Aligning reflection in the cooperative education curriculum

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Reflection is widely used in cooperative education to support learning and praxis; however, a review of the literature reveals limited empirical evidence for the correlation between reflection and positive student learning outcomes. As with any 'wicked' issue, there are multiple positions on reflection. A substantial body of anecdotal evidence, together with evidence based on student satisfaction and self-reporting does, however, indicate the value of reflection for learning, particularly when transparently aligned with the curriculum. This paper draws from the evidence for the practice of reflection to present new models, informed by theory and developed as a result of this research, to support the alignment of reflection in the cooperative education curriculum. (Asia-Pacific Journal of Cooperative Education, 2010, 11(3), 137-152)

Keywords: cooperative education; reflection; curriculum alignment; participation; service learning; work-integrated learning.

INTRODUCTION

> If knowledge and competencies could be acquired solely by direct experience, human development would be severely retarded, not to mention exceedingly tedious and hazardous. (Bandura, 1999, p. 25)

Learning through experience takes many forms in higher education: from cooperative education and work-integrated learning with their focus on praxis (Habermas, 1973) and work readiness (Smith et al., 2009; Watts, 2006), to practicum, internship and practice clinics designed to develop professional practice (McAlpine & Weston, 2000; McNamara & Field, 2007; Billett, 2009) to the encouragement of social responsibility through service-learning (Holland & Ikeda, 2004). These many approaches are captured in the definition of work-integrated learning (WIL) offered through an Australian Learning and Teaching Council-sponsored scoping study into WIL: "An umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum" (Patrick et al., 2009, p. iv). Learning through experience within a purposefully designed curriculum has a long history in higher education, with sandwich programs said to be offered in the United Kingdom as early as 1840 and cooperative education programs first offered in the United States in 1906 (Haddara & Skanes, 2007, p.67). However, as Bandura asserts, experience alone does not guarantee learning.

Reflection is widely discussed in the literature for its contribution to learning through experience (Caldicott, 2010; Moon, 2004). Indeed, a number of authors argue that reflection may be required to elicit the rich learning potential from experience (Boud, Keogh & Walker, 1985; Bringle & Hatcher, 1999). Consistently linked to praxis, a term attributed to Habermas (1973), and defined by Zuber-Skerritt (2001) as "the interdependence and integration – not separation – of theory and practice, research and development, thought and action" (p. 15), reflection provides a means by which experience can be understood and generalized both

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during (reflection in) and after (reflection on) action (Schön, 1983). If managed well, reflection will support students to surface tacit knowledge about their practice, thus adding to their work-based learning experience (Smith, Kielly-Coleman & Meijer, 2010). Conversely, cooperative education is said to foster reflective practice (Ricks, 1996), thus positioning reflection as both a tool for praxis-based learning and a professional practice that is fostered through experience-based learning in higher education. This paper explores the evidence that well designed and aligned reflection may underpin and synthesize learning through cooperative education.

BACKGROUND

A literature review was undertaken in preparation for an institution-wide cooperative education initiative of an Australian metropolitan university. Known as the Participation and Community Engagement (PACE) program, units of study may be drawn from the range of cooperative education learning modalities and are analogous to the work-related learning activities offered by many universities that may be termed work-integrated learning, cooperative learning, service learning, career development learning, experience-based learning, internship and practicum. PACE, with its embedded notions of community engagement and global citizenship (Macquarie University, 2010) and transformative learning (Mezirow, 1991), is broader in scope than work-integrated learning, hence the breadth of our literature search and the choice of the term cooperative education throughout this paper.

Reflection is widely utilized and reported as a professional practice and one that supports learning through cooperative education. We sought to explore the underlying assumption of this widespread practice, that reflection has positive outcomes for learning. The aim was to locate the evidence and learn from the experience of others. Three research questions were developed to guide this process.

