# MEANINGS AND INTERCHANGEABILITYOF CONTINUING PROFESSIONALDEVELOPMENT, TRAINING AND EDUCATION AND THEIR CONNECTION AND INFLUENCE ON LEARNING AND DEVELOPMENT IN BUILT ENVIRONMENT.

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**Abstract**

Problems associated with the performance, delivery and quality of products or services due to the ineffective performance of workers in the Malaysian construction industry are continually debated. Critics have frequently associated these shortcomings with inadequacies in the education, training, and continuing professional development (CPD), offered to those in the workforce.

This paper investigates the underlying concepts for education, training, and CPD, and identifies their differences and similarities. Understanding the similarities and differences among these factors is critically important because these factors signiÞcantly inßuence the design and delivery of effective education, training, and CPD programs.   Most importantly, the parties responsible for developing and implementing such programs must understand that all three types of programs must be based on the underlying principle of learning if they are to be effective.

**Keywords**: Built environment, human resources, education, training, continuing professional development (CPD), learning

## Introduction

It is generally believed that the way to ensure high-quality performance of the workforce is through the process of education, training, and continuing professional development (CPD). Based on this conviction, the Malaysian construction industry initiated many initiatives to support its employees.   However, to date results have been variable and critics frequently argue that that many of the education, training, and CPD programs offered to workers have been inadequate and ineffective.

The challenge of providing effective education, training, and CPD involves the scope with which the responsible parties conceive, design and deliver these programs. The recurrent questions: "Who should provide the education?," "Who should provide the training?," "Who should be responsible for CPD?" and "How should these initiatives be coordinated?" continue to be debated.   Some have contended that differentiating education, training, and CPD is a non-issue and simply a case of semantics. Yet, in the practical operational context, understanding and appreciating the similarities and differences has signiÞcantly inßuenced the way in which responsible parties design and offer these programmes to the workforce.

This paper discusses the differences and similarities among education, training, and CPD, their meanings and characteristics and then explores the elements that facilitate their effective delivery.   The authors conducted a literature search to investigate the validity and appropriateness of current programmes offered to Malaysian construction industry. Findings reveal the need for a holistic approach to education, training, and CPD, based on the principle of learning.   In conceiving this issue, technology together with education, training and CPD were investigated.

## Job Performance of the Malaysian Construction Industry

At its best, the Malaysian construction industry is capable of matching its counterparts from the more developed countries in delivering quality products using world-class standards.   Examples include the construction and administration of the new National Administrative Centre at

Putrajaya, Multi-Media Super Corridor, Petronas Twin Towers and Kuala Lumpur International Airport (KLIA). However, performance in many other areas has been poor. Complaints that products and services do not meet the required quality are recurring. Many completed construction projects are deteriorating rapidly. Many projects are not completed on time, within projected costs or to the promised level of quality. Reliance on workers imported from other countries continues to increase (CIDB, 2006, Sariah 2003).

Malaysia has always modelled the United Kingdom (UK) system in developing its human resources. Education, training, and CPD are offered to workers through academic, vocational and professional frameworks. Organisations such as technical colleges, institutions of higher learning, vocational schools, national training organisations, in-house construction organisations, employers and professional institutions play central roles in offering a range of improvement pathways and alternatives to workers.

While this provides the advantage of creating linkages between the frameworks, the task of outlining the scope of education, training, and CPDs has been very complex. In many circumstances, these frameworks overlap and the demarcation between them blurs, impeding education, training, and CPD activities. Hassan (1994), Arshad (1997), Ghani (2003) and Ismail (2005) pointed out that in many instances, education, training, development and CPD in Malaysia tend to be polarised and fragmented, rendering many of the programmes ineffective.

### Education

Education originates from the Latin word which means "to raise," "to train" or "to bring up." Wikipedia (2007) defines education as a discipline, a body of theoretical and applied research relating to understanding and improving the process of teaching and learning. Allman (1982), Martin (1998), Hughey and Mussnug (1997) and Matrix (1998) all argue that many early definitions of education advocate a front-end model where education occurs during the formative years, and then ceases with social maturation. Peter (1973) perceives education as a humanistic process that leads to an individual becoming "educated."

