

When students learn from experience in the occupational field

THOMAS GROENEWALD

University of South Africa

Received 03 June 2007; accepted 20 August 2007

This research was prompted by my concern over the lack of uniformity in the terminology used to discuss student learning in the relevant occupational fields. The literature review was originally an attempt to give a thorough theoretical foundation to the discourse. Instead, it digressed and ended up illustrating both the disparity in nomenclature and the tangent plane of learning from, at and through work. The qualitative research design, which is based on a constructivist and interpretivist paradigm, is explained. The use of a questionnaire is also explained. The results substantiate my concern, but do not contribute to uniformity. Participatory action research is suggested as a way forward. *Asia-Pacific Journal of Cooperative Education*, 2007, 8(2), 93-107.

Keywords: Theorizing about learning; experiential learning; primary experience; learning, for, at, and through work; workplace learning pedagogy; interpretive research; South Africa.

What do we call that part of an academic program, which concerns the learning by students from experience within the occupational field? It seems that, among role players involved with higher education in South Africa, there is a variety of terminology in use. Members of the Southern African Society for Cooperative Education (SASCE) felt that uniformity in terminology is a necessity. During the proceedings of the society's 2006 conference it was agreed to research existing terminology as used by cooperative education practitioners. This article reports on the findings of the initial research. The first section provides the reader with some background into the literature on key terminology.

Learning from experience happens in everyday life. It is taken for granted. Cunningham, Dawes and Bennett (2004) call this a truism. Experiential learning, however, is a key element in a discourse which has learning from experience as its 'subject' and which constructs this learning in a certain way. Usher (1993) uses the metaphor of reading to illustrate experiential learning. The metaphor suggests positioning of the reader in relation to the text: "To read is to give meaning" (p. 170). Experience itself has no intrinsic meaning, but the "meaning of experience depends on an interpretive process" (p. 170). The meaning of the experience is relational to the reader's meaning system and context.

Theorizing about learning from experience originates from a number of traditions established over an extended period of time. Behaviorism, a stimulus-response (S-R) learning approach to learning (Cotton, 1995), is based on the work of John Watson, Ivan Pavlov, Frederic Skinner and Edward Thorndike at the end of the 19th century (Jarvis, Holford & Griffin, 2003). In behaviorism, a distinction is made between operant and instrumental conditioning. In operant conditioning, the learner's response is reinforced by a succeeding stimulus, whereas in the case of instrumental conditioning, the learner must perform specified acts within a trial situation. Two diametrically opposing approaches to teaching and learning have emerged. One, discovery learning or problem solving (trial and error), has become significant in education. The other emphasizes predetermined behavioral outcomes

from learning. This distinction also underlies the sterile differentiation between education and training, a distinction Jarvis, Holford and Griffin (2003) do not find helpful.

Cognitivist theories followed behaviorism. Jean Piaget laid the foundation of cognitivist theory during the first half of the 20th century, with his five stages of cognitive development linked to the child's age. Lawrence Kohlberg found Piaget's stage theory too simplistic and developed a theory that involved six stages of moral development. James Fowler extended both Piaget's and Kohlberg's theories and introduced six stages of what he called faith development. The significance of Fowler's contribution is that Fowler's theory argues that human development is experiential, not age based. Lev Vygotsky set out to discover the relationship between learning capabilities and the developmental process. Jarvis, Holford and Griffin (2003) point out that people deal with situations on the basis of past experiences. Vygotsky also attempted to isolate the dynamics in cognition, learning and thinking. This led Engestrom to regard learning as an expansion process within the social context. Mezirow "defines learning as 'the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one's experience as a guide for future action'" (Jarvis, Holford & Griffin, 2003, p. 39). Mezirow emphasizes that there is no 'a' meaning and differentiates between meaning perspectives (assumptions and expectations filtering our impressions) and meaning schemes (symbolic models projected upon impressions in order to construe meaning). At the heart of Mezirow's theory is transformative learning, which results in the transformation of meaning schemes based on experience.

Theories of learning have historically been located in psychology, but learning definitely has a social dimension or context. In all social interactions, people continuously learn from and alongside others. Much has been said about the schools 'hidden curriculum', namely what children learn from their social relationships. Significant factors of adult learning are the surrounding social structures of the home, workplace and formal learning environment. Traditional functionalism (a process of internalizing the values, beliefs and norms of the society born into) has made a place for lifelong learning policies (to keep learning, to adapt in order to survive). Albert Bandura points out that learning, as a social process, involves functionalism, interactionism and significant symbolism (Jarvis, Holford & Griffin, 2003). Learning is not simply reactionary, but involves reciprocal determination. This links to collective learning and further theory development, namely, the view of society as a learning organism. Terminology such as a "learning society", "learning culture" and the "learning organization" is common.

