

CONTINUING PROFESSIONAL DEVELOPMENT: LEARNING ACTIVITIES OF MALAYSIAN REGISTERED QUANTITY SURVEYORS

Mohd Hisham Ariffin¹ and Johan Victor Torrance

Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Shah Alam, MALAYSIA

ABSTRACT

Malaysian Registered Quantity Surveyors are being mandated by the Board of Quantity Surveyors Malaysia to participate in Continuing Professional Development (CPD) activities beginning from year 2001. At the root of CPD is the process of learning and Registered Quantity Surveyors are required to be learning participants. Understanding the learning preferences of the Registered Quantity Surveyors is one of the ways to ensure optimum participation in CPD activities. This paper examines the theoretical models of professional learning and focuses on formal, non-formal and informal learning. The findings of three surveys on Malaysian Registered Quantity Surveyors CPD in relation to their learning preferences and actual participation, are described and discussed. Registered Quantity Surveyors prefer CPD activities that are conducted either in formal, non-formal and informal learning contexts. There were no specific preferences for the three types of learning contexts. Actual types of participation by Registered Quantity Surveyors in CPD activities were mostly in non-formal and informal learning activities.

Keywords: Continuing Professional Development, Malaysian Registered Quantity Surveyors, Formal learning, Non-formal learning, Informal learning

Introduction

Learning is continuous and natural. An individual can learn through personal experience or via media or from a teacher. A person also learns from his interaction with people during work, play or home. Thus, the learning can be from primary personal experiences (learning from self-experience) or secondary experiences (such as from writings and observation) or both. Whether as a child or as an adult, as a student or as a worker, a person never stops learning.

However, in the past, learning was considered as something done at school and associated with formal education. After the period of schooling, learning supposedly is not needed. This scenario has changed due to shifts that have occurred in society with regard to learning (Oarvis, 2001). These changes have led to the emergence of lifelong outcomes to learning. In addition, governments have realized that lifelong learning could be used to with human further their political, social and economic agendas. Further impetus to promote lifelong individual and learning among the populace is brought about by rapid changes taking place due to learning. The advances in information and communication technology (ICT). There are also changes experience its in the nature of work, communication, family, community and lifestyles.

Although professionals can learn through experience after their initial professional education, these socio-economic and political pressures have become the catalysts to more conscious lifelong learning among the professionals. They have to engage in learning from further learning beyond that of their initial professional education. Such learning activities are categorised under the term continuing professional development (CPD).

Continuing Professional Development

Continuing Professional Development as 'the systematic maintenance, improvement and organised and broadening of knowledge and skill and the development of personal qualities necessary firstly for the execution of professional and technical duties throughout the practitioner's working life (PARN, 2000; BQSM, 2000). Similar definitions are used by many professional associations in the United Kingdom, Australia, New Zealand, South Africa, Far East independent at and North America. The term Continuing Professional Development is synonymous that use terms with the term Continuing Professional Education. The latter is frequently used in these concepts North American professions except in the teaching profession where the term Armstrong Continuing Professional Development is used instead. In the United Kingdom and to different le many Commonwealth countries, the term Continuing Professional Development is more widely used than Continuing Professional Education. Other terms are used specific to a profession such as Continuing Legal Education (CLE), Continuing Medical Education (CME) and Continuing Engineering Education (CEE).

There is a question as to whether CPD is a narrower interpretation of either adult more didactic education or continuing education. Definitions by UNESCO and OECD of adult education encompass training and education, vocational and non-vocational provision, study for qualification and for its own sake, and educational provision both within and outside of educational establishments. The definition of continuing education has evolved from being a subset of adult education to that of an alternative. This can be seen from the definition of continuing education that would include higher and further In studies by education, learning that takes place outside formal educational institutions and non- against the institutional learning. However, continuing education and adult education are often either bracketed together as one or as a joint or linked activity (Tight, 1996).

Theories of learning

There are numerous theories on learning. These theories attempt to explain adult and child learning. Jarvis et al (1998) discussed in their book some of the schools of learning theories i.e. behaviorist type theories, cognitivist theories, social learning theories and experiential learning theories. Behaviorist theories focus on the measurable behavioural outcomes to explain learning. The cognitivist theories are concerned in various ways with human development. In the social learning theories, the relation between the individual and the social group (or collectivity or society) is primarily used to explain learning. The basis of experiential learning theories is the processes of learning from experience itself.

