



Australian  
Institute of  
Architects

**In Support of the  
Managing Architect**

*Lessons from the Orgill Report*

*Assoc Prof Peter Skinner FRAIA*

## **REPORT BY**

Australian Institute Of Architects  
ABN 72 000 023 012

Queensland Chapter  
70 Merivale Street  
South Brisbane, Q. 4101.

Tel. 07 3109 7320  
Fax. 07 3109 7333

## **PURPOSE**

- This report is prepared as discussion and recommendations from key findings of the Building the Education Revolution Implementation Taskforce, chaired by Mr. Brad Orgill, and published as Interim Report August 2010, First Report December 2010 and Final Report June 2011.

<http://www.bertaskforce.gov.au/pages/publications>

- The reports are analyzed from the viewpoint of the architectural profession with a particular focus on lessons that can be learned regarding the procurement and delivery of building projects.

- The author of this report is the Peter Skinner FRAIA, President of the Queensland Chapter of the Australian Institute of Architects .

Associate Professor Peter Skinner FRAIA  
School of Architecture  
University of Queensland  
Mob. 0421 456 526  
Email [p.skinner@uq.edu.au](mailto:p.skinner@uq.edu.au)

11 November 2011.

## EXECUTIVE SUMMARY

1. Significance of the Orgill Report. The Orgill Report is underpinned by a database of 3,700 concurrent school projects by 22 different authorities. Its findings and conclusions are drawn from visits to 460 schools and detailed value-for-money analyses of 137 built projects. This is a rare and remarkably detailed study of building procurement in all regions.

- **The Orgill report is an independent, authoritative, statistically rigorous study of current building procurement.**

2. Key Conclusions regarding Procurement Methods. The Report concluded only two strategies successfully delivered value for money. Only where the education authority – (a) “leveraged existing capital works capacity to act as an informed buyer”, and /or (b) “empowered school principals and managing architects” was value for money achieved.

- **Successful outcomes were only observed where architects were active managers in (a) public or (b) private sectors.**

3. The Importance of the Architect in the Public Sector. The Report links poor outcomes in NSW and Victorian government projects to a loss of public sector technical skills. Queensland Works’ better performance is attributed to retention of adequate in-house architectural, engineering and construction expertise to act as an informed buyer.

- **Queensland Works delivered superior outcomes because it retained strong technical expertise in-house.**

4. The Managing Architect and Delivery of Value for Money. All Independent Schools, and the majority of Catholic School authorities appointed architects in a managing role. Government authorities appointed architects in managing roles in Tasmania, ACT, WA and (for the initial phase only) in SA.

- **All 15 projects investigated that had Managing Architects were rated as achieving ‘Satisfactory’ value for money.**
- **Not one of 71 projects rated as ‘Fail’ or ‘Marginal’ in terms of value for money had used Managing Architects.**

5. The Managing Architect and Quality of Building Work. The Taskforce noted that building quality in non-government schools was consistently good, or of high quality. The Government Schools where highest quality work was observed were those in WA, ACT and Tasmania. In SA, poor quality was observed only where the architect had been ‘novated’ contractually to the builder during the construction phase. Most published reports of poor quality work were in NSW and Victorian Government projects procured without Managing Architects.

- **All projects examined that used Managing Architects throughout achieved a good, or high, built quality results.**
- **Not one instance of poor building quality was reported where a Managing Architect oversaw the construction.**

6. Observations of Industry-Wide Concern. The Orgill Report identifies four issues of general concern within the broader construction industry relating to (a) documentation technology, (b) private certification, (c) poor workmanship, and (d) project management skills. The report was also critical of poor incorporation of ESD features in School projects (e).

- **The Institute is strongly committed to research and continuing professional development in areas (a) & (e).**
- **We strongly promote the use of Managing Architects to provide professional safeguard in areas (b), (c) & (d).**
- **The reported rise of project managers with generic skills in lieu of technical expertise is a very serious concern.**

7. Recommendations of the Orgill Report. The Report makes five recommendations, including a call to update the 1991 Productivity Commission study on the basis of the observed changes in the industry.