An overview about the theory of experiential learning would be incomplete without a brief mention of the neurobiological approach. Behavior is related to electrical and chemical events inside the body (Cotton, 1995). Neurobiology is the pursuit of the scientific comprehension of the functioning of the brain and the nervous system, specifically in terms of learning. A body of knowledge is steadily expanding about specific parts of the brain registering during learning activities. Brain scans or neuroimaging has already detected, among others, how memories are formed and how learning pathways differed for dissimilar languages. It is envisaged that in future it might be feasible to predict learning disabilities regarding, for example mathematics. Having given an overview of the theories relating to learning from experience, I shall now attempt to define the key terms related to experiential learning.

According to Boud, Cohen and Walker (1993), any attempt to define experiential learning is complicated by, among other things, the preoccupation of philosophers with 'experience'. The word 'experience' not only contains many ambiguities, but also acts both as noun and verb. As a verb, 'experience' is either a particular instance or a process of observing (detached), but also undergoing (passive) or encountering (interactive). As a noun, 'experience' implies what is known from observing, undergoing or encountering, the knowledge or practical wisdom derived. Jarvis, Holford and Griffin (2003) point out that the term 'experience' is used in a number of ways, with a multitude of meanings, such as something direct, a feeling, knowledge, an external phenomenon's impact, life history and an emotional moment. All of these meanings refer to something subjective; some are lifelong and other episodic: "Experience, then, is being caught up in the flow of time" (p. 54). Boud, Cohen and Walker proceed to indicate (on the basis of Oakeshott's philosophy) the interdependence between 'experiencing' and 'what is experienced' - the one cannot be severed from the other. They conclude that experience is a meaningful encounter, not just an observation, or a passive undergoing, but an active engagement with the context. Jarvis, Holford and Griffin conclude that there are many variations on the concept of experience and suggested six; these are presented in Table 1.

The learner is also an important part of the experience and enriches it with his or her personal contribution. Boud, Cohen and Walker (1993) present five propositions about learning from experience:

- Experience is the foundation of, and the stimulus for, learning
- Learners actively construct their experience
- Learning is a holistic process
- Learning is socially and culturally constructed, and
- Learning is influenced by the socio-emotional context in which it occurs.

The endeavor to derive clarity about experiential learning appears to lead to confusion. Jarvis and Wilson (1999, p. 120) define experiential learning as an activity "in which the learner has a *primary experience* with the reality being studied, or learning about" (original emphasis). They give two definitions of experience; namely, (a) direct involvement in, and (b) accumulation of past experiences. The latter can be a rich source of learning (according to Malcolm Knowles), but they caution that this is only true if these experiences did not have an

TABLE 1
Six variations on the concept of experience (Jarvis, Holford & Griffin, 2003)

Primary	Experience by any or all of the senses within a social context of certain aspects of that context
Secondary	A mediated experience, which has little or nothing to do with the context within which it occurs, for example a discussion, presentation or show
Actual	An experience that occurs at the present time
Recalled	The process of recalling memories from previous actual experiences
Real	An experience within the actual context
Artificial	A creation from an experience, which highlights some aspects of the real or actual experience.

inhibiting effect. Jarvis and Wilson further define the term 'work experience' as "*experience of the work situation, by performing a job as part of a course*" (p. 363, original emphasis) and qualify it as a form of experiential learning. They offer, as alternative term, the word 'internship', which they define as a "professional placement for students which gives them an opportunity to utilize the relevant theory in practice and to observe other professionals in their work situation" (pp. 179-180). Beaudin and Quick (1995) describe field-based experiences similarly, namely working with practitioners in the field of study, actually doing the job being trained for. They include learning activities such as internships and practicum assignments. Jarvis and Wilson equate internship to teaching practice. An internship plan, they say, is a curriculum specification of an educational institution for a period of internship. Jarvis and Wilson furthermore give the following definition of clinical experience, namely "the professional practice that a trainee nurse, or other health-related trainee professional, receives" (p. 62). It appears from the various definitions that experiential learning/work experience/field-based experience/internship/professional placement/practicum assignments/teaching practice/clinical experience, are synonyms; however, the different terminologies are contextually specific.