1. What is reflection?

2. What is required to develop reflective capacity?

3. What is the relationship between reflection and cooperative education?

This paper synthesizes key findings from the resulting literature review and presents new models outlining the roles of reflection and principles for aligning reflection in the cooperative education curriculum. Scaffolding the development of reflective capacity for learning through experience and a detailed exploration of the relationship between reflection and cooperative education are the foci of separate papers.

METHOD

A systematic search of the literature was undertaken to identify and elicit overt and articulated theoretical underpinnings for reflection and its application to cooperative education. The literature review comprised comprehensive, but not exhaustive, Boolean searches through several databases including ERIC, Australian Education Index and British Education Index. Key words and phrases relating to reflection were used initially to define reflection on a macro-level: critical reflection, transformative reflection, premise reflection, critically reflective practice, reflective writing and typologies of reflection. The search was then refined to focus on reflection in the context of cooperative education learning

experiences (using terms listed above) and the application of reflection in practice including learning and teaching (scaffolding) the skills of critical reflection. The search now included critical reflection, critically reflective practice, reflective learning, reflective judgment, reflexive learning, metacognition, critical thinking, transformative learning and scaffolding critical reflection.

Additionally, articles cited in the literature were sourced, and seminal works and prominent researchers in the field canvassed. Current literature, primarily writings from this decade, was the focus of the review whilst earlier seminal works such as Brookfield (1995), Mezirow (1991), Kolb (1984) and Schön (1983) were acknowledged and incorporated, as was the foundational influence of Dewey. The refined literature review focused on identifying qualitative and quantitative research that would provide a body of evidence to establish the effectiveness of reflection in higher education generally, and for cooperative education particularly. The literature related to reflection and cooperative education, including nearly 60 studies (denoted with an asterisk [*] in the reference list), was then judged for its relevance to learning through cooperative education. As a result, approximately 25 key readings were explored to conceptualize themes and elicit strategic directions for aligning reflection in the cooperative education curriculum.

LEARNING FROM THE LITERATURE

Although the use of reflection in higher education is well-documented and anecdotal evidence, student self-reporting and small case-based studies are widely reported, empirical evidence for the efficacy of the relationship between reflective practice and learning outcomes is not widely reported in the literature. Analysis of the literature revealed a tendency for researchers in the field to write with the assumption that reflection works, without providing evidence for the basis of that assumption: the theoretical basis for reflection was not readily apparent in the literature. The *coherent structure* (p.3) of a theory would support our understanding of the role of reflection by allowing us to systematically interpret the literature (Anyon et al., 2009).

The cooperative education literature reviewed, with its focus on the practice of reflection, offers a unique insight into the relationship between knowledge about practice and how it can develop, through practice, into a personal theory (Jarvis, 1999), but the development of meta-theory is difficult to locate. Reflection, in the cooperative education literature, is thus judged to be presented as a conceptual framework rather than a theory. A conceptual framework can be judged, for example, in terms of its scope, its logical characteristics and whether or not it stimulates further work based on its concepts. On these criteria, reflection is deemed a success as it continues to successfully scaffold a large body of research (Smyth, 2004) and generate ongoing enquiry.

Evidence-based Practice

Of the nearly 60 studies related to reflection and participation that were reviewed, only a small number comprised large-scale, longitudinal research (Eyler & Giles, 1999; Astin, Vogelgesang, Ikeda & Yee, 2000; Kiely, 2005; Rothwell & Ghelipter, 2003; Correia & Bleicher, 2008; Aukes, Geertsma, Cohen-Schotanus, Zweirstra & Slaets, 2008). The largest of these studies, with more than 22,000 students sampled over five years, identified reflection as an important contributing factor for learning through service (Astin et al., 2000). Limited

empirical evidence was offered otherwise, with single iterations and small samples predominant. Many studies that outlined useful steps and guidelines for scaffolding or designing reflection, for example, were based on student self-reporting, perception or practitioner action research that have not been replicated (Bringle & Hatcher, 1999; King, 2002; Rothwell & Ghelipter, 2003; McNamara & Field, 2007; Santoro & Allard, 2008; Stupans & Owen, 2009).

