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Portfolio Benchmarking Of Teacher Education Courses

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Abstract

Benchmarking is usually associated with a systematic and cyclical process utilised by industrial and commercial institutions to improve their economic performance, increasingly with a global perspective. The process assumes an emerging strategic plan for change and can include a focus mix of management vision, consultation with the workforce and clients, integration of latest technologies, improved training programs and more adaptable and responsive administrative structures. Benchmarking can be undertaken within the enterprise itself, with other similar organisations nationally or internationally, or against generic best practice processes wherever they exist in quite disparate situations. While economic benchmarking can be found in some higher education institutions in Australia, a coherent approach to educational benchmarking in regard to the quality of teaching and learning outcomes is not yet established. Throughout 1997, Monash University and Victoria University of Technology, Melbourne, embarked upon a five-step change process of educational benchmarking as a means of reviewing the quality of pre-service teacher education courses. The central feature of this process is the construction of a philosophical and reflective teaching portfolio by all preservice teachers. A description of the portfolio

benchmarking implementation procedure is given, together with a discussion of findings and proposals for a continuing research program.

Benchmarking

A central feature of higher education in Australia over the past decade is increasing competition between the institutions concerned that is intended to 'lead to improved efficiency, customer responsiveness and rates of innovation' (Marginson, 1997). However, there appear to be few articulated procedures and indicators that relate to improvement in student learning outcomes and which can demonstrate the results of competition policy. In industry and commerce, the technique of benchmarking is perhaps one such general technique that could be transferred to higher education as a quality assurance mechanism.

In broad terms, benchmarking can be defined as 'a method for continuous improvement that involves an ongoing and systematic evaluation and incorporation of external products, services and processes recognised as representing best practice' (Macneil, Testi, Cupples and Rimmer, 1994). A difference that arises when attempting to conceptualise educational benchmarking is that the private sector tends to benchmark process, whereas public institutions concentrate on outcomes (McGaw, 1995). This may be because for schools and universities in Australia, learning outcomes are generally not clearly delineated, although this situation at the school level is changing with the production of curriculum guidelines and statements over recent times and, at the tertiary level, with the development of a national competency framework for beginning teachers (Australia, 1996).

For the purposes of this study, the following definition of educational benchmarking (Cherednichenko, Hooley, Kruger and Mulraney, 1996) is being explored as a means of reviewing pre-service teacher education courses and of improving the quality of teaching and learning outcomes for beginning teachers:

Educational benchmarking is a collaborative and democratic process whereby particular aspects of a teacher education course conducted by one organisation, can be evaluated either internally (one year, one subject, one procedure), or externally against particular aspects of the operation of another organisation (like-against-like as in industry benchmarking, or like-against-unlike as in generic benchmarking).

The benchmarking process being adopted here involves the development of a teaching portfolio by beginning teachers. At Victoria University of Technology, fourth year Bachelor of Education P-12 preservice teachers structure a portfolio around areas of teaching competency taken from either state or national frameworks. The graduating teachers are qualified to teach both primary and secondary students generally in two disciplinary areas.

At Monash University, Graduate Diploma in Education preservice secondary science teachers produce a teaching portfolio that reflects their philosophy of what it means to be a science teacher as well as beginning teacher competencies from the national framework.

The portfolios at each institution are compiled differently. For example, at Victoria University of Technology it is suggested that competence can be demonstrated through the systematic exhibition of a range of practice and theory artefacts. Such artefacts include lesson plans, case writing, research reports, classroom work of students, videos, assignment extracts and summary statements of teaching and learning intent.

At Monash University, competencies are demonstrated through well selected portfolio items that represent successful teaching episodes that encompass competencies. The competencies in this second instance are not intended to be self explanatory, but to act as prompts to allow articulation of competencies by beginning teachers. In addition to competencies, beginning teachers are asked to visually represent their philosophy of "what it means to be a science teacher." This philosophical requirement again requires well designed and selected portfolios items that should demonstrate to the portfolio reader their notions of teaching and learning both generally and with respect to science specifically. A variety of representations are adopted by students such as posters, photographs, diagrams and collages for example.