Mothata's (2000) definition qualifies experiential learning further; namely, "learning through experience rather than through books or formal study" (p. 63). Similarly, work experience is further qualified as the "placement of a student or trainee with an institution, company or organization to give experience in the working environment" (p. 179). It can be deduced that experiential learning is learning through primary experience within the reality, rather than learning from books or formal study. The meaning of work experience, it seems, is about the placement of students, as part of the curriculum, within the work environment, in order to learn by performing the job. Here, Evans, Hodkinson and Unwin (2002, p. 1) make the important point that "the workplace is a crucially important site for learning and for access to learning." Eraut (2002) distinguishes different groups of qualifications and their relationship to workplace learning. The most common are those that are based on, and taken immediately prior, to full-time employment; Eraut calls these 'initial qualification (IQ) pathways'. A small portion of these IQs, described as professional or vocational, contain varying proportions of work-based/related learning. The highest proportion IQ pathways are generally formative in nature. In all cases, though, further learning is general learning that occurs when entering employment. The extent of (a) work-based/related learning that occurred during the IQ pathway, and (b) how competent the individual is deemed for the first job, determines the extent of any further learning required. Knight (2003, p. 9) states that the "aim of work-based learning should be to enable students to enjoy a successful outcome to their study and to produce reflective assignments which are both meaningful to their own learning and designed to meet the academic requirements of higher education study." The Higher Education Quality Committee (HEQC) of South Africa defines work-based learning as follows (South Africa, 2004, p. 26):

A component of a learning programme that focuses on the application of theory in an authentic, work-based context. It addresses specific competences identified for the acquisition of a qualification which relate to the development of skills that will make the learner employable and will assist in developing his/her personal skills. Employer and professional bodies are involved in the assessment of experiential learning, together with academic staff.

However, Hodkinson and Bloomer (2002) report that, in the United Kingdom at least, work-based learning and lifelong learning are perceived as closely related. During the mid-1980s work-based learning was described as any learning linked to the requirements people's work role (Brennan & Little, 1996). The key reasons then underlying the interest in work-based learning were fourfold: (i) increased investment in human capital due to economic restructuring and productivity changes; (ii) optimization of key employee skills through process-driven strategies of training and education embedded in the production process; (iii) mobilization of knowledge for continuous innovation and competitiveness; and (iv) the UK government's support for financing of continuing education by employers through work-based learning. Three strands of work-based learning were identified "viz. learning *for* work; learning *at* work; and learning *through* work" (p. 5, original emphasis). Teaching and learning in higher education is largely about learning for work. The sandwich courses in the United Kingdom, which include a significant element of work placement, have been a feature of higher education since the 1950s. Learning *at* work largely entails in-company training and development; such training and development may lead to modular credit accumulation towards a higher education qualification. Learning *through* work is derived from doing work or performing a function. It might be feasible to get such learning recognized (prior learning assessment) as credits towards a formal qualification. Beaudin and Quick (1995) described prior learning assessment as credit or certificates obtained to acknowledge a person's learning derived from life experiences. This is done mainly by means of portfolio assessment or challenge examinations.

Cunningham, Dawes and Bennett (2004), on the other hand, acknowledge that the qualification-related use of the term 'work-based learning' is legitimate, but devote an entire handbook to "learning linked to real work" (p. 7) and quote Woodall's definition: "Development that occurs in the course of or as a consequence of the real work activities that constitutes a manager's job role." Cunningham, Dawes and Bennett (2004, p. vii) argue that work-based learning (latter meaning) should be taken seriously, despite the "commonplace rhetoric of 'lifelong learning' and the 'knowledge-driven society'." Fuller and Unwin (2002) identified five models in the pedagogy of learning in the workplace. Although the boundaries are fluid and tend to coalesce, the various models do sometimes occur in their pure form. Table 2 reflects these five models. Fuller and Unwin (2002, p. 99) emphasize the fact that Engestrom reclaimed the role of teachers and trainers in the learning in the workplace, a role they claim that "has been diluted by the parallel of those who advocate informal learning, the outcome-based approach and experiential learning".

Although the above arguments have been something of a systematic digression, all the terms mentioned are relevant to this study. It is of particular importance to take note of the alternative meanings assigned to some of the terminology that seems to have been haphazardly adopted by cooperative education practitioners in higher education.

In conclusion, Jarvis, Holford and Griffin (2003) point out that experiential learning is currently problematic, because it became something of an ideology in education. This is further complicated by an ideological focus on community service and a conflation of the different terms 'experiential learning' versus 'service learning'.

TABLE 2
Fuller and Unwin's five models of workplace learning and pedagogy

Transmission	Tacit acquisition	Communities of practice	Competence-based	Activity theory
Skills and knowledge passed on informally, either in the workplace or on-the-job. Synonymous with Taylorist demarcated job roles.	Mirror of the transmission model. Concerned with the acquisition of tacit skills through informal learning processes.	Learning is both a collective and individual activity. Arose out of the social theory of learning.	The outcomes of learning are detached from the learning process. Trainers facilitate and guide learning. The learner is responsible for attaining the outcomes.	Acknowledges the extent of learning through social situations and interaction, but also claims that knowledge and understanding are advanced by structured teaching.