One study that may be seen to support the use of reflection in experience-based learning is that undertaken by McAlpine and Weston (2000) who used the work of six exemplary teachers to develop a model of the metacognitive process in (teacher) reflection. They concluded that the evidence showed that reflection is a mechanism for the construction of knowledge from experience although this knowledge did not necessarily lead to behavior change (better teaching) or link to student learning. Practice and feedback over time are considered necessary to move from 'better thinking' to 'better action', reinforcing the findings of other studies that identified the importance of regular feedback and formative assessment for scaffolding critical reflection skills (Bain, Mills, Ballantyne & Packer, 2002; Mabry, 1998; Power, Clarke & Hine, 2002; Stupans & Owen, 2009).

Research into students' and employers' perceptions of the advantages and disadvantages of reflective practice to professional development in a work-based learning context concluded that despite good intentions "no tangible evidence remained at the end of the process as proof of change in terms of the participants' approach to their working and/or personal lives" (Nikolou-Walker & Garnett, 2004, p.306). A study into the development of reflective learning with management students in the UK and Israel could not ascertain how many students achieved the paradigm shift of transformative learning that could be achieved through critical reflection (Rothwell & Ghelipter, 2003). However, research into the development of agentic (pro-active and critically engaged) professionals through practice-based pedagogies identified that reflection before, during and after practical experience contributed to learning and the development of learner agency (Billett, 2009).

The research reviewed is inconclusive in establishing a relationship between reflection and learning through cooperative education experience. Practice, as reported in the literature, is however, almost universal in the application of reflection to cooperative education learning situations. There is widespread practitioner acceptance, particularly in education, nursing, medicine, law and other disciplines requiring professional practice. The literature reports extensive and positive anecdotal evidence and perceptions around the efficacy of reflective practice for learning. It appears that practitioners are drawing on their "felt knowing" (Gendlin, 1968; Walkerden, 2009) to justify their commitment to the elusive approach that is reflection. The preponderance of practice-based evidence may be explained from two perspectives. The first is a pragmatic one: research funds for the longitudinal research necessary to establish empirical evidence for the efficacy of the relationship between reflective practice and student learning outcomes is not easily obtained. The second perspective would suggest that establishing such evidence is a "wicked" problem (Rittel & Webber, 1973), neither easily nor universally defined, comprised of a high degree of complexity, offering many possible approaches, and lacking clear causal pathways and solutions.

The elusive and situational nature of reflection is an overarching theme in the literature: reflection is explored and defined through many applications, typologies and taxonomies

(Mezirow, 1991; Brookfield, 1995; Jay & Johnson, 2001; Larrivee, 2008; Kreber & Castleden, 2009). Reflection is differentiated in the literature by levels (from merely reporting to critically reflecting), focus, source, perspective or lens (Brookfield, 1995). An analysis of different approaches to reflection identified that "no fewer than 15 different terms were used to describe the reflective process [and that] the term reflection is used as a noun, a verb, an adjective, a process and/or an outcome" (Rogers, 2001, p. 40).

Although the language differed between the many typologies, taxonomies and approaches to reflection, most authors agreed that not all reflection is critical reflection and that critical reflection is a higher order skill that is challenging to teach and learn (Jay & Johnson, 2001; Larrivee, 2008). The very notion of reflection presupposes students have the capacity to engage in introspection and open-minded self-analysis of their own beliefs and knowledge. The capacity for critical reflection is, therefore, said to be associated with higher order cognitive processes of self-regulation and metacognition (Paris & Winograd, 2003). The ability to critically reflect is also associated with the higher levels of learning in taxonomies of learning objectives such as Bloom's taxonomy (1956, revised by Anderson et al., 2001) and the SOLO (Structure of the Observed Learning Outcome) taxonomy (Biggs & Tang, 2007) in which the process of reflection is described as "indicative of the highest *extended abstract* level of learning" (King, 2002, p. 3).

