EXPERIENTIAL LEARNING: AN OVERVIEW

*A discussion paper prepared for Professor Joanne Wright,
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Contents

Executive Summary

- o Experiential learning can be represented as a four-stage cycle where learning begins with experiences that allow participants to observe, review and reflect on what they have practised, and then critically reflect to consciously link their experiences to theory or previous experiences.
- o Experiential learning positions learning as a continuous process where theory and practice are conceptualised and reconceptualised, with each spiral deepening a student's understanding
- o Offering experiential learning opportunities has a positive influence on student recruitment, retention and completion rate, as well as increasing the number of students more likely to continue into postgraduate studies straight after their undergraduate program.
- o Experiential education, which is focussed on learning through connection and collaboration through constant critical reflection, can develop students' higher level graduate attributes, including those identified by the Institute for the Future as key workforce skills required for the next decade.

1. What is experiential learning?

Experiential learning shifts the learning design from being teacher-centred, where the teaching is largely transmissive and the students may remain unmotivated and disengaged, to an approach that is semi-structured and requires students to cooperate and learn from one another through direct experiences tied to real world problems. The role of the teacher in this process is to facilitate rather than direct the student's progress (Kolb & Kolb, 2009).

Experiential learning is a holistic philosophy of education based on the notion that an individual's life experiences, education and work play a central role in their learning and understanding of new knowledge (Fry, Ketteridge & Marshall, 2009; Kolb & Kolb, 2009). It is not a set of tools and techniques to provide students with a range of experiences, as it is frequently misunderstood to be. Rather, it positions learning as a continuous process in which students bring their own knowledge, ideas, beliefs and practices – at different levels – to their understanding and interpretation of new information. In turn, this transformative process shapes the changes in their understanding and interpretation of theory, beliefs, values and practice (Ambrose, Bridges, DiPietro, Lovett & Norman, 2010; Cooper, Orrell & Bowden, 2010). Experiential learning can be used as a method of instruction to support a personalised approach to learning in a higher education context that often values the student undertaking learning in a variety of campus-based, project-based, work-integrated and community contexts.

The concept of experiential education draws together the work of several notable 20th century scholars who were valued for their theories of human learning and development (Kolb, 1984). The Association for Experiential Education (n.d.) has summarised the key findings of their work into a set of key experiential learning principles:

- o Experiential learning occurs when carefully chosen experiences are supported by reflection, critical analysis and synthesis.
- o Experiences are structured to require the student to take initiative, make decisions and be accountable for results.
- o Throughout the experiential learning process, the student is actively engaged in posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative and constructing meaning.
- o Students are engaged intellectually, emotionally, socially, soulfully and/or physically. This involvement produces a perception that the learning task is authentic.
- o The results of the learning are personal and form the basis for future experience and learning.

- Relationships are developed and nurtured: student to self, student to others and student to the world at large.
- The instructor and student may experience success, failure, adventure, risk-taking and uncertainty, because the outcomes of the experience cannot totally be predicted.
- Opportunities are nurtured for students and instructors to explore and examine their own values.
- The teacher's primary roles include setting suitable experiences, posing problems, setting boundaries, supporting students, insuring physical and emotional safety, and facilitating the learning process.
- The teacher recognises and encourages spontaneous opportunities for learning.
- Teachers strive to be aware of their biases, judgments and preconceptions, and how these influence the student.
- The design of the learning experience includes the possibility to learn from natural consequences, mistakes and successes.

Experiential education has gained recent momentum in the higher education sector. Driving this shift is the recognition by universities that the purpose of 21st century education has evolved to include the generation of student competence in self-directed learning, citizenship, eco-sustainability and employability, in addition to traditional knowledge, skills and attitudes within particular disciplines (Deakin Crick, Goldspink & Foster, 2013). Universities need to prepare their students to be contributing members and leaders of local, national and global communities, and to be able to apply their acquired knowledge to real-world problems. Additional drivers include the economic necessity for higher education institutions to more closely interact with business and community, the decreasing employment markets and increasing competition among graduates across most disciplines, and an increased understanding of learning theories and cognitive development (Cantor, 1997). From a university's perspective, embedding experiential education into programs has been found to increase student recruitment, retention and completion rates and studies have shown that students are more likely to continue on to postgraduate education at a significantly increased rate, after participating in experiential learning as part of their undergraduate program (Cantor, 1997).

2. What does experiential learning look like?

In practical terms, what does 'experiential learning' mean and how can it be enabled?
Kolb (1984) has described experiential learning as a four-stage cycle (Figure 1) beginning with concrete experience, followed by reflective observation, abstract conceptualisation and active experimentation. This sequential process enables learning to occur "through a process whereby knowledge is created through the transformation of experience" (Kolb, 1984,41). In practice the learning cycle is more like a spiral learning process where theory and practice are conceptualised and reconceptualised, with each spiral deepening the student's understanding (Kolb & Fry, 1975).

Anthony, Ewing, Jaynes and Perkus (1990) have identified six common features that are inherent in effective experiential learning opportunities: (1) they are learner-centred and student directed, (2) they are structured to have an increased emphasis on problem solving, discovery and inquiry, (3) they focus on practical applications of course content, (4) they focus on holistic understanding of a discipline, (4) they are perception based, and (6) the emphasis is on the heuristic process – learning about learning.

The notions of experiential learning underpin many of the teaching and learning activities used in higher education contexts. Examples include work-integrated learning, work-based learning, laboratory teaching, simulations and service learning experiences. In each of these activity types, learning begins with experiences that allow participants to observe, review and reflect on what they have practised, and then critically reflect to consciously link their experiences to theory or previous experiences (Cooper et al., 2010).
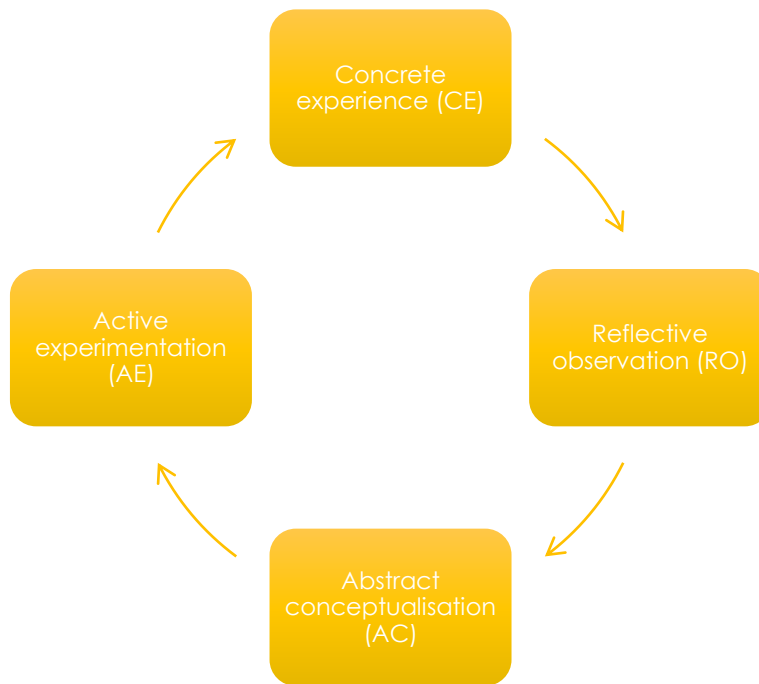
FIGURE 1 - KOLB LEARNING CYCLE (KOLB, 1984)

3. What are the implications of experiential learning?

1. What are the implications for the design and development of curricula, pedagogy and assessment?

Experiential learning opportunities require students to have a personal role in the direction of their learning through active participation. UC-Davis (2011) have synthesised the research in this area to identify the key roles of students in experiential learning:

1. Students will be involved in problems that are practical, social and personal.
2. Students will be allowed freedom in the classroom as long as they make headway in the learning process.
3. Students often will need to be involved with difficult and challenging situations while discovering.
4. Students will self-evaluate their own progression or success in the learning process which becomes the primary means of assessment.
5. Students will learn from the learning process and become open to change. This change includes less reliance on the instructor and more on fellow peers, the development of skills to

investigate (research) and learn from an authentic experience, and the ability to objectively self-evaluate one's performance.

A key distinguisher of experiential learning from other learning approaches is the requirement for students to continually self-evaluate their progression in the learning process through constant reflection (Fry et al., 2009). Students must critically reflect on their experience, both while it is happening and subsequently, and consciously create meaning and conceptualisation from the experience (Gamble, Davey & Chan, 1999).

This requirement has implications for the development of curricula as critical reflection and reflective practice are not innate skills and students will need to be taught these skills alongside core discipline knowledge. It has been suggested that conventional teaching methods are not effective for developing students' reflective practice skills and approaches such as role models, observation of competent practitioners, self-practice and mentors should be utilised instead (Boud, Keogh & Walker, 1985). Curricula also need to be designed to include adequate time for reflection. Ideally, reflection should be focussed on longitudinal outcomes rather than short-term assessments, which potentially has implications in a higher education context where courses are discrete and semesterised.

How can an institution ensure that all educators have the skills to develop students' skills in reflective practice? What role can educational technologies (eg. e-portfolios) play in assisting students to reflect on their learning? How can programs be designed to self-evaluate students on their learning processes over time rather than focus on short-term assessments within a semester?