RESEARCH DESIGN

De Vos, Schurink and Strydom (1998, p. 19) define research “as a structured enquiry that utilizes acceptable scientific methodology to solve problems and creates new knowledge that is generally acceptable.” The research design employed here is based on a qualitative paradigm (Royer & Zarlowski, 2001), because of the phenomenalist and relativist nature (White, 2000) of the variety of terminology or nomenclature in use. A descriptive study has been approved by the executive of SASCE as a first step towards an attempt to derive uniformity. It was agreed that it is necessary to collect textual data from cooperative education practitioners in the field in order to determine the scope of the disparity. The research reported here would be followed by the viewpoint of an executive committee of the SASCE regarding proposed uniform terminology. A workshop would have been arranged to table and debate the results of this research undertaking. This has unfortunately not materialized.

It is my opinion that practitioners construct their own terminology, and assign their own meaning to this terminology. The terminology in use might, however, have been influenced by particular institutional traditions and/or polices. The aim of this research has been to collate the various terminologies and the meaning assigned to these terminologies by the respective users and to try and make sense of the scope of these terminologies. In terms of the interpretivist framework (Henning, Van Rensburg & Smit, 2004) in qualitative research, knowledge is constructed “by descriptions of people’s intentions, beliefs, values, and reasons, meaning making and self-understanding” (p. 20). It was therefore considered essential that research participants use their own words (language) to clarify the meaning of the terminology in use.

Participants

The population consists of two groups. The 86 delegates of the 2006 conference of the SASCE, and the cooperative education practitioners on the email address lists of the SASCE’s secretariat. This includes members in good standing and non-active members. In the case of corporate members (e.g. educational institutions), several individuals are on the secretariat’s e-mail address lists. Table 3 shows the institutions or groupings and the numbers of recipients of regular e-mail messages from SASCE. Note that there is some degree of duplication among the lists. The population consists of about 300 people.

The entire population served as the sample. The sample is a purposive (i.e., based on my judgment as the researcher and the approval of the SASCE executive) and convenient (the available cooperative education practitioners whose email addresses are known) or according to Strydom and De Vos (1998) and Welman and Kruger (2001) an incidental sample.

Procedures

Royer and Zarlowski (2001) submit that qualitative approaches do not preclude a positivistic scientific logic (the use of the questionnaire is implied); that research approaches are not

TABLE 3
Numbers of corporate recipients

Institution or grouping	Recipients
Cape Peninsula University of Technology	28
Central University of Technology	8
Durban University of Technology	45
Mangosuthu Technikon	1
Nelson Mandela Metropolitan University	29
Tshwane University of Technology	21
University of Johannesburg	7
University of South Africa	22
Vaal University of Technology	43
Individual members and miscellaneous	65

systematically attached to a given paradigm; and that the use of procedures are left to the discretion of the researcher. Based on these reasons a self-reporting electronic (Mouton, 2001) qualitative questionnaire was designed and the executive members of SASCE were used to ratify the suitability of this protocol (De Vos, 1998). The feedback received from this group contributed to the refinement of the data-collection instrument, prior to electronic distribution. The refined data-collection instrument was sent out under an accompanying letter on a SASCE letterhead (Ibert, Baumard, Donada & Xuereb, 2001) to the entire population described above. De Vos and Fouche (1998, p. 89) define a questionnaire, as a data-collection method, "as an instrument with open or closed questions or statements to which a respondent must react." Schurink (1998) points out that 'open-ended' cannot be truly open-ended because the questions are structured. However, the answers are open. The main advantage of an open-ended questionnaire is that the data are obtained systematically, which makes comparison easier. This was a major consideration in this study. The major disadvantage of a questionnaire is that it restricts the contributions by participants and thus narrows qualitative data collection.

There has been a danger here in forcing the data (Welman & Kruger, 2001), and this is why the carefully worded cover-page asked recipients to partake "in a research project about the nomenclature in use with regard to various aspects of programmes that include learning within an occupation-field, as part of the curriculum of such a programme." Note that the wording does not include any leading terminology, because the researcher wanted the phenomenon to speak for itself (Groenewald 2004; Welman & Kruger, 2001). The recipients, either members of SASCE and/or the 2006 conference delegates, were asked to give their personal responses to a number of questions enclosed. They were asked to not look up published descriptions or definitions, but to respond in their own words: "Please write down what comes to mind when you read each of the questions." These instructions, as well as the submission details, were repeated at the top of the questionnaire. The cover-page also explained the purpose of the research in brief, and gave details of the return date and whom to contact in the case of queries.