According to Larrivee, (2008) the term critical reflection has the "most consensus in the literature as a level of reflection examining ethical, social, and political consequences of one's practice" (p. 343). This definition, with its emphasis on examining, possibly confronting, implications of one's practice, offers potential for students to challenge their underlying assumptions, values and beliefs. Such a process, founded in the deeper practice of critical reflection, is considered to be essential to transformative learning (Mezirow, 1991; Boud, 1994; Dirkz, 2001) as challenges to habits of mind may lead to changes in students' meaning schemes or worldviews, precursors for behavior change.

Situating reflection in the cooperative education context

Cooperative education introduces new learning conditions that increase the need for learners to demonstrate agency or the ability to be "self-organizing, proactive, self-regulating, and self-reflecting" (Bandura, 2006, p. 164). These conditions may include expectations additional to academic learning outcomes from the host organization, the academy and the beneficiaries of the service or activity being undertaken (Patrick et al., 2009); situations that may trigger emotions, challenge values and beliefs (Boud, Keogh & Walker, 1985) and engage learners beyond the cognitive with the potential for affective and whole-person learning (Yorks & Kasl, 2002). Learners may also experience reduced access to and direct communication with teaching staff and peers, and increasing reliance on technology to direct their learning activities and connect them with their teachers and each other. Without guidance, structure and support, learners may be overwhelmed by the complexity and struggle to make the most of their learning experience. Reflection, by supporting learners to make sense and meaning from their experience (Schön, 1983; Rarieya, 2005) is a valuable tool for learning through cooperative education and, at its most critical, may contribute to transformative learning (Mezirow, 1991).

The role of reflection for debriefing and attending to the emotional aspects of the experience is emphasized by Boud, Keogh and Walker (1985) in their three-stage model of returning to

the experience, attending to the feelings and re-evaluating the experience. Structured opportunities for reflection before, during and after the learning experience will support learners to develop agency and reflective capacity and support them in navigating the inherent complexities of cooperative education (Billett, 2009).

A definition of critical reflection offered by the UK Qualifications and Curriculum Authority (QCA) in the context of the National Standards for Key Skills emphasized the role reflection may play in learning through cooperative education:

> Critical reflection is taken to mean a deliberate process when the candidate takes time, within the course of their work, to focus on their performance and think carefully about the thinking that led to particular actions, what happened and what they are learning from the experience, in order to inform what they might do in the future. (King, 2002, p.2)

Another definition, of relevance to the cooperative education context for its focus on praxis, is that used by Correia and Bleicher, "Reflection helps students make stronger connections between theoretical perspectives and practice. We view reflection as a skill that can assist students in making sense of their learning experience" (2008, p. 41).

Cooperative learning in higher education requires a degree of structure and planning that is not always required in other forms of experiential learning. Curriculum alignment has an important role in creating the conditions for students to learn (Biggs & Tang, 2007). Including reflection within the curriculum offers a mechanism for students to make sense and meaning of their learning experiences (Rarieya, 2005; Billett, 2009). Reflection with its many applications, levels and contexts is not easily defined and a key message emerging from the literature is the importance of creating an effective climate and context for reflection by being clear about the intent, purpose, meaning and expectations for its application within the cooperative education curriculum (Kolb, 1981; Boud & Knights, 1996; Bringle & Hatcher, 1999; McNamara & Field, 2007). The purpose, context and expectations of the cooperative education experience also require clarification as tensions may be created through differences in stakeholder "motivations, objectives and understanding of the intended purpose (of WIL)" (Patrick et al., 2009, p. 17).

Defining what is meant by reflection within the context and situation it is to be applied is an important step to effectively utilizing reflection within the cooperative education curriculum. This entails identifying and clarifying the intended role or roles for reflection in learning through the cooperative education experience and then aligning the reflection with the curriculum design and the learning experience. These learnings have been synthesized and developed into two new models to support positive student learning outcomes from reflection for learning through cooperative education. The first model identifies and classifies the major roles of reflection for learning through cooperative education. The second model presents principles, elements and reflective prompts for aligning reflection for learning through cooperative education.

