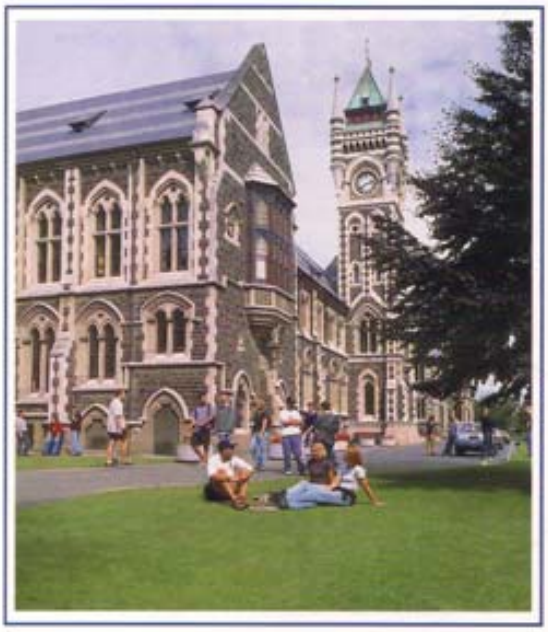
A GUIDE TO BENCHMARKING



by

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Phil Meade, September 1998

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Introduction

The changing environment of higher education in recent years has produced new pressures and concerns for universities. Rising student numbers and a decline in government funding have created greater competitiveness in the tertiary sector, and consequently a demand for higher quality, efficiency, and customer service in the functions which the University provides. In this present environment, and in the future, the successful universities will be those which can continually improve and adapt their services to meet and exceed the demands of stakeholders.

In this regard, benchmarking, the *formal and structured* observation and exchange of ideas between organisations, may prove a valuable tool. Rapid improvement can be facilitated through comparing the University's performance with that of other institutions and adapting their successful practices to the University's own purposes. Benchmarking may be seen as especially relevant to higher education, since the notion of exchanging ideas through collegial contact is integral to academic work.

The purpose of this guide is to explain the principles of benchmarking within the context of the university system, and to assist in the planning and deployment of specific benchmarking projects. Benchmarking complements other improvement initiatives, and should thus be considered in relation to quality enhancement processes already in place at Curtin University of Technology (Curtin).

Benchmarking Theory

Table 1. Principles for Benchmarking

"Learning from the best is the first step towards becoming the best."

Benchmarking:

- improves practices, services or products;
- involves learning about 'best practices' from others;
- accelerates the rate of progress and improvement;
- contributes to continuous quality improvement;
- is an ongoing process;
- promotes fresh and innovative thinking about problems;
- provides hard data on performance;
- focuses not only on what is achieved, but how it is achieved;
- involves the adaptation, not merely the adoption, of best practices; and
- results in the setting of specific targets.

Definition of Benchmarking

The rapid growth of literature has generated numerous definitions of benchmarking (see Table 2). This is not to suggest, however, that there is no essential agreement on what the concept of benchmarking entails. Rather, the differences in definition are largely a matter of emphasis or application.

> ***Benchmarking is the formal and structured process of searching for those practices which lead to excellent performance, the observation and exchange***

of information about those practices, the adaptation of those practices to meet the needs of one's own organisation, and their implementation.

Table 2. Principles of Benchmarking

Benchmarking is the process of understanding what is important for your organisation's success, understanding your own processes, finding and learning from others whose processes are better than yours, then adapting that learning to improve your performance. Benchmarking is far more than copying. It requires deep self-assessment and the ability to translate practices that work in another context into a process appropriate to your own organisation (from O'Dell, in Watson, 1992: xv).

Benchmarking is a well-planned and systematic process of discovery and learning. It has measurement as its fundamental basis, and compares against better and best organisations inside or outside the education sector. It has clear objectives and mechanisms to measure performance.

Benchmarking is an ongoing, systematic process for measuring and comparing the work processes of one organisation with those of another, by bringing an external focus to internal activities, functions, or operations (from Kempner, 1993).

Benchmarking is more than just gathering data. It involves adopting a new approach in which one continually questions how processes are performed, seeks out best practices and implements new models of operation (from Alstete, 1995: vii).

Benchmarking is an ongoing, systematic process to search for and introduce best practice into an organisation in such a way that all parts of the organisation understand and achieve their full potential (from Burnet, 1996: 2).

Types of Benchmarking

Although the principles of benchmarking are straightforward, much of the theory surrounding benchmarking is 'detail rich' (Bogan & English, 1994: 73). This engenders an appearance of complexity which is enhanced by the numerous categories of benchmarking which appear in the literature.

One such categorisation is based around the kind of organisation which serves as the benchmarking partner. This results in the identification of four types of benchmarking:

- **internal benchmarking** – in which comparisons are made against another school/area within one's organisation;
- **competitive benchmarking** – in which comparisons are made with direct competitors;
- **industry benchmarking** – in which the benchmarking partner is not a direct competitor, but does share the same industry as one's organisation; and
- **generic benchmarking** – which involves comparisons of processes and practices regardless of the industry or field of the partner.