The questionnaire consisted of eight sub-sections, followed by provision for optional identification details; confidentiality undertakings; space for any additional comments; and thanking participants for their contributions. The questions and instructions were carefully formulated to be truly open, non-leading and unbiased, but specific. Please refer to Table 4 for the sub-fields and examples of the questions and/or instructions.

It is believed that the procedure described above ensures that the research is trustworthy and reliable (Jones, Torres & Arminio, 2006). Although the questions or instructions were specific in order to achieve (a) consistency, the formulation is believed to add to (b) the neutrality. It is believed that, if the questionnaire was used with another population, it would render similar findings, which is (c) applicability, the third element of Guba's trustworthiness model (Poggenpoel, 1998; Schurink, Schurink & Poggenpoel, 1998). Overall, it is believed that the questionnaire succeeded in establishing confidence in the (d) truth value of the findings. It is further believed that the research design did not necessitate any specific ethical considerations, other than non-disclosure of the identity of contributions (Mirriam, 1998).

Data Analysis

According to Henning, Van Rensburg & Smit (2004, p. 101) the "true test of a competent qualitative researcher comes in the analysis of the data, a process that requires analytical craftsmanship and the ability to capture understanding of the data in writing." The origin of the research term 'analysis' is traced back to the German word 'analusuein' by Jones, Torres and Arminio (2006) which means, literally, to unloose or undo. This 'unloosening' makes possible the emergence of the hidden voice and the freeing up of meaning. Qualitative analysis takes place simultaneously with data collection (Mirriam, 1998), and starts by intensively interacting with and manipulating the data, actively seeking persistent words, key phrases, common and unusual ideas, themes, patterns, categories and trajectories (Jones, Torres & Arminio, 2006; Mirriam, 1998; Poggenpoel, 1998) whilst coding the data (Allard-Poesi, Drucker-Godard & Ehlinger, 2001). Poggenpoel (1998) points out that the researcher must pay attention to the vocabularies of the research participants. Jones, Torres and Arminio (2006) put forward two complementary ways of analyzing language: (1) representational (assuming that the words contain thoughts, beliefs, knowledge and feelings); and (2) presentational (focusing on how the words were uttered). This dual approach brings to light potentially richer understandings and meanings of the phenomenon.

As part of the data management, all the individual submissions were transferred to one single contextual whole made up of the raw data received from the participants (Mirriam, 1998; Poggenpoel, 1998). The original raw data were stored for reference purposes (Poggenpoel, 1998). This collection of raw data was shared with the members of the executive committee, several of whom commented that it did not help to bring about uniformity. Indeed, some remarked that it aggravated the problem. In this regard, Jones, Torres and Arminio (2006) emphasize that analysis must advance beyond mere listing or reporting the data collected. I will now discuss the results of the analysis.

TABLE 4
Indication of the content of the questionnaire

Sub-section	Examples of questions/instructions
On-campus	What do you call the learning where students experience aspects of the curriculum on campus; for example, in a laboratory, in the ward of an academic hospital, etc? Please define the term(s) in use – describe the meaning.
In the occupational field	What do you call the learning where students experience aspects of the curriculum within the occupational-field setting? Please define/describe the term in use in your own words.
Other 'non-experiential' learning	What terms are in use for the remainder of the learning activities (e.g., classroom) of the students' curriculum?
Official terminology	What official terms are in use (if they differ from your own given above) at your institution/organization to identify each of the mentioned components of an academic program?
Learning facilitators/enablers for on-campus 'practicals'	What do you call the individual(s) that facilitate/s and/or enables the on-campus learning? Please describe the 'job' title(s) in use.
Learning facilitators/enablers for in-occupational field learning	Who do you perceive to be involved in facilitating and/or enabling in-occupational field learning? Please name and define/describe the role of each participant.
Other relevant terms in use	Are there any other terms in use at your institution/ organization that were not yet mentioned in your replies to the previous questions? Please name and define/describe each term in your own words.
Programme differentiation	Does your institution/organization differentiate between the academic programs that include in- occupational field learning, from those without? What terms are used?

RESULTS

Unfortunately, only 16 submissions were received (a participation rate of about five percent). The composition of participants includes 10 University of Technology members, three from Comprehensive Institutions (a combination of a traditional academic university and a former technikon), one participant from a traditional university, one representative from a Sectoral Education and Training Authority (SETA) and one representative from a Ministry of Education. Excluding the latter two participants, the representation consists of seven cooperative education coordinators, five academics and two persons from an open and distance learning (ODL) educational institute. The academic disciplines include engineering, chemistry, biochemistry and education. It is evident from the participation description that the results are by no means representative and cannot, therefore, be generalized. Given the response rate, the results are indicative only and should be read with caution.