Three roles for reflection in learning through cooperative education

The exploration of the literature identified distinctions being made between the terms reflection, critical reflection and critically reflective practice. Reflection is the generic term that may apply to any level of reflective activity from descriptive to comparative through to

critical (Jay & Johnson, 2001). Critically reflective practice is described as contributing to the ongoing development of professional practice (Schön, 1983; Brookfield, 1995) while critical reflection as defined previously using Larrivee's (2008) description, is an activity aimed at facilitating insight and potentially transformative learning which may or may not be situated within professional practice. These distinctions prompted us to question the role of reflection within cooperative education. Is it to develop critically reflective practice as a lifelong professional practice? Or perhaps it is to develop critically reflective skills more generally? Do all students need to critically reflect or are there some circumstances and disciplines that require this level of reflection more than others? What contribution may reflection make to the transformative learning potential of cooperative education experiences? What possible contribution may it offer to the development of moral, ethical and social values? If cooperative education is recognized for its contribution to the development of generic skills / graduate capabilities, (Patrick et al., 2009; Smith et al., 2010) what is the role of reflection in providing evidence for the development of those skills? Of course, these roles are not mutually exclusive – reflection may play a number of concurrent roles in cooperative education. Each role, however, may require different approaches to learning, teaching and assessment, thus reinforcing the importance of defining and aligning the intended roles for work-integrated learning and reflection within the cooperative education curriculum.

The first of our two models classifies the many applications of reflection into three defining roles of reflection for, in, and on, learning through cooperative education. Reflection is recognized as having a role in academic learning, in skills development and for lifelong learning (Figure 1).
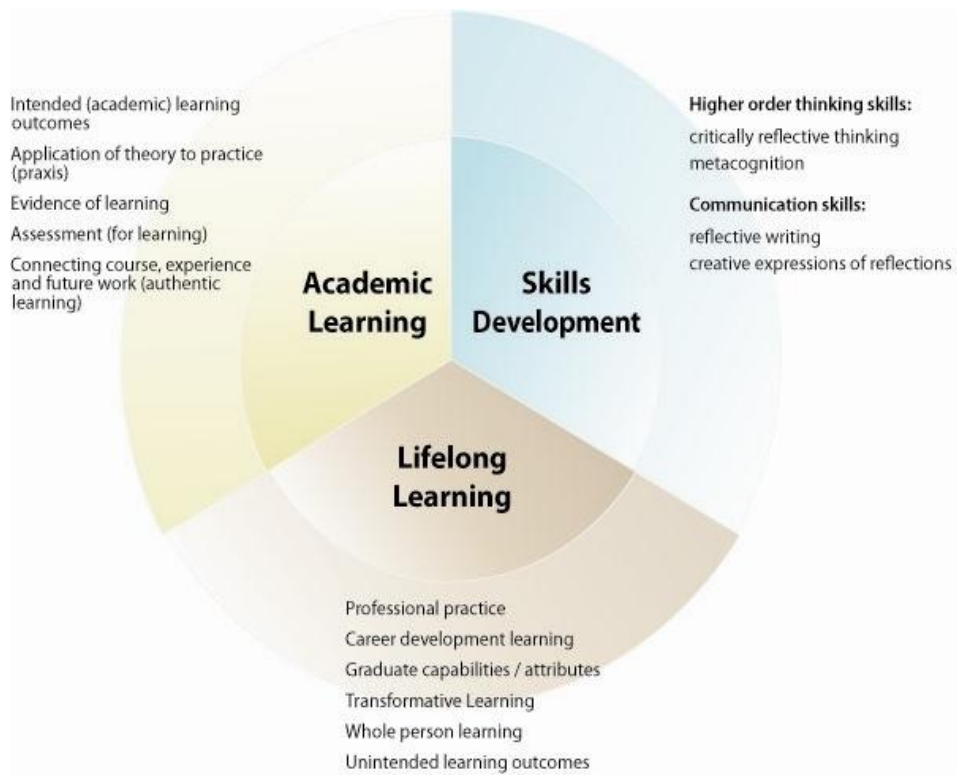
The diagram shows three overlapping circles labeled "Academic Learning", "Skills Development", and "Lifelong Learning" with the following annotations:

