



# The development of performance measures through an activity based benchmarking project across an international network of academic libraries

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## Abstract

**Purpose** – The purpose of this paper is to outline the findings from the initial stages of an activity-based benchmarking project developed across an international network of academic libraries. Through working on a shared response to the question: “if we enable and support the academic endeavour how do we measure our effectiveness?” the network of libraries is using the formal mechanism of benchmarking as a means of continuous improvement.

**Design/methodology/approach** – Actual improvements as a result of benchmarking are known to arise from considering and looking at processes, tools and techniques rather than from simply comparing and reviewing measurements of activity. The establishment of the Matariki Network of Universities provided the opportunity to begin work on international benchmarking amongst the member libraries. The project is a collaborative exercise involving comparisons across the libraries on a selected number of services and activities that are similar across the institutions and are representative of overall library service provision. In this first stage of the project the focus is on support for teaching and learning, specifically activities and programmes that support the transition of first-year students into university life. To simplify the process the libraries have shared details in relation to specific cohorts of students. In order to achieve this, participating libraries used an online collaborative workspace to respond to a series of questions. These responses were analysed to identify common themes, highlight exemplars and select further topics for discussion.

**Findings** – Acknowledging the challenge of international collaboration, processes and mechanisms were developed. It was important to establish a shared language with a set of agreed terms and definitions. Similarly, taking time for each partner to contribute to the project has been valuable. Consideration of each of the libraries responses to the survey questions reveals a diverse number of activities and practices that represent a strong commitment to the needs of students. Drawing on institutional strategic direction and policy, each library allocates substantial resourcing to these activities and practices. The exercise within the benchmarking project produced a valuable set of data for each library to review and learn from. In terms of managing the project, findings are consistent with those reported in the administration of other benchmarking projects. The libraries are in the early stages of developing a series of common international performance measures. It is evident that learning more detail about assessment processes used across each library is necessary to advance the project aims. Further work with the project partners on measuring the effectiveness of their activities will allow the testing of the application of a maturity model for quality improvement of library assessment practices.

**Research limitations/implications** – The project provides the opportunity to develop a series of performance measures that can be verified across an international network of libraries. Sharing information on activities and practices that impact upon the wider institution provides a means to review and improve library assessment practices.

**Originality/value** – This paper outlines the first benchmarking activity in the development of a review of performance measures through an activity-based benchmarking project. The activity included an international network of academic libraries. This work will lead to benchmarking effectiveness measures and the development of a library assessment capability maturity model.



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This will offer a development path, and a better understanding of progress, to demonstrate value and provide evidence of successful outcomes.

**Keywords** Academic libraries, Performance measures, Benchmarking, Universities

**Paper type** Case study

## Introduction

This paper details the findings from the administration of an activity-based benchmarking project across an international network of libraries; the Matariki Network of Libraries. The project is in the early stages of developing a shared response to the question “if we enable and support the academic endeavour how do we measure our effectiveness?” Through this the libraries are using the formal mechanism of benchmarking as a means of continuous improvement.

This benchmarking is a collaborative exercise that involves comparisons across the libraries on a selected number of services and activities that are similar across the institutions and are representative of overall library service provision. With the initial round of information-sharing successfully completed, a valuable set of data for each library to review and learn from has been produced. How one library has responded to the data are presented in this paper as an illustration.

Detail on the process and mechanisms developed in managing the project to meet the challenges of the international collaboration are also presented. The findings here are consistent with those reported in other benchmarking projects. These are discussed in this paper within the context of the administering the project. To advance the project aims, it has been identified that there is a need to share more detail about assessment processes used across each library. Further work on measuring the effectiveness of activities will allow the testing of the application of a maturity model for quality improvement of library assessment practices.

## The Matariki Network

The Matariki Network of Universities ([www.matarikinetwerk.com/](http://www.matarikinetwerk.com/)) is an international collaborative venture that has been established to enable member universities to enhance diversity, and to share ideas, experiences and expertise. Each member of the network is a leading university demonstrating international best practice in research and education, based on established academic traditions. The network includes: Dartmouth College, Durham University, Queen’s University, the University of Otago, Tübingen University, the University of Western Australia and Uppsala University. The network takes its name, Matariki, from the Māori name for the group of stars called the Pleiades, which are also known as the seven sisters. Matariki is also the word for the Māori New Year, symbolising a new beginning.