As far as on-campus and in-occupational field learning are concerned, two categories of terminology emerged from the collective data (see Figure 1). Participants did not restrict their answers to the sub-categories of the questionnaire, but proceeded to present the terminology in use under the first sub-category of the questionnaire and, in some cases, repeated themselves later in their responses to the questionnaire.

The terminology category used in in-occupational field experiences is described as a process of placing students in the workplace for hands-on experience. Some participants specify the actual work experience as experiential learning, whereas others submit that the terms 'experiential learning' and 'work-integrated learning' are interchangeable. One participant defined experiential/work-based learning as "an activity linked to the formal academic program which is extended to the workplace for purposes of experiential performance and to allow the candidate first-hand experience. The process must allow for abstract conceptualization, experimentation, real and concrete experience and reflective observation." It is further remarked that experiential learning is "typically done in terms of a log book with more or less supervision by a workplace mentor coach and or a representative of the institution." Students apply their knowledge gained from the classroom learning and learn in the workplace setting. Students learn by doing and experiencing the daily routines. Credit bearing learning takes place in industry.

The on-campus experience-terminology category is described as instruction or learning in a laboratory. Practical experiments or tests, which form part of the curriculum, are performed in a laboratory. Hands-on practical skills within the discipline context are demonstrated or experienced in a simulated non-workplace environment. Theory is thus concretized.

The on-campus practicals are facilitated by lecturers and supported by laboratory technicians or assistants. The latter are often student assistants. The instructors could be any level of academic staff, even heads of departments.

The in-occupational field experiential learning is enabled by either of the following facilitators: workplace mentor/supervisor, a training supervisor, the institutional experiential learning coordinator or a lecturer. There are various nuances to the job titles of these

*Correspondence to Mahmoud Haddara, email: mhaddara@mum.ca

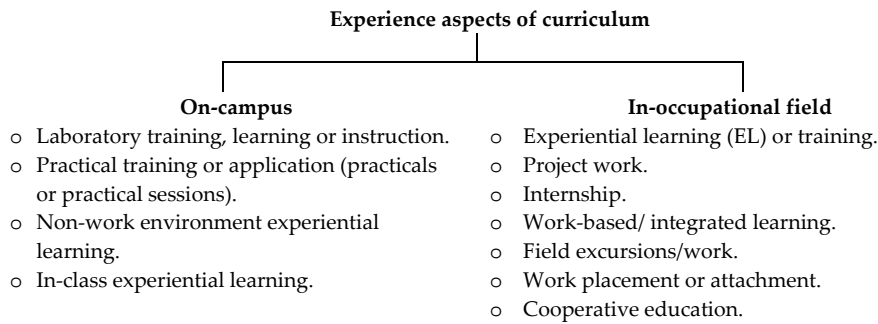


FIGURE 1
Two categories of terminology used in cooperative education programs

facilitators. The key roles of the mentor/supervisor consist of making sure all students are exposed to the learning (rotation of students); guiding and coaching students; helping the student to experience the world of work and to build up skills; assessment and certification upon completion in accordance with the specified outcomes; and liaison with the educational institutional coordinator. It is sometimes specified that the university must approve the workplace mentor. The experiential learning coordinator is an educational institution staff member, someone who is responsible for all aspects related to the experiential learning of those enrolled in an academic program. Responsibilities include, among other things, facilitating work preparedness skills, placement, learning program implementation, workplace visiting, monitoring, assessment and debriefing of students.

Other terminology that participants included are internships; continued professional development; work (itself); contact sessions; community service and service learning, theoretical training/learning; provider-based learning, workshop training; reading; seminars; on-line discussions; written assignments; problem/project-based learning; extra-curricular; student-centered learning; full/part-time; learnerships; liaison; open learning; online/e-learning; and blended learning. The terminology listed here obviously does not contribute to the aim of this research, which is to advance uniformity. It is presented here mainly to give readers an insight into participants' contributions.

It is evident from the 14 submissions that originated from educational institutions that official terminology is either not known, or that there is little in the way of official institutional terminology for the various aspects of cooperative education programs.

DISCUSSION

One of the participants remarked that she struggled to understand the questions and another found the numbering confusing. Although the analysis of the whole data corpus may have overcome some of these concerns, it may well have impacted on the data collection. A participant questioned the effectiveness of general distribution by email. The low participation rate indicates that this participant has a valid concern. One participant

indicated that ethical clearance is required to conduct research with their university staff. This may further explain the low participant rate if the recipients of the email questionnaire work at universities who follow this policy.