Academic Learning:
- Intended (academic) learning outcomes
- Application of theory to practice (praxis)
- Evidence of learning
- Assessment (for learning)
- Connecting course, experience and future work (authentic learning)

Skills Development:
- **Higher order thinking skills:** critically reflective thinking metacognition
- **Communication skills:** reflective writing creative expressions of reflections

Lifelong Learning:
- Professional practice
- Career development learning
- Graduate capabilities / attributes
- Transformative Learning
- Whole person learning
- Unintended learning outcomes

FIGURE 1.

Three roles of reflection for learning through cooperative education

Reflection has an important role within academic learning. Pivotal to this role is the concept of praxis, discussed previously, whereby reflection provides an avenue for applying and integrating theory to the practice that is explored through an authentic cooperative education experience (Patrick et al, 2009; Smith et al., 2010). A range of skills can be developed through reflective practice in cooperative education units, including higher order thinking and metacognitive skills (Paris & Winograd, 2003) and traditional and creative communication skills (Petrosino & Cunningham, 2003; McIntosh, 2008), all of which are foundation or generic skills for academic and lifelong learning and professional practice. The roles of reflection are not discrete. Rather, we intend that they be approached from the perspective of a learning system with each role treated as interrelated, and the learning opportunities identified within the roles as interchangeable, responding to the context in which reflection is to be applied and aligned to the intended learning outcomes.

Aligning reflection for learning through cooperative education

Given the range of cooperative education approaches, and the many roles that reflection may play in learning through cooperative education, it is imperative to establish the intended

roles for reflection in each learning situation and to define how these roles align with the curriculum. These factors need to be considered in the early stages of curriculum design, for their influence on how:

- reflection is situated within the curriculum and the learning experience;

- reflection is defined and introduced to students;

- reflective skills are scaffolded;

- reflection in action is designed to assist students to make sense of their experiences and support learning in situ;

- access to teachers and peers is made available to provide a reflective learning community;

- reflection on action is utilised to assist in debriefing and learning from the experience; and

- assessment tasks are designed and aligned with the learning outcomes and content of the curriculum.

Creating an effective climate and context for learning through reflection requires clarity of intent, purpose, meaning and expectations (Boud & Knights, 1996; Bringle & Hatcher, 1999; Kolb, 1981; McNamara & Field, 2007). Two concepts pivotal to achieving clarity are alignment and transparency. Alignment of curriculum, reflection and experience is key to effective curriculum design for cooperative education, and thereby reflection, whilst transparency is a process whereby students develop a shared understanding of what is being asked of them as learners in relation to reflection. We have termed the synergy created by the two concepts (recognizing the work of Biggs & Tang, 2007) *transparent alignment of reflection to experience.*

Our second model offers a synthesis of the key principles and elements of good practice (informed by works such as Boud & Knights, 1996; McNamara & Field, 2007; and Stein, Isaacs & Andrews, 2004) for curriculum design for reflection in cooperative education units (Figure 2). These principles of intent, expectations and authenticity are not independent. They are interconnected and interdependent, and each element needs to be elucidated and understood by teachers and learners, and in some instances workplace supervisors, for reflection to be utilized effectively in learning through cooperative education. We conclude that if the key principles are used to guide curriculum development and align reflection, then learning through cooperative education will be enhanced.
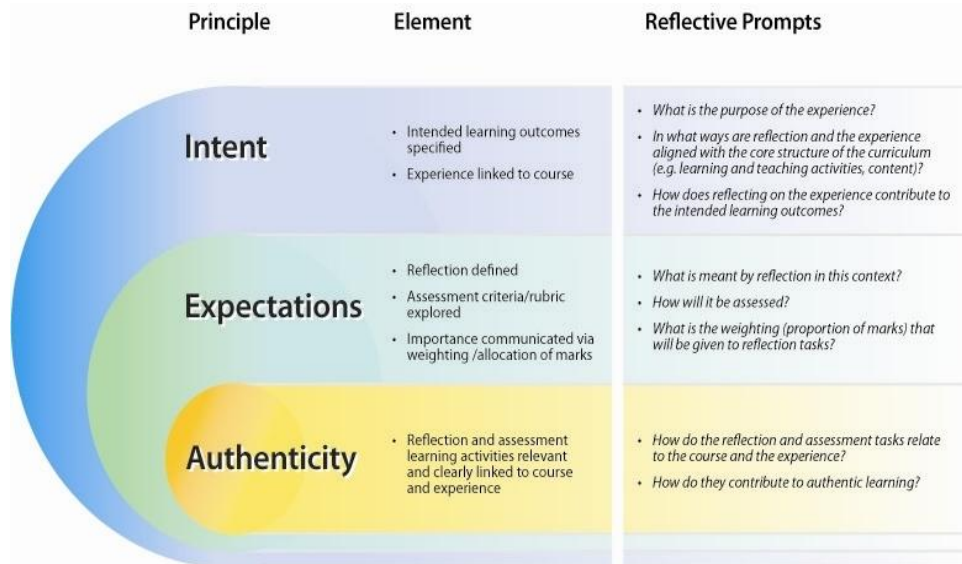
FIGURE 2.
Aligning reflection for learning through cooperative education: Principles, elements and reflective prompts for curriculum design

Following the application of the principles to curriculum design, a reflective approach to defining the elements of curriculum design is encouraged to achieve transparent alignment. A series of self-reflective prompts that are grounded in the literature has been developed (Figure 2). These prompts are designed as pragmatic, yet directive tools, for use by all participants in the learning process, that is, by teachers, students and workplace supervisors. The prompts aim to engage participants in a process of refining and aligning reflective activities to achieve a shared understanding of expectations of intended learning through the cooperative education experience. Incorporating the model into unit or subject guides and outlines may be one way to prompt unit conveners, students and workplace supervisors to engage in exploration of the purpose of reflection in cooperative education, and thus encourage the development of the shared understanding that is so essential to effective application of reflection to cooperative education.

SUMMARY DISCUSSION

The original intent of the literature review was to systematically identify evidence for the role of reflection for learning through experience such as that offered through cooperative education. The research reviewed is inconclusive in establishing the relationship between reflection and positive student learning outcomes, presenting limited empirical evidence and theoretical underpinning to support the use of reflection in higher education. However, the broad, diverse and prolific literature provides evidence of the practice of the application of reflection for learning through cooperative education. This practice defies common academic protocols of research-informed teaching, instead relying on evidence from practice, an almost universal application of reflection to cooperative education learning opportunities, widespread practitioner acceptance, positive anecdotal evidence and positive student perceptions.

From the literature we learn that establishing an effective climate for reflection begins with clarity around any role that reflection plays in the cooperative education curriculum. Three defining roles of reflection for learning through cooperative education are offered after analysis of the literature: academic learning, skills development and lifelong learning. A model for clarifying and working with these roles is proposed as a learning system in which the learning opportunities within each role are interchangeable and positioned depending on the context and intended learning outcomes.