These four types of benchmarking appear frequently in the literature. The reader needs to be wary, however, because the use of these terms is not always consistent or free from ambiguity.

A second broad method of categorisation considers the practices or processes which are benchmarked. This results in three types of benchmarking:

- **process benchmarking** – which focuses on discrete work processes and operating practices;
- **performance benchmarking** – which compares products and services; and
- **strategic benchmarking** – which examines how companies compete (Bogan & English, 1994).

Benchmarking studies may be more or less general in the topics they address. Specific studies tend to be more useful in producing concrete recommendations for change, due to their more detailed analysis of particular processes. Conversely, more general studies may provide less detailed analyses of processes, but their wider ranging focus can be useful in providing overviews of school/area and institutional practices (McEntyre, 1996).

Why Benchmark?

Benchmarking assists in the achievement of excellence, enabling `quantum leaps' in improvement by borrowing and adapting the successful ideas and practices of organisations while avoiding unproven or problematic strategies. Benchmarking increases the potential for improvement in numerous ways (see Table 3). One of the most important benefits of benchmarking is the discovery of innovative approaches, a function of particular importance as enhancement of current practices is rarely sufficient to ensure future excellence.

> *Benchmarhing helps create the learning organisation: a group of dedicated individuals who actively pursue excellence, growth and knowledge. If the experts are right..., only those organisations that can quickly learn from and master their environments will survive into the twenty-first century. Objective information can help trigger the transformation to the continuous improvement philosophy, but it can only do so if it is continually reapplied and reinforced. Benchmarhing sets the framework for excellence, attaining it depends on the actions that are taken once the results are in.*
>
> (Leibfried & McNair, 1992: 320-321)

Much of benchmarking's strength lies in its balance between quantitative and qualitative measurements of processes and outcomes. Although the informal exchange of information has long been a part of academic culture, benchmarking provides a formal and objective structure for this exchange.

> *Due to its reliance on hard data and research methodology, benchmarhing is especially suited for institutions of higher education in which these types of studies are very familiar to faculty and administrators. Practitioners at colleges and universities have found that benchmarhing helps overcome resistance to change, provides a structure for external evaluation, and creates new networks of communication between schools where valuable information and experiences can be shared.*
>
> (Alstete, 1995: v)

By highlighting problem areas as well as the potential for improvement, benchmarking provides an incentive to change and assists in the setting of objectives and targets. Furthermore, its emphasis on understanding the processes underlying successful practice makes it a useful tool in establishing action

plans and initiatives for achieving these goals. Benchmarking is thus a comprehensive and selfcontained method for improving organisational practices: it highlights areas needing improvement, it provides objective data to illustrate the need for change in these areas, and it leads to the formulation of plans and initiatives for bringing about the required improvements. Benchmarking is thus a critical component in Curtin's overall approach to quality enhancement.

Table 3. Benefits of Benchmarking

Benchmarking:

- provides a systematic approach to quality improvement;
- brings an external focus to internal activities;
- utilises existing knowledge about the effectiveness of particular processes;
- identifies new ideas and technologies;
- exposes the need for change;
- establishes the extent of improvement required;
- demystifies and encourages change;
- provides a framework for change;
- decreases subjectivity in decision making;
- legitimises targets by basing them on hard data;
- enables the incorporation of `best practices' into one's organisation;
- encourages a learning culture which is open to new ideas;
- promotes contacts and networks.

Criticisms of Benchmarking

Despite its many benefits, benchmarking has not been without its critics. Hammer & Champy (1993) have argued that benchmarking produces a restrictive framework for innovation by focusing on those processes which are already occurring within one's industry, and also sets a cap to ambition by seeking to be only equal to the best. Wolverton (1994) adds that benchmarking's emphasis on current practices may leave us without the freedom to adapt to, and prepare for, the future, and furthermore, that it has the disadvantage of placing organisations in the role of followers rather than leaders. Kerridge (1995) argues that organisations do not need to compare themselves with other organisations, or know how good they are in order to make improvements, while Pederson (1992) questions the ability of benchmarking to provide anything other than marginal improvements in processes.

These objections have already been addressed to some degree. Generic benchmarking focuses on organisations outside one's direct industry, and in this way can provide us with a more innovative and less industry-specific framework for change. The adaptive nature of benchmarking means that the recommendations arising from a benchmarking exercise must be attentive to the future, while the requirement that benchmarking be an ongoing process allows for recognition of, and response to, ongoing developments. Nevertheless, the objections mentioned here may apply in some contexts, and it is certainly worth being aware of them. There is no way of guaranteeing that a benchmarking project will produce desirable results, although the potential for improvement is high and the worst result it is likely to produce is increased organisational knowledge. Even marginal improvements in processes and practices can be quite significant to organisational success.