Although this initial research substantiated the concern about disparity of terminology, it has not helped to advance uniformity in the terminology. It is questionable if the proposed submission of an executive viewpoint (from the SASCE) about the nomenclature, followed by a debate, would improve matters. I say this because the SASCE does not have the political clout needed to enforce a decision on higher education in Southern Africa. Putting forward a viewpoint would therefore only be a single act of discourse on the whole issue of uniform terminology. The SASCE, as a society with the aim of advocacy of a specific educational strategy, functions within a higher education environment where knowledge is created through research output. It cannot, therefore, act against this tradition and take arbitrary decisions about the uniformity of educational terminology, however valid it may regard these decisions.

As a way forward, therefore, a participatory action research design is recommended instead. Practitioners who share my concern over the disparity of nomenclature and who agree that there is a need for uniformity, may engage in a research process. Extensive literature reviews regarding existing terminology and the origins of this terminology should inform such participatory action research. The research should not be restricted to educational terminology, but should also focus on the managerial and public relations dimensions of cooperative education. The constant comparative method of Guba may be considered as a viable means of developing theory around the emerging uniform terminology. The process would entail accomplishing change as result of self-development on the part of the participants.

REFERENCES

- Allard-Poesi, F., Drucker-Godard, C., & Ehlinger, S. (2001). Analysing presentations and discourse. In Thiétart, R-A (Ed.), *Doing management research, a comprehensive guide* (pp. 351-372). Translated by S. Wauchope. London: Sage.
- Beaudin, B.P. & Quick, D. (1995). *Experiential learning: Theoretical underpinnings*. Fort Collins, CO: Colorado State University, High Plains Intermountain Center for Agricultural Health and Safety.
- Boud, D., Cohen, R., & Walker, D. (Eds.) (1993). *Using experience for learning*. Buckingham, UK: Society for Research into Higher education & Open University Press.
- Brennan, J., & Little, B. (1996). *A review of work-based learning in higher education*. Sheffield, UK: Department of Education and Skills, Quality Support Centre.
- Cotton, J. (1995). *The theory of learning, and introduction*. London: Kogan Page.
- Cunningham, I., Dawes, G., & Bennett, B. (2004). *The handbook of work-based learning*. Aldershot, UK: Gower.
- De Vos, A.S. (1998). Introduction to the research process. In A.S. De Vos (Ed.), *Research at grass roots, a primer for the caring professions* (pp. 37-50). Pretoria: Van Schaik.
- De Vos, A.S., & Fouche, C.B. (1998). General introduction to research design, data collection methods and data analysis. In A.S. De Vos (Ed.), *Research at grass roots, a primer for the caring professions* (pp. 76-94).. Pretoria: Van Schaik.