Merriam and Caffarella (1999) listed down five key theories of learning processes i.e. behaviorist, cognitivist, humanist, social learning, and constructivist (somewhat related with experiential learning theories). The humanistic theory is concerned with learning from the perspective of human potential for growth. It seemed that Jarvis et al (1998) had lumped together the humanistic theories with the cognitivist group of theories because Merriam and Caffarella (1999) had defined the cognitivist theory as being concerned with learning from the perspective of the internal mental process (including insight, information processing, memory and perception).

Learning can be viewed from the methods by which adult learning is practiced and organised. Thus, such learning concepts can be seen from two perspectives i.e. firstly, the perspective of the individual learner and secondly, the perspective of the organization providing the learning experience. Both perspectives are not dichotomous and in fact overlap. The individualistic perspective includes concepts such as experiential, independent and self-directed learning. The organizational perspective includes concepts that

use terms such as distance, flexible and open learning. Regardless of the perspectives, these concepts share a concern with issues of control and responsibility (Tight, 1996).

Armstrong (1999) stressed the need for appropriate methods of learning appropriate to different levels of learning and different times of life. Higher levels of learning involve, among others, adapting existing knowledge or skills to a new environment and tasks, and creating new 'self knowledge' through experience. However, learning methods must take into account cultural diversities. (Ashton, 1986). Due to basic commonalities in Asian cultures, Malaysians may prefer learning situations that are more didactic and teacher-centred, where the instructor or presenter plays the role of the provider of knowledge (Kirkbride et al, 1989 c.f. Zulaiha, 1993).

Formal, non-formal and informal learning

In studies by Mocker and Spear (1982), the level of learners control were compared against the level of institutional control, with regard to the objectives (purposes) and means (processes) of learning. Four categories of lifelong learning were identified. First, there is formal learning where 'learners have no control over the objectives and means of their learning'. The second type is non-formal learning where 'learners control the objectives but not the means'. The third type is informal learning where 'learners control the means but not the objectives'; and lastly, self-directed learning where 'learners control both the objectives and the means'.

There are other definitions of formal, non-formal and informal learning. Some definitions use the term education and learning settings instead of learning (Coombs et al 1973 c.f Radcliffe and Colletta, 1989; Titmus, 1979; Marsick and Watkins, 1990; Lederman, 1998; Wiltsher, 1999). The following definitions used in this paper are more to the setting or context of the learning.

Formal learning is learning that takes place in a structured and intentional way approved by and is often provided by formal educational establishments. Formal learning also involves evaluation and formal recognition of the learning such as a credit, diploma, degree, or professional qualification. Formal learning can occur not only in academic formal learning programmes but in courses, workshops, seminars where formal recognition of educational performance will occur. The mode of learning may include classroom, distance learning, self-study, action learning etc.

Non-formal learning is any organised learning activity provided by organizations outside the established formal educational system whether operating separately or as an important feature of some broader activity — that is intended to serve identifiable learning clienteles and learning objectives. The learning may or may not be evaluated and recognized. Non-formal learning can occur in seminars, workshops, conventions, meetings, committees, teaching/supervising students, research, reading journals or books (separate from taking courses etc), using audio/visual tapes. Thus non-formal learning is less structured more flexible and more responsive to individual needs than formal learning.

Informal learning is not structured, though it may occur in a structured setting. Such learning can be either intentional and self-directed or incidental. Intentional and self-directed learning involves purposeful self-learning through consulting with other people, watching video-tapes, self-contemplation and reflection, etc. Incidental learning is the byproduct of some activity such as task accomplishment, interpersonal interaction, sensing the organizational culture, trial and error experimentation or even formal learning. The control of informal learning rests primarily in the hands of the learner.

These definitions are based upon the main types of learning found in the learning context. This is because the classifying of learning into categories of formal, non-formal and informal has been questioned. Jarvis (1985) criticised the definitions because informal, formal and incidental learning can occur either

separately or at the same time or not at all although the situation is towards that form of learning.

Other writers have argued that self-direction is a continuum, from very formal regimented settings to highly informal, non institutional settings. In other words, self-directed learning is found in formal, non-formal and informal learning settings in varying degrees (Brockett and Hiemstra, 1991; Kasworm, 1988; Brookfield, 1986). Thus, self-direction is not defined here as a fourth type of learning.

