

BENCHMARKING THE IMPLEMENTATION OF CONTINUING PROFESSIONAL DEVELOPMENT IN THE VICTORIAN CONSTRUCTION INDUSTRY

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In the state of Victoria, the state government has taken a leadership position on the potential benefit of introducing voluntary continuing professional development (CPD) for registered building practitioners (RBPs) in the construction industry. Benefits are believed to accrue to the Victorian community through a more highly skilled and managed SME construction sector, improved quality buildings with fewer defects and greater efficiencies gained by a reduction in industry internal and external operating costs. This research has identified appropriate industry and community benchmarks to enable a quantification of the costs and benefits that result from this policy. These benchmarks will enable the policymaking body of Victoria, the Building Commission (BC) to evaluate the effects of the implementation of its policy and contribute to informing the debate about the merits and possible drawbacks of such a policy in the construction industry in Victoria.

The proposed Victorian CPD policy will affect a whole industry sector. This pioneering policy approach is already being viewed as a touchstone for other jurisdictions in Australia and abroad. Consequently, this research project is considered by our industry partner to be pivotal in the leadership position that they are taking in Victoria. This investigation is being conducted by the research team under the auspices, guidance and with the cooperation of the Building Commission (BC) and the Building Practitioners Board (BPB) of Victoria. This policy research evaluation is necessary to assess the proposed implementation of CPD in the Victorian construction industry. The identification and creation of agreed and significant industry benchmarks are crucial to evaluating this policy initiative. These benchmarks will serve as independent yardsticks for assessing the impact of the new policy and are described and discussed in this paper.

Keywords: Builder registration, construction industry, small to medium enterprises (SMEs), continuing professional development (CPD)

INTRODUCTION

The Building Commission and its stakeholders believe building practitioners can be part of an industry that offers security and a worthwhile financial return, as well as a stimulating work environment that is attractive to work force entrants. CPD will enable us to do this. CPD will also provide direct benefits to consumers through improved quality of building workmanship.

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Commissioner, Building Commission (2003, p2)

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The state government of Victoria (Australia) through the Building Commission (BC) and the Building Practitioners Board (BPB) have taken a leading position on the potential benefit of introducing voluntary continuing professional development (CPD) starting in 2004 for all registered building practitioners (RBPs) in the construction industry.

Background work undertaken by the BC and the authors has shown that a number of voluntary and mandatory CPD schemes mainly for professional groups have already been implemented in Australia and overseas. However, the proposed Victorian CPD policy will be applicable to all 20,000 registrations (with 17,500 RBPs as some practitioners have more than one registration). Taken with a similar initiative in NSW this will be the largest ever implementation of voluntary CPD to a group of non-professional practitioners in the world and one that will affect a whole industry sector.

THE BUILDING COMMISSION

The Building Commission is the premier government authority for the development and implementation of building policy in Victoria. The Commission developed the requirements for registered building practitioners in 1995 and through the BPB has supervised and administered the registration system in the industry. The Commission has been at the forefront of ensuring that builders' indemnity has been maintained throughout all the recent problems in the insurance industry.

As part of its industry support, the Commission supervises one of the largest building activity databases known as the *Building Activity Statistics Information System* (BASIS). Regular industry activity publications emanate from this database and the Commission has plans to develop 'data warehousing in order to leverage the Commission's valuable building industry database'. It is this database that this research project will have access to in this work. The Commission has also established a comprehensive agenda for improvement of performance of the building and construction industry.

The authors have completed the initial survey of 500 regional and metropolitan builders and the results of this work has been documented in local and international conferences and journals (Mills et al 2003; Mills, et al, 2002a and 2002b; Smith, et al, 2002). Encouraged by this work the Building Commission and researchers have placed a high priority on conducting future research into the effect their policy initiatives will have on the performance of the construction industry and on the community in general. Through the support of the Building Commission and BPB, the joint research aims to encourage greater support, economy, equity and quality in the industry. The BC actively encourages the development of more capable and adept SME contractors.

REASONS FOR INTRODUCTION OF CPD

The problems associated with education, and training of construction SMEs has long been recognized in Australia (CII (AUS), 1995; CIDA, 1995; DISR, 1999) and in many countries such as the UK (Latham, 1994; Egan, 1998), Singapore (Ofori and Chan, 2001), Ireland and in Europe generally (Construction Industry Federation, 1999; Forfas, 2001).