- De Vos, A.S., Schurink, E.M., & Strydom, H. (1998). The nature of research in the caring professions. In A.S. De Vos (Ed.), *Research at grass roots, a primer for the caring professions* (pp. 3-22). Pretoria: Van Schaik.
- Eraut, M. (2002). The interaction between qualifications and work-based learning. In K. Evans, P. Hodkinson & L. Unwin (Eds.), *Working to learn, transforming learning in the workplace* (pp. 63-78). London: Kogan Page.
- Evans, K., Hodkinson, P. & Unwin, L. (Eds.), *Working to learn, transforming learning in the workplace*. London: Kogan Page.
- Fuller, A., & Unwin, L. (2002). Developing pedagogies for the contemporary workplace. In K. Evans, P. Hodkinson & L. Unwin (Eds.), *Working to learn, transforming learning in the workplace* (pp. 95-111). London: Kogan Page.
- Groenewald, T. (2004). A phenomenological research design: Illustrated. *International Journal of Qualitative Methods*, 3 (1). Retrieved 25 April 2006, from http://www.ualberta.ca/%7Eiiqm/backissues/3_1/html/groenewald.html
- Henning, E., van Rensburg, W., & Smit, B. (2004). *Finding your way in qualitative research*. Pretoria: Van Schaik.
- Hodkinson, P., & Bloomer, M. 2002. Learning careers: conceptualizing lifelong work-based learning. In K. Evans, P. Hodkinson & L. Unwin (Eds.), *Working to learn, transforming learning in the workplace* (pp. 29-43). London: Kogan Page.
- Ibert, J., Baumard, P., Donada, C., & Xuereb, J-M. (2001). Data collection and managing the data source (pp. 172-195). In R.A. Thiétart (Ed.), *Doing management research, a comprehensive guide*. Translated by S. Wauchope. London: SAGE.
- Jarvis, P., Holford, J. & Griffin, C. (2003). *The theory and practice of learning* (2nd ed.). London: Kogan Page.
- Jarvis, P., & Wilson, A.L. (1999). *International dictionary of adult and continuing education*. s.v. "experiential learning", "work experience", "internship" and "clinical experience". (2nd ed.). London: Kogan Page.
- Jones, S.R., Torres, V., & Arminio, J. (2006). *Negotiating the complexities of qualitative research in higher education*. New York: Routledge.
- Knight, P. (2003). *Work-based learning in the OU: What COBE offers*. Centre for Outcomes-Based Education. The Open University. Retrieved 23 September 2005, from <http://www.open.ac.uk/cobe/OU-and-ALs/WBLintheOU-whatCOBEoffers.pdf>
- Miriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Mothata, S. (Ed.). (2000). *A dictionary of South African education and training*. Johannesburg: Hodder & Stoughton.
- Mouton, J. (2001). *How to succeed in your masters and doctoral studies: A South African guide and resource book* (8th impression, 2005). Pretoria: Van Schaik.
- Poggenpoel, M. (1998). Data analysis in qualitative research. In A.S. De Vos (Ed.), *Research at grass roots, a primer for the caring professions* (pp. 334-353). Pretoria: Van Schaik.
- Royer, I. & Zarlowski, P. (2001). Research design. In R.A. Thiétart (Ed.), *Doing management research, a comprehensive guide* (pp. 111-131). Translated by S. Wauchope. London: Sage.
- South Africa Council for Higher Education, Higher Education Quality Committee. (2004). *Criteria for Institutional Audits*. Pretoria: Compress. Retrieved 8 September 2004, from http://www.che.ac.za/documents/d000061/CHE_Institutional-Audit-Criteria_June2004.pdf
- Schurink, E.M. (1998). The methodology of unstructured face-to-face interviewing. In A.S. De Vos. (Ed.) *Research at grass roots, a primer for the caring professions* (pp. 297-312). Pretoria: Van Schaik.
- Schurink, W.J., Schurink, E.M., & Poggenpoel. (1998). Focus group interviewing and audio-visual methodology in qualitative research. In A.S. De Vos. (Ed.) *Research at grass roots, a primer for the caring professions* (pp. 313-333). Pretoria: Van Schaik.
- Strydom, H. & De Vos, A.S. (1998). Sampling and methods. In A.S. De Vos. (Ed.) *Research at grass roots, a primer for the caring professions* (pp. 189-201). Pretoria: Van Schaik.

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 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.

Cooperative education 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. Essentially, cooperative education is a partnership between education and work, in which enhancement of student learning is a key outcome. More specifically, cooperative education 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 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. 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 directly from the website. In order to ensure integrity of the review process authors' names should not appear on manuscripts. Manuscripts should 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.

EDITORIAL BOARD

Editor-in-Chief

Assoc. Prof. Richard K. Coll

University of Waikato, New Zealand

Editorial Board

Dr. Mary Atchison

RMIT University, Australia

Dr. Richard Chapman

Soil & Land Evaluation Ltd, New Zealand

Dr. Chris Eames

University of Waikato, New Zealand

Dr. Gawie Engelbrecht

Technikon Pretoria, South Africa

Ms. Jenny Fleming

Auckland University of Technology, New Zealand

Dr. Thomas Groenewald

University of South Africa, Johannesburg, South Africa

Mr. Dave Hodges

UNITEC Institute of Technology, New Zealand

Assoc. Prof. Helen McGregor

UTS Sydney, Australia

Ms. Nancy Johnston

Simon Fraser University, Canada

Prof. Stephen F. Johnston

UTS Sydney, Australia

Ms. Norah McRae

University of Victoria, Canada

Dr. T. Anthony Pickles

University of Bradford, England

Ms. Susanne Taylor

Technikon Witwatersrand, South Africa

Dr. Neil Taylor

University of New England, Australia

Dr. Neil Ward

University of Surrey, England

Dr. Miriam Weisz

RMIT University, Australia

Dr. Karsten Zegwaard

University of Waikato, New Zealand

© New Zealand Association for Cooperative Education

Usher, R. (1993). Experiential learning or learning from experience: does it make a difference? In D. Boud, R. Cohen & D. Walker (Eds.), *Using experience for learning* (pp. 169-180). Buckingham, UK: Society for Research into Higher education & Open University Press.

Welman, W.C. & Kruger, S.J. (2001). *Research methodology for the business and administrative sciences* (2nd ed.). Cape Town: Oxford.

White, B. (2000). *Dissertation skills for business and management students*. London: Continuum.