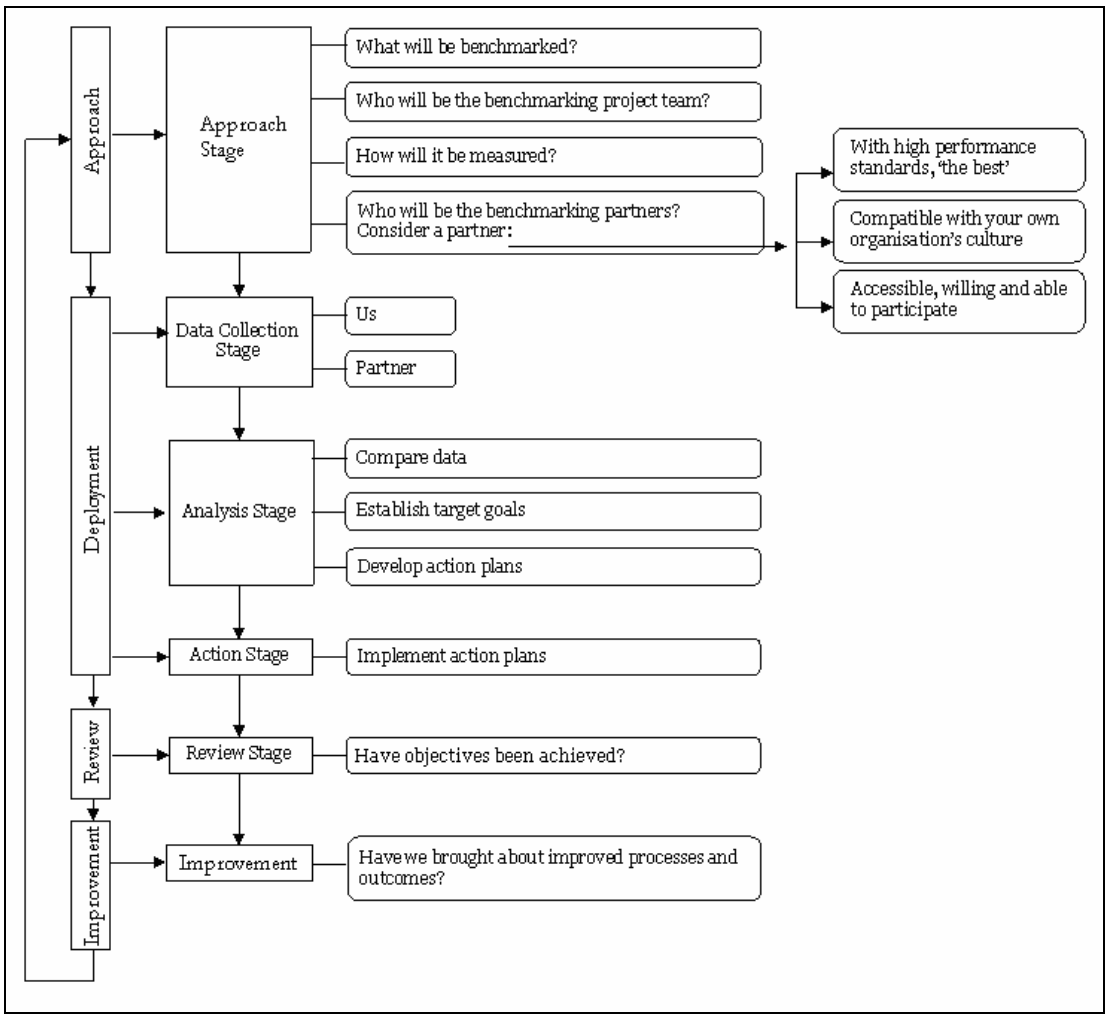
Benchmarking Practice

The benchmarking process described in this section is designed to take place within the overall context of Curtin University's Quality Framework.

As with the definitions which were presented earlier, numerous models of benchmarking practice (containing between three and fourteen steps) are discussed in the literature. However, the differences between these models are cosmetic and the fundamental approach remains similar (Bogan & English, 1994). In all cases, the general model needs to be adapted to the specific circumstances of a particular organisation. This guide presents a model of the benchmarking process with four major phases (consistent with Curtin's Quality Framework) and a series of stages and tasks (see Figure 1): The Approach phase, which incorporates the necessary planning steps, the Deployment phase, incorporating the Data Collection, Analysis and Action stages; the Review phase and the Improvement phase. The importanc of closing this loop so that improvements inform a higher level of ongoing continuous improvement cannot be stressed too highly.

Although the model represents the stages as temporally consecutive, this is an idealisation, and some overlap between the stages can be expected.

Figure 1. Model of Benchmarking Procedure



1.0 The 'Approach' Phase

The planning phase is critical for success: poor preparation and excessive anxiety to begin collecting data are some of the most common problems in benchmarking (Spendolini, 1992: 148). The decision to engage in benchmarking stems from a recognition of a need for improvement, and a determination that benchmarking is the appropriate strategy to pursue.

1.2 Selecting a benchmarking topic

Benchmarking can be applied to each of the University's core activities: teaching and learning and research and development, and also to the services which support this core work: student services, academic services, financial services etc. Teaching and research are arguably the most difficult areas to benchmark; conversely, they present the greatest potential for improvement.

General priorities for improvement need to be identified before selecting a topic for benchmarking. It is therefore crucial that you 'know yourself' before embarking on a specific benchmarking exercise. This requires an awareness of the characteristics and conditions which are essential to ensuring departmental success ('critical success factors'), an understanding of the processes which underlie these characteristics, and knowledge of the strengths and weaknesses existing in your department.

The main criterion for selecting and prioritising areas for improvement is that the topic chosen is essential to departmental success.

The identification of critical success factors can aid in the recognition of such areas. Critical success factors are related to the overall purpose of a department. They are a limited yet comprehensive group of indicators which must show high performance if the department is to succeed in achieving its principal goals (Bendell, Boulter & Kelly, 1993). Examples from higher education include professional accreditation, student evaluations, and graduation and placement rates (Alstete, 1995).

By providing broad evaluations of departmental performance, critical success factors serve to highlight levels of performance in crucial areas. The identification of departmental strengths and weaknesses need not rely on quantification for validity, however, and potential benchmarking topics may suggest themselves on the basis of a less formalised view of priorities for improvement.

In situations where priorities for improvement are unclear, it may be more difficult to identify an area for specific benchmarking. In such cases a broader, more general benchmarking study may be useful. While such a study is less likely to produce concrete recommendations for change, it can provide an overview of departmental procedure, and an analysis of strengths and weaknesses as compared to the benchmarking partner. As such, it may serve as a useful precursor to more focused benchmarking.

Assuming that an area which would potentially benefit from improvement has been identified, it is then necessary to assess whether benchmarking is the appropriate tool for addressing this problem. Benchmarking is a comparative study which is designed to yield improvements in practices, processes or outcomes. For this reason benchmarking would be the wrong strategy to pursue when the problem identified relates to deficiencies which do not arise from operating procedures. These might include such problems as the inadequate performance of a particular member of staff, personal conflicts between staff members, or a lack of departmental vision or direction.

A suitable candidate for benchmarking will also need to be amenable to measurement, so that comparisons can be made with the benchmarking partner (see section 1.3: Identifying the measures which will be used to collect the data). The cost and difficulty of benchmarking the area under consideration also need to be taken into account. You should assess whether the time and money spent on the project is likely to be offset by the benefits you can hope to gain. Once again, this stresses the importance of choosing an area which is relevant to shool/area success, which is in particular need of improvement, and where benchmarking can effect improvement. At this stage it may be necessary to narrow the focus of the study somewhat; it is better to conduct a small yet highly effective benchmarking exercise than to undertake a larger project with more variable results.

Table 4. Examples of Benchmarking Topics in Higher Education

Examples of what might be benchmarkcd in ***teaching and learning***

- Student support systems and/or learning methods which have led to decreased dropout rates and higher student satisfaction in first year subjects.
- Teaching review and feedback strategies which have enabled staff to increase the effectiveness of their teaching without adding significantly to their workload.
- Processes for recognising and rewarding good teaching through the promotions system, which are perceived to be credible and effective.
- Teaching methods which encourage students to develop generic skills such as problem solving abilities, teamwork and lifelong learning skills.
- Quality management processes which have led to increased networking and application of innovative teaching methods across the University.

Examples of what might be benchmarked in ***research***

- Support mechanisms and conditions within the school or area which establish and maintain a research culture.
- Strategies which lead to greater availability of focused time for research (allowing for teaching load, consultancy, administration and other demands).
- Processes and support programmes for better facilitating and supporting postgraduate research.

Examples of what might be benchmarked in ***support services***

- Improving support, course advice, and assistance for potential students during enrolment.
- Providing careers advice and contacts for graduates seeking employment.
- Methods and programmes for staff development and support.
- Strategies for improving public relations and the overall image of the University.

1.3 Selecting a benchmarking project team

Three to eight members is the optimal size for a benchmarking team (Bogan & English, 1994). Team members need to be experienced, competent and respected within the area which is to be benchmarked. If possible, the inclusion of an experienced benchmarker in the team may also be beneficial. Dale (1995) provides a summary of the ideal team member; the person should be involved in implementing change, have a `hands on', action orientated approach, be creative and flexible in their thinking, and be a good

communicator and effective advocate of change. In this regard, heads of school / area may be particularly well suited to the benchmarking process.

The length of time required for the benchmarking project will vary. Boxwell (1994) suggests that three months is the ideal time frame within which to conduct a benchmarking study, although this assumes that the project team will be able to devote itself to the study full time. Within the University environment this is unrealistic; team members should plan to devote approximately ten per cent of their time to the study, with this rising to twenty five per cent in peak times (Spendolini, 1992). It is also recommended that team members familiarise themselves with the benchmarking process (the appended resource readings and references, available on request from the author, may be of assistance in this regard).

1.4 Identifying the measures which will be used to collect the data

The next step in planning the benchmarking project is the selection of appropriate indicators for measuring performance. Measurement is essential to the benchmarking process; without the measurement of specified outcomes ('metrics') accurate comparisons cannot be made. In order to achieve such measurement, the benchmarking team needs to select a number of appropriate performance indicators. Performance indicators may be characterised in the following way:

> *The function of performance indicators is to identify the principal characteristics or components of successful performance, expressed either in terms which can be quantified or as reliable estimates of relative achievement. Thus they provide a profile of performance levels attained by a particular organisation at a particular time; this enables a comparison with other organisations or with the same organisation at different rimes.*

When selecting performance indicators for the purpose of a benchmarking study, a number of factors need to be taken into consideration. The most important are the need for:

- both quantitative and qualitative measures of performance;
- indicators that are relevant to the selected topic for benchmarking;
- indicators which exhibit sufficient precision to accommodate meaningful comparison;
- 'contextualising' of benchmarking data; and
- measures of performance that can be reproduced, to enable comparison with the benchmarking partner and evaluation of one's own performance after initiatives arising from benchmarking have been implemented.

Schools / areas undertaking benchmarking may wish to check with the Office of Strategy and Planning to clarify what measures already exist across the university and what data is readily available.

- University Measures
- University Online Data and Information Systems

A mixture of quantitative and qualitative measures of performance is recommended. The benchmarking project will become too 'outcome-orientated' and fail to come to terms with underlying processes if the method concentrates solely on quantifiable measures. Without an understanding of how results are achieved, adaptation of best practices to one's own institution is liable to prove difficult.

Conversely, if qualitative data are not linked to quantitative measures then the benchmarking study may become too subjective and accurate comparisons of performance may be problematic. Generally, quantitative data is useful in showing performance gaps between one's institution and the benchmarking partner, while qualitative data helps explain this gap. Quantitative measures of performance will lend objective weight to a benchmarking exercise, and highlight more vividly the need for change, while qualitative information will aid in showing the way to change.

Performance indicators also need to be relevant to the topic being addressed and sufficiently precise to allow a detailed understanding of the factors contributing to successful performance. Taken together, the group of indicators used should present an approximation of a complete picture of the benchmarked topic. In order to achieve this, performance indicators will need to be selected for each of the core processes and outcomes relating to the topic under consideration.

Furthermore, each indicator should focus on a discrete and clearly defined part of the process being studied, so that in the analysis stage detailed differences in procedure and performance can be identified. Precise indicators will facilitate adaptation of successful practices to one's own institution, by allowing a corresponding degree of precision when formulating plans for improvement.

When the collected data are analysed they will need to be understood in terms of the numerous contexts in which the studied processes are embedded. For example:

- a benchmarking partner may show high performance, but new operating systems may be responsible for an actual decline in the partner's performance (compared to past performance);
- differences in research output may be accounted for by different levels of governmental funding; and
- a renowned organisation's reputation may be responsible for attracting top quality staff and students, affecting overall performance.

An awareness of the need to contextualise benchmarking data should be kept in mind when selecting performance indicators. However, it should not be expected that the data alone will be sufficient to produce this contextualisation. Performance indicators do not provide an actual assessment of performance; instead, they perform a *signalling function*. Informed expert judgement, using the additional insight gained from the indicators, is necessary in order to provide a meaningful interpretation of institutional performance (Meade, 1994).

The availability of data pertaining to performance indicators should also be considered. The use of existing data will greatly reduce the cost and difficulty of a benchmarking exercise. Quantitative measures of performance are liable to be readily available through the information management systems of institutions.

- University Measures
- University Online Data and Information Systems

1.5 Selecting a benchmarking partner

The search for a benchmarking partner begins in the planning stage but might not be finalised until after the internal processes of the organisation have been assessed, as an understanding of the institution's own processes may clarify what is required of the benchmarking partner. Alternatively a specific institution may be targeted on the basis of its reputation for excellent performance. Benchmarking need not be carried out

with only one partner; several organisations may be benchmarked, to an effective maximum of four to eight partners.

The benchmarking organisation(s) may be another academic institution, but government departments or private enterprise could also act as benchmarks in areas such as marketing, information technology, human resources and financial management. Insights can be gained from leaders in different fields, as many processes are functionally similar, even though the products differ. One of the advantages of benchmarking outside the field (generic or functional benchmarking) is the enhanced potential for discovering new practices. Many innovations can spring from applying the dynamics of one industry to another, although a corresponding degree of innovation and creativity is called for in the benchmarking team to adapt and implement the ideas (Camp, 1989: 58).

Internal benchmarking has the advantages of being convenient and relatively inexpensive. It is easier to find partners and establish relationships, and fewer problems arise from confidentiality of data. Internal benchmarking across disciplines or faculties can also provide some of the advantages (as well as some of the difficulties) of benchmarking outside one's own industry.

Table 5. Points to Consider When Deciding on a Benchmarking Partner

- the performance standards of the potential partner;
- the accessibility of the potential partner;
- the cultural similarity and compatibility of the potential partner in relation to one's own institution;
- the geographical proximity of the potential partner (cost and ease of site visit and other communication);
- the willingness of the potential partner to participate; and
- the ability of the potential partner to participate.

1.6 Approval of benchmarking projects

Approval for particular benchmarking projects requires the submission of a proposal (see Appendix) to the appropriate senior manager with budget control. This will include an outline of the planned benchmarking project, and a projected budget and schedule. Benchmarking may be expected to take between twelve and eighteen months, although a definite deadline will not usually be set. Instead, interim reports of progress will be required at specified intervals during the benchmarking study.

2.0 The 'Deployment' Phase

2.1 The Data Collection Stage

2.1.2 Collect data from own organisation

A measurement of current performance in the selected areas is necessary to provide a baseline against which comparisons can be made. It is important that we first study our own institution, and understand what is currently being practised, before attempting to measure the performance of any other institution. Parts of this study may be begun in the planning stage of the benchmarking exercise, when school / area

priorities for improvement are investigated. This self-analysis will enable a more clear focus if it is decided that a visit to the benchmarking partner is essential.

2.1.3 Collect data from benchmarking partner

The performance of the benchmarking partner is assessed in this step, with the focus on both measurement of outcome or product, and investigation of practices by which those outcomes are achieved. As discussed earlier, new insights are gained through an emphasis on process and practice. Direct site visits, where appropriate, allow for discussion and exchange of information, and the observation of processes. After contacting the benchmarking partner and arranging a time for the visit, the following guidelines may be of assistance:

Preparing for the Site Visit

- Decide who is to attend. Although the usual size of a benchmarking team is three to eight members, budgetary constraints, particularly if the benchmark partner is some distance from your organisation, may require that a reduced team conduct the actual site visit.
- Obtain preliminary information from the partner to save time during the visit.
- Prepare an agenda to structure the visit, and provide it, with other relevant information, to the benchmarking partner.

Conducting the Site Visit

- Site visits usually take from half to a full day. This may need to be extended however, depending on the scope of the benchmarking experience. Where possible benchmarking visits should coincide with conference or meeting attendance at interstate or overseas venues. The essential outcome of the visit is to collect sufficient data to identify the characteristics of best practice for each process. This goal should be kept in mind throughout the visit. Careful prior planning should also reduce the risk of `industrial tourism'.

After the Site Visit

- Conduct a debriefing as soon as possible to ensure that documentation is complete.
- A written record of discussions needs to be circulated to all relevant parties.
- Consider sending a summary of observations to the partner to check accuracy.
- Arrange for any necessary follow up.

2.2 Analysis of Data Stage

2.2.1 Compare data

Information obtained from the benchmarking partner is compared with that from the internal evaluation. Three key questions need to be considered here:

- Is the partner better?
- How much better are they?
- Why are they better?

If a performance gap exists, the magnitude and causes of the gap need to be determined. The focal point of the analysis is to identify the specific practices which contribute to the other institution's superior

performance. Identification of the gap and its magnitude are the easy parts of this process; the main difficulty lies in understanding which factors are responsible for the success of the partner organisation. Such an understanding is crucial, however, if best practices are to be incorporated into one's own institution. As a guideline, it may be useful to consider differences in the benchmarking partner in the following areas:

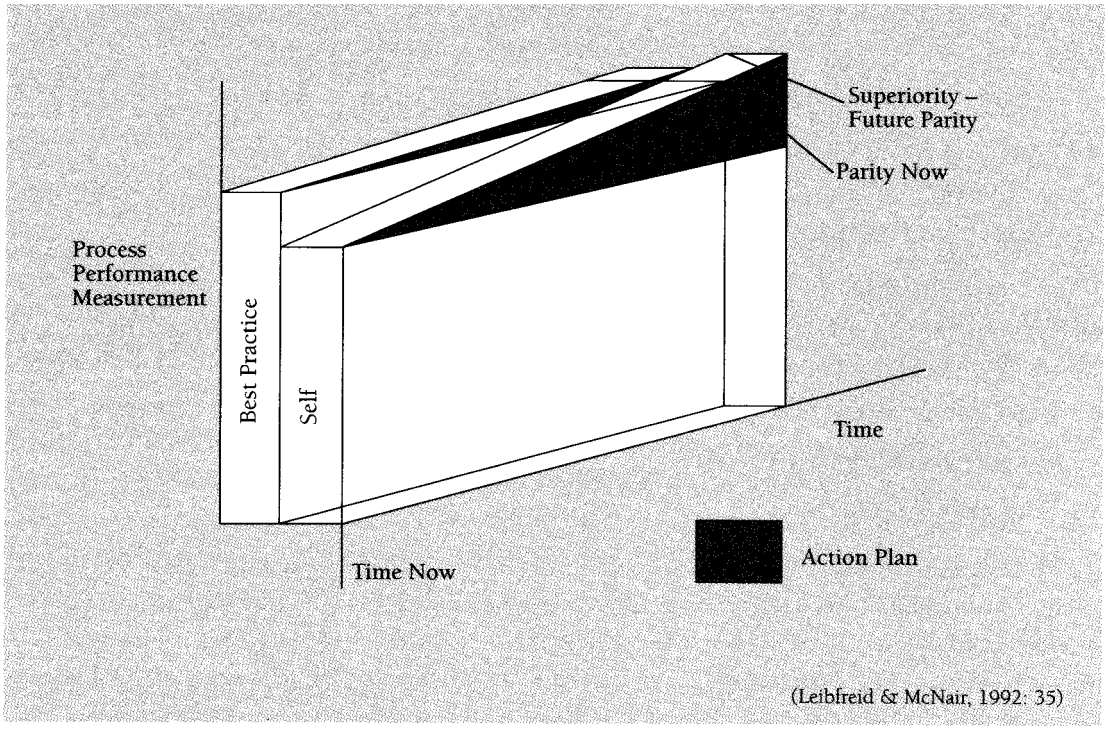
- Operating procedures;
- Leadership and management systems (for example, resource allocation, planning, and communication between management and other areas of the organisation);
- Evaluative systems: how performance is measured within the organisation, and how these data are acted upon;
- Staffing policies and support for staff;
- Organisational culture; and
- Structure (for example, the nature of the organisation, its location and tradition, levels of government funding, and the amount of direct competition).

2.2.2 Establish target goals for improved performance

Establishing targets for improved practice is one of the original goals of the benchmarking process. The aim of benchmarking is at least equal to the benchmarking partner's performance, and preferably to overtake it. In establishing goals some prioritisation may be necessary. Factors to consider here may include the difficulty of achieving a particular goal, the costs of change as compared to the likely benefits to be accrued, the necessity of change to the achievement of critical success factors, and the amount of organisational upheaval which particular changes may bring. These are only guidelines for prioritisation, however, and should not be taken as reasons for avoiding improvement altogether. It must be accepted that beneficial and necessary change may not always be easy (Cook, 1995).

Goals need to be amenable to comparative measurement. The expression of these goals in terms of the performance indicators used within the benchmarking study is therefore recommended. The setting of targets for future performance should also take into account the continuing improvement of the benchmarking partner. Rather than merely aiming to equal the partner's current performance, an estimate of their future performance should be made, and goals for parity or superiority constructed in relation to this (see Figure 2).

Figure 2. Action Plan



2.2.3 Develop action plans

This step involves the identification of changes required to achieve the specific performance targets, and the formulation of an action plan for improvement. The key here is the adaptation of the approaches and insights gained from the benchmarking exercise. An attempt simply to copy the practices observed, without sensitivity to organisational and environmental factors, is unlikely to cause significant improvement, and may in fact lead to unforeseen problems (Alstete, 1995). Action plans should also include provisions for review, which will be related to the target goals discussed above.

2.2.4 The benchmarking report

The purpose of the benchmarking report is to present the findings of the benchmarking exercise as well as a summary of the recommendations for change. Reports should include a brief outline of the project's methodology, a detailed yet concise presentation of the quantitative and qualitative results of the benchmarking, and a summary of the benchmarking's key findings and the recommendations arising from these. The report may also include information relating to the future review of the benchmarked processes, and the results of any implemented change.

2.3 The Action Stage

As noted earlier, the purpose of the benchmarking exercise is improvement. The goal of benchmarking is not to measure what the competition is doing, but to improve our own performance. This requires the effective implementation of the recommendations for improvement which arise from the benchmarking

exercise. Accomplishing the goals and targets contained in the action plan requires a commitment to change, and may prove the most difficult aspect of the benchmarking process.

The benchmarking report may be a useful tool here, in providing objective measures of performance which clearly illustrate the need for improvement if parity or superiority to the benchmarking partner is to be achieved. Mere recognition of the need for improvement will be insufficient. Successful change will require effective leadership and planning if those responsible for implementing recommendations are to be galvanised into an effective agency of improvement.

3.0 The 'Review' Phase

A continuing process of review is necessary to determine whether outcomes have improved, and whether objectives and targets have been met. If they have not, the reason should be ascertained: does the problem lie with the plans, or with their implementation, or is the data analysis incorrect?

4.0 The 'Improvement' Phase

Having completed the review phase it is important to reflect on the learnings from the benchmarking exercise and to identify how the process and outcomes can be strengthened. This learning will help inform a higher level of continuous improvement as a new cycle of improvement commences.

Examples of Benchmarking Projects

Examples of benchmarking projects carried out at the University of Otago have included the following. The School of Physiotherapy has benchmarked its clinical teaching against the University of Sydney and the University of Queensland, in order to review both the format and the cost effectiveness of clinical education at Otago. This study proved useful not only in providing alternative approaches to clinical education, but also as an impetus towards change. The Dean of the School of Physiotherapy, Professor S. John Sullivan, commented:

> *It [the benchmarking exercise] is very useful in giving me a quick overview of what is going on elsewhere and "reasons" to reinforce the changes, which were needed in our programme. The most important contribution was that there was concrete evidence that clinical education could be successfully delivered in different formats and thus it was possible to argue for change. We have made major changes to our Clinical Education programme (and are now reflecting budgets) and it seems to be doing fine.*

Art History and Theory has conducted a more general benchmarking exercise with the University of Essex. This study ranged across research, teaching, and support services and yielded a number of valuable conclusions and recommendations. For example staff/student ratios at Otago are twice those at Essex, and Essex also has a much higher proportion of senior staff. Otago counters this to some degree by employing more tutors than Essex; however, graduate teachers at Essex receive almost twice as much per hour in comparison to their Otago counterparts.

Some recommendations for both universities were produced, such as a review of the conditions under which academic staff are employed, examination of practice with regard to the delivery of job transferable skills, better facilities for postgraduate students, and clearer job differentiation for staff. Additionally, areas which could benefit from further research were identified, for example a decline in undergraduate numbers and an increase in graduate students. It was also agreed that a follow up benchmarking exercise would be conducted in three years' time. As a general benchmarking exercise this was quite a success; it identified areas which required improvement, it produced a number of recommendations for change, and it also fostered a mutually beneficial and supportive exchange of ideas between the two institutions.

The University of Otago has also been part of a wide-ranging comparative study, covering four Australian and the seven New Zealand universities and focusing on research outputs across a range of departments and divisions. Data were collected on research published, graduate and postgraduate numbers and research expenditure for the years of 1993 and 1994. These data were weighted by dividing research output by the number of equivalent academic staff in each department. A points system was also used in which different types of publication were given different weightings. The final report was circulated amongst heads of department at Otago, who were seen to be in the best position to act on its findings. As one would expect, the generality of the report prevented the formulation of specific recommendations for change. However, as a guide in identifying underperformance in departments or divisions, the report proved very useful for targeting areas requiring further attention.

Resource Papers

Reading 1
O'Dell, Carla
Building on received wisdom,
Healthcare Forum journal 36/1 (1993) 17 – 21

O'Dell's article is a very readable introduction to benchmarking, presenting it as a tool of continuous quality improvement which can accelerate the rate of change. The benchmarking process is clearly and systematically described, and common mistakes are listed.

Reading 2
Flower, Joe
Benchmarking: a conversation with Robert C. Camp
Healthcare Forum Journal 36/1 (1993) 30 – 36

Xerox introduced formal benchmarking to US industry, and Robert Camp was closely involved in those early efforts. This article summarises Camp's instructions on how to carry out a benchmarking exercise.

Reading 3
Alstete, Jeffrey W
Executive Summary
from *Benchmarking in Higher Education: Adapting Best Practices to Improve Quality* ASHE-ERIC Higher Education Report No. 5. (1995) iii – vii

Alstete briefly considers what benchmarking is, the applicability of benchmarking to higher education, and where benchmarking is being used in higher education, as well as providing a summary of how an institution can get started at benchmarking.

Reading 4
Payne, James S. & Blackbourne, J.M.
Learning through benchmarking
Journal for Quality and Participation 16/5 (1993) 62 – 65

The School of Education at the University of Missouri benchmarked using four businesses as partners; this article describes how they went about benchmarking, and what they learnt from the exercise. The authors make a case that institutes of higher education can usefully learn from business.

Reading 5
Linke, R.D.
Some principles for application of performance indicators in higher education
Higher Education Management 4/2 (1992) 194 – 203

In this article Linke examines principles of institutional performance appraisal. He considers the selection of appropriate performance indicators, and the need for expert judgement both in selecting indicators and contextualising performance indicator data.

Reading 6

Murphy, Penelope S.

Benchmarking academic research output in Australia

Paper presented to the 6th International Conference on Assessing Quality in Higher Education, Hong Kong, 19 - 21 July, 1994

This paper describes benchmarking, but concentrates mainly on the issue of benchmarking research productivity. The focus is on measurement (metrics) rather than the practice of benchmarking. However, benchmarking output alone is insufficient; there is a need to understand the processes which underpin excellence.

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External Benchmarking Proposal

(Refer Also: Benchmarking process worksheet: www.auqa.curtin.edu.au)

Department:

Benchmarking Partner:

Title of Benchmarking Project:

Plans of Benchmarking

Describe the subject for the benchmarking project, identifying your improvement priorities:

What measurements are proposed:

Indicate reasons for selecting benchmarking partner:

Membership of Internal Benchmarking Team

Benchmarking Partner's Contacts

Executive level:

Faculty/Departmental Level:

Benchmarking schedule

Signature:_____

Comments and recommendations of senior manager with budget control:

Signature:_____ Date:_____