BENCHMARKING: THEORY AND PRACTICE

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(Editor)

New Zealand Universities Academic Audit Unit

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Benchmarking: Theory and Practice

Table of Contents

Introduction

The Academic Audit Unit has had an interest in benchmarking for some time. In 1999, the Unit organised two workshops on the topic led respectively by Mr Tom Gott, Management Consulting Services, Price Waterhouse Coopers and Dr Phil Meade, Deputy Vice-Chancellor (Academic), University of Otago. Participants in both workshops were very interested in applying the concepts discussed, and at the end of the second workshop there was a discussion on how the momentum could be maintained. As one step, the AAU offered to make the next issue of its regular quarterly publication, the Good Practice Digest, a special issue on benchmarking. This was published in December 1999.

This monograph is an another attempt at furthering discussion of benchmarking as it relates to higher education and collects together a number of invited articles addressing a variety of issues on the topic. Martin Carroll (Manager, Quality, Victoria University of Wellington) considers the extent of benchmarking practices in New Zealand tertiary institutions and discusses the concept of BenchLearning. Robin Mann (Institute of Technology and Engineering, Massey University and Director of the New Zealand Benchmarking Club) reports on the progress of the New Zealand Benchmarking Club in its first year and discusses the opportunities it provides for research. Peter Fraser (Division of Veterinary and Biomedical Sciences, Murdoch University) discusses a benchmarking pilot project between Murdoch and Massey Universities, noting some useful lessons that have been learned. The edited extract from the paper by Leeanne Pitman, Isabella Trahn and Anne Wilson discusses recent progress that has been made by Australian University Libraries in benchmarking their performance.

This monograph is the fifth publication in the AAU's Series on Quality, which is produced with the aim of contributing to the maintenance and enhancement of quality in higher education.

Robyn Harris
Acting Director
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July 2001

Benchmarking in the New Zealand Tertiary Education Sector

Martin Carroll
Manager, Quality, Victoria University of Wellington

The following is adapted from a presentation to the 10th Australasian Association of Institutional Research conference at UNITEC, New Zealand, December 1999.

Introduction

Sessions on the topic of benchmarking have been a feature of Australasian tertiary education conferences for several years (see, for example, Pittman[1]; Carroll and Fraser[2]). This paper will address progress made in the New Zealand tertiary sector - particularly the university sector.

The term benchmarking has been highly fashionable since its inception in 1979 when Xerox Corporation underwent their famous turnaround story. In the two decades since, it has become simultaneously an exciting but confused concept; promising much but delivering mixed results. This paper presents a story about a tertiary education sector increasingly committed to benchmarking, but unclear of precisely what it is and how to use it in an increasingly competitive context.

Benchmarking and BenchLearning

The challenge in discussing benchmarking is being sure that everyone knows precisely what is being talked about. It is the phenomenological researcher's dream come true - a concept that everyone understands individually but that few people agree on collectively.   Definitions and understandings of benchmarking are not commonly shared.

International research on benchmarking, surprisingly limited as it is, suggests that it is a growing and changing practice. Research by Anderson and benchmarking guru Robert Camp[3] identified two main changes that have occurred over benchmarking's first two decades. The first change is that computer-based benchmarking is becoming increasingly common. Certainly in New Zealand most of the top five consultancy firms actively promote their international databases of best practice. And then, of course, there is the International Benchmarking Clearinghouse.[4]

The second change is in the focus of benchmarking. To quote from Anderson and Camp:

> "In early studies, the focus tended to be on performance measures, often of competitors, and for the purpose of setting more ambitious targets. Recent studies have examined how non-competitors and industrial outsiders learn how to improve business processes. Comparison of performance measures has developed into learning about best practices."[5]

These are two quite distinct phenomena, with their own purposes and methods. Each of these will be addressed separately in this paper under the terms benchmarking and BenchLearning.

Benchmarking is commonly thought of as the comparison of data (be it of inputs, in-process measurements and/or results), usually of competitors, for such purposes as measurement and reporting. Some authors have used definitions such as "Measuring an operation's or departments' performance compared to others" (see Bennett, B. 1993), or "The establishment of operating targets based on best practices" (see Rogers, D.S., Daugherty, P.J., and Stank, T.P., 1995).

This approach is somewhat less than the more noted authors and advocates such as Robert Camp[6], Michael Spendolini[7] and Anne Evans[8] would claim. However, it is close to the way benchmarking is being interpreted in practice.

Indeed, such comparisons of key performance indicators (KPI) are not even necessarily used to set stretch targets, but to set minimum standards. For example, last year Australian education ministers agreed to National Literacy and Numeracy Benchmarks, in which benchmarks were described as follows (italics added):

> "Benchmarks are a set of indicators or descriptors which represent nationally agreed *minimum acceptable standards* for literacy and numeracy at a particular year level. In this context 'minimum acceptable standard' means a critical level of literacy and numeracy without which a student will have difficulty making sufficient progress at school." [9]

This is quite different from, and considerably more limiting than, the more formative concept.

More recently, Karoef and Oestblom[10] coined the term "BenchLearning" as a way of distinguishing the learning phenomenon from the comparison phenomenon. The term is a hybrid drawing upon the established term "benchmarking" and the much-acclaimed concept of the "learning organisation". Within the New Zealand tertiary education sector the term BenchLearning has met a mixed response, with some finding it a useful and meaningful term for differentiating between two phenomena, and others resisting it as being somewhat clumsy. Victoria University of Wellington has used the concept of BenchLearning to develop the following definition:

> "BenchLearning is the continuous process of advancing our own practices in light of those used by outstanding achievers." [11]

Disclosure

There are many practices to which the labels benchmarking or BenchLearning are attributed. In many cases, the practice under discussion is more like normal competitor intelligence gathering (collecting information about a competitor without requiring their co-operation), industrial tourism (unfocused collection of data) or even corporate espionage (collection of information using illegal or unethical means).

Benchmarking and BenchLearning, on the other hand, suppose that an information-sharing *relationship* is entered into with the information source. Central to understanding benchmarking and BenchLearning, therefore, is the core phenomenon of *disclosure*. For the purposes of this paper disclosure is described as follows:

> "The abnormal and voluntary sharing of otherwise confidential business information to, and on request by, an external party."