- **We strongly support the call for investigation of adverse productivity results from poor procurement models.**

8. Recommendations by the Queensland Chapter of the Australian Institute of Architects.

**1. Governments should review procedures for the procurement of school buildings and public buildings of similar scale and complexity and consider empowering Managing Architects to improve value for money and built quality**

**2. Governments should commission similar independent studies into value-for-money and building quality outcomes for major building types such as university research buildings that are currently being built using a range of comparable methods, to identify the most efficient and effective procurement methods.**

**3. The Institute should actively promote the role of the Managing Architect and support it through ongoing continuing professional development programs.**

# *In Support of the Managing Architect: lessons from the Orgill Report.*

This paper provides an analysis of key findings from the Final Report of the Building the Education Revolution Implementation Taskforce, chaired by Mr. Brad Orgill. The Final Report in July 2011 followed a First Report in December 2010 and an Interim Report in August 2010. <http://www.bertaskforce.gov.au/pages/publications>

## 1. SIGNIFICANCE OF THE ORGILL REPORT

The BER Implementation Taskforce was formed in response to highly publicized problems associated with the roll-out of the BER economic stimulus package from 2009 to 2011. The Taskforce's primary task was to investigate and resolve complaints, and to assess value for money. In doing so it undertook an immense research task to evaluate the success of the processes employed to procure more than 10,000 educational building projects by 22 separate client authorities across Australia. The Task Force published three detailed reports culminating in the final report in July 2011.

### 1.1 The Australian Institute of Architects' interest in the Report

Although the primary focus of the Task Force was to identify and address problems, the Institute's Queensland Chapter working party does not wish to focus on details of individual cases of problems or successes. Nor are we interested in attributing blame or praise for past actions in the BER process. We are, however, very interested in studying the Task Force reports for what they can tell us more generally about the range of current methods of building procurement.

*We believe that this report provides strong evidence for the important role played by architects working in both public and private sectors to produce good outcomes in building.*

### 1.2 Significance of the Report

The BER IT study is the most detailed empirical research into building procurement methods ever undertaken in Australia. The specific conditions of the BER program have research at a scale that is unprecedented and unlikely to be repeated in our lifetimes. The BER produced 23,675 construction projects in 7,935 schools. The Taskforce's extensive information collection, the BER-CAM database, provides direct comparison of a range of 3,700 equivalent (P21) building types procured by 22 different authorities across all regions of Australia. As all projects were undertaken in the same time frame and within the same economic circumstances they provide the context for comparative research of exceptional statistical validity.

460 schools were visited for detailed study, and 137 of these projects were subjected to detailed value for money (VFM) analysis. These detailed studies were weighted predominantly towards projects that had generated complaints, but also included 19 projects randomly selected to represent a broader cross-section of projects

*The data collected by the BERIT cannot be easily replicated, and provides a valuable comparative study of different building procurement methods currently employed across Australia.*

### 1.3 Independence of the Taskforce

As a professional Institute we are interested in the implications of the BER IT reports from the viewpoint of our members, practicing architects in both public and private sectors. We are also interested in the public benefits that could flow from improvements to the methods of building procurement as the result of such a study. The make-up the Taskforce comprised Chair Mr. Brad Orgill (economist and business consultant from the finance sector), Mr. David Chandler OAM (construction procurement consultant) and Mr. Alex Buchan (property and construction contract consultant). The Industry Advisory Panel to the Taskforce comprised a quantity surveyor, an engineer involved in design construction and project management, a construction lawyer, a public sector leader, a representative of school principals and one architect.

*When considering the report's positive comments on the important role played by architects, it should be noted that there were no architects on the BER Task force and only one architect in a representative industry advisory panel of six.*

#### 1.4 Value for Money Assessment

We are pleased that the Taskforce has assessed quality outcomes against time and cost parameters to evaluate detailed value for money performance in 137 key projects. The measures of quality used in this study (although only 30% of the total assessment weighting) evaluate the delivery of fitness for purpose and compliance with design standards and agreed scope.

*As architects we are well aware of the interdependence between time, cost and quality. We remain strongly critical of procurement methods that seek to control cost and time variables by sacrificing quality. It is clear from the methodology of the value for money analysis that the identified loss of quality is not trivial or superficial, but the most fundamental issues of failure to deliver buildings fit for purpose complying with agreed scope and standards.*

#### 1.5 BER-CAM Database

The BER-CAM database analyses delivery costs per square metre for 3,700 P21 hall, library and classroom projects across Australia. The delivery rates are weighted for the number of projects undertaken by each provider and for regional factors. In the analysis of this data the average size of projects, and speed of implementation were also discussed as further factors influencing cost per square metre. After due allowance for these variables the Taskforce was able to make strong and precise conclusions on unit costs by education agency, and hence by procurement method.

*We are pleased to accept the database as a thorough and representative snapshot of contemporary school building procurement methods, and commend the Taskforce's careful method of analysis of these data.*

## 2. CONCLUSIONS OF THE REPORT

The Taskforce's analysis identifies only two successful procurement strategies that achieved value for money:

"In examining approaches to implementation and the impact of attaining value for money the task force concludes that critical to success was that the education authority; either

- leveraged existing capital works capacity to act as an informed buyer, and /or
- empowered school principals and managing architects."

The conclusion is clear. Where authorities did not have sufficient capacity and expertise in-house, value for money was only successfully achieved when architects were empowered as consultants to manage the process.

*We are gratified, but not surprised, that such an exhaustive study has identified that the engagement and empowerment of a managing architect was critical in delivering value for money in all cases except those where the client body retained adequate capacity to act as an informed buyer.*

## 3. THE ROLE OF THE ARCHITECT AS AN INFORMED BUYER

The first path to successful building delivery that the Task Force identifies is that of existing public works authorities that have retained the capacity to act as an informed client. The report expresses the view that both Victorian and NSW public education organizations did not demonstrate this capacity. The Taskforce discusses a sector-wide loss of technical capacity due to policies of outsourcing design and construction work and the ascendancy of generic 'project managers' at the cost of professionally accredited architects and engineers. Queensland Public Works is identified as the exception among the larger government authorities as it retained greater in-house expertise of architectural, engineering and construction skills.

The Report makes clear that state government authorities need to retain an adequate in-house capacity of professional architectural and engineering skills. There is a clear implication that excessive outsourcing of professional services has led to technically de-skilled client authorities unable to effectively manage processes dominated by large external contractors.

*The Institute strongly supports the argument for retention of skilled and experienced professionals including architects through the development of strong architectural career progression opportunities within the public sector.*

#### 4. THE ROLE OF THE MANAGING ARCHITECT IN DELIVERING VALUE FOR MONEY

The Taskforce identifies the critical role of the managing architect in delivering value for money for client authorities and in attaining high quality built results. The Executive Summary of the final Orgill report notes that the independent schools, the majority of Catholic authorities (notably excluding Sydney and Woolloongong Dioceses) and Tasmanian, ACT, WA and SA governments all positioned architects in a managing role. It is noted that the SA architects were 'novated' to builders after definition of project scope.

##### 4.1 Evaluation of Value for Money

In the value for money reviews conducted by the Taskforce projects were awarded Pass, Marginal or Fail grades. The majority of the projects examined were selected as a result of complaints. On analysis managing architects were not involved in any of the 40 projects receiving Fail grades or the 31 projects rated Marginal. The projects that were rated lower than Pass were predominantly in NSW (54) and Victorian (11) government schools, together with four Queensland government schools, one NT government school, and one Sydney Catholic School. By comparison, all 15 projects examined that had managing architects received Pass grades.

*The Institute of Architects is very pleased to see such a clearly expressed statement of the importance of employing architects as managers of the procurement process, based on analysis of the BER outcomes.*

*It seems self-evident that users are likely to best served if they are consulted in discussions of their needs with the building designer. Buildings are much more likely to be well sited if there is a pre-existing Master Plan, or where the siting is discussed directly by the designer with user groups. Building designers with prior experience with the school community and knowledge of the nature of the local building industry are most likely to choose locally economical construction methods. In all of these cases, we would argue strongly that registered architects are the profession with the best educational training, experience, accreditation and professional responsibility for the design and documentation of project-specific buildings.*

*We are gratified, but not surprised, that the Taskforce's analysis strongly demonstrates evidence of value for money outcomes associated with appointment of an architect as leader in the procurement process*

#### 5. ROLE OF THE MANAGING ARCHITECT IN DELIVERING BUILT QUALITY

In terms of the standard of building work the Taskforce noted that the quality in non-government schools was consistently good or of high quality, and that the government schools where the highest quality work was observed were in WA, ACT and Tasmania. This again is an almost perfect match with those authorities that employed managing architects, with the single exception of SA, where, as noted above, the architect was 'novated' to the builder during the construction phase. Again most of the reported cases of poor quality outcomes occurred in NSW and Victoria where managing architects were not involved.

Victoria and Western Australian governments both utilized template designs with quite different outcomes. Good value for money and good quality outcomes in Western Australia can be seen to reflect the important role played by the employment architects in client briefing, building siting and material specification.

*Unlike other potential managers of the construction project, architects have a direct interest in ensuring that designed quality is not sacrificed during the construction processes, and that the users' needs are met. Even when not engaged to deliver bespoke designs, the managing architect can play a key role in delivering value and quality. Other possible managers of the procurement and construction delivery process may not fully value the importance of design decisions that ensure long-term building durability, environmental performance and satisfaction of user needs. An architectural firm's reputation will be closely associated with the final success of the project, in a direct manner not shared by a contractor or project manager.*

*We are gratified, but not surprised, that the taskforce's analysis so strongly demonstrates evidence of positive built quality outcomes associated with appointment of an architect as leader in the procurement process.*

## 6. OBSERVATIONS OF INDUSTRY-WIDE ISSUES

The Executive Summary of the Final Report includes observations of systemic weaknesses within the construction industry:

“The Task force has observed a number of construction industry wide issues. These include:

- inadequate use of technology to deliver coordinated project design documentation;
- the potential for conflict of interest of private certification if aligned to the delivery managing organization;
- substandard workmanship which may be the result of low completion rates of trade apprenticeships; and
- a trend to generic skills for project managers rather than technical qualifications backed by significant hands on construction experience.”

A further general comment is that:

“The Taskforce has been disappointed with the inadequate incorporation of environmentally sustainable design (ESD) features in school projects.’

### 6.1 Coordinated Project Documentation Technologies

Issues associated with Documentation, Building Information Modeling, Integrated Project Delivery and Quality Assurance procedures are central to the contemporary practice of architecture. The architectural profession is aware of the importance of changing project documentation methods including the introduction of building information modeling to integrated project delivery.

*Our Institute is active in the development and implementation of best practice documentation protocols, and this is a major focus area of our continuing professional development program. It is recognized that to more actively secure the role of Managing Architect, that an ongoing development of contract documentation and administration skills is needed.*

### 6.2 Private Certification

The report observed instances of failures and poor practice and questions potential conflicts in the performance of Private Certification when the Certifier was employed directly by the Contractor.

*In Architecturally managed procurement processes, Private Certifiers retain an appropriately independent role. Architects also have professional training and expertise in the application of the Building Code and related regulations, enabling an informed oversight of certification.*

### 6.3. Deskilling in the Construction Industry

The Report is critical of a general technical loss of skill in the construction sector. It reports a trend towards poor on-site construction skills attributed to a failing apprenticeship completion rates.

*The Institute is well aware of the dangers posed by low skill standards on site. These can be exacerbated by shortcomings in construction management and certification. These issues provide further reasons to strongly advocate*

*the employment of architects as technically educated, experienced, accredited and responsible managers of the building delivery process.*

#### 6.4. The Reported Trend to Generic Project Management

The Taskforce is critical of 'generic' project management skills and 'project managers' who may have little or no technical training or experience.

*The Institute of Architects is particularly concerned that individuals offering 'project management' skills may have limited design understanding, technical experience or professional accreditation and accept limited responsibility for the consequences of their actions. Anecdotally, there appears to be a growing class of adversarial 'managers' whose combative techniques can prove counterproductive to the project's on-site progress.*

*From the experience of our members, it can be argued that the insertion of this additional layer of generic 'management' may frustrate overall productivity and increase costs in the industry.*

#### 6.5. Poor ESD Outcomes

Successful environmental performance of a building is dependent on a clear ESD strategy and the integrated performance of all aspects of the design from initial siting, orientation and building material selection to subsequent operational and maintenance procedures. The Taskforce's expressed dismay at the poor quality of built outcomes is not surprising in reported instances where 'de-scoping' or deletion of key elements is reportedly undertaken without due consideration of the consequential effects on environmental performance.

*As a profession we are very aware of the deleterious consequences of ad hoc substitutions or deletions undertaken without a holistic understanding of environmental design consequences. We share the Taskforce's disappointment with the observed poor integration of ESD features, and see this as another strong argument for the role of a Managing Architect. Through our accreditation of education programs, training for professional registration, continuing professional development and awards program the Institute maintains a strong commitment to research, knowledge and application of ESD principles.*

## 7. RECOMMENDATIONS OF THE ORGILL REPORT

The Final Report made five recommendations to do with winding up the BER process (1), setting annual energy use standards (2), developing a national policy on air-conditioning (3), updating the 1991 Productivity Commission report on the Construction Industry (4) and reviewing the integrity of private certification (5).

### 7.1 Endorsement of Recommendations

*The Institute's Queensland chapter endorses the final Orgill recommendations and would be pleased to assist in their implementation, particularly in the development of standards for higher ESD performance (2 & 3) and processes of improving certification standards (5).*

### 7.2. Updating of Productivity Commission's report on the Construction Industry (Recommendation 4).

The report notes significant differences in its assessment of key issues that have the potential to affect overall productivity in the industry, compared to the issues identified by the Productivity Commission Report in 1991.

At that time, key issues were industrial relations, planning consents, Australian participation and project management. It is significant that the Orgill Report did not find contemporary evidence of adverse impacts of the first three of these, but instead drew attention to current issues of poor workmanship, public works capacity and the nature of private certification. It is equally significant that the Taskforce continues to see significant deficiencies in project management twenty years after the first report.

*It is of great significance that the Taskforce has recommended that the Productivity Commission should update its work on obstacles to productivity in the construction industry. The Queensland Chapter shares the Taskforce's concerns and*



would strongly support further research into the presumed but untested advantages that are used to justify existing Managing Contractor procurement methods. The Taskforce's clear identification of the success of the Managing Architect model in delivering value for money should call into question other existing practices that by inference are seen to deliver lesser value for money. Continued use of economically inefficient procurement methods would have adverse consequences for productivity in the construction industry.

## 8. RECOMMENDATIONS BY THE QLD CHAPTER OF THE AUSTRALIAN INSTITUTE OF ARCHITECTS.

The Queensland Chapter of the Australian Institute of Architects commends the BER Implementation Taskforce for undertaking a far-reaching and thorough study into the processes of procuring school buildings under the BER stimulus package. In our view, the evidence of this study explodes many of the currently prevailing arguments for design and construct and managing contractor procurement methods currently widely employed by public authorities and major institutions throughout Australia.

The study provides compelling evidence of the significant advantages of the Managing Architect model in achieving value for money outcomes - fitness for purpose, delivery of agreed standards and scope of works - and delivering built work of good and high standard workmanship. By comparison the NSW and Victorian BER outcomes provide salutary evidence of the risks of ineffectiveness and lack of competitive pressures in the managing contractor model. In our view, the findings of the Orgill Reports into the provision of school building projects are so conclusive that they should inform all future consideration of procurement of these buildings and projects of similar scale and complexity across all regions.

The P21 projects examined were relatively simple hall, library and classroom building types up to \$2.5 million. Policies for the procurement of other comparable building types for housing, health, justice, community services, aged care, childcare and state and local government purposes should also be reconsidered as a result of the findings of the Orgill Report.

### Recommendation 1.

**Governments should review procedures for the procurement of school buildings and public projects of similar scale and complexity and consider empowering Managing Architects to improve value for money and quality.**

We would also argue, given the findings of the Taskforce that similar comparative studies of value for money and building quality should be carried out for much more substantial construction projects procured under differing methods. In Queensland currently there are under construction a number of significant projects for the delivery of major Research and Higher Education Institutions and Health facilities being delivered by both Managing Architect and Managing Contractor models. Anecdotal advice from our members leads us to believe that comparative analyses of these two procurement processes may again demonstrate the value of entrusting the management of the process to professional architects. We can hypothesize that many of the benefits found in the BER study could equally translate to larger projects. Given the significant scale of these projects, we believe a similar detailed independent assessment of this proposition would be prudent to establish a sound evidence-based policy for Major Project procurement.

### Recommendation 2.

**In the interests of improved competitiveness in the construction sector, governments should be encouraged to commission similar independent studies into value-for-money and building quality outcomes for major building types such as university research buildings, which are currently being procured through a range of comparable methods, to identify the most efficient and cost-effective procurement methods.**

As a professional body, the Australian Institute of Architects should seek to capitalize on the benefits identified in the Managing Architect model of project delivery, and seek to fill deficiencies identified within the project management field. The Institute should be pro-active with regard to the opportunities for our profession to argue for a more prominent role in the procurement process, and respond positively to observed short comings in the use of technology in design in order to achieve more efficient productivity across the industry as a whole.

Recommendation 3.

**The architectural profession should study the findings of the Orgill Report in order to better promote the role of the Managing Architect. Architects' design expertise, technical knowledge and professionalism equip us well to serve an empowered client and deliver value for money and quality outcomes. The Institute should ensure through continuing professional development programs that we build on the skills to deliver improved value and productivity in the face of the rising input and operational costs.**

The Queensland Chapter of the Australian Institute of Architects stands ready to articulate or enlarge on these comments in any forum, or to assist Government or other authorities to develop implement any policy changes that may flow from this analysis.

---