Compulsory Continuing Professional Development

The Board of Quantity Surveyors Malaysia (BQSM) registers and regulates the of the consultant quantity surveyors in Malaysia since 1981. A quantity surveyor who is registered with the Board of Quantity Surveyors Malaysia is called a Registered Quantity Surveyor. By being registered, the quantity surveyor concerned is licensed to practice and offer consultancy work related to quantity surveying functions.

With effect from year 2001, the BQSM has mandated CPD participation as essential for relicencing and continuing practice as a Registered Quantity Surveyor. A list of approved learning activities for the compulsory CPD includes workshops, reading books, authoring and presenting papers, participation in committees of the Institution of Surveyors Malaysia etc; (BQSM, 2000). Most of these activities are formal and non- formal learning situations.

Findings

The findings of three previous studies conducted by the first author are reviewed in this paper. Below is the description and results of these studies

1. **Study A.** A survey was conducted on participants of the Quantity Surveying Convention 2001 held on 8th — 9th May 2001 at the International Islamic University Malaysia in Kuala Lumpur. There were more than 300 participants present (exact figures were unavailable) on the second day during when the survey questionnaires were distributed. The number of usable completed questionnaires returned was 111. Only 77 of the respondents were Registered Quantity Surveyors and only their questionnaires were analysed. The subjects were asked to grade their preferences for various CPD activities from a scale of 1 (least preferred) to 5 (most preferred). Tables 1, 2 and 3 show the means, medians and standard deviations of the preferences for the various types of learning activities.

The results of the studies indicate that respondents prefer CPD activities that are convenient in terms of time away from the office (i.e. formal learning #4, non- formal learning #12 and #13). They also show a preference for receiving information rather than giving knowledge to others (see Table 1: formal learning #4; Table 2:non-formal learning #1, #3, #10, #12, and #13; Table 3: informal learning #9). The respondents also showed a preference for CPD activities that enable social interaction with other quantity surveyors and other non-QS persons (see Table 3: informal learning #3, #4, and #5). Experiential work-based learning was also preferred (see Table 3: informal learning #7, #8, and #9).

2. **Study B.** A postal survey was conducted on the whole population of Registered Quantity Surveyors in Malaysia (n734) in December 2000. The response rate was 20.02%. Among the questions asked was one on their views on the proposed Compulsory CPD. The question was open-ended and the answers were analysed for common themes. Although only relatively few respondents answered the question, the responses given provide an idea as to the preferences of the Registered Quantity Surveyors regarding their CPD. Figure 1 shows the distribution of the responses for this study.

Table 1: Preferences Scores for Formal Learning Contexts

Formal learning contexts	Mean	Median	SD
1 Full time study at university or college	2.87	3	1.46
2 Part-time study at university or college	3.07	3	1.32
3 Distance learning study at university or college	2.93	3	1.34
4 Short courses at university, college or private companies	3.75	4	1.15
5 Learning from videos, audio tapes, or computer study programs	3.40	3	1.116
6 Learning from computer-assisted study programs	3.42	3	1.06

Table 2: Preferences Scores for Non-formal Learning Contexts Firm’s

Non-formal learning contexts	Mean	Median	SD
1 Attending CPD talks	4.13	4	0.82
2 Attending organized technical visits	3.34	3	1.16
3 Attending seminars, conferences or workshops	4.08	4	0.90
4 Preparing and and speaking at CPD talks	2.30	2	1.18
5 Preparing and speaking as host of organised technical visits	2.12	2	1.05
6 Preparing and speaking at seminars, conferences or workshops	2.26	2	1.19
7 Preparing and speaking to students in class as invited speaker or part-time lecturer	3.06	3	1.29
8 Writing articles for professional journals	2.56	3	1.13
9 Writing professional and technical hooks	2.32	2	1.11
10 Attending in-house training sessions	3.74	4	0.95
11 Presenting at in-house training sessions	3.13	3	1.21
12 Reading books or journals	3.84	4	0.90
13 Learning from Internet	3.56	4	0.94
14 Mentoring junior staff or supervising trainees	3.38	3	1.05

This study shows that the respondents preferred to have CPD activities that enable them to learn beyond the confines of their profession. They seem to believe that having providers other than the Institution of Surveyors, and CPD topics on non-QS areas would enable them to do so. In addition, the respondents also would like have work-based experiences to be considered as approved CPD activities.