In Australia the importance of training and maintaining management and skills competencies has in the past been given impetus by the builder and sub-contractor

registration requirements in Victoria for all work over the value of A\$5,000, with insurance being mandatory for jobs over A\$12,000 in value. In NSW, comparable requirements have been established in the *licensing of builders*. Other states, in particular, Queensland, are also moving in a similar regulatory direction. These legislative provisions have placed a greater need on the authorities, the builders themselves and their insurers to guarantee the maintenance of building quality standards. However, the initial introduction of CPD in March 2004 with the requirement for RBPs to undertake CPD training has NOT been mandatory for all practitioners. The policy debate on CPD has now focused on a very significant problem; should it be mandatory or voluntary. According to past research (Brennan, 1990) “this can be distilled down to a one basic issue, if the voluntary argument is adopted the practitioners that are most likely to need training (CPD) are those least likely to become involved”. To mandate that practitioners complete CPD would suggest that they would not engage in it otherwise. This makes the assumption that; firstly, there is a problem and secondly that practitioners have a need to maintain and update their skills and must be forced to do it. In addition, the construction industry is changing globally and has a critical need to keep up to date and be competitive. These are the reasons for the BC and government of Victoria taking this initiative.

The genesis of this research began six years ago. The State Government of Victoria Department of Infrastructure (Building Policy group) first collaborated with the CIs in 1998 and suggested research into the operation of small to medium enterprises (SMEs) as one deserving more attention. Research undertaken by Smith, *et al* (2000) has found that SMEs in construction face many difficulties in their ability to deliver quality building products. A range of initiatives were identified to assist SMEs generally and regional SMEs in particular. Since the compulsory registration of building practitioners was implemented in 1995 it has been recognized by the industry stakeholders and the BC that the performance and capabilities of SME building contractors are maintained and over time be raised so that they can deliver consistent quality houses and buildings to the community.

The Building Commission is the responsible authority for the development of building policy in Victoria. Past research work in this area has continued with the present industry partner, the Building Commission of Victoria. Mills, *et al* (2002a) have identified some of the problems and barriers facing SME contractors throughout Victoria. This research also identified some potential policy initiatives and action to attack and alleviate these problems. Results of the past research has been integrated with an economic impact analysis which is occurring in parallel with this project.

A rigorous policy research evaluation will be established to assess the proposed implementation of voluntary CPD in the Victorian construction industry. The identification and creation of agreed and significant industry benchmarks are crucial to evaluating this policy initiative. These benchmarks will serve as independent yardsticks for assessing the impact of the new policy.

Further support for this work comes from another the key stakeholder in this research; the Building Practitioners Board of Victoria (with responsibility for builder registration) who have expressed great interest in ensuring continuing standards of registered builders is maintained at a satisfactory level. The expressed policy aim of maintaining and improving the performance of this important industry sector is impressive, but this research seeks evidence to examine the effect, merits and possible drawbacks merits of the CPD strategy to be adopted in Victoria.

THE NEED FOR CPD

The construction industry is a relatively large employer of labour, either directly as employees, suppliers and subcontractors, or indirectly in the large number of small businesses that make up the sector. These small businesses are found in all areas, metropolitan and regional, forming a vital and significant part of the economy and business activity in some areas, and for these reasons governments take an active interest in the health of the construction industry (DISR, 1999).

Construction activity on all projects, large, medium and small, is moving away from where raw materials are processed on site to one where significant factory based fabrication occurs and the site has become an assembly area where quality control, managerial, logistical and organizational skills are paramount (Love and Sohal, 2002; Georgiou et al, 2002). It is essential that SME construction firms take advantage of these trends to remain competitive and to provide a productive capacity beyond that delivered by employees directly employed. Managerial and trade skills are essential to this process.

Continuing professional development is the learning process that occurs after initial qualifications (or in this case after registration) have been obtained. CPD has been defined by the OECD (1995) as the “educational activities of qualified personnel whose profession require that they update their skills and knowledge.” Therefore, CPD does not relate to the education required to obtain entry to an occupation, instead it is referred to as the “life-long learning process utilised to maintain competence and skill” OECD (1995: 9).

CPD has received an increasing level of interest by professional groups within the industry, but has been less well appreciated by non-professional categories of the workforce. Professional groups understand that to remain relevant to the community they need to update their training. According to Brennan (1990) this is because of significant changes that have occurred in context of the environments in which they operate. Although some professionals have taken formal educational courses such as course-work university degrees, this type of learning process will not address all educational needs. Many skills are best updated by other means and as a result, CPD has developed into a broad range of access and opportunities, which includes everything from seminars and courses to private reading.

Non-professional groups have not appreciated the need for CPD as part of the on-going development of the industry. The argument against mandatory CPD suggests that individuals cannot be forced to learn. If a mandatory CPD policy was to be implemented, many practitioners would attend the minimum number of training courses but would not gain any benefit. According to Brennan (1990) it is important to establish the objectives of CPD in advance of making a decision about its compulsory adoption. This debate in Victoria has been ongoing for a number of years and hence the implementation of CPD at this time, with the intention of introducing it as a mandatory program in the next two years.

Registration of builders and sub-contractors in Victoria has placed more responsibility on the builders, most of whom are SMEs, for defects (Georgiou, et al, 2000). Therefore, the risk of completing the project satisfactorily falls directly on the contractor and their insurers. Failure to maintain quality standards in delivering

projects could result in the removal of indemnity insurance and more importantly, loss of registration, leading to closure of the firm.

Parallel to these issues are the problems faced by SMEs based in regional areas (outside the metropolitan cities) where their access to skills, resources, markets and training is limited. In this case the cost of compliance with mandatory CPD is significantly higher. The authors have researched and published in this area (Mills, et al, 2003). The research showed that although the potential improvement in building quality would be the same for both metropolitan and regional-based building contractors, the cost of attending compulsory CPD in the two groups varies significantly.

The earlier research was a study and analysis of SMEs in construction. It surveyed 500 SME construction companies in Victoria, regional and metropolitan. The section on training showed that CPD training costs were being unequally weighted against small regional-based firms; indicating that the location of the company is a major contributing factor to their ability to meet registration requirements. Regional companies have costs that are approximately four times higher to attend training courses and seminars than similar metropolitan-based firms. Company location is therefore, a limiting factor that impacts on the ability of regional firms to comply with CPD (Smith, et al, 2002). The authors' previous research therefore questioned the notion that increasing registration requirements will improve outcomes for all participants. Instead it leads to an indication that some sections of the industry (particularly firms outside the metropolitan area) may experience significant problems and dis-benefits resulting from undertaking CPD.

The authors will analyse and evaluate the effectiveness of voluntary CPD on the building and construction industry in Victoria using agreed benchmarks. This research will be conducted by a research team working in conjunction with the Building Commission and the Building Practitioners Board of Victoria. CPD will move from a voluntary system to become a compulsory component of registration in Victoria at a future date and will apply to the 17,500 Registered Building Practitioners. This policy will have a significant economic impact on the operation of the construction industry and Victoria is the first jurisdiction in the world to implement such an extensive policy change in this area.

BENCHMARKS

The authors have commenced preliminary research, which will identify appropriate industry and community benchmarks to enable a quantification of the costs and benefits that result from the introduction of this policy. These benchmarks will enable the BC of Victoria to evaluate the effects of the implementation of its policy and contribute to informing the debate about the merits and possible drawbacks of such a policy in the construction industry in Victoria. This research will inform wider and similar policy debates in New South Wales where similar CPD requirements have also been introduced. This will also inform debates in Queensland, Tasmania and New Zealand, where there are plans to introduce similar programs of CPD. All these states are using each other's experience to guide and inform their own policies and forms of implementation.

The research is primarily concerned with determining the impact of CPD on SMEs in construction. The economic impact of policy change has been reviewed by Owen

(1993) who has recommended that any future research methodology should contain both qualitative and quantitative measures of performance. Benchmarks using key performance indicators (KPIs) need to be established and appropriate measures of performance in qualitative and quantitative terms are required. A single approach is unlikely to succeed. This is due to the complex nature of the benefits, costs and some intangibles that are likely to accrue to a range of stakeholders. The benchmarks at the broadest level are likely to be derived from the characteristics of the following:

- financial,
- technical,
- workforce,
- occupational health and safety (OH&S),
- defects,
- disputes,
- training and
- quality control of processes and production factors.

The authors already have experience of many of these factors (Mills, et al, 2002b).

The research will utilise an on-line survey with access to the entire range of registered builders in Victoria that is maintained by the authors in conjunction with the Building Commission. A variety of analyses of the data to identify individual, local, regional, state and national factors in CPD, is expected to be generated by the survey data.

In addition to the quantitative indicators, semi-structured interviews with individual firms of various kinds (regional, metropolitan, large, small and medium size and sub-contractors) to identify their needs in CPD training will be conducted. An important feature of the interviews is the exploration of possible solutions, policies and strategies to the identified problems, such as the use of learning alliances (Love et al., 2000), e-learning capabilities, and whether regional SMEs have different needs and requirements to metropolitan based firms.

Linking SME contractors (especially regional areas) into nationally available programs by the use of information technology is an obvious, but to date an unexplored and innovative approach to improving quality in the construction industry. Such a development opens up a whole range of policy, training and project opportunities for regional SME contractor.

BENEFITS OF CPD

Benefits are believed to accrue to the Victorian community through a more highly skilled and managed SME construction sector, improved quality buildings with fewer defects and greater efficiencies gained by a reduction in industry internal and external operating costs. The BC (2003, p5) have identified the following benefits to RBPs of the CPD scheme:

- safe and high quality buildings and built environments
- improved knowledge, skills and performance standards
- up-to-date with latest building technology, building trends, codes and regulations
- enhanced career opportunities for participants in scheme

- reduced liability exposure to insurance claims
- improved attitude and professionalism
- better service to customers
- improved networking amongst practitioners
- positive and productive attitude to learning
- potential for reducing disputes improved
- better career prospects for participants

CPD REQUIREMENTS FOR BUILDERS

The framework for the CPD scheme has been designed to integrate the present education activities (seminars, training and short courses) into a feasible model of CPD that RBPs find effective, accessible, inexpensive and are aligned with their own and industry requirements.

Generally Builders must accumulate twelve (or fifteen) points of recognized CPD per year where generally, one point is equal to one hour of designated learning categories. The CPD is classified under two group activities where one group involves *structured* learning activities and the second group consists of *interactive* learning activities. The activities normally found in these groups are summarized in Table 1.

CPD commenced in March 2004 as a voluntary program. Further research an analysis will be needed to make progress towards establishing a mandatory program, which will require changes to the Building act 1993. At the time of registration renewal, practitioners will have to show evidence (certificates will be provided by industry associations) of completed CPD following the requirements shown in Table 1. When CPD is legally required at annual registration renewal time, RBPs will have to pay their registration fee, provide evidence of insurance and satisfy the CPD requirements with evidence of their CPD activities.

Table 1: CPD Activities and Requirements

GROUP 1: STRUCTURED LEARNING		GROUP 2: INTERACTIVE LEARNING	
Minimum of 9 points from this group		3 points or more from this group	
TYPICAL ACTIVITIES	Max. Points	TYPICAL ACTIVITIES	Max. Points
• Structured on the job training	No capping	• Meetings	3
• Industry based education	No capping	• Committee representation	3
• Seminars/workshops	No capping	• Discussion groups	3
• Short courses	No capping	• Mentoring	3
• University education	No capping	• Lecturing	3
• Vocational education	No capping	• Publications (subject/trade/technical)	3
• Information sessions	3	• Private/individual studies	3
• Trade sessions	3	• Apprenticeships (supervising)	3
• Conferences	3	• Service to the profession	3
		• Subscription to the Building Code of Australia (BCA)	1
		• Membership of the Industry Association	1

RBPs must accumulate at least a total of 12 points per year under these two group headings

Source: Adapted from Building Commission (2003, p13)

CONCLUSION

The introduction of CPD will address the key problem of raising the educational and managerial skills of a key industry in the economy that has traditionally under-performed when compared to other sectors (Stoekel and Quirke, 1992). However, the most significant characteristic of this joint work between the BC and the authors is that the CPD training needs of SMEs will be specifically measured, reviewed and examined over time. This will be compared to a number of performance indicators that will be monitored overtime. This will be the first opportunity to examine the impact of CPD on a whole industry, and hence gain an understanding as to whether CPD implementation creates a benefit to the building industry and the community.

It is envisaged that this research will form the basis of the policy evaluation and reform in Victoria and possibly in other states. The assessments, evaluation and proposed arrangements and model(s) for improving the industry may have wider interest and application. The data collection process is expected to be robust and flexible enough to be used in other states of Australia, and is expected to have

relevance to other countries who have yet to implement similar approaches to improving building quality. The BC as a major industry partner and the premier source of building policy in Victoria has already identified the proposed research as being highly significant to its development and evaluation of building policy and legislation.

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