The question of competence itself and its appropriateness in teacher education courses is disputed, particularly when at least three approaches to competence can be identified (Reynolds and Salters, 1995). The first concerns a task oriented approach, the second involves the organisation of a restricted view of knowledge as facts, while the third is more holistic and includes aspects of judgement and values across different situations. The different approaches to demonstrating competencies in teaching portfolios can be seen at the two institutions but does highlight both institutions stance of the appropriateness of competencies in preservice teacher education.

At this stage of the research, the concept and practice of educational benchmarking are not being employed to establish absolute standards of performance for graduating teachers, but rather to involve all participants in an ongoing collaborative process of course review and improvement of teaching and learning. The benchmarking technique should be able to identify aspects of best practice within each institution, so that recommendations for changed teaching can be developed. As cycles of benchmarking are completed over time, a baseline of understanding between institutions will emerge, enabling a much closer linking of course structure and learning outcomes to occur and to be validated as proposals for action are implemented and evaluated.

Teacher Portfolios

The term portfolio as used by an artist or architect conveys a picture of a variety of documents compiled to demonstrate one's achievements. Teaching portfolios, as opposed to portfolios used in other professions, can be much more than just an end product (Bird, 1990).

Portfolios, as an assessment tool, are becoming highly regarded as a way of assessing both student and teacher performance (Wolf, 1989, 1991). The high regard is largely related to the difference in learning outcomes compared to more traditional forms of assessment, as they require active decision making through their construction.

The portfolio literature demonstrates a broad range of applications in education as different groups begin to examine the possibilities they offer to give a broader and clearer picture of an individual's achievements, knowledge and learning. The ability to better understand the nature of an individual's learning through the use of portfolios is enhanced through the development of teaching portfolios: giving access to teachers'/preservice teachers' learning about pedagogy. The teacher portfolio is seen as a more "authentic" form of teacher assessment (Barton & Collins, 1993; Shulman 1987, 1988) even though the incorporation of its use is viewed by some as occurring much faster than the proof of its efficacy as an assessment tool (Haertel, 1991). However, there is general agreement that teaching portfolios increase the power to capture the complexities of teaching and learning over time and across different contexts in authentic settings (Shulman, 1988).

In preservice teacher education, the value of portfolios is attractive. They can be used as a way of encouraging preservice teachers to document and describe their skills and competence as a teacher. This is particularly the case when teaching portfolios are applied to the situation of seeking employment. (Corrigan & Loughran, 1994; Robinson, 1986; Wineberger & Didham, 1987). Prospective employers would be able to "tap" into a teacher's skills and competence and their philosophy of teaching and learning as it is articulated during a "stroll through" the teaching portfolio. However, if this view is to be fully realized, the teaching portfolio should not be viewed as an "exercise in amassing paper" (Olsen, 1988). Individual preservice teachers must be responsible for the items included in the portfolio as it is through these decisions that reflection on practice will be enhanced (Garman & Piantanida, 1991).

Portfolio Benchmarking

A five-step benchmarking procedure has been agreed between Victoria University of Technology and Monash University. The procedure involves:

1. introducing preservice teachers to the concept of portfolios and construction of teaching portfolios through the collection and development of appropriate portfolio items,
2. ongoing contact between the two institutions throughout the year for progress reporting,
3. public exhibition of the portfolios by the preservice teachers towards the end of the year,
4. a benchmarking seminar involving staff of the two institutions and finally,
5. a second seminar where the results of benchmarking are made known and discussed with representatives of the profession present including teachers, Principals, employers, professional groups and preservice teachers.