3. **Study C.** A survey was conducted on the population of Malaysian Registered Quantity Surveyors (717) in 2002. Although there were 771 fully Registered Quantity Surveyors, 64 persons were excluded. This was because the survey was part of a broader research (Mohd Hisham Ariffin, 2005) and the 64 persons were involved in earlier interviews of the research. The overall response was 261 persons (36.4%). Eleven respondents’ questionnaires were discarded because of inconsistent responses and being answered by people who did not fit the cohort definition. Initially, 41 subjects were hand-delivered the survey instrument. However, the 41 ‘hand-delivered’ respondents were found to be biased towards Malays and thus discarded. Thus, the subsequent delivery was by post.

The subsequent postal survey yielded 209 returns (29.1% response). The following tables indicate the actual participation of the respondents in CPD activities in 2001.

Table 3: Preferences Scores for Informal Learning Contexts

Informal learning contexts	Mean	Median	SD
1 Attending ISM related Annual General Meetings	3.20	3	1.23
2 Participating in ISM committees	2.74	3	1.03
3 Networking with businessmen or government servants etc.	3.62	4	1.05
4 Discussion with other QS professionals	3.84	4	0.81
5 Discussion with non-QS professionals	3.49	4	0.96
6 Secondment to another post in the organization	3.13	3	1.17
7 Reflecting back on previous work experiences and thinking out ways for improvement	3.76	4	0.99
8 Learning from participating in new QS practice areas	3.95	4	0.92
9 Presentations by suppliers, nominated subcontractors etc.	3.47	4	1.01

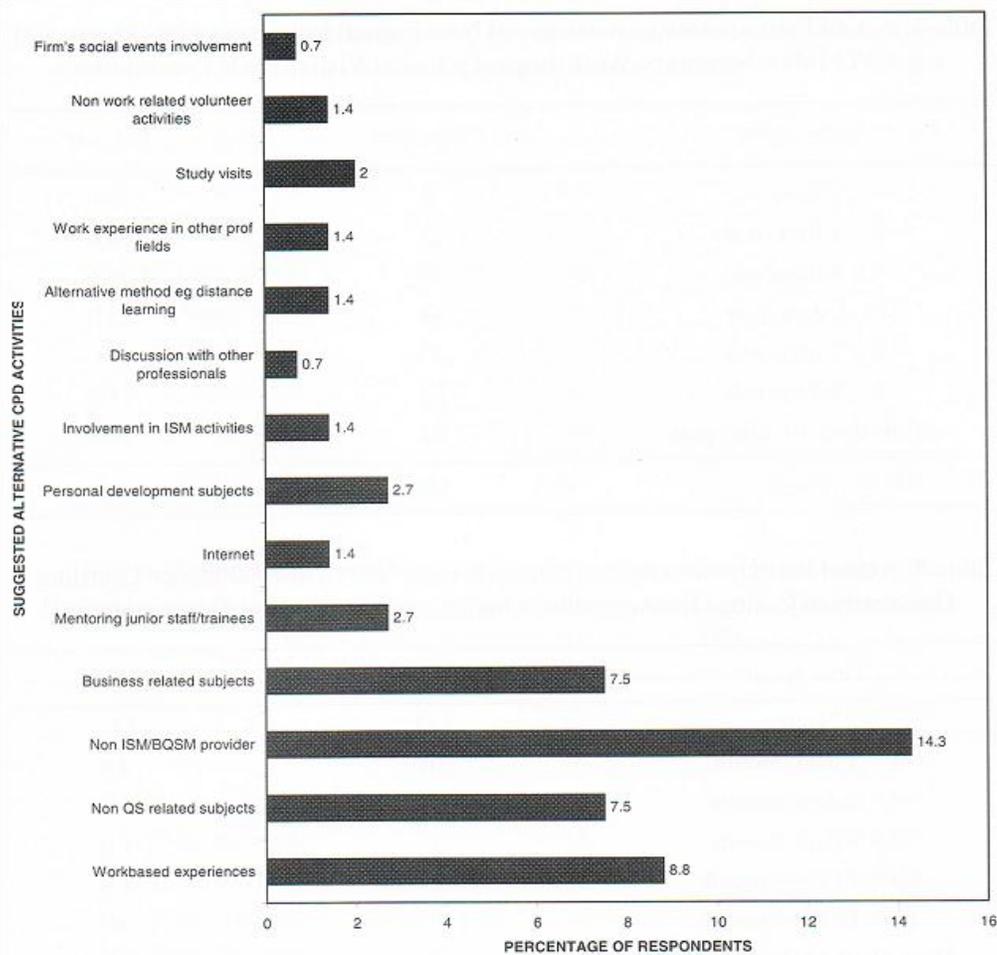


Figure 1: Suggested Alternative CPD Activities

The results indicate that the Registered Quantity Surveyors who responded to the survey mostly participated in CPD activities that involved didactic and social experience learning. This included being the audience at seminars, conferences, talks and reading learners to books. They also liked to obtain new knowledge through discussions with others. A have a chat minority were involved in other types of CPD activities such serving with the Institution apply their of Surveyors Malaysia and/or the Board of Surveyors Malaysia, presenting their ideas methods as on paper or public presentations and pursuing accredited qualifications at universities orientation or colleges.

Table 4: Actual Participation as Audience at Non-Formal Education Activities in 2001 e.g. CPD Talks, Seminars, Workshops, Technical Visits, Trade Presentations

Time spent	Frequency	Percent
None	6	2.9
- 2 days/year	21	10.0
3 - 4 days/year	50	23.9
5 -6 days/year	46	22.0
6 - 7 days/year	21	10.0
8 - 9 days/year	24	11.5
More than 10 days/year	41	19.6
Total	209	100.0

Table 5: Actual Participation in Studying Full Time / Part Time! Distance Learning at University or College for Accredited Qualifications in 2001(1 Day = 8 Hours)

Time spent	Frequency	Percent
None	182	87.1
1 - 3 days/month	10	4.8
4 - 6 days/month	7	3.3
7 - 9 days/month	2	1.0
10— 12 days/month	2	1.0
13 — 15 days/month	0	0
More than 15 days/month	6	2.9
Total	209	100.0

Discussion

Professionals are generally autonomous adults who engage in the learning activities voluntarily. They learn by building upon existing experiences. Their learning is optimized when the content of the learning is relevant, has direct application to practice and delivered in a facilitatory rather than a didactic manner (Madden and Mitchell, 1993). However, as pointed out earlier, Malaysians may prefer a didactic approach to discussions learning. The findings of the third study indicated that the majority of the respondents informed⁷ (91.1%) conducted their CPD through attending seminars, talks, conferences etc. However, few of them (12.9%) actually attend academic programmes for accredited are qualifications.

Table 6: Actual Participation in Researching, Writing Articles and Cost Indices for Technical Journals, Books and Presenting Papers at Non-Formal Education in 2001

Time spent	Frequency	Percent
None	156	74.6
1- 5 hours/year	19	9.1
6- 10 hours/year	5	2.4
11- 15 hours/year	5	2.4
16- 20 hours/year	2	1.0
21- 25 hours/year	3	1.4
More than 25 hours/year	19	9.1
Total	209	100.0

Table 7: Actual Participation in Learning Informally from Books, Technical Journals, Videos, Audio-Tapes and Internet in 2001

Time spent	Frequency	Percent
None	18	8.6
1- 5 hours/week	113	54.1
6- 10 hours/week	35	16.7
11- 15 hours/week	9	4.3
16- 20 hours/week	2	1.0
21- 25 hours/week	4	1.9
More than 25 hours/week	28	13.4
Total	209	100.0

Table 8: Actual Participation in Learning Informally from Discussions with Businessmen, Government Servants, QS Professionals, Non-QS Professionals, Student Trainees, Junior Staff etc. in 2001

Time spent	Frequency	Percent
None	13	6.2
1- 5 hours/week	92	44.0
6 - 10 hours/week	45	21.5
11 - 15 hours/week	19	9.1
16 - 20 hours/week	10	4.8
21 - 25 hours/week	7	3.3
More than 25 hours/week	23	11.0
Total	209	100.0

Table 9: Actual Participation in Councils or Committees of the Institution of Surveyors Malaysia and/or the Board of Surveyors Malaysia in 2001

Time spent	Frequency	Percent
None	165	78.9
1- 5 hours/month	25	12.0
6- 10 hours/month	7	3.3
11- 15 hours/month	4	1.9
16- 20 hours/month	1	.5
21- 25 hours/month	2	1.0
More than 25 hours/month	5	2.4
Total	209	100.0

The practitioner or his employer will consider several factors when deciding on and participating in CPD. Accessibility, time of day, venue and cost are among the factors individual considered. Thus, the content, process and range of forms of CPD offered should be appropriate. The timing, venue and delivery method of CPD should also suit the second individual practitioner and flexibility has to be emphasized. In addition, the different learning needs styles and opportunities of the practitioners and their employers should relevant pr be considered in the provision of CPD. For example, learning opportunities could be offered by work-based activities that either incur minimum time away from the office or have affordable course fees (Rapkins, 1995). This is somewhat shown by the during the respondents' preferences for learning contexts that are convenient time-wise and are work-based. These preferences may also indicate reluctance to give up extra time outside working hours for CPD. The findings of the third study on actual CPD participation lend support to this proposition. Participation in CPD through reading books, journals etc. was done by 91.4% of the respondents. Furthermore, 87.1% of the respondents did not participate in CPD that involved pursuing accredited qualifications at to engage institutions at a part-time, distance learning or full time basis.

The respondents had shown strong preferences for work-based learning contexts. In such contexts, learning generally comes from primary experiences in their work actual practice. However, the difficulties in quantifying and qualifying work-based learning mostly seem to have led to the use of non-formal and formal learning contexts in many CPD programmes. In some formal and non-formal learning contexts, experiential learning approved is used to enhance the learning outcomes. Queeney (2000) argued for practice-oriented Informal CPD due to the nature of professional learning. Practice oriented CPD emphasizes the three the relationship between the knowledge delivered within the context of professional practice. Being adult learners, professionals also learn in the context of their prior experiences. Hence, participatory learning and hands-on activities will enable the learners to link what is being taught with their own professional practice; i.e. they have a chance to 'try it out.' CPD delivery methods should allow the professionals to apply their accumulated expertise in an educational setting. If realistic, such delivery methods as case studies, role playing and practice simulations can provide a true practice orientation.

The respondents' preference for learning contexts that allow social interaction is expected. Individuals not only learn through their own experience but also from other people. Learning occurs in the course of being members of teams. In their working lives, their interactions with their managers, co-workers and people outside of their organizations are sources of learning (Armstrong, 1999). This proposition seems to be supported by the findings of the third study on actual CPD participation. The majority of the respondents participated in seminar and conference type activities where such social interactions between participants can be had during breaks and lunch. A majority of the respondents also indicated that they learnt much

from their discussions with other people such as businessmen, civil servants and even the 'less informed' students.

The nature and context of practice across the professions and throughout society are changing. Professionals are increasingly viewed in terms of the competencies they possess, rather than their disciplines. There is also a contradictory trend to specialization and generalization of professional practice. There is also a shift in emphasis from individual practice to multidisciplinary team practice (Torrance and Hisham, 2001). Such developments may hold the motivation behind the strong preferences shown in the second study. The respondents would like to have CPD activities that allow them to learn and interact with fellow QS professionals, non-QS professionals and other relevant persons. This might explain why the majority of the respondents of the third study participated in seminars, talks, conferences and other non-formal 'presentation- type' activities. In these activities, the audience has chances to discuss among themselves during the breaks.

Conclusion

The findings in the first two studies indicate that Registered Quantity Surveyors like to engage in CPD activities that are conducted either in formal, non-formal and informal learning contexts. There does not seem to be any specific preference for the three types of learning contexts. The findings of the third study showed that the actual type of participation by Registered Quantity Surveyors in CPD activities were mostly through attending seminars, reading and discussions with others. These types of activities are in non-formal and informal contexts. The types of CPD activities approved by BQSM are biased towards formal and non-formal learning contexts. Informal learning does occur in the conduct of these CPD activities. The findings of the three studies elaborated in this article seem to show that the list of approved activities for the compulsory CPD for Registered Quantity Surveyor ignored the strong possibility that much learning is hidden and that a great portion of it is informal.

Acknowledgements

Acknowledgement of thanks: The organizers of the QS National Convention 2001 for allowing the survey to be conducted during the Convention proceedings. This is a revised version of a paper presented at the National Construction Industry Conference, from 29th to 30th October 2001 organised by Universiti Teknologi Malaysia at Johor Bahru.

References

- Armstrong, M. (1999). *A handbook of human resource management practice*, Kogan Page, London.
- Ashton, D. (1986). Handling cultural diversity, In Mumford, Alan (editor) *Handbook of management development* (2nd ed.), Gower Publishing, Aldershot, Hants, England.
- Board of Quantity Surveyors Malaysia (2000). *Rules and guidelines to compulsory continuing professional development for quantity surveyors*, Kuala Lumpur.
- Brockett, R. G. and Hiemstra, R. (1991). *Self direction in adult learning: perspectives on theory, research and practice*, Routledge, London.
- Brookfield, S.D. (1986). *Understanding and facilitating adult learning*, Jossey-Bass, San Francisco.
- Coombs, P.H., Prosser R.C. and Ahmed, M. (1973). *New paths to learning for rural children and youth*, International Council for Educational Development (ICED), New York.
- Javis, P. (2001). The public recognition of learning, In Javis, Peter (ed.) *The age of learning: education and the knowledge society*, Kogan Page, London.
- Jarvis, P. (1985). *Adult and continuing education: theory and practice* (1992 reprint), Routledge, London.
- Jarvis, P., Holford, J. and Griffin, C. (1998). *The theory and practice of learning*, Kogan Page, London.

- Kasworm, C.E. (1988). Self directed learning in institutional contexts: An exploratory study of adult self-directed learners in adult education, In Long, H.B. et al. *Self directed learning: Application and theory*, University of Georgia, Adult Education Department, Athens, Georgia, 65-98.
- Kirkbride, P.S., Tang, S.F.Y. and Shae, W.C. (1989). The transferability of management training and development: The case of Hong Kong, *Asia Pacific Human Resource Management*, February, 7-19.
- Langford, M.R., Hancock M.R., Fellows, R. and Gale, A.W. (1995). *Human resources management in construction*, Longmans Scientific and Technical, London, England.
- Lederman, E. (1998). *Maintaining competence: understanding how professionals learn*, Unpublished D.Ed. dissertation, University of Toronto, Toronto, Canada.
- Madden, C.A. and Mitchel, V.A. (1993). *Professional standards and competence: A survey of continuing education for the professionals*, Department of Continuing Education. University of Bristol, Bristol, England.
- Marsick V. J. and Watkins, K. (1990). *Informal and incidental learning in the workplace*, Routledge, London.
- Merriam, S. B. and Caffarella, R. S. (1999). *Learning in adulthood*, (2nd ed.), JosseyBass, San Francisco.
- Mocker, D.W. and Spear G.E. (1982). Lifelong learning: formal, nonformal, informal and self directed, (Information series no. 24), *ERIC Clearinghouse for Adult, Career and Vocational Education*, Ohio State University, Columbus, Ohio.
- Mohd Hisham Ariffin (2004). *Reasons for and deterrents to the participation of Malaysian registered quantity surveyors in continuing professional development activities*, Unpublished Ph.D thesis, Universiti Teknologi MARA, Shah Alam, Malaysia.
- PARN (2000). *Continuing Professional Development, United Kingdom, Professional Associations Research Network*. Accessed: 1 March 2001 at http://www.parn.org.uk/uploads/cpd_res.pdf
- Radcliffe, D.J. and Colletta N.J. (1989). Non formal education, in Titmus, Cohn J (ed.) *Lifelong education for adults: An international handbook*, Pergamon Press, London, 60-64.
- Queeney, D.S. (2000). *Continuing professional education*, In Wilson, Arthur L. and Hayes, Elizabeth R., *Handbook of adult and continuing education*, Jossey-Bass, San Francisco.
- Rapkins, C. (1995). Professional bodies and continuing professional development, in Clyne, S. (ed.) *Continuing professional development: perspectives on CPD in practice*, Kogan Page, London.
- Tight, M. (1996). *Key concepts in adult education and training*, Routledge, London.
- Titmus, C (1979). *Terminology of adult education*, United Nations Educational, Scientific and Cultural Organisation, Paris.
- Torrance, J.V. and Mohd Hisham Ariffin (2001). *Pushing the frontiers of surveyors' K- culture, Proceedings of the 2001 Malaysian Survey Congress — 'Enhancing professionalism and business development'*, Institution of Surveyors Malaysia, Kuala Lumpur, June 14-16.
- Wiltsher, C. (1999). Fundamentals of adult learning In Wilson, J. P. (ed.) *Human resource development*, Kogan Page, London, p. 186.
- Zulaiha Ismail (1993). HRD practices for multinational corporation managers in Malaysia, In Reynolds, A. and Nadler, L. (ed.) *Globalisation: The international HRD consultant's and practitioner's handbook*, Human Resource Development Press, Amherst, Massachusetts, USA, pp. 327-340.