

# The development of benchmarking policies and practices in education

This article examines benchmarking policies and practices in education from the 1990s until today. A brief definition of benchmarking, as defined by experts in the commercial sector, provides a context for an examination of such evaluative work in educational settings. Following this definition, the article investigates the uses of benchmarking in international and domestic higher education settings, in order to set the scene for an assessment of benchmarking practices and policy in Australian compulsory education settings. In conclusion, the article endeavours to draw together the learning from established benchmarking practices in education in order to support aspirations for the future.

## Introduction

Benchmarking has become a catchcry of industry in recent years, as businesses face growing competition in a rapidly evolving market. In order to be competitive in an ever-changing economy, companies have been seeking ways and means to improve for the purpose of greater efficiency and larger profits. Benchmarking is seen by many sectors as a means to achieve the change necessary to remain competitive and profitable.

In recent years, the education sector has also come to realise the potential of such activity. As education has become increasingly globalised, learners are finding they have more choices about where and how they learn. The result of this has been twofold: educational institutions need to improve in order to be competitive with their contemporaries, and a growing public demand for transparency and accountability (MCEETYA 2008a) has meant that benchmarking practices are needed for the reporting of standards and outcomes across the educational sector.

Benchmarking originated in the private sector, and was first defined by Robert Camp of Xerox (1993). Camp argues that benchmarking is a direction-setting exercise and nothing more than a quality tool to include in a company's improvement processes. He defines it as 'the continuous process of measuring our products, services and practices against those of our toughest competitors or companies renowned as leaders' (Camp 1993, pp. 23–24). Many authors have since added to this definition (Allen 1993; Anand & Kodali 2008; Cole 2009; Epper 1999) and a comparison of definitions highlights several key components of effective benchmarking, including:

- continuous, ongoing improvement cycles
- a focus on self-improvement
- recognition of best practice
- comparison between current organisational practice and best practice
- internal and/or external comparison

**Betina Przybylak**



*Betina Przybylak is completing a Doctorate of Education at the University of Melbourne, and is an Associate Lecturer in Educational Studies at La Trobe University.*

*Email <B.Przybylak@latrobe.edu.au>.*

- understanding of what makes best practice the best
- striving to surpass expectations.

While the above authors have argued that it is the balanced combination of these factors that contribute to effective benchmarking processes, the following review demonstrates that it is rare to find them being used effectively in the education sector.

### Benchmarking in education

Jackson (2001) attributes the first educational use of the term 'benchmark' to RK Melton, who as a student physician was cited in the 1957 *New Oxford English Dictionary* as stating: 'Standards represent benchmarks with which students compare their ability and performance' (Jackson 2001, p. 218). However, Jackson (2001) and Epper (1999) both attribute the first uses of a benchmarking process in education to the United States higher education system in the early 1990s, with Australia and the United Kingdom following closely behind in the mid-1990s. Links to benchmarking in compulsory education have been evident since the late 1990s in Australia, with the later development of National Benchmarks and the 2008 establishment of NAPLAN assessment to evaluate student progress against agreed standards (VCAA 2008).

It should be noted that while benchmarking in the commercial sector is well documented, the same could not be said of the education sector. While there is some evidence of systematic benchmarking within both compulsory and post-compulsory education, the general trend of reporting appears to be sporadic at best. Thus, the remainder of this review attempts to provide a summation of what can be found in the literature about links between benchmarking and education, both in Australia and overseas.

### Benchmarking in higher education

#### The United States of America

While Jackson (2001) and Epper (1999) have both identified the United States (US) as the initial user of benchmarking in higher education, Epper (1999, p. 25) acknowledges that: 'a relatively small number of higher education institutions committed themselves to full-scale benchmarking efforts in the early to mid-1990s'. She highlights a study conducted by the National Association of College and University Business Officers (NACUBO) in 1992 in which 600 benchmarks of administrative functions and processes were developed, but emphasises that the creation of benchmarks is not in and of itself a benchmarking exercise. She goes on to list a number of benchmarking projects conducted in the US, but does not provide further detail.

In a chapter on higher education benchmarking in the US and Canada, Farquhar (1998) corroborates Epper's claims, indicating a difficulty in finding source information, but does identify NACUBO as being the predominant benchmarking

agent for US universities. Concurring with Epper, he argues that its development of 600 benchmarks of higher education functions 'does not necessarily result in benchmarking' (Farquhar 1998, p. 36), but rather provides information for benchmarks that can be utilised in a variety of ways.

A further review of the literature produces few testimonies on the success or failure of higher education benchmarking endeavours. Farquhar (1998, p. 32) confirms that although North America is the birthplace of benchmarking, 'its application to higher education in the US and Canada is of more recent vintage and has generated only a few publications so far'. He goes further to report that, at the time, many US higher education institutions underwent quality improvement programs that either did not report results or did not adhere to benchmarking as it has been defined in this review. Meanwhile, a benchmarking study conducted in 1999 by the Council for Adult and Experiential Learning (CAEL) supported this notion again, noting that despite nearly 45 per cent of American companies taking up benchmarking, the technique was 'barely addressed in the higher education literature' (CAEL 1999, p. 3).