At Victoria University of Technology, the fourth year Bachelor of Education group first confronted the concept of a teaching portfolio, in mid-Semester 1. It was suggested that constructing the portfolio over the remainder of the year would enable individual and group reflection on the fourth year itself and on the entire four years of the course. Portfolio construction would also provide a public exhibition of achievements and learning that had occurred, meet short-term requirements of the Bachelor of Education and link with longer-term employment demands and become part of a benchmarking process for course quality and review.

In terms of structure, the portfolio was left to the preservice teachers' own creativity, although it was strongly noted that utilising the five areas of national competence, or the Dimensions of Teaching (Victoria, 1996) that have been developed by the Victorian Government for employment purposes, would be advantageous. In relation to content, the teaching portfolio should display a teacher's philosophical overview of teaching and learning, include a range of items to demonstrate competence, reflection and theorising such as lesson plans, case and commentary writing, mentor comments, student work, video and computer examples, literature reviews, research reports and extracts that support the philosophical position being adopted. In addition, the idea of including summary statements at key points in the portfolio was supported, brief notes that provide some explanation of what follows, why the items have been included and how they attempt to demonstrate a particular aspect of competent practice.

While both purposes were discussed, the teaching portfolio was seen as having a much stronger connection with reflection on the year and on the course and the learning that has taken place, rather than with employment. However, it was noted that portfolio construction was now an integral part of teachers' professional lives and, for the fourth year group, could be used for reflection on the course, then at interview when applying for a position and ultimately, for teacher appraisal and development purposes during the first year experience. This view was confirmed when Principals were speaking with the group during the final year. From the university standpoint, the teaching portfolio was primarily seen not as utilitarian, but as a means of promoting deep reflection on the purpose of teaching, learning and schooling and as a basis for personal action in the public realm.

Monash University Graduate Diploma in Education secondary science preservice teachers produce portfolio items that are intended as artifactual tools which help the preservice teachers begin to articulate their understanding of what it means to be a science teacher as well as their teaching skills and abilities. There cannot be a 'right' formula for the construction of a portfolio item as each item will reflect differences in philosophy about science teaching, teaching and learning experiences, creativity, product layout and design. It is these individual differences that are seen as a valuable asset in the use of teaching portfolios as the items produced will reflect each individual's understanding of their learning from experiences. Some of these teaching and learning experiences may often have been shared and thus similar as within the course preservice teachers are afforded numerous opportunities to place themselves in the context of "the learner" and share in small group work their experiences and thoughts.

Preservice teachers are encouraged to develop their portfolios with employment opportunities in mind. Therefore, each item needs to convey its message in a simple and meaningful way. The course developers argue that if the items meet this aim, the preservice teachers are in a better position to illustrate (for a prospective employer) what they have to offer a school. Their portfolio can be used to creatively demonstrate how their views of teaching and learning were shaped and how these influenced their teaching practice.

However, if portfolio items are to follow this general approach, it is important to recognise that the items alone cannot (nor should they be expected to) fully convey their meaning. They are designed as a prompt to delve into the preservice teacher's understanding of the experiences which underpin the item as well as signalling how those experiences have subsequently influenced the individual's teaching practice. Portfolios are not an attempt to simplify or summarise the complex, inter-related thoughts and actions associated with the teaching and learning, rather they are a way of initiating dialogue about the problematic nature of teaching and learning from their creator's perspective. This is why there can not be 'one' right way of producing a portfolio item and why teaching portfolios are such a valuable tool in understanding the individual preservice teacher. They are an insight into that person's perspective of teaching and learning.

While it is important to gain insight into a teacher's perspective of teaching and learning, it is also important to verify the skills and abilities of that teacher. The national competencies for beginning teachers has provided a concrete framework from which preservice teachers can gather evidence of their skills and abilities. Again, it is not intended that portfolio items address every competency listed, but that items should act as a prompt for preservice teachers to articulate their competencies through teaching experiences they have had.