This description is elaborated upon as follows:

Abnormal - the information would not ordinarily be disclosed as a part of business as usual.

Voluntary - the disclosure is made at the discretion of the owner, and is not made as a result of mandatory requirements such as central or local government legislation or professional body regulations.

Otherwise confidential - not only would the information not normally be disclosed, but indeed it may be confidential to the organisation for commercial/strategic reasons.

Business information - the information is about how business operates, and therefore includes within its scope processes as well as inputs and outputs.

On request by, an external party - The initiative for the disclosure to occur comes from a party external to the information owner.

In contemplating this phenomenon, there are a number of high-level research questions that leap out at us. Not least of these are:
- Why do information owners agree to such disclosure, particularly in a small and competitive tertiary education sector like New Zealand's?
- Does such disclosure help or hinder the information-provider organisation? How and why?
- Are such instances of disclosure likely to increase or decrease in occurrence and why?

The Benchmarking Context

Benchmarking occurs in a context, and I believe that the context has a dramatic and direct impact on the extent and nature of both benchmarking and BenchLearning.

The past decade has seen a complete transformation in the nature of the relationship between tertiary sector organisations in New Zealand. Most notably, the days of universities primarily recruiting from their assigned geographic regions, as co-ordinated by the University Grants Committee, are long over. This is perhaps most evident in the gradual demise of the apolitical and altruistic Liaison Officer.

Some cities now have more than one university. In the mid 1990's these were typically small outposts used for recruiting, specialised graduate courses like the

Executive MBA, or for support of distance education students. Now these cities contain major campuses. The greater Auckland area, for example, now accommodates Auckland University, a major campus of Massey University at Albany, an outpost for the University of Otago and the Auckland University of Technology. This is, of course, not to mention the potential for other major polytechnics in Auckland becoming universities in the foreseeable future. The larger the campuses, the greater the likelihood of programmes of study that overlap with other local universities.

The inevitable consequence of this is that these organisations are now fiercely and directly competing for the same students. In that context, why would Institution A give Institution B, or the collectivity of institutions, information that could be used against them in the marketing arena?

For example, it was interesting in a session at a recent AAIR conference on the Balanced Scorecard to hear one presenter say "I won't show you the targets - they're commercial in confidence". This is a common defence most institutions have used. In New Zealand, tertiary education managers are getting very good at using the Official Information Act (OIA) to seek benchmarking data, and even better at using the Privacy Act and clauses in the OIA to decline such requests when they come to them.

Current Benchmarking Practices in New Zealand Universities

Current benchmarking and BenchLearning activities in the New Zealand tertiary sector may be summarised under three broad groupings:
* Collective benchmarking
* Individual benchmarking and BenchLearning
* 3rd party benchmarking

Collective Benchmarking

There is not yet any comprehensive, co-ordinated body that facilitates BenchLearning in the tertiary sector. In terms of benchmarking, there is a small number of exercises that are co-ordinated on a national basis.

Tertiary Statistics Monitoring Group
This is an independent consultative group comprising representatives from the Ministry of Education and all provider aspects of the tertiary sector. Its primary function is:

> "to provide a forum in which to discuss and advance issues related to the collection, storage and exchange of student-related data, with particular reference to the Education Amendment Act 1990 s.226, under which tertiary education providers are required to provide to the Ministry '...such statistical information in the possession of the institution as the Secretary specifies in relation to students...' " [12]

Specifically, it seeks to do this through establishing a common glossary, standards and protocols, and through establishing efficient and effective data collection, storage and exchange systems.

Is this benchmarking? There may be potential for the Tertiary Statistics Monitoring Group to adopt a greater role in facilitating national benchmarking. As yet, there has been no national agreement from the Vice-Chancellors to share information in this way. One concern would probably be that such information would be used for marketing purposes.

New Zealand Vice-Chancellors' Committee

The New Zealand Vice-Chancellors' Committee (NZVCC) produces a number of reports that provide the basis for some comparison of data. For example, its annual statistical collection contains statistics on:
- student headcount and EFTS (age, ethnicity, gender, full/part time, previous occupation, school decile ranking, allowances);
- staff headcount and FTE; and
- financial data.

The NZVCC also produces a University Graduate Destinations Report. The Report is compiled from a survey of all those persons who became eligible to graduate from a New Zealand university during a calendar year and is published around December of the following year. This survey is conducted for the NZVCC by its Standing Committee on Graduate Employment. As well as analysing outcomes for the total survey population, the report also features sections covering:
- University Bachelor or Bachelor with Honours Graduates;
- University Graduates with Postgraduate Qualifications (Masterates, Doctorates);
- University Diplomas; and
- International Graduates from NZ Universities.

These types of reports do provide useful, high-level data that positions one's own university against the rest of the sector, and possibly some conclusions could be developed about the relevance of the institution's programmes to employer groups (although that would need to be treated with extreme care).

Course Experience Questionnaire

For several years academic executives and quality managers at New Zealand universities have been getting together to talk about quality issues that they have in common. Each year there has been a level of support for entering into a New Zealand equivalent of the Australian course experience questionnaire that could be used to create benchmark data. However, this has not yet eventuated. Instead, a number of universities have proceeded on an individual basis.

Individual Benchmarking and BenchLearning

It seems apparent that most BenchLearning, in particular, occurs at the level of an individual institution. The University of Otago is an example of an institution that is adopting a co-ordinated, funded and supported approach. Victoria University of Wellington also provides guidelines and contestable funding at a grass roots level. Some successes are starting to emerge. Moreover, much that may be called

BenchLearning is being incorporated into change management projects and system upgrades.

At Victoria University of Wellington, attempts to engage in benchmarking and BenchLearning relationships with Australian universities have proven embarrassing. Trans-Tasman differences in accounting treatments, degrees of devolution and research funding structures and sources made comparisons of financial data extremely difficult. If these difficulties are ignored, and the data misinterpreted, the risk is run of either setting entirely inappropriate standards or, worse, implementing inappropriate practices.

Victoria University of Wellington participated in Commonwealth Higher Education Management Service (CHEMS) during 1997. CHEMS is a good example of a co-operative benchmarking club. However, Victoria withdrew for a number of reasons. Firstly, participation in such clubs is not cheap. But that on its own was not a deterrent. Secondly, the extent to which the data provided was analysed for comparability was insufficient to develop confidence in the meaningfulness of the differences. Thirdly, the chances that the other participating members would necessarily capture best practice in a relevant topic and context was random. After all, if one university elects to participate in a given topic because they believe themselves to have significant opportunity for improving in that area, then is it not probable that all the other universities are participating for a similar reason? Where exactly, then, will the best practice be sourced? Fourthly, the choice of topics used in any one year may not necessarily bear any useful relationship to an organisation's own strategic priorities for that year or budgetary period.

Third Party Benchmarking
In addition to the benchmarking that an institution may undertake for itself, or that it may undertake for others (such as the Ministry of Education), there is benchmarking undertaken about institutions by and for other interested parties. One could argue that this is inevitable, and even desirable as a means of ensuring public accountability and independent information for potential students. However, one could also argue that the information is so complex that it is prone to oversimplification or misunderstanding. This will be illustrated through the following examples.

For some years, academics Coy, Dixon and Tower were publishing comparisons of the annual reports produced by New Zealand universities. They ranked the reports on a matrix that included, for example, evaluations of the extent of social reporting and readability. That may be deemed an example of a robust approach to independent benchmarking. There are also examples of somewhat more arbitrary benchmarking.

The New Zealand Herald has attempted to obtain information on performance indicators it believed to be newsworthy for the purpose of publishing its own ranking of New Zealand universities. The intended result may have been akin to the Australian *Good Guide to Universities*. However, some universities refused to supply the information, and the eventual article was not able to include tables of comparable data.

Asiaweek magazine is another example of a third party benchmarking exercise effectively out of the control of participating institutions and for purposes other than those of the participant universities. There have been numerous commentaries on the extent to which the *Asiaweek* magazine method is inequitable in its handling of data from universities in different countries and political systems.   Examples include differences in limitations on entry and sources of research funding. Consequently, the results of the *Asiaweek* survey can be misinterpreted, misused and even damaging to the innocent.

Straw Poll of NZ Business Sector

As part of this author's own PhD research on the phenomena of disclosure and benchmarking, a brief quantitative survey was undertaken to seek a crude determination of the extent of benchmarking activity within the New Zealand business sector. The survey did not differentiate between benchmarking and BenchLearning. Survey forms were sent to the chief executives of the 272 Auckland and Palmerston North businesses listed in the Top 500 Businesses in New Zealand.[13]   The organisations were New Zealand-owned, with a for-profit orientation, and excluded the finance sector. Sixty-seven (25%) responses were received. No reminders had been issued. The survey had the following results:

Our company undertakes benchmarking regularly	8	(12%)
Our company has undertaken some benchmarking	38	(57%)
Our company has not undertaken any benchmarking, but intends to	7	(10%)
Our company has not undertaken any benchmarking	14	(21%)
Total	67	(100%)

Whilst the results have not yet been tested for statistical significance (and are unlikely to be), they tend to establish that the phenomenon of benchmarking is indeed being practised within New Zealand businesses and looks set to grow as more organisations take up the practice.

Straw Poll of NZ Tertiary Sector

Purpose
A very basic quantitative survey was undertaken in November 1999 to seek a crude determination of the extent of benchmarking activity within the New Zealand tertiary sector. The survey sought no more than to identify whether it was occurring, in what broad topic areas, with what geographic scope, and what the balance was between benchmarking and BenchLearning. Such a purpose required some clearly established definitions.   For the purposes of the survey the following two definitions were presented.   Respondents were asked to think in terms of these definitions, irrespective of whether they used those terms in that way within their organisations.

Benchmarking - the comparison of data (be it of inputs, in-process measurements and/or results) for such purposes as measurement and reporting.

BenchLearning - having conducted benchmarking, the additional comparison of how processes are designed and implemented by superior performers, for the purpose of organisational improvement.

Method
Surveys were sent to the chief executives of New Zealand's 34 publicly funded tertiary institutions. The survey form included an incorrect return fax number, and so mid way through the period allowed for responses each non-respondent received one telephone reminder that also served to advise of the correct fax number!

Twenty-one responses (62%) were received. The responses were from 13 polytechnics, four universities, three colleges of education and one whare wananga, giving a fairly good spread across the sector. Three of these were in prose rather than on the quantitative form provided, and so were not included in the statistical analysis. Reference, however, will be made to them.

No attempt has been made to differentiate between the responses of different classes of institution. This is firstly because of the small population size, and secondly because to do so would be to assume that the survey methodology would stand up to, and contribute meaningfully to, an analysis of differences in organisational culture, which it clearly cannot.

It should be declared before presenting the results that the survey methodology has received some criticism. Three respondents suggested that the questions were too simplistic to accurately capture what was going on in their institutions. Moreover, the survey results reveal what is known at a central level, but probably precludes benchmarking and BenchLearning activities at departmental level. These criticisms are entirely reasonable, and so by way of introductory remarks it must be stated that these results may be interpreted as interesting but by no means statistically significant.

Almost as if to support the earlier statements about the competitive context, 16 of the 18 quantitative respondents requested that their responses be treated anonymously.

Results and Discussion
Three quarters of respondents said that they had no standardised definition of benchmarking or BenchLearning, and 82% had no policy in regard to benchmarking or BenchLearning. Despite that, half the respondents said that they required benchmarking information as part of their regular performance reporting.

61% said that they were actively involved in benchmarking. This compares with 69% of a similar poll of New Zealand businesses conducted one year earlier (see above). The extent of BenchLearning activity was, not surprisingly, considerably less with only 28% claiming active involvement.

Figure 1: Corporate Information

Figure 2: Project Management
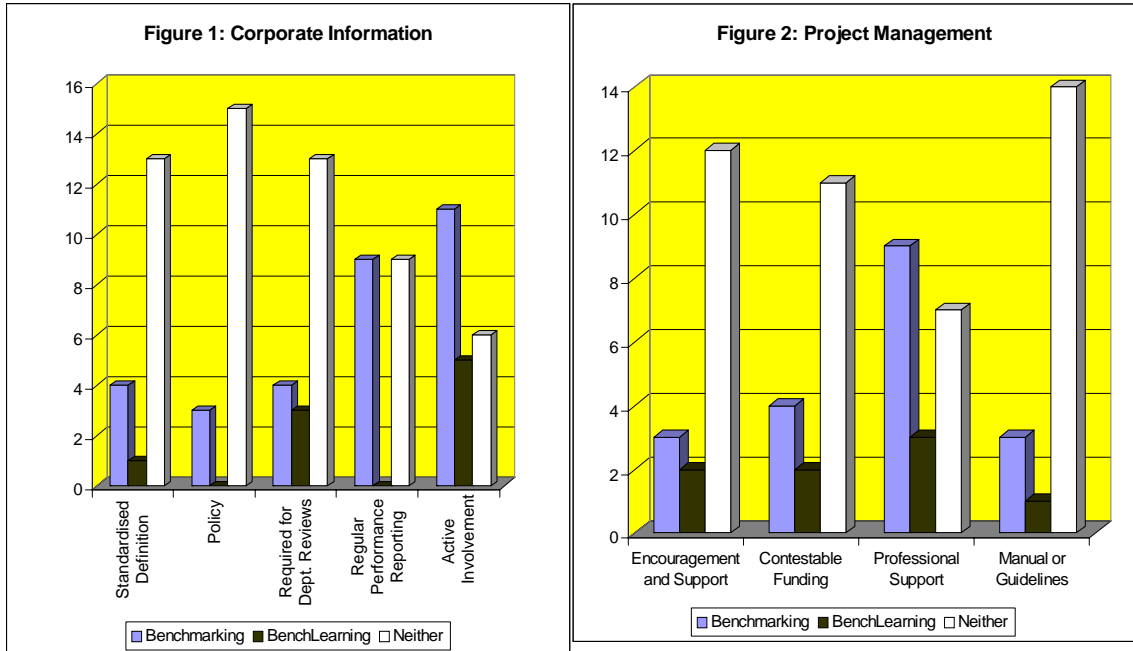

This indicates a somewhat *ad hoc* approach to benchmarking and BenchLearning, and indeed that notion was reinforced in the text responses. The majority of institutions that responded do not provide guidelines or manuals, do not provide contestable funding and have no programme for encouraging project initiatives on a case-by-case basis.

Figure 3: Does Benchmarking Occur (by Topics)?

Figure 4: Does BenchLearning Occur (by Topic)?
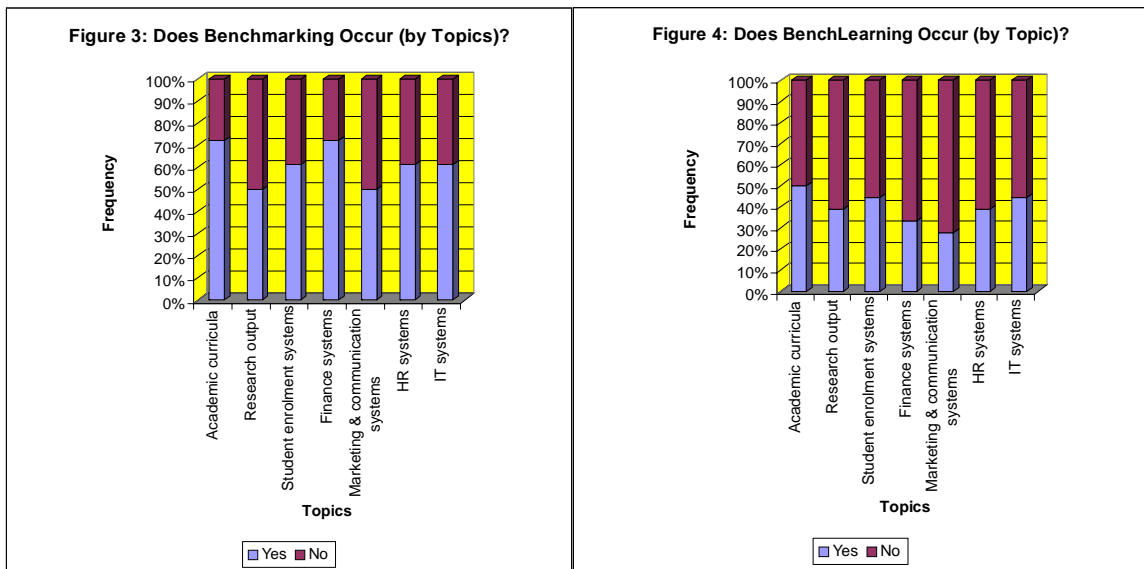
From the closed list of broad options provided, the most frequently benchmarked topics were academic curricula and finance systems. The most frequently BenchLearned topic was also academic curricula. The least frequently benchmarked and BenchLearned topics are marketing and communication systems. This is hardly surprising, as those are indeed at the cutting edge of competitiveness.

In terms of geographical scope, of the benchmarking occurring, 14% is international, 53% is domestic and 33% is within the institution itself. The geographical scope of BenchLearning projects is similar (20%, 48% and 33%, respectively). This spread is hardly surprising given that international BenchLearning is generally considered to be expensive.

Figure 7: Benchmarking by Geographic Scope

With the benefit of hindsight, the response rate and the content of the text responses indicated a level of interest that may have tolerated a more thorough survey.

Figure 8: BenchLearning by Geographic Scope
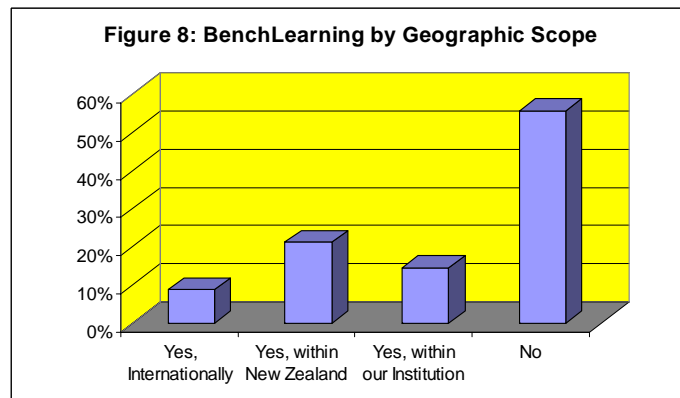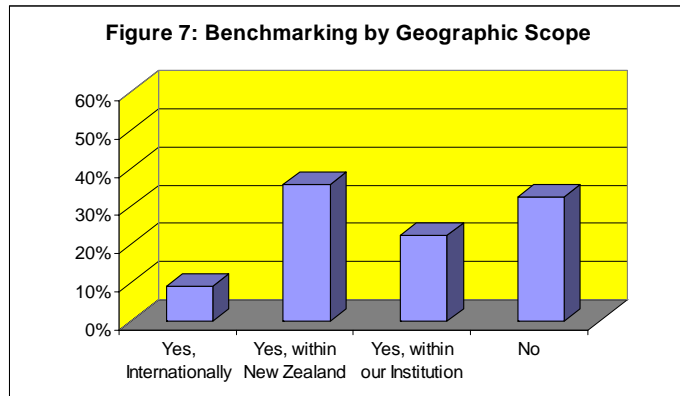
Possibilities include:

- Open categories for topic responses;
- Self-declaring definitions;
- Differentiation of partnering benchmarking and BenchLearning relationships versus benchmarking clubs;
- Differentiation of self-initiated benchmarking versus comparisons required by regulatory bodies;
- Indications of utility of benchmarking; and
- Indications of successes with BenchLearning.

The survey results have been returned to participants, along with their own entries, as a modest benchmarking exercise in comparing their benchmarking efforts against the rest of the tertiary sector.

Predictions for the Future of Benchmarking and BenchLearning

One of the world's leading organisational benchmarking programmes is the prestigious Malcolm Baldrige Award. It is described as benchmarking because the criteria for excellence are supposedly based upon world-leading organisations. However, the criteria are not standards, but rather a series of questions designed to help shape a best-practice governance and management framework.

The overarching purpose of the Baldrige Award is to lift the standard of quality in organisations. Therefore, a condition of entering the programme is that upon winning you must be prepared to share your best practices. When Xerox won the award it was so inundated with requests for information about its practices that it decided to generate revenue from it.   Xerox Quality Services was established to turn benchmarking requests into a revenue-generating activity.

Could this be an indicator for New Zealand's future? In this highly competitive context, benchmarking data that can be used for marketing purposes is, for that reason, both very valuable and very hard to obtain. Will benchmarking become a commercial side-business? This author's own PhD research has produced evidence of benchmarking relationships turning into commercial transactions.   What commences as a simple request for disclosure can turn into a consultancy opportunity for the BenchLearning host, or even the opportunity to sell a practice or system.

It is possible, however, that this is a feature of the culture of the commercial sector. Perhaps the culture of the New Zealand tertiary education sector is not so hard-hearted. At the ATEM conference in September 1999 Professor John Hood, Vice-Chancellor of the University of Auckland, made the following comment in his plenary address:

> "I never thought about charging for sharing best practice, but I suppose one would want to be selective about with whom one shares best practice."[14]

As it turned out, after a few years Xerox Quality Services was disestablished. It was never particularly profitable and it certainly was not part of Xerox's core business.

It is always a little precious and presumptuous to anticipate the future on matters such as this, but let me try. If a similar paper were written in one or two years time, the following three events will be reported:
- There will be an increase in BenchLearning at an individual institution level with organisations outside the tertiary sector.
- Benchmarking clubs will continue to be formed, but the benefit of membership will be the status earned via association with internationally reputable institutions, rather than actual benchmarking or BenchLearning utility.
- There will be an increase in State-required benchmarking, and its utility will seem to be of profound importance to Ministry officials but a complete mystery to the institutions who will incur considerable costs in providing the data.

Conclusion

To stimulate discussions, may I conclude with this thought? My research is becoming finely honed on this research problem. There appears to be a conflict between the following three statements, all of which have been defended to date by the literature and research participants as having validity within the contextual scope of my research:
- BenchLearning is a reciprocal activity.

- BenchLearning is about gaining insight into practices that give rise to a competitive advantage.
- Information about competitive advantages is commercially sensitive.

How can we, within the New Zealand tertiary education sector, solve that conundrum?

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The New Zealand Benchmarking Club – One Year On
A short summary on the progress of the Club and the opportunities it provides for research

Dr Robin Mann
Institute of Technology and Engineering, Massey University

The New Zealand Benchmarking Club, formed by Massey University in partnership with the New Zealand Business Excellence Foundation, was established in May 2000 with the purpose of achieving an ambitious vision: "world-class performance by its members and widespread adoption of excellent business practices within New Zealand". The format of the Club, its processes, values and the total commitment of its member organisations to "working together" are believed to be unique in the business world. The Club's innovative processes are centred on benchmarking and business excellence criteria and are intended to provide a fast-track route to sustainable world-class performance levels (as measured by the internationally recognised Baldrige criteria[1]).

The Club is now one year old and in those twelve months it has set the foundations for achieving its vision through:
• establishing an advisory committee and agreeing on a common vision, mission and strategy (no mean achievement for 16 diverse organisations[2]);
• member organisations completing a full business excellence self-assessment and sharing management practices in areas of strength;
• conducting an in-depth review of leadership, customer and market focus, and performance measurement practices;
• the establishment of working parties to identify best practices and benchmarks for the following two topics - "Developing leadership capability" and "Identifying best practice in customer relationship management";
• providing benchmarking training by a world renowned expert (Bob Osterhoff, Rank Xerox) to 55 individuals from the Club.

Exciting developments for year two of the Club are already underway. The New Zealand Benchmarking Club was recently accepted as New Zealand's representative on the Global Benchmarking Network. This is a network of benchmarking centres/clubs worldwide (from 18 countries) set-up to foster benchmarking and promote best practice sharing. This means that for the first time in New Zealand an infrastructure will be in place to capture and learn about best practices on a global scale. For the Club it also means that it will now have the ability to learn from the experience of more established clubs so that present services can be improved and new services can be developed.

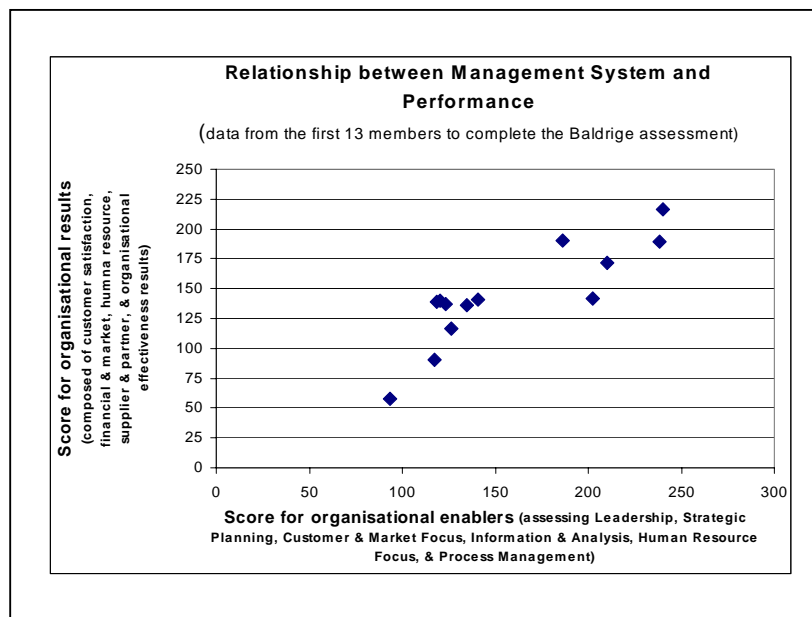**Operating the New Zealand Benchmarking Club from a University**

The New Zealand Benchmarking Club is based on a model its founder, Dr Robin Mann, developed for the UK Food and Drinks Industry Benchmarking Club between 1996-1998 whilst working for Leatherhead Food Research Association. The UK

government helped to support this Club through matching funding (contributing funds to match the money raised through membership fees). This Club is still operating and bringing benefit not only to its members but also to the UK food and drinks industry as a whole.

The New Zealand Benchmarking Club has an opportunity to make a far more significant impact than the UK Club. Firstly its scope is wider and the potential for learning and best practice sharing is greater due to the diversity of its membership base. Secondly, the mechanisms/processes for delivering the Club's vision have been refined and improved in NZ. Thirdly, and perhaps most importantly, the New Zealand Benchmarking Club has the full support of Massey University and the New Zealand Business Excellence Foundation. Operating a Club from a university base provides the perfect opportunity to conduct business research and to disseminate the findings to businesses and business students via publications, seminars, conferences and lectures. In addition, the partnership with the New Zealand Business Excellence Foundation provides a strong link to businesses already focussing on business improvement and to those thinking of beginning the business excellence journey. The New Zealand Business Excellence Foundation (a charitable organisation) runs the prestigious New Zealand Business Excellence Awards and is the leading publicity vehicle for business excellence within New Zealand.

As the prime purpose of benchmarking and business excellence involves gaining new knowledge and insights through identifying, applying, and refining leading-edge practices from around the world the subject is ideal for postgraduate research. Already the Club has produced the first clear evidence within New Zealand that having excellent management practices pays. The results of a self-assessment by each member organisation showed an almost perfect correlation between those organisations with the higher scores for their management system and their performance results – see Figure 1 (below).   The need to conduct further groundbreaking research based on academic rigour is paramount as the implications from such research can determine the success or failure of New Zealand business.

Figure 1: Relationship between Management System and Business Performance

Relationship between Management System and Performance

(data from the first 13 members to complete the Baldrige assessment)

Score for organisational results (composed of customer satisfaction, financial & market, humna resource, supplier & partner, & organisational effectiveness results)

Score for organisational enablers (assessing Leadership, Strategic Planning, Customer & Market Focus, Information & Analysis, Human Resource Focus, & Process Management)

To this end a recent advertisement for PhD students produced an overwhelmingly positive response with over 30 applicants (the majority were managers/directors working in business who could see the benefit of undertaking PhD research in business excellence and benchmarking). This level of response, as far as the author knows, is unprecedented for PhD research.

It is in the Club's strategic plan to aim to recruit seven PhD students to support the Club so that each student can work on improving Club members' performance on one aspect of business excellence (there are seven business excellence criteria - Leadership, Strategic Planning, Customer and Market Focus, Information and Analysis, Human Resource Focus, Process Management and Business Results). However, at present, it has only been possible to recruit two PhD students due to funding difficulties (no government scheme supports PhD's in this area). Through pressure on the government it is hoped that this situation will be reversed in the near future particularly as the Ministry of Economic Development's own reports[3,4] (studies of over 1,500 New Zealand companies) indicate the importance of benchmarking. One study[3] found that benchmarking was the single practice that clearly separated high and low performing firms within New Zealand.

For more information on the Club or on business excellence please contact: Dr Robin Mann, Director of New Zealand's Benchmarking Club, Institute of Technology and Engineering, Massey University, Private Bag 11-222, Palmerston North, New Zealand. Tel: 64 6 350 5455, Email: r.s.mann@massey.ac.nz.

References/Further Information

1. For information on the Baldrige criteria visit the United States' National Institute of Standards and Technology website (http://www.nist.gov/).
2. The 16 members of the Club are: Amcor Flexibles Australasia, Canterbury Health Ltd, Coca-Cola Amatil NZ, Crop & Food Research, Fletcher Wood Panels, Hamilton City Council, Inter-Weave Ltd, Kiwi Dairy Products, Lactose New Zealand, Montana Wines Ltd, New Zealand Sugar, Philips New Zealand, Pilkington – Automotive, R&D Solutionz, Royal & SunAlliance and Vector Ltd.
3. Australian Manufacturing Council (1994), *Leading the Way - A Study of Best Manufacturing Practices in Australia and New Zealand,* Melbourne.
4. Ministry of Commerce, (1999), *Gearing Up - A Study of Best Manufacturing Practice in New Zealand*, Wellington.

A Benchmarking Pilot Project Between the Division of Veterinary and Biomedical Sciences, Murdoch University and the Institute of Veterinary, Animal and Biomedical Sciences, Massey University

Based on comments supplied by Professor David Fraser, Division of Veterinary and Biomedical Sciences, Murdoch University

Benchmarking is about partnerships, discussion and exchange of information and ideas with similar academic units at other universities nationally or internationally, looking for innovative ways of improving teaching, research performance and management. Benchmarking is based on identifying best practice. Therefore the institutions have the opportunity to look at the practices and processes of the other institution for their gain. Benchmarking establishes links between institutions that will, if properly instigated, assist in ensuring all staff are better prepared for change.

Recognising the values stated above the Division of Veterinary and Biomedical Sciences at Murdoch University in Western Australia and the Institute of Veterinary, Animal and Biomedical Sciences at Massey University in New Zealand initiated a preliminary exploration into the possibility of benchmarking between the two institutions. This decision was based on similarities between the two institutions. Both are remote from the large universities on the eastern seaboard of Australia that have veterinary faculties. Both are of similar size, have similar facilities and education goals. Both institutions have a goal of developing best practices in the courses offered and the management practiced.

The initial exploration was by a number of Murdoch University staff visiting Massey University to confer with staff and gain an overview of courses, facilities and staffing levels. The exploration showed that there were clearly defined areas that each institute could share to the benefit of the other. Some of these areas were in course organisation and teaching methods and the process of selecting undergraduate students. Others were in the organisation and running of postgraduate education, and methods and sourcing of research finance to the institutions. The sourcing and management of research funds by Massey were seen by the Murdoch staff to have a great deal of merit.

Despite some very positive initial impressions, the benchmarking project did not proceed, due to other workload commitments. Nonetheless, some useful lessons have been learned.

It is important that, if benchmarking is to be developed between institutions, management should ensure that staff understand what benchmarking is and what it entails, and that any fears and concerns of staff about the process are addressed. As the outcomes of any such exercise are for the betterment of staff and the institutions, these should be fully explained, and the full co-operation of staff obtained. There is also a need to develop direct department or area interaction of both institutions to create direct personal contact between them.

It is also important that the type of people who are involved in driving the benchmarking project are the academic, clinical and general staff that are accepting of change and are the core to future development of the institutions. These may be staff who are starting on their careers.

Edited Extract from "Working Towards Best Practice in Australian University Libraries: Reflections of a National Project" (from Australian Academic and Research Libraries, 2001, vol 32, pp1-15)

Leeanne Pitman, Isabella Trahn and Anne Wilson

The Council of Australian University Librarians has been concerned for some time to facilitate access by Australian university libraries to information which would assist them with the implementation of best practice initiatives.   Funding from the Evaluations and Investigations Program of the Development of Education, Training and Youth Affairs during 1998 provided an opportunity to fast track those aims. Two reports have now been published; 'Guidelines for the Application of Best Practice in Australian University Libraries: Intranational and International Benchmarks'[1] and the accompanying 'Best Practice Handbook for Australian University Libraries'[2].

The relevant literature, survey responses and site visits indicate that benchmarking is regarded as a useful and appropriate tool for improving products, processes and services. It also indicates that what has been largely perceived in the past as a tool for business, industry or profit oriented organisations can be used effectively in the service sector, and in particular in academic libraries. Almost half of the Australian university libraries responding to the project surveys reported involvement in formal benchmarking exercises over the past few years.

One factor in the growing level of acceptance of benchmarking as a tool may be that there has always been in the libraries at least, a strong tradition of informal co-operative surveying, exchange and aggregation of data. The ready adoption of benchmarking within universities as a whole is reflected in the Australian Vice-Chancellors' Committee benchmarking project which established agreed benchmarks across the whole spectrum of university enterprise. One of a number of working parties involved in the work developed the proposals for areas relating to libraries and information services provision. Some university libraries have since begun actively reviewing and building relevant so-called McKinnon benchmarks[3] into annual library performance reviews and some universities are looking to incorporate the benchmarks from the wider project across the whole university enterprise.

A number of benchmarking methodologies have been utilised, depending on institutional goals and objectives, the organisation's size and structure and the type of process identified for benchmarking. In depth process analyses with other university libraries included: interlibrary loans/document delivery; cataloguing as a complete function; shelving; acquisition and processing of core or recommended texts; monograph purchase and processing and research support.

Common instruments were used in planned timetables with other university libraries to extract comparable data with the intention of discussing possible process improvement in the following areas:
* management
* services
* collections

- materials availability
- costing core processes
- client satisfaction
- staff satisfaction
- multidimensional profiling
- information skills (one project underway, another planned)

Some other areas were benchmarked with organisations other than libraries, such as managing improvement and change within a quality framework; personnel services; enquiry services and client satisfaction.

Australian university libraries are also notable for seeking out distant benchmarking partners in a way that might seem incomprehensible in academic libraries in more compact nations. The first steps in international partnering have been taken through membership and participation in activities promoted by the Association of Commonwealth Universities Commonwealth Higher Education Management Service (CHEMS) Benchmarking Club and the Universitas 21 global alliance. International benchmarking presents particular challenges and the experience of Australian partners in this arena is probably fairly described as substantial but pioneering.

Informal benchmarking exercises reported included: original cataloguing, acquisitions, innovation in reference systems, information literacy and reference services, space utilisation, and library-based centres for researchers. There is a relative lack of expressed interest in precise initiatives such as process benchmarking and a public preference for less formal activities such as the exchange of views and co-operation on new initiatives or joint lobbying for a greater good.

The best practice project found that Australian benchmarking partners are usually a mixture of newer and older institutions, with some groupings including libraries as far apart as it is possible to be on the Australian continent. Willingness appears to be the key criterion. Being near neighbours in Australia is sometimes a specific criterion for *not* considering benchmarking. Nationwide benchmarking exercises, even those restricted just to university libraries, have emerged only from the very compact European nations such as Holland and Denmark. For the four Australian university libraries involved in the Universitas 21 grouping of libraries and the other group of university libraries who have been involved in the CHEMS library benchmarking projects, appropriate cultural, political and historical sensitivities are being developed.

References

1. A. Wilson; L. Pitman and I. Trahn 'Guidelines for the Application of Best Practice in Australian University Libraries: Intranational and International Benchmarks' Canberra Evaluations and Investigations Programme Higher Education Division Department of Education, Training and Youth Affairs 2000 (EIP Publication 00/11)
2. A. Wilson and L. Pitman 'Best Practice Handbook for Australian University Libraries' Canberra Evaluations and Investigations Programme Higher Education Division Department of Education, Training and Youth Affairs 2000 (EIP Publication 00/10)

3. K. McKinnon; S. Walker and D. Davis 'Benchmarking: A Manual for Australian Universities' Canberra Department of Education, Training and Youth Affairs 2000

Appendix A

New Zealand Universities Academic Audit Unit

**Te Wahanga Tatari Kaute Tohungatanga
o nga Whare Wananga o Aotearoa**

Definition

Preamble

1. In order to maintain and enhance the quality of their academic activities, the eight universities of New Zealand have established the New Zealand Universities Academic Audit Unit (AAU) and fund and sustain its operation.

2. In its activities, the AAU takes account of the special features of the New Zealand universities including:
    i.   the characteristics of a university, as generally accepted, and as set out in the Education Amendment Act 1990;
    ii.   the obligation that each university has under that Act to establish a charter;
    iii. the obligation under such a charter to take account of the principles of the Treaty of Waitangi;
    iv.   the obligation to develop and state aims and objectives in accordance with the goals and principles stated in the charter;
    v.   the relatively small scale of the university system;
    vi.   the provisions the universities have made for interinstitutional cooperation and peer review;
    vii. their long-standing relationships with university systems in other parts of the world; and
    viii. the existence of other agencies monitoring the performance of the universities.

Terms of Reference

3. The AAU's terms of reference are:
    i.   to consider and review the universities' mechanisms for monitoring and enhancing the academic quality and standards which are necessary for achieving their stated aims and objectives;

    ii.   to comment on the extent to which procedures in place in individual universities are applied effectively;

    iii.   to comment on the extent to which procedures in place in individual universities reflect good practice in maintaining quality;

    iv.   to identify and commend to universities good practice in regard to the maintenance and enhancement of academic standards at national level;

    v.   to assist the university sector to improve its educational quality;

    vi.   to advise the NZVCC on quality assurance matters;

    vii.   to interact with other national and international agencies and organisations in relation to matters of quality assurance in education;

    viii.   to carry out such contract work as is compatible with its audit role.

4.   In fulfilling these terms of reference, the AAU focuses its attention on areas of particular importance to universities, including mechanisms for:

    i.   quality assurance in the design, monitoring and evaluation of courses and programmes of study for degrees and other qualifications;

    ii.   quality assurance in teaching, learning and assessment;

    iii.   quality assurance in relation to the appointment and performance of academic and other staff who contribute directly to the teaching and research functions;

    iv.   quality assurance in research, more especially, but not exclusively, in the context of its relationship with university teaching; and

    v.   taking account of the views of students, of external examiners, of professional bodies, and of employers in respect of academic matters.

5.   One quality assurance mechanism which is used by all of the universities is the Committee on University Academic Programmes of the NZVCC. On behalf of the NZVCC, that body exercises a number of functions of course approval and monitoring as a result of the 1990 Act and by agreement among the eight universities. The AAU audits and comments on the adequacy and effectiveness of CUAP's execution of these functions.

Structure

6.   The AAU comprises:

    i.   a Board;

    ii.   a Register of auditors; and

    iii.   a secretariat, headed by a Director.

7.   The Board comprises eleven or twelve members, appointed by the NZVCC. They include:

    i.   one student member representative nominated by the NZUSA;

    ii.   one member nominated by the national employers body;

    iii.   one member nominated by the national trade union body;

    iv.   two members drawn from those professions for which the universities provide a specific educational preparation, in respect of which nominations will be sought from the various relevant professional bodies;

    v.   two members drawn from the community, as a result of public notice;

     vi.   two senior academics, one nominated by the Australian Vice-Chancellors' Committee, preferably being a member of the Australian Quality Committee or its equivalent, and one nominated by AUSNZ;

   vii.   one member of the NZVCC;

  viii.   the Director of the AAU; and

    ix.   a chairperson appointed by the NZVCC either in addition to or from within the above members.

In making its appointments the NZVCC takes account of the need to include at least one Maori member. No member shall represent the Ministry of Education or other agencies. The term of office of appointed Board members is three years, with the exception of that of the nominee of the NZUSA, which, at the request of that Association, is one year. Appointed Board members shall not serve continuously for more than two terms of office.

8.   The functions of the Board are to:

     i.   advise the NZVCC on the terms of reference of the AAU and on its operation;

    ii.   determine the policy of the AAU, within the parameters set by this document, and monitor its implementation;

   iii.   appoint the Director of the AAU;

   iv.   approve the operating procedures of the AAU, and confirm that they are carried out;

    v.   approve the budget of the AAU for recommendation to the NZVCC; and

   vi.   approve and submit an annual report of the AAU to the NZVCC.

It does not have the power to offer or make recommendations to or in respect of individual universities. It has no power to amend the audit reports, but ensures that the process of audit is such as to produce reliable reports that reflect an independent judgement.

9.   Auditors are appointed to the Register by the Board on the advice of the Director and given an appropriate training. They include both currently employed academics and other persons of appropriate experience. From the Register, small panels are drawn in order to audit the individual universities, and such panels normally include at least two persons in the former category and one in the second.

10. The Director's role is to:

     i.   ensure that the terms of reference of the AAU are fulfilled;

    ii.   advise the Board on matters relating to the review, maintenance and enhancement of quality in universities;

   iii.   make recommendations to the Board on the appointment of auditors to the Register, and provide for their training;

   iv.   assist in and ensure the smooth running of the audits and the preparation of the audit reports;

    v.   employ the other staff of the AAU;

   vi.   report to the Board on the operation of the AAU;

   vii.   prepare the annual report of the AAU; and

viii.   fulfil such other duties as are appropriate to the purpose and functioning of the AAU.

Other Aspects

11. In its procedures, the AAU bases its operations on the concept of quality audit as defined by the ISO, paying attention to both process and outcomes.

12. The AAU is an independent body.

13. The AAU is funded by the universities by such levies or contributions as the NZVCC sees fit, but is expected additionally to draw on the staffing and secretarial resources of the universities which it audits.

14. The eight universities have undertaken to participate in this scheme. The scope of its operation shall not be extended, nor the number or nature of institutions participating be varied or increased, without their unanimous consent (although the AAU may undertake work on contract for any institution or organisation at the discretion of the Board of the AAU).

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