In her article 'Applying Benchmarking to Higher Education: Some Lessons From Experience', Epper provides a possible reason for the lack of research into American higher education benchmarking, arguing that 'in many ways, and perhaps without realizing it, colleges and universities have always engaged in benchmarking' (Epper 1999, p. 24). Epper justifies this assertion, noting that universities have for a long time: compared themselves with contemporary institutions to improve practice; been ranked nationally against their peers; and participated in ongoing knowledge sharing; all of which lend themselves well to benchmarking processes. CAEL appears to support Epper's claim, noting that benchmarking is better suited to universities than other quality management processes because the key benchmarking elements of research, inquiry and analysis are part of the everyday practice of academics (CAEL 1999, p. 3). Therefore, perhaps the very nature of universities means that they do not report on benchmarking because they do it without thinking.

Farquhar proposes an alternative reason for the apparent lack of writing in the field of higher education benchmarking in the US. He observes that many institutions undertake benchmarking independently of larger projects (Farquhar 1998, p. 38), and theorises that many of these institutions undertake functional benchmarking processes without reporting their findings to the wider educational community. Farquhar (1998, p. 40) goes on to declare that 'it is apparent that leaders of higher education institutions in the US are far from exploiting the benefits of benchmarking to the extent that their counterparts in American business, healthcare, and government have'.

In response to the issues of sporadic use and reporting of benchmarking practices in US higher

education, in 1996 the American Productivity and Quality Center (APQC) established the Institute for Education Best Practices. The Institute's aim was 'to encourage and assist education institutions in benchmarking not just with other education institutions, but also with business, healthcare and government' (Farquhar 1998, p. 40). The success of initial studies undertaken by APQC resulted in the creation of an online 'Knowledge Base of Education Best Practices' and the development of a 'Facilitators' Network' to support members of the Institute. In concluding his chapter on benchmarking practices in US higher education, Farquhar predicts an improvement in the consistency of benchmarking practices in American universities.

### Other perspectives

Based on the prediction of Farquhar, one could anticipate an influx of American higher education benchmarking literature in the time since his chapter was published, but this does not seem to be the case. While American studies have been conducted in the meantime, it appears that more instrumental changes in the field have occurred in the United Kingdom and Australia. As government and public pressure have encouraged universities in these countries to implement efficient, cost-effective and transparent practices in order to remain competitive (Ellis & Moore 2006; Hudson 2007; Jackson 2001; Jackson et al. 2000), the body of work in higher education benchmarking has tended to originate in these two countries.

### The United Kingdom

In the United Kingdom, benchmarking in higher education began in the early to mid-1990s as a means to manage university services (Jackson 2001). Jackson reports that libraries in tertiary institutions were among the first to use benchmarking in improvement practices, with the Royal Military College of Science Library at Cranfield University being the first to launch a collaborative benchmarking project in 1993 (Jackson 2001, p. 222). The project involved 20 other higher education institutions and used survey data and site visits to evaluate such elements as stock availability, staff training, user experience and the learning environment. Benchmarking data were used to rank participating libraries, which then used the report of findings to improve their internal processes. Jackson's report did not include information on how the benchmarking reports were used in libraries, but this competitive benchmarking process would have informed each library's understanding of their own organisational practices and could have been used as the starting point for generic benchmarking procedures.

In a chapter on benchmarking in United Kingdom universities, Lund (1998, p. 66) asserts that:

Benchmarking as a quality tool in United Kingdom higher education came to the forefront in July 1997 when the *Report of the National Committee of Inquiry into Higher Education* (the Dearing Committee) included the suggestion that the early work of the newly established Quality Assurance Agency should include work with institutions to establish small expert teams to provide benchmark information on standards, in particular threshold standards, operating within the framework of qualifications, and completing the task by 2000.

This statement is supported by various other authors (Jackson 2000; Jackson et al. 2001; Yorke 2002), who claim that the release of the *Report of the National Committee of Inquiry into Higher Education* (the Dearing Report) instigated new, more formalised benchmarking practices in United Kingdom higher education.

Lund, however, suggests that while this event was a turning point for United Kingdom higher education, it was not the beginning of the change process within the country. Lund (1998, p. 66) contends that rather than being a point of complete innovation for United Kingdom higher education, the Dearing Report could be perceived to be:

the culmination of a series of policies which aimed, from the mid-1980s, in a contest of increased financial constraint and demands for greater accountability, to encourage UK institutions to measure their own achievements against agreed performance indicators.

Similar to Australia (Ellis & Moore 2006; Hudson 2007), the United Kingdom has seen an ever-increasing number of students participating in post-compulsory schooling; the end result being that higher education has become increasingly linked with employment and the economy (Yorke 2002, p. 165). At the same time, the public has become increasingly aware of their educational needs and are pushing governments for higher outcomes and greater accountability and transparency from tertiary institutions. The result is that since the mid-1980s, universities in the United Kingdom have been working towards better practices and higher accountability, with the release of the Dearing Report being yet another step in this process.

What makes the Dearing Report stand out in a period of ongoing change for United Kingdom higher education, are the actions taken to address its recommendations since it came into being. The role of universities in the economy and wider international stage was formally recognised in 1999 when the Education Ministers of all European Union countries signed the 'Bologna Declaration', which agreed to the adoption of a 'system of easily readable and comparable degrees' as a key contributor to the economic development of the European Union (Yorke 2002, p. 169). The signing of this agreement placed greater emphasis on the

findings of the Dearing Report and highlighted further the need to formalise benchmarking practices within United Kingdom higher education.

At a similar time, the Quality Assurance Agency (QAA) was set up to ‘encourage HE institutions to show how their standards ... are related to what subject communities or other bodies that influence standards believe such standards should contain’ (Jackson et al. 2000, p. 190), with benchmarking being seen as a way to reach this objective. During the period from 1997 to 2000, QAA worked with benchmarking groups to create subject benchmarks. Benchmarking groups were typically made up of 12 to 15 representatives from within the wider academic subject community. These drew support from larger advisory bodies and practitioner networks (Jackson et al. 2000, p. 191). These benchmarking groups were given the responsibility of creating statements that could represent the general expectations of a subject at a given level, in order to provide the academic community with the means to describe activities and programs within a given subject (Yorke 2002, p. 155). This was meant in turn, to inform the development of subject standards within institutions.

It was also intended that these benchmarks would ‘represent general expectations about the standards for the award of qualifications at a given level and articulate the attributes and capabilities that those possessing such qualifications should be able to demonstrate’ (Yorke 2002, p. 155). In other words, it was hoped that the QAA subject benchmarks would help universities to demonstrate the key skills and abilities that students completing a particular degree should embody, thereby making the employability of graduating students more obvious to prospective employers. The creation of an easily identified, employable workforce was in the best interests of Britain’s government, and therefore, British universities. The link between the Dearing Report, QAA subject benchmarks and the ongoing development of the United Kingdom’s economy can be seen in these intended outcomes, as the government works to support universities in their ongoing development of cost-effective, transparent practices.

### **The United Kingdom and subject benchmarks**

In 2000, 22 university subject benchmark statements were released, along with a raft of hopes and expectations. In his article ‘Growing Knowledge About QAA Subject Benchmarking’, Jackson (2002) discusses the elements that academics need to consider in order to develop subject standards that adhere to the QAA’s subject benchmarks. He attests that it is neither desirable nor possible to achieve uniform standards across the whole higher education system, but rather places the onus back on the academics responsible for teaching programs to develop the depth of required outcomes and expectations (Jackson 2002, p. 140). Both

Yorke (2002) and Jackson (2002) emphasise the importance of developing meaningful standards that are appropriate to the context of a subject within a given institution.

It is important to note at this point, that the process of turning subject benchmarks into standards does not equate to a benchmarking process, but once this initial phase is complete, the use of subject standards could inform benchmarking practices. Jackson provides some insight into the benchmarking applications of the standards developed from QAA subject benchmarks, highlighting their potential application in both competitive and internal benchmarking processes. With regard to competitive benchmarking, Jackson suggests using subject benchmarks as a prompt for peer review of similar subjects across institutions, while also encouraging their use internally as a part of subject reviews and evaluations of teaching and learning (2002, p. 140). While these applications seem appropriate, no evidence of their implementation has been uncovered within the literature.

Meanwhile, in his chapter ‘Benchmarking: an Overview of Approaches and Issues in Implementation’ Schofield discusses issues of benchmarking related to higher education. He suggests (1998a, p. 16) that:

If the dangers of misleading one-off snapshots are to be avoided, it follows that benchmarking should be used in order to enable an institution to set targets for the continuous improvement over time of its performance to achieve best practice.

The release of the QAA subject benchmarks in 2000 provided the United Kingdom higher education system with an ideal opportunity to put Schofield’s recommendation into practice. A systematic search of the literature has found that while QAA subject benchmarks continue to be developed (Jackson 2002; QAA 2010), further evidence of the results of the initiative in regard to their use in institutional benchmarking has not been found. This begs the question: Did the Dearing Report achieve its objectives or is this an ongoing process yet to be vindicated through appropriate research and evaluation?

### **Australia**

Over the past 30 years, the prominence of benchmarking in the Australian post-compulsory education sector has grown in line with decreased funding and increased quality assessment measures being enforced by government (Massaro 1998, p. 50; Weeks 2000). Following similar patterns to those discussed in the US and the United Kingdom, authors who have researched the field prior to 2000 have noted an apparent lack of literature reporting the outcomes of benchmarking practices (Massaro 1998). Those who were able to find evidence of benchmarking in Australian higher education prior

to 2000, tended to report that the benchmarking practices discussed were often process or facilities driven, with a focus on improving cost efficiencies (Henderson-Smart et al. 2006).

In 1998, Massaro provided supporting evidence of this, reporting that the majority of benchmarking in Australian institutions had been conducted by the universities themselves or by consulting firms engaged by universities to assist in the improvement of management practices (Massaro 1998, p. 51). At this time, benchmarking had not been taken on by funding bodies and, as a result, those that did conduct benchmarking exercises did it voluntarily, with their own funds. He hinted at a sporadic and haphazard approach to benchmarking that was not clearly defined or consistent from one institution to another, which may explain the lack of reporting of benchmarking results prior to 2000. Furthermore, he noted that in those benchmarking practices for which he could find evidence, there was little use of benchmarks upon which to derive conclusions or make recommendations for future change.

In their article 'Benchmarking Learning and Teaching: Developing a Model', Henderson-Smart et al. (2006) highlight the 1998 release of *Benchmarking in Higher Education: An International Review* by the Commonwealth Higher Education Management Service (CHEMS), as an early benchmarking report that included analysis of Australian institutions (Henderson-Smart et al. 2006, p. 146). While this report provided clear discussion of successful benchmarking endeavours (both in Australian and international higher education institutions), it focused on the managerial aspects of the university system. It described standards and cost-efficient practices, much like the projects outlined by Massaro and did not provide insights into the wider application of benchmarking to improve student learning (Schofield 1998b).

In 2000, something of a shift can be found in the activities related to, and the reporting of, benchmarking in Australian higher education. Following in the footsteps of the American Productivity and Quality Center's (APQC) creation in 1996 and the United Kingdom's Quality Assurance Agency (QAA) initiation in 1999, the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) established the Australian Universities Quality Agency in March of 2000 (AUQA 2010). Operating independently of governments and the higher education sector, the Australian Universities' Quality Agency or AUQA is:

the principal national quality assurance agency in higher education with the responsibility of providing public assurance of the quality assurance of Australia's universities and other institutions of higher education, and assisting in enhancing the academic quality of these institutions. (AUQA 2010)

While it is clear that the Australian Government was responding to international and domestic trends

in higher education when it set up AUQA, Australia has taken a unique approach to developing AUQA's goals and priorities. Where both APQC and QAA have created very narrow objectives that relate specifically to benchmarking and benchmarks consecutively, AUQA has developed a mission that relates to accountability, quality assurance, enhancing the academic quality of institutions and assisting institutions in undertaking this process. It appears that in developing its mission, AUQA has tried to address the needs of all stakeholders in order to ensure that all parties involved in higher education in Australia are aware of their responsibilities and where they will be held accountable.

From its key mission statement, it could be argued that AUQA operates from a perspective that focuses solely on accountability and value for money (Henderson-Smart et al. 2006). A cursory review of the objectives listed on the AUQA website might also suggest this, with the main priority being to 'arrange and manage a system of periodic audits' (AUQA 2010) of academic institutions and accreditation authorities, with public reporting of results following these audits. However, upon closer inspection it becomes apparent that the focus of auditing practices has been on evaluating the quality of academic activities and on ensuring that the policies and procedures universities and accreditation authorities put in place, work to maintain and elevate the quality of academic activities. Reporting to the public is complementary to these endeavours and ensures that both taxpayers and wider educational communities have access to the same information.

Furthermore, Henderson-Smart, et al. (2006, p. 145) have acknowledged the change that AUQA has instigated, noting that: 'Australian universities are required to determine what quality is and to have ultimate responsibility of what they do'. This comment would suggest that Australian universities have autonomy in choosing how they interpret directives while also adhering to the fact that standards must be reached. While this autonomy allows for freedom of innovation and creativity, Australian higher education institutions may suffer from a lack of direction when interpreting AUQA's expectations, without the development of guidelines or benchmarks to guide them.

In a 2007 analysis of Australian higher education benchmarking audits conducted by the AUQA, Stella and Woodhouse provide some explanation of how higher education institutions can facilitate their own development. They refer to 'external reference points' that institutions either must or choose to comply with, such as the definition of a university outlined in the National Protocols for Higher Education Approval Processes (the 'National Protocols'), internal legislation and guidelines provided by Universities Australia (Stella & Woodhouse 2007, p. 5). The National Protocols were adopted by MCEETYA in March 2000 in conjunction with the establishment of AUQA, and

are a regularly reviewed set of criteria that higher education institutions *must* meet to assure the public of their standing in both the domestic and international sectors (MCEECDYA 2009).

In reporting the findings of its auditing processes, AUQA does not make comparisons between institutions explicit, but rather asks them to ‘make and use well-chosen and well-structured comparisons with other relevant institutions and organisations’ (Stella & Woodhouse 2007, p. 5), indicating an expectation that universities would employ either competitive or functional benchmarking practices (Camp 1993; Evans 1994) as a part of this process.

While auditing universities, AUQA asks them whether they undertake these comparative processes. Stella and Woodhouse (2007) note that universities interpret the term ‘benchmarking’ in a wide range of ways. Some institutions perceive benchmarking to be a comparison of public data, while others undertake well-planned and carefully thought out data collection and use, or look at how well they perform in relation to their counterparts (Stella & Woodhouse 2007, p. 5). The latter authors also explain that in the adoption of benchmarking techniques, Australian higher education institutions tend to display ‘more commitment than achievement’. While many have made concerted efforts to describe benchmarking in the evaluation context, and others have attempted to define benchmarking processes within the context of their own institutions, Stella and Woodhouse (2007, p. 6) assert that ‘many of these efforts are aspirational, ad hoc and very new’. Auditing processes have not yet revealed the reasoning behind institutional benchmarking practices.

These assertions made by Stella and Woodhouse would appear to correspond with the benchmarking trends and practices already evident in Australia, the US and the United Kingdom prior to 2000, and provide the clearest picture yet of the benchmarking environment in higher education since the establishment of governing bodies such as APQC, QAA and AUQA. This would appear to indicate that such bodies need to undertake one or both of two measures: first, to define benchmarking in the context of their expectations; and second, to provide further support and resources in the implementation and reporting of such endeavours in order to contribute more effectively to the wider educational community.

### **Putting higher education benchmarking in context**

While the term ‘benchmarking’ is used widely in the higher education sector to describe evaluation and quality management techniques, it is a term that is not widely understood by those that use it. Confusion in terms and in application have prevented many people in the higher education sector from implementing any effective benchmarking practices that go beyond a cursory

comparison of services and facilities. While the US, the United Kingdom and Australia have all made attempts to implement benchmarking practices that evaluate the quality of teaching and learning programs within their higher education systems, none have been able to implement and report on such practices consistently in order to contribute to the growing knowledge of the education community.

In highlighting that the US, United Kingdom or Australia have not achieved this goal, it must be noted that Australia’s approach to monitoring, mapping and reporting on higher education activities and quality assurance processes has the potential to provide the most appropriate avenue for further growth. The efforts of AUQA to audit and record the practices of universities across Australia is an ongoing and cyclic benchmarking process that uncovers best practice within Australian higher education, following many of the elements of benchmarking outlined at the beginning of this article. With access to the findings of AUQA, and, in turn, exposure to a widening use and understanding of effective benchmarking practices, it stands to reason that the Australian higher education sector is in a strong place to move forward successfully with benchmarking practices.

### **Benchmarking in compulsory education**

During the last three decades, the compulsory education system encompassing primary and secondary education in Australia has undergone many transformations similar to those of their higher education counterparts. Operating within the same federal system and under the same Ministerial bodies as higher education, the compulsory education sector has also been placed under many of the same pressures as the higher education sector. Some of these pressures have led to the same drive for increased accountability and transparency, as well as a demand for improved learner outcomes and quality standards.

The final stages of this review examine the policy and practices of benchmarking in the Australian compulsory education sector over the past 20 years. It aims to draw connections between the sectors where appropriate and make observations about the ongoing implications of benchmarking policy and practices.

One of the key characteristics of Australian compulsory education in the 1990s was the adoption of outcomes-based education or OBE (Donnelly et al. 2005). Developed as an element of the National Curriculum Standards and Profiles by Curriculum Corporation in 1994 (Alderson & Martin 2007), OBE is a student-centred learning philosophy which moves away from traditional practices that focus on the teacher imparting knowledge to students. A system adopted by several Western countries (including the USA and the United Kingdom), OBE is an approach of teaching focusing on outcomes and works to create and

implement learning experiences that allow students to demonstrate what they know and are able to do (Alderson & Martin 2007; Malan 2000).

While the National Curriculum Standards and Profiles were not a nationally prescribed curriculum, they were described by Collins (1995, p. 12) as a:

collaborative effort to build a common frame for the entire school curriculum at a national level through the development of an agreed vocabulary, agreed key learning areas each defined by a statement, and an agreed 'profile' of learning progress for each key learning area.

As in the higher education sectors of the USA, the United Kingdom and Australia, the compulsory education sector was making a concerted effort to develop a national approach to curriculum standards.

While the implementation of OBE in Australian compulsory education was gaining momentum in the mid-1990s, in March 1997 the state and territory Education Ministers agreed on a new National Goal whereby 'every child leaving primary school should be numerate, and be able to read, write and spell at an appropriate level', with a further sub-goal stating that 'every child commencing school from 1998 will achieve a minimum acceptable literacy and numeracy standard within four years' (VCAA 2008). The result of such a powerful directive from Education Ministers was that the Australian compulsory education sector soon saw the need for a system to measure student learning in literacy and numeracy.

### National benchmarks for compulsory education

What followed in the same year was the creation of the National Literacy and Numeracy Plan, under which Education Ministers agreed:

to support the development of agreed benchmarks for Years 3, 5, and 7, against which all students' achievement in these years could be measured, and students' progress against the benchmarks to be measured using rigorous State-based assessment procedures. (MCEETYA 2008b)

The resulting National Benchmarks outlined the minimum expected literacy and numeracy levels for students at each level, which state and territory governments would be required to assess and report against (VCAA 2008). While states were required to report against the benchmarks, a review of government documentation does not reveal either how the benchmarks were arrived at or how state and territory data would be used. It could be assumed that measuring of benchmarks could inform the implementation of formal national benchmarking of student progress, but no indication of this has been found.

The National Literacy and Numeracy Plan called for 'assessment of students against the national benchmarks using rigorous state-based assessment procedures' (VCAA 2008), which left the states and territories with the task of developing rigorous standardised tests to fulfil this purpose. Released in stages, the Years 3 and 5 benchmarks for reading, writing and spelling were approved by MCEETYA in April 1998, with the Year 7 benchmarks following in March 2000. The numeracy benchmarks for all three levels were also released at the same time. This meant that the states and territories received the benchmarks in a disjointed manner, which may have contributed to the somewhat sporadic adoption of the benchmarks throughout the country.

A search for state and territory adoption of the National Benchmarks does not uncover many details regarding how, and when, the states and territories developed and implemented their state-based testing measures. The Victorian Curriculum and Assessment Authority (VCAA) website provides the most detail of any state, explaining that until 2007 the Achievement Improvement Monitor (AIM), a statewide assessment and reporting program in English and Mathematics, was used annually to provide an indication of how well Victorian students (in Years 3, 5, 7 and 9) were progressing in the areas of literacy and numeracy (VCAA 2008). The tests, which were administered by teachers at the school but marked by VCAA, aimed to identify how each child was performing against the Victorian Essential Learning Standards in English and Mathematics. Information gained from the AIM tests were used for reporting against the National Benchmarks.

Beyond the information provided by VCAA, the only other source of information mentioning state approaches to assessing the National Benchmarks before 2008 was the Australasian Curriculum, Assessment and Certification Authorities' (ACACA) website. The ACACA website provides information on state and territory standards and benchmarking, under a section of the site entitled *Changing Secondary Schools in Australia Years 7 to 10: State by State* (ACACA 2010). Each state and territory has provided a description of their benchmarking practices, with information provided ranging from the detailed and thorough approach of the Victorian education system, to one that reported that they were moving *towards* reporting Year 7 literacy and numeracy benchmarks in the period of 2001–2002. The fact that information provided was out-of-date and that the National Benchmarks were relevant to only one year level covered by the site, greatly reduces the validity of this website as a resource for benchmarking practice. It is a matter of some concern that this was the only site, other than that of VCAA, that could be found on the subject.

### Benchmarking curriculum

After the early 2000s, there was little evidence of benchmarking practices in Australian compulsory

education until 2005 when the federal Department of Education, Science and Training published the project report *Benchmarking Australian Primary School Curricula* (Donnelly et al. 2005). While this project focused solely on primary education, connections can be made with the secondary sector. The project examined the results of Australian and international tests such as Trends in International Mathematics and Science Study (TIMSS), the Third International Mathematics and Science Study—Repeat (TIMSS-R) and the Programme for International Student Assessment (PISA). The aim of the project was to identify characteristics of high-performing education systems and the strengths and weaknesses inherent in Australian state and territory curriculum documents (Donnelly et al. 2005, p. 3).

Between 1994 and 2005 Australian students participated in TIMSS three times (every four years). The results of these tests indicated that while Australian students generally performed well in international tests, they had not improved significantly since 1994–95 and were in fact being outperformed by countries that had previously been ranked below Australia (Donnelly et al. 2005, p. 3). Adding insult to injury, the study also found that while Australia appeared to stand still, other countries were able to achieve stronger results across the greater majority of students, resulting in less disparity between higher and lower performing students (Donnelly et al. 2005, p. 15).

In searching for a reason behind the stagnant nature of Australian test scores, Donnelly et al. (2005, p. 4) identified the characteristics of better performing education systems and benchmarked them against state and territory curriculum documentation. The results of this exercise indicated that the outcomes-based education (OBE) model adopted by Australian compulsory education in the mid-1990s was less rigorous than the standards or syllabus used by higher performing education systems. Donnelly et al. (2005, p. 2) reported that outcomes-based education ‘leads to outcome statements that are generally vague, imprecise and lacking in academic content’, with the result being that curriculum documents provide copious examples and indicators to compensate for the lack of definition in outcome statements. As a result, schools and teachers have reported that they find the process of interpreting OBE outcomes statements to be difficult and frustrating (Donnelly et al. 2005, p. 7).

One of the main recommendations of the *Benchmarking Australian Primary School Curricula* report was that state and territories abandon the OBE approach to curriculum and adopt a syllabus model of instruction (Donnelly et al. 2005, p. 7). A syllabus model was recommended rather than a standards approach because those schools that consistently scored higher in the tests utilised this teaching method. The two approaches have many similarities as both: are based on established disciplines or categories of knowledge; have specific, concise curriculum descriptors; and emphasise

whole-class teacher-centric instruction. To make a distinction between the two, a syllabus approach:

- relates to specific year levels
- mandates the number of hours for subject learning
- provides a differentiated curriculum, with students being streamed based on ability and interests
- utilises summative assessment with the expectation that students will achieve a particular level at a particular time
- uses direct instruction and explicit teaching.

Standards, on the other hand have:

- a common curriculum between students
- an expectation that essential concepts will be mastered at particular levels
- a greater focus on direct instruction and explicit teaching without mandating it. (Donnelly et al. 2005, pp. 6–7).

In comparing the two, it could be said that syllabus instruction is a prescriptive approach made specific to individual students, while standards-based education also utilises a prescriptive approach but applies it to a student cohort at a particular level.

In setting the scene for the recommendations of the study, the authors noted that education departments within the Organisation for Economic Co-operation and Development (OECD) and the Asia-Pacific Economic Cooperation Forum (APEC) had undergone, or were undergoing, significant upheavals at the time, with reforms having been being instigated within educational systems in these countries since the 1990s. The report provided examples of these changes:

- New Zealand had introduced a senior school certificate
- Australia had developed the National Standards and Profiles (Alderson & Martin 2007)
- In the US, OBE had been replaced by a standards approach
- Japan, Singapore and Hong Kong had all implemented educational reforms that emphasised more creative and flexible approaches to teaching and learning (Donnelly et al. 2005, p. 19).

The world educational climate was looking outward to find best practice to implement, and the *Benchmarking Australian Primary School Curricula* report suggested a complete shift in Australia’s approach to primary education. The global educational climate was at the perfect point for the use of benchmarking practices to determine next steps, and Australia could have capitalised on this. While this may have occurred, the literature does not provide any direct evidence that benchmarking

of international best practice in compulsory education occurred beyond the above report.

### What happened next?

What actually followed may not have been a huge leap from OBE to syllabus-oriented curriculum, but rather saw a more ‘morally’ comfortable adjustment of ideas and approaches that brought the country’s curriculum closer together by introducing more formal monitoring procedures, and refocusing curriculum development efforts. In April 2007, MCEETYA Education Ministers agreed ‘that States and Territories would work together to conduct national literacy and numeracy testing in years 3, 5, 7 and 9 from 2008, consistent with the requirements of the *Schools Assistance (Learning Together—Achievement through Choice and Opportunity) Act 2004*’ (MCEETYA 2008b). The federal government was taking responsibility for the monitoring of National Benchmarks for the first time thereby taking some of the weight of rigorous assessment and reporting functions away from state and territory education departments.

### NAPLAN

This shift from state and territory-directed benchmark testing to national testing seems to support the notion that the Australian Government was recognising the need to approach education in a united manner. In May 2008, students across Australia took the National Assessment Program: Literacy and Numeracy assessments, otherwise known as ‘NAPLAN’, for the first time (ACARA 2010b; MCEETYA 2008b). With the intention that ‘the results from the NAPLAN tests provide an important measure of how Australian schools and students are performing in the areas of reading, writing, spelling and numeracy’ (VCAA 2009), NAPLAN provided the raw data that could inform future benchmarking practices in the Australian compulsory education sector.

Since the introduction of NAPLAN, three significant events have taken place in Australian compulsory education. These indicate a continuing shift in the focus of Australian schooling, towards a climate that is more conducive to the implementation of benchmarking processes that can result in improved student learning: a) in December 2008, the members of MCEETYA signed the Melbourne Declaration on Educational Goals for Young Australians; b) the development of a national curriculum commenced in 2009; and c) the My School website was launched in January 2010. In the Melbourne Declaration MCEETYA also declared a new Australian focus, stating that: ‘Improving educational outcomes for all young Australians is central to the nation’s social and economic prosperity and will position young people to live fulfilling, productive and responsible lives’ (MCEETYA 2008a, p. 7). The Declaration went further to make a commitment to action that directed all Australian state governments to

support the goals and priorities of the Declaration (MCEETYA 2008, p. 10).

### More on the Melbourne Declaration

The goals announced in the Melbourne Declaration replaced the National Goals established by MCEETYA in 1997 and were of such a nature that they highlighted a huge paradigm shift in Australia’s approach to education. Goal 1: ‘Australian schooling promotes equity and excellence’ (MCEETYA 2008, p. 7) replaced the former goal that: ‘every child leaving primary school should be numerate, and be able to read, write and spell at an appropriate level’ (VCAA 2008); while Goal 2: ‘All young Australians become successful learners, confident and creative individuals, and active and informed citizens’ (MCEETYA 2008, p. 8) replaced the sub-goal of 1997 that: ‘every child commencing school from 1998 will achieve a minimum acceptable literacy and numeracy standard within four years’ (VCAA 2008). It is clear that the intent of the new 2008 goals is to refocus educators’ attention away from the outcomes-based objectives of the 1990s and towards the long-term goals that every Australian has the right to achieve. The Melbourne Declaration’s commitment to action indicates that this focus is expected to be shared by all people working within the Australian education sector.

### An Australian curriculum

As a next step towards a shared vision for Australian compulsory education, the Australian Curriculum, Assessment and Reporting Authority (ACARA) published the Curriculum Development Process in June 2009 (ACARA 2009). The document maps out the development stages of the new Australian Curriculum. The first stage of the process involved the development of *The Shape of Australian Curriculum: English, Mathematics, Science and History* paper, which was used to inform the basis of the Curriculum Writing Stage (ACARA 2009). During this stage, the national curriculum documents were written and made available for public consultation, with modification being made in light of feedback. The next several years will see the implementation and review of the Australian Curriculum, which intends to provide evidence related to the successes or failures of the initiative.

The move by the Australian Government to develop an Australian curriculum highlights further the commitment it has made to its educational goals. With the reality of a national assessment and curriculum framework being implemented across the country, the potential applications of benchmarking processes to improve student learning grow more tangible and real. In light of these possibilities, the launch of the ‘My School’ website in January 2010 (Gurr 2010, in press) could be seen as a confusing element of the Federal Government’s plan.

### The My School website

The My School website provides statistical and contextual information about schools that allows site users to compare one school with another. Each school profile includes: a description submitted by the school; ethnographic information such as student numbers and make up; and comparative NAPLAN data that plots a school's outcomes in comparison with similar schools and all schools in Australia (ACARA 2010a). This information provides a snapshot of a school's standing that can be compared with any other school in Australia, and has been heralded as a comparative tool for schools, parents and community members.

According to leadership expert David Gurr, the My School site constitutes the first instance of 'easily accessed comparative performance data available for all schools in Australia' (Gurr 2010, in press). This could potentially provide the data for the initiation of a gamut of benchmarking activities that could only be limited by the creativity and ingenuity of the schools and institutions undertaking benchmarking practices. The potential for internal, competitive, functional and generic benchmarking processes is huge. Schools, and indeed higher education, will now have access to data that could allow for the identification of best practice and the comparison of data within, and external to, any given school.

While some schools will celebrate their My School results, others will be uncomfortable with what My School reports will show. Those that have made significant gains in student outcomes will show improvements from one year to the other, while those that maintain steady results may be seen to be standing still in matters of learning improvement, when they have actually been working hard to maintain strong results with a changing cohort of students (Milburn 2010). In his article, 'Making Sense of My School', Gurr notes that: 'for schools that already have access to extensive data and a high level of data literacy amongst staff ..., these data are likely to confirm and support current school directions' (Gurr 2010, in press). Schools that already have strong assessment practices will not be surprised by what they find on the My School website. Those schools with minimal assessment data are likely to be more anxious about My School results, and may find a sudden urge to improve their assessment practices, as teachers, parents and the wider community question the My School data.

Many people in the education community are concerned that scoreboards and league tables will pitch one school against another in a competitive 'buyers' market (Gurr 2010, in press). The reality is that the My School resource exists. Parents are likely to access it when choosing schools for their children, and conducting their own informal benchmarking exercises in order to make the best choice they can with a growing body of information. Schools can probably expect to be asked more questions about their teaching and learning practices, as the

community becomes more knowledgeable about the actual meaning behind such results.

Those schools that do well from My School will be the ones that see it as an opportunity to improve, change, acknowledge weaknesses and failures, and celebrate strengths and successes. The launch of the My School website sees the advent of public education in its truest sense.

### Looking forward

In looking to the future, it always helps to review the past. In explaining the need for effective benchmarking at Xerox, Camp referred to the Chinese proverb: 'If we don't change our direction, we might end up where we're headed' (Camp 1993, p. 23). This proverb can serve as a motto for benchmarking in education, offering both advice and a warning for future endeavours.

Benchmarking practices in education have come a long way. National and international governments have begun to set the scene for future benchmarking success, but in the past this has not always resulted in actual progress. Historically, the education sector has implemented benchmarking practices in an inconsistent and sporadic manner, with the result being a lack of solid evidence identifying sound benchmarking techniques.

Before it can move forward, the education sector needs to review what has been learnt from the past. This entails an examination of internal learning before moving on to learning from the experiences of others. As attested by Camp (1993), organisations must know their internal workings before they can seek to learn from others. Benchmarking is a cyclic, ongoing process of self-reflection and evaluation that leads to learning from the best. The best can be found anywhere; one just needs to look for it.

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