## Activity-based benchmarking project

The Matariki Network provides the platform for the libraries to share in the development of a series of common international performance measures which will provide each of the universities with a benchmark for reviewing and comparing library performance in areas of specific interest.

It is well understood that university libraries need to be working towards methodologies and strategies to show that they are making an impact on the teaching, learning and research endeavours of their university. All are under increasing pressure to show how they perform relative to like institutions in the global community. While there is growing

interest in cross-national benchmarks there is little benchmarking that allows reliable international comparisons (Löfström, 2002).

Benchmarking is the process of identifying best practices and learning from others. It has been found that actual improvements following benchmarking arise from considering and looking at processes, tools and techniques rather than simply comparing and reviewing measurements of activity. Benchmarking activities extend networking, build collaborative relationships and mutual understanding between participants, enable better understanding of practice, process or performance, and provide insights into how improvements might be made (Jackson, 2001). Activity-based benchmarking is a methodology in which a selected number of activities, which are either typical or representative of the range of services an institution provides, are analysed and compared with similar activities in other selected institutions (Schofield, 1998).

Why use the Matariki Network? Each member of the network is amongst the leading places of learning in its respective country while reflecting a modern and international outlook. Each has distinguished traditions in research and each focuses on a rounded education which is research-led. Matariki members encourage an inter-disciplinary approach and support a full subject base across the sciences, social sciences and humanities; in addition all have medical schools. Each also has a mix of postgraduate and undergraduate students with a high residential component, and a significant “town and gown” relationship.

Comparison of performance and process amongst institutions possessing similar characteristics will lead to a better understanding of relative performance in an environment where there is an increasing need to demonstrate value and provide evidence of accountability. Benchmarking amongst the Matariki Network Libraries will set individual institutional performance in an international context and help each identify areas of strength and weakness. Identification of best practices amongst the group will augment quality assurance processes and highlight areas for potential improvement. This data will inform the development of a library assessment capacity maturity model that allows each library to identify an improvement path (Wilson, 2012). In a climate of competition for local and national resources, sharing on an international level offers great potential, but requires careful relationship management and considered planning (Amos and Hart, 2013).

### **Setting up the project**

The project is managed by a team from the University of Otago Library with the assistance of a seeding fund from a University Quality improvement grant. Following agreement from each of the partners to participate in the project, a discussion document was distributed. This sought agreement on the project scope and timeframe, as well as the establishment of a framework for information exchange.

Coinciding with the release of this document a member of the project management team, the University of Otago University Librarian, undertook visits to four of the seven partner libraries. This provided an opportunity to continue discussion about the project and explore commonalities. Resourcing did not allow for site visits to the remaining two partner libraries. Consequently, the cooperation of one of these partners was fostered through the use of online video conferencing; the other required a number of e-mail letters. One of the partners required additional explanation to clarify the kind of benchmarking that was being proposed as initially it was perceived as a statistical task. Previous researchers have also reported that “the concrete nature of benchmarking as a self-improvement tool to improve organisational performance is not always fully

understood and it is often confused with rankings and league tables” (Burquel and van Vught, 2010, p. 4).

In defining the scope it was agreed that the project should consider existing and emerging practices that support selected service components and identify developing initiatives. The service components were divided into three prime areas: support for learning, support for research and the library and the student experience. Each survey cycle would consider in turn an aspect of each service component and a single aspect of that component. Resonating with previous findings, that existing academic library measures offer limited value as they tend to be too internally focused and lacked meaning to stakeholders (Matthews, 2007), it was agreed that, rather than measuring and comparing traditional processes, the project would focus on activities that support wider institutional strategic imperatives. This was in order to provide a better understanding of progress in an environment where there is an increasing need to demonstrate value and provide evidence of successful outcomes.

It was then agreed that the first area of focus was to consider support for learning, and specifically, activities and practice for programmes that support the transition of first-year students to university life. How new undergraduate students transition into university and the drive for increased social inclusion are areas of interest that contribute to the broader aims of the network institutions and funding bodies.