Portfolios developed by Monash University preservice are designed to consist of 6-8 well selected portfolio items, that are visually appealing and invite the portfolio reader to ask questions and engage the preservice teacher in dialogue. The portfolios should enable the preservice teacher to articulate to a prospective employer their philosophy about teaching

and learning in the context of teaching science as well as articulate their skills and abilities through teaching experiences they have had.

Findings

Analysis of the teaching portfolios at Victoria University of Technology followed a process of moderation. This involved each member of staff reading a selection of portfolios, identifying those that were typical of the year level, those that were considered as benchmark and those that still required substantial and additional work. Examples of each of the three categories were then shared amongst staff and finally, agreement was reached on those portfolios that were representative of each. These portfolios were then taken to the benchmarking seminar for discussion with the other institution. The framework of analysis involved three broad areas, where the portfolios needed to demonstrate evidence of the five national areas of competence; critical reflection, particularly as related to the connection between practice and theory and resulting social action and thirdly, practice described, interpreted and theorised.

From this procedure, the Victoria University of Technology portfolios were considered to exhibit the following general features:

1. Thoughtful construction around the five national areas of competence
2. Abundant evidence of teaching practice and of an extensive knowledge of educational and curricula programs, although mainly at the primary level
3. Some evidence of key themes emerging that are based upon close personal contact between preservice teachers and individual lecturers
4. Limited evidence of practical theorising for the purposes of explanation and educational change and linking educational work to the world of social action
5. Approximately ten percent of portfolios could be considered 'benchmark' in demonstrating the range of criteria contained in the framework of analysis.

While the benchmarking process and research outcomes being presented here are preliminary, they do provide the basis for some tentative speculation regarding the Bachelor of Education course, its procedures, structures and approaches to teaching and learning. First, the strong emphasis on classroom work in the portfolios could result from a developing and extensive partnership program between the university and local schools, that attempts to work from practice to theory and recognises the centrality of preservice teachers' knowledge and experience in their own learning (Kruger, Cherednichenko and Hooley, 1996). The preservice teachers see themselves as moving into schools to become good teachers over the years ahead and to assist

students with their learning. While this aspiration has social significance, it is generally not articulated as such. The course may therefore not be structured sufficiently strongly as yet to provide the intensity of curriculum experience at both the primary and secondary levels on which profound reflection occurs to connect a particular workplace, in this case schools, with broader social and political movements. A characteristic of the benchmark portfolios is that there is some evidence of this connection being made, in some cases very explicitly, but whether this is due to the nature of the course, or other factors, is not yet known.

At Monash University, teaching portfolios are evaluated in a number of ways. The only formal course requirement placed upon preservice teachers is to produce a teaching portfolio. Within the course students have the opportunity to evaluate their teaching portfolios in firstly seminar sessions where preservice teachers articulate the ideas behind their portfolio items with lecturers and colleagues, and secondly in a process of "mock" interviews. In the mock interview process, Principals (50 in 1997) from surrounding schools volunteer their time to form small interview panels (2-3) and conduct "mock" employment interviews. Preservice teachers are strongly encouraged to introduce their teaching portfolios into the "mock" interviews. Principals provide both preservice teachers and course developer feedback on the "mock" interview process.

The feedback gained from this internal "benchmarking" process has highlighted the high degree to which preservice teachers can articulate their ideas on teaching and learning, although it tends to be disciplinary based. Even when actual portfolios were not produced in the interview itself, the process associated with developing a teaching portfolio has obviously benefited the preservice teachers' ability to articulate their ideas about teaching and learning as well as talking animatedly about particular teaching experiences in order to demonstrate the teaching competencies.

Generally, the development of reflective thinking and a personal philosophy about teaching and learning have been quite successful in the Monash University course. The teaching portfolios have provided an excellent vehicle for the documentation of these processes. The move into more competency based documentation in the teaching portfolios has been a more recent innovation at Monash University, both in response to national trends and interactions with Victoria University of Technology. The use of teaching portfolios at Monash University has been a well documented process over the last six years (Corrigan & Loughran, 1994, Loughran & Corrigan, 1996) and continues to develop many aspects of the course.