Two concepts pivotal to achieving clarity that emerged from the review of the literature were alignment and transparency. We learn that alignment of curriculum, reflection and experience is fundamental to effective curriculum design for the application of reflection to learning through cooperative education. Further, a transparent process of developing shared understanding of what is being asked of students as learners in relation to reflection is important in establishing an effective climate and context for reflection. We term the synergy offered by these two concepts transparent alignment of reflection to learning through cooperative education and offer a model to describe the interconnected and interdependent principles and elements for effective curriculum design for reflection in cooperative education units. Reflective prompts are suggested for discussion between students, teachers and workplace supervisors to develop transparent alignment and shared understanding of intended learning. After careful consideration of the evidence, we conclude that if the key principles for effective curriculum design are used to guide curriculum development and align reflection, then learning through cooperative education will be enhanced. We now invite colleagues to explore, apply and develop the models as a means of testing their validity as tools for supporting the alignment of reflection in the cooperative education curriculum.

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References marked with * denote studies related to reflection that were reviewed for evidence of a relationship between reflection and positive student outcomes.

ABOUT THE JOURNAL

The Asia-Pacific Journal of Cooperative education (APJCE) arose from a desire to produce an international forum for discussion of cooperative education, or work integrated learning (WIL), issues for practitioners in the Asia-Pacific region and is intended to provide a mechanism for the dissemination of research, best practice and innovation in work-integrated learning. The journal maintains close links to the biennial Asia-Pacific regional conferences conducted by the World Association for Cooperative Education. In recognition of international trends in information technology, APJCE is produced solely in electronic form. Published papers are available as PDF files from the website, and manuscript submission, reviewing and publication is electronically based. In 2010, Australian Research Council (ARC), which administers the Excellence in Research (ERA) ranking system, awarded APJCE a 'B' ERA ranking (top 10-20%).

Cooperative education/WIL in the journal is taken to be work-based learning in which the time spent in the workplace forms an integrated part of an academic program of study. More specifically, cooperative education/WIL can be described as a strategy of applied learning which is a structured program, developed and supervised either by an educational institution in collaboration with an employer or industry grouping, or by an employer or industry grouping in collaboration with an educational institution. An essential feature is that relevant, productive work is conducted as an integral part of a student's regular program, and the final assessment contains a work-based component. Cooperative education/WIL programs are commonly highly structured and possess formal (academic and employer) supervision and assessment. The work is productive, in that the student undertakes meaningful work that has economic value or definable benefit to the employer. The work should have clear linkages with, or add to, the knowledge and skill base of the academic program.

INSTRUCTIONS FOR CONTRIBUTORS

The editorial board welcomes contributions from authors with an interest in cooperative education/WIL. Manuscripts should comprise reports of relevant research, or essays that discuss innovative programs, reviews of literature, or other matters of interest to researchers or practitioners. Manuscripts should be written in a formal, scholarly manner and avoid the use of sexist or other terminology that reinforces stereotypes. The excessive use of abbreviations and acronyms should be avoided. All manuscripts are reviewed by two members of the editorial board. APJCE is produced in web-only form and published articles are available as PDF files accessible from the website http://www.apjce.org.

Research reports should contain; an introduction that describes relevant literature and sets the context of the inquiry, a description and justification for the methodology employed, a description of the research findings-tabulated as appropriate, a discussion of the importance of the findings including their significance for practitioners, and a conclusion preferably incorporating suggestions for further research. Essays should contain a clear statement of the topic or issue under discussion, reference to, and discussion of, relevant literature, and a discussion of the importance of the topic for other researchers and practitioners. The final manuscript for both research reports and essay articles should include an abstract (word limit 300 words), and a list of keywords, one of which should be the national context for the study.

Manuscripts and cover sheets (available from the website) should be forwarded electronically to the Editor-in-Chief. In order to ensure integrity of the review process authors' names should not appear on manuscripts. Manuscripts should be between 3,000 and 5,000 words, include pagination, be double-spaced with ample margins in times new-roman 12-point font and follow the style of the Publication Manual of the American Psychological Association in citations, referencing, tables and figures (see also, http://www.apa.org/journals/faq.html). The intended location of figures and diagrams, provided separately as high-quality files (e.g., JPG, TIFF or PICT), should be indicated in the manuscript. Figure and table captions, listed on a separate page at the end of the document, should be clear and concise and be understood without reference to the text.