It was acknowledged that each partner was at a different stage of working with certain groups of students across the disciplinary range for which there was an identified need or institutional/funding body priority. To simplify the process it was agreed that each partner identify a specific cohort that they wished to provide data on. This would allow each partner to undertake some internal benchmarking in identifying the most pertinent cohort to report on.

In recognition of the varying priorities and time zones across the network, an online workspace was developed as a secure environment to facilitate the sharing of information and foster collaboration. Within this workspace a series of terms and definitions were discussed and agreed to. As identified in other international benchmarking exercises (Schreiterer, 1998; Fielden and Carr, 2000; Burquel and van Vught, 2010), this enabled the libraries to translate activities so they could make meaningful comparisons and ensure a high level of commonality across potential language and cultural variations.

### Methodology

A series of nine questions were posed and agreed upon. Each question consisted of a main part that was followed by guidelines to prompt the reporting of standardised information, for example:

Question 1: Describe the cohort – Include details on size, specific characteristics, and identified learning needs. Subsequently each Libraries response to these questions was posted to the workspace.

Question 2: Explain how the library works with the cohort – Briefly outline the history of this relationship. Include details of the other groups in the University who work with this cohort. Highlight the way the library and these other groups work together.

To ensure a successful outcome for all the partners, each was asked to confirm a timetable that would allow for their resources to be allocated. It was agreed to extend this over a nine-month period to accommodate the various academic calendars.

This timetable may not be what would be expected in a local or national project, but it

was important to recognise the local academic cycles so that the individual members could allocate resources to the project. The benefit of identifying measures that could translate across an international network outweighed any urgency to deliver. As confirmed by Epper (1999), the long-term benefits of bringing each of the partners to the project in their own time, for each to realise the benefits from investing resources, became an important focus.

Once all the libraries had contributed a data analysis of the responses was undertaken. A second document that summaries aspects of the survey resources and suggested areas for further consideration was then distributed to the partners. The aim of this was to provide a catalyst for on-going discussion; both across the network, and within each of the libraries. Each of the partners was invited to consider their activities and programmes in relation to what others reported.

### **One library's approach to responding to the data**

From the position of participant in the project, The University of Otago Library undertook strategies to maximise engagement within the library. This included sharing tasks across the liaison team. One group identified the cohort to report on and answered the survey questions; another group reviewed the results and produced a summary report. This report identified what we do well and what we could do better. This was used by the liaison management team to support and prioritise planning.

In confirming the processes, issues of ownership and responsiveness were present, as experienced by Town (2000). Some staff only viewed the data in terms of services to first year students and did not extrapolate the examples provided to their experience or a wider service provision. Other staff reported that there were no plans to change anything as things were working successfully. Despite this, six initiatives were added to the library operational plan. The management team reported that while some of the initiatives were already being considered, identifying that others were implementing them successfully provided affirmation and an emphasis to make them a priority.

### **What libraries reported**

Consideration of each of the libraries' responses to the survey questions reveals a diversity of activity and practices that represent a strong commitment to the needs of students. The cohorts reported on by the partners all varied in size and scope. Three libraries reported on discipline specific cohorts of students, two libraries reported on cohorts that had distinctive characteristics, for example, students with disabilities, and two libraries reported on generic and specific activities offered to students.

Drawing on institutional strategic direction and policy each library allocates substantial resourcing to these activities and practices. Notwithstanding, a challenge facing all the libraries is that of sustainability; adequate and secure resourcing, scalability, service continuity and student capacity were common issues.

### **The research question**

In considering our research question, "if we enable and support the academic endeavour how do we measure our effectiveness?", we found there was a rich array of activity reported by the libraries in collecting data to inform practice and measure effectiveness. These range from formal assessment survey processes through to more subjective levels of feedback collected in action. Many indicated that a combination of quantitative and qualitative data are collected; from data on numbers attending through to data on how clients felt the activities and programmes impacted or contributed

to learning outcomes. In considering this diverse range the project team propose that in order to advance the project aims that the partners make it a priority to learn more detail about assessment process that are used across each library.

Further to this, the development of a library assessment capacity maturity model, as described by Wilson and Town (2006), Wilson (2012) and Tang (2013), could allow each library to identify an improvement path. From a review of what works and what does not one might be able to draw a guide to building library self-assessment capability maturity which has relevance to the wider academic library environment. This is not a new concept and borrows heavