their learning experience (Kolb, 1984) and conceptual knowledge would become grounded (Billet, 2001). A students reflecting on adaptation to new

technology commented: *"Some things ...no idea like learning how to calculate Sewerage Depths....but took only a few days because user friendly. First awed but then moved on"*. The study also observed that engagement in the workplace may be affected for reasons other than access to work skills. For instance, an employer commenting on a student: "(She) *Understood the Science based environment, but not the Public Service Environment"*.

Interview feedback also disclosed the importance of student-employer relations in the workplace and its likely effect on engagement. Responding to the question on the degree of communication between student and employer, the employer commented: *"I would like to see more communication from XXX and have been kept in the loop more"* and the Student's response to that same question was*: "She is very busy and inaccessible"*.

Stage 5 - *Sustainment*

This is the post-placement stage where maintaining status quo is critical. Individuals must be motivated to anticipate situations in which relapse could occur and be prepared for alternate strategies such as acquiring new skills to solve new problems (Drucker, 1994; Nonaka, 1994), to progress and to project and maintain balance in their career.

The feedback from the interviews yielded four main groups of students (identified below) and confirmed student outcomes varied according to individual drives and engagement.

1. GO-GETTERS – had strong focus on goals and work skills and were ambitious
2. BELIEVERS – believed they worked proficiently, but had contradictory employer reports
3. VACILLATORS –not quite sure of their goals and career paths
4. DRIFTERS – confused and had no specific goals, aspirations and looking for inspiration

DISCUSSION

The objective of the model was to illustrate how feedback can motivate students to move through the Career Development Cycle. It also has the capacity to assist students to understand that setbacks and stagnation can occur at anytime in their career due to personal, environmental or work-related reasons. Early awareness and discussion of these alternatives will add confidence and motivation to continue working towards their goals.

In this study, face-to-face interviewing was successful due to direct feedback through open discussion and observation of non-verbal communication to support responses. It helped reinforce reasons for change in attitude/behaviour, and to elicit student's own motivation to change/adapt. This autonomy in decision making was most important in student engagement. Equally important were the content of the interview and its administration. The content was based on a tested and trialled format (WSD) which identified six key work skill facets and comprised the basis for the questions. In this research, the interview was administered by the placement coordinator who was known to the students and therefore had their confidence to engage in open discussion.

Patrick et al (2008) raised a number of resourcing issues which are applicable to this study. Time, cost and geographical access are major limitations in replicating this methodology with larger enrolments in a course. Also, accessing students and employers located nationally and internationally becomes a major issue for face-to-face interviewing. An ethical issue might be the lack of anonymity of student responses when interacting face to face (Opdenakker, 2006). However, despite these limitations, face-to-face inteviewing is a relevant tool to provide pertinent feedback and motivate students. The technique uses a guiding style to engage with, clarify strengths and aspirations, evoke motivations for change, and promote autonomy of decision making (Rollnick et al, 2010).

This research has illustrated the role of feedback and motivation in moving through The Career Development Cycle and the validity of applying that knowledge beyond the WIL experience per se. The capacity for students to willingly engage and openly communicate their experiences and concerns has been successfully piloted in this study with reference to select responses. However, many other recorded variables and responses have scope for further analysis and evidence for student engagement in WIL.

CONCLUSION

This study attempts to bridge the gap in WIL between tacit learning (experiential learning) and explicit learning (directed learning) in its application to the Career Development Cycle. Placements need a commitment from all – students, employers and coordinators and to be effective there has to be communication via written text and spoken word. While contemporary behavioural theories and work-based models do not take into account changes with time nor predict relapses, The Career Development Cycle does incorporate these facets, and is a consistent generic model that measures outcomes in WIL. The value of the study lies in its affirmation of the pedagogical role of feedback in motivating students to engage in Work Integrated Learning as a lifelong learning experience.

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