2. What are the implications for the development of staff as teachers?

Experiential learning opportunities shift the role of the educator to a facilitator, guided by a number of steps summarised by Wurdinger and Carlson (2010). Educators should:

1. Be willing to accept a less teacher-centric role in the classroom
2. Approach the learning experience in a positive, non-dominating way
3. Identify experiences that students will have a personal connection to and interest in.
4. Explain the purpose of experiential learning to their students
5. Share their feelings and thoughts with their students

6. Tie the course learning objectives to course activities and direct experiences so that students know what they are supposed to do.
7. Provide relevant and meaningful resources to help students succeed.
8. Allow students to experiment and discover solutions on their own.
9. Find a sense of balance between the academic and nurturing aspects of teaching.
10. Clarify students' and instructor roles.

This role shift will require educators to reflect on their practice and for some shift their pedagogical approach. Not all academics will possess the instructional design skills required to develop effective experiential learning activities. Evidence-based frameworks have been developed to guide educators to take a systematic approach to designing experiential learning activities, however institutions may need to offer targeted staff development opportunities to support educators in applying and adapting the frameworks to their specific teaching contexts. For some disciplines, educators will also need to consider professional accreditation requirements for experiential learning, numbers of students to be taught, and materials and resources needed and available (Cantor, 1997).

How can an institution ensure all educators have the skills to develop and embed effective experiential learning opportunities into curricula? What professional development and support is required for professionals external to the university that are supervising students during experiential learning opportunities, for example on clinical placements or during internships?

4. How can experiential learning support development of new workforce skills?

As previously mentioned, universities need to prepare students to be contributing members and leaders of local, national and global communities, who are able to apply their acquired knowledge to real-world problems. Over the course of a degree program, students must develop "21st century skills" in addition to core discipline knowledge in their chosen field. The Institute for the Future (IFTF) has identified the key drivers likely to influence the landscape over the next decade and how these translate into key work skills required by individuals (Figure 2).
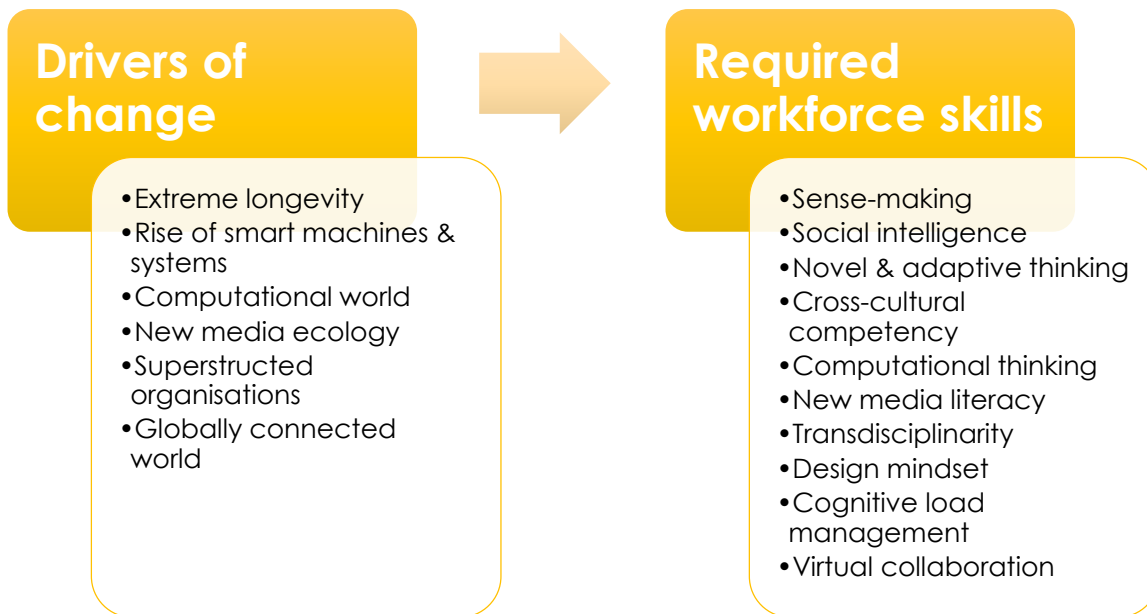
Drivers of change

- Extreme longevity
- Rise of smart machines & systems
- Computational world
- New media ecology
- Superstructed organisations
- Globally connected world

Required workforce skills

- Sense-making
- Social intelligence
- Novel & adaptive thinking
- Cross-cultural competency
- Computational thinking
- New media literacy
- Transdisciplinarity
- Design mindset
- Cognitive load management
- Virtual collaboration

FIGURE 2 – DRIVERS OF CHANGE IN THE WORK LANDSCOPE AND THEIR TRANSLATION INTO REQUIRED WORKFORCE SKILLS (IFTF, 2011)

The results of this research highlight that to succeed in the next decade, individuals will need to be able to navigate a rapidly shifting landscape and critically reflect on the knowledge and skills they need to adapt to multiple situations (IFTF, 2011). Experiential education, which is focussed on learning through connection and collaboration through constant critical reflection, lends itself to developing these skills in individuals.

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