

**theory to practice/generic skills/lifelong learning:
the connection**

**This is an extended abstract only
complete reference list included**

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Abstract

Utilising three differing cohorts of accounting students, with variation in experience of professional practice and from different cultural backgrounds this paper examines how they bring to an assignment generic skills acquired elsewhere, and how they develop and take from the experience generic skills to be used in other situations, skills invaluable in becoming life-long learners. The accounting profession requires more from their graduates which in turn puts pressure on academics to modify the curriculum in higher education to provide experiences which not only deliver the content, required by the profession but wherein students will develop the required graduate attributes. A phenomenographic perspective has been adopted in the study.

Background

The importance of lifelong learning in higher education hinges upon, among other things, the "capacity to respond flexibly to changing circumstances, to learn throughout a career, and to integrate theory and practice by generalising from a theoretical knowledge base to deal capably with previously unmet situations" (Bligh, 1982). The objective of developing life-long learners is that their learning, ". . . becomes part of themselves" (Gadamer, 1975). The literature stresses the importance of both theory and practice as necessary elements in the process of learning (Taylor, 1993), (Bowden, Masters, & Ramsden, 1987) and the development of generic skills through real world practice (Bowden & Masters, 1993), yet many writers assert that students have difficulty in transferring theoretical concepts acquired in the classroom to practical applications in the workplace in areas as varied as aviation psychology, accounting and mathematics (Wiggin, 1997), (Crebbin, 1997), (Yap, 1997), (Yasukawa, 1997). Often it seems undergraduates acquire skills in isolation, rather than developing underlying generic skills, which allow them to "do it again" (Candy,

Crebert, & O'Leary, 1994) and solve related, but similar "problems-in context" (Laurillard, 1984) or in essence study "imitation subjects" (Ramsden, 1992) none of which develop generic skills to take into new learning contexts. Learning outcomes as applied to iteration between theory and practice and to generic skill development can be ranked hierarchically as deep and surface in approach (Marton & Saljo, 1984) and as structurally simple or complex as measured by the Structure of Observed Learning Outcomes (SOLO) (Biggs & Collis, 1982).

The accounting profession both locally and internationally has been forthright in expressing its discontent with accounting graduates it believes to be unequipped for the demands of professional accounting (Institute of Chartered Accountants in Australia, 1994), (Patten & Williams, 1990), (American Accounting Association Committee on the Future Structure Bedford Committee, 1986). The graduate attributes/generic skills most commonly referred to in the professional context are critical thinking, analytical skills, communication, team work, and problem solving (Rachinger, 1997), (Johns, 1997), (Candy et al., 1994), (Business /Higher Education Round Table, 1992). (A discussion of the different terminology will be discussed in Results.) What must be negotiated between the profession and academics is the extent and breadth of curriculum review to include these attributes, while being mindful of the effect of excessive workload and certain assessment methods in driving students into surface approaches (Ramsden, 1992).

Other professions have been more outspoken in their criticisms and demands of academe. The Institution of Engineers, Australia (IEAust) the engineers' professional accrediting body, has mandated certain graduate attributes they desire as outcomes, and to be thereby included in the undergraduate course. These include communication skills, the ability to identify, formulate and solve problems, the ability to function effectively in various roles in multidisciplinary and multicultural teams, and a capacity for lifelong learning (Institution of Engineers Australia (IEAust), 1999). Accounting graduates themselves, when responding to the Course Experience Questionnaire (CEQ) some months after graduation, do not report favourably on the appropriateness of workload and of generic skills when compared to other disciplines, with the mean scores of both being around the centre point within the mean score range for all disciplines (Johnson, 1999). In 1999 accounting had deteriorated slightly to be below the mean scores in both areas (Course Experience Questionnaire, 1999).

While many researchers in varied contexts agree the answer is not teaching generic skills in isolation, there is less agreement as to what the answer is (George et al., 2000), (Scoufis, 2000), (Martin & Ramsden, 1987), (Ramsden et al., 1986). Problem based learning is one suggestion (Boud & Feletti, 1991). Creating the link between the classroom and the workplace experience is also known to be critical (Martin, 1996) (Crebbin, 1997). This paper addresses the role of iteration between theory and practice as a building block in developing generic skills in accounting which are a critical skill to equip students for lifelong learning. A phenomenographic approach is used in the analysis of the results of the study. Approaches to the relationship of theory to practice are ranked hierarchically from lower to higher order approaches. Generic skills of problem solving, analysis and communication are matched with approaches to the relationship of theory to practice. The SOLO taxonomy of educational objectives is applied to the particular generic skills. These are included in diagrammatic form below.

Approach to the relationship of theory to practice

STRUCTURAL (How)	REFERENTIAL (What)			
	Requirements of the assignment	Requirements of Work	What does data mean?	What is the company?
Use materials provided	A	B		
Store for future use		C		
Develop proforma		D		
Test proforma widely			E	
What is the complete history?				F
What is the future?				G

Figure 1. Outcome Space: Structural and Referential Aspects of Approaches to the Relationship of Theory to Practice.

A. Limited data, course focus approach: An intention to focus on the immediate demands of the assignment by adopting a strategy of using course material and the basic processes provided by the course.

B. Limited data, work focus approach: An intention to focus on the unknown demands of future professional work by adopting a strategy of storing material and processes offered by the course.

C. Stored data, work focus approach: An intention to focus on the immediate requirements of professional work by putting into practice a strategy of using relevant course material provided.

D. Proforma development, work focus approach: An intention to focus on the requirements of work in the present and in the future by developing a proforma to help interpret data.

E. Proforma testing, meaning focus approach: An intention to focus on the meaning of data by extensive trialling of a proforma.

F. Company history, company identity focus approach An intention to focus on an understanding of the company's story, by interrogating data for meaning to develop an understanding of its past.

G. Company future, company identity focus approach: An intention to focus on the company's potential future by interrogating data for meaning.

Generic skills matched to approaches to the relationship of theory to practice

Category	Referential (What is the task)	Structural (How is the task executed)	Generic Skills Observed
A	Requirements of Assignment	Use Materials Provided	Problem solving (assignment focus)
B	Requirements of Work	Use Materials Provided	Problem solving (work focus)
C	Requirements of Work	Store for future use	
D	Requirements of Work	Develop Proforma	
E	What does data mean	Test Proforma Widely	Analytical (Assignment focus)
F	What is the company	What is the complete history	Analytical and Communication (Wide focus)
G	What is the company	What is the future	

Figure 2. Observable generic skills paralleled to approaches to iteration between theory and practice

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