Research Issues Arising

The following issues have been identified for elaboration and for incorporation into the benchmarking process:

1. Development of benchmarking process itself

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Bringing together the concept and practice of educational benchmarking and portfolio construction, as a means of documenting competent practice of beginning teachers and for quality review of pre-service courses, is a new endeavour in Australia. Accordingly, at this stage of the research, a number of issues remain to be detailed and implemented for improving the process that was undertaken during 1997. The nature of the teaching portfolios themselves for example, differ at each institution.

At Monash University, the portfolio is concise and visually based and is intended to be an artefact that prompts thinking, discussion and reflection, and is uniquely individual. The notion of a "benchmark portfolio" is consequently not an idea that can be easily conceptualized. At Victoria University of Technology, the portfolio contains many items documenting the richness and fullness of all aspects of the 4th year course and is taken to be a representation of reflective and competent practice, with benchmark examples therefore being able to be identified. The intended readership of the portfolios becomes an important issue in their development..

A portfolio will be constructed differently and thought of differently by the preservice teachers, depending on the intended readership. At Monash University, the intended readership is a prospective employer in an interview setting. In this situation the need for conciseness and visual appeal are important in a time constrained setting such as an interview. At Victoria University of Technology, there is an agenda for multiple readers, one of which is a prospective employer. Linking the portfolios with specific aspects of course design has also been difficult at this time as the process for the development of portfolio items throughout the two courses differs. At Monash University, the process of developing portfolio items is used in a formative way, helping preservice teacher formulate their ideas and philosophy about teaching and learning. At Victoria University of Technology the process of portfolio production has a more summative role in documenting preservice teachers skills and abilities and the subsequent reflection on those skills and abilities. These differences and the underlying principles for these differences should become clearer as the benchmarking process evolves and proposals for improvement are tried and evaluated.

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2. Portfolio and Benchmarking- the tensions

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A number of tensions and paradoxes exist in both the process of producing portfolios and in the benchmarking process which will need to be resolved as the understanding of key ideas and concepts matures over time. The portfolios can exhibit a clear philosophy of intent, but whether this philosophy actually impinges on classrooms in schools may be more difficult to discern. The notions of competence, reflection and practical theorising may vary considerably between all participants. It is a challenge to ensure that the concept of a reflective and philosophical teaching portfolio is encountered at such a time in a course that it makes sense to the preservice teachers and that they are able to move into the phase of ongoing compilation with clarity of thought. The process of developing teaching portfolios

and the personal reflection involved in their development is in tension with the portfolio product and its intended uses such as for employment. Preservice teachers may perhaps need to be asked to make their own choice on how they structure their portfolio and for what purpose. As the benchmarking process is refined over time and a greater correlation is achieved between learning outcomes and course structure, less guidance regarding the portfolios will be required.

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3. Development of framework of analysis

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An explicit and public framework of portfolio analysis is required to ensure that preservice teachers are aware of the issues involved in portfolio production and that the final work is an accurate representation of course outcomes. The portfolio concept is broader than a single artefact and that both course developers and preservice teachers may need to be aware of the breadth associated with the use of teaching portfolios and make decisions based on informed practice and well developed goals. The framework must be flexible enough to cater for differences as well similarities.

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4. Possibility for international benchmarking

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At present, the educational benchmarking that has occurred between Victoria University of Technology and Monash University involves two institutions that exist in similar cultural circumstances. There are differences in regard to socio-economic environments, size of student population and the resource base available. The next step may include a benchmarking procedure with an institution that exists in quite different social, political, economic and cultural conditions and one that is generally seen to produce course outcomes of high quality by international measure. Pursuit of this opportunity will enable the cycle of benchmarking to be complete and include internal arrangements of quality assurance, external comparisons with a similar organisation in the same country and external benchmarking with an organisation from another country that is coping with a set of markedly different educational and cultural concerns.

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