Gura (1992) asserts that the current concepts of education emerged significantly from the earlier works of Friedrich Froebel and John Dewey. Friedrich Froebel (1782-1852), who introduced kindergarten for early childhood education, demonstrated that children learn by playing. John Dewey (1859-1952) introduced the idea that education and life are interrelated, not separate; children learn best by doing and acting in the world, and through a continuity of experience that is essential to growth. Building on these concepts, Richardson and Wolfe (2001) and Dewey (2005), suggest that both formal and informal education is important, but must be differentiated. They conceived formal education as highly structured and informal education as taking place mostly outside recognised educational institutions.

Reid and Barrington (2004) and Bereiter (2002) also view education as taking place beyond an individual's early intellectual stage of development. Jarvis and Griffin (2003) stress that education must involve learning that is built on understanding. They add that education is not a single event and should be planned rather than haphazard. Cross (2006) and Merriam, et al (2007) maintain that learning in education should not be limited to the formal process; education should be principle driven, and teach general skills and knowledge for the sake of a field of discipline, rather than have a specific job focus.

### Training

Wikipedia (2007) defines training as the teaching of vocational, practical, or specific useful skills. In noting the variable definitions of training, Anderson (1994) suggests that training is a systematic development of the attitude, knowledge and skill behaviour pattern required by an individual in order to adequately perform a given task or job. Thomson (1990), Gravan, et al (1995), Reid and Barrington (1999) and Matrix (1998) all define training as a deliberate, planned and systematic process to modify and develop knowledge, values, attitudes, techniques and skills through

learning experiences, to achieve a set level of performance in an activity or a range of activities. They all share the belief that training must be derived from understanding the learning process and if successful, will speed up the learning process; training is focused on making the individual proficient by instruction and practice; and is a job-specific form of education which can be general or organisation-specific, but does not necessarily relate to the job that the individual undertakes.

Thomson (1990) conceives training as a deliberate, planned and systematic process to modify, develop knowledge, values, attitude, techniques and skills through learning experiences, to achieve a set level of performance in an activity or a range of activities. In differentiating training from education, Rodgers (1986) suggests that training has narrow goals and specifies the "right" way to do something. Reid and Barrington (1994), Thomson (1990), and Harrison (1993) commonly maintain that training should focus on making the individual proficient through instruction and practice. It is a job-specific form of education, which can be general or organisation-specific, but does not necessarily relate to the job that the individual undertakes. Gravan, et al (1995) emphasise that training must be developed from understanding the learning process and how people learn, because effective training speeds up the learning process. In differentiating formal from informal training, Thomson (1990) suggests that in contrast to informal training, formal training entails a deliberate and structured learning process. Hendry, et al (1995) stress the continuum of training as encompassing initial and continued skill training and re-training.

Gravan, et al (1995) emphasise that training must be developed from understanding the learning process and how humans learn because effective training speeds up the learning process. Martin (2006) conceives that training can be a subset of learning, but warns that training alone is not powerful enough to develop individuals in organisations. In differentiating formal from informal training, Wilson (2005) suggests that in contrast to informal training, formal training entails a deliberate and structured learning process.

Hendry, et al (1995) describe the continuum of training as encompassing initial, continued skill training and re-training. Axtell, et al (1997) affirm that an initial transfer of skills is an important pre-requisite to subsequent skills application at the workplace.

**Continuing Professional Development (CPD)**

CPD in the building industry originates from the concept of human resource development within the context of general management. Baum (1995), and McIntosh (1994) identify development as more focussed on the learner than the learning. Unlike training, it is not concerned with the uniformity of learning outcomes, but concentrates on improving job performance by enhancing employees' abilities to perform. Many of the notions of development point to the issue of expanding one's potential through a conscious and unconscious learning process with the goal of enabling an individual to take up a future role within an organisation. Pedler (1995) defines development as making the most of opportunities in both the outer and inner sphere of a potential achievement, while Baum (1995) and Lauermann (1992) characterise development as a process that can take place at any time and is not constrained by formal parameters or specific points within an individual's life cycle. It is neither confined to the classroom or coaching situation, nor restricted to planned or formalised group sessions.

Knight (2002) and Eurat (1999) note that CPD arises from the concern that the knowledge gained during the initial professional course will decline with time, especially within the current rapidly changing business environment. Professionals need to adopt education and training as a continuous lifelong process to remain in touch with current developments. They maintain that this has long been the basis for professional institutions ensuring that their members continually maintain and develop their knowledge and competency level. Cerverno, et al (1992) support this, and add that competency development is an integral part of becoming and remaining a qualified professional.

Dreyfuss and Dreyfuss (1986) observe that a person begins his or her career as a

novice, becomes an advanced beginner, then becomes proficient, then competent, and finally an expert. Eraut (1999) suggests that much of the learning required to attain full professional competence actually occurs after the completion of formal training. He believes that off-the-job and work-based learning are fundamentals to ensuring the continuous process of development. Cheetham and Chivers (2001) stress the importance of processes that lead to professional competence. They assert that these must include the opportunity to experience a wide range of developmental experience as well as the motivation to acquire the necessary competencies and improve continuously with adequate practice in carrying out the various key tasks and functions, in order to master the requisite competencies. They add that persistence in overcoming difficulties and in persevering when things are not going well, together with the influence and support (when needed) of others, are essential ingredients of effective CPD.

## Evaluating the Differences and Similarities

An analysis of education, training and CPD clarifies their differences and similarities. We suggest that all are complimentary components of the same process, i.e., the enhancement of human potential or talent. Education is often viewed as the beginning of an individual's intellectual development. Training is frequently viewed as a pre-requisite, to certify one's ability and suitability for a prospective job. Education and training contribute to CPD, which in turn facilitates "growth" or "development" within the individual and the organization.

Important distinguishing features can be drawn. Education is generally focused on the individual and its objectives are less quantifiable as each individual's learning priorities differ. In the training context, behavioural objectives are quite specific and are usually related to the present job. CPD focuses primarily on future roles, and behavioural objectives are less precise. The nature of the learning processes within education, training, and CPD can be different. Training mainly involves learning in a structured mechanistic manner. On the other hand, education and CPD tend to emphasise "organic" learning processes where the focus

of change is on the individual, rather than on what he or she can do. The learning context for each also varies. Training is associated with "learning by doing," whereas education is more synonymous with "learning by thinking;" and CPD involves learning, thinking, doing and feeling.

The distinction between education, training, and CPD is frequently a function of their use. Within the context of the development and improvement of workers in the Malaysian construction industry, each element may be part of an educational initiative, but may also comprise an element of an industry level or in-house management training or CPD programme.

It is arguable that the debate about the similarities or differences among education, training and CPD is primarily academic. However, in the real-world implementation process there is a tendency to polarise these elements. Within the practice of education, training, and CPD in the Malaysian construction industry, such distinctions have occurred and are still occurring. Yet, absolute definitions are generally not helpful in understanding the role of education, training and CPD.

## The Need for a Holistic View

There is a tendency to view the concepts of education, training and CPD as separate, with education viewed as occurring primarily in the school system and a system of higher vocational education. Training is viewed as conducted by specific companies or organisations to meet a particular need, which is often occupationally differentiated. In many training cases, the employee is not selected unless he or she is fully educated for the job prior to applying for it; the training provided is job-specific with many other learning activities thought to be outside the employer's concern. Most training, development and CPD is conducted on the job or through self-directed models, manuals or curricula.

As technology changes, the scope of professions is also quickly changing, distorting boundaries that separate jobs and professions. It can no longer be assumed that organisational

or industrial CPD, educational and training programmes can be adequately provided in traditional ways. The complexity, quantity and quality of knowledge, skills and competencies have changed so much within the last decade, exacerbated by the speed that information is transferred and exchanged. Employees must now cope simultaneously with large databases, integrated management and information systems as well as traditional manual systems. This challenges the model that places education first and training second, followed by CPD. In this information technology age, workers must now adapt to changes in a much shorter period of time than before (Hammet and Pettigrew, 1994).

The view that CPD, education and training are separate is becoming outdated; these factors no longer maintain the clear boundaries they once had. The distinction is further blurred given the increasing pressures on employees to be "self-dynamic" by being productive, innovative, and change-orientated. CPD, education and training providers in the Malaysian construction industry must work cooperatively to provide relevant and practical programs.

**Conclusion**

This paper has provided significant research to establish a basis for understanding the key concepts of education, training, and CPD. In developing effective programs, appreciation of the fundamentals of how people learn is critically important. While the debate on the similarities and differences among education, training, and CPD may continue, the holistic and sound understanding of their concepts and variable processes must be the principal starting point for their development. There is much to be learned and re-learned to improve performance in the Malaysian construction industry. It is imperative to recognise education, training and CPD as a single integrated process and as a whole, bonded together through sound understanding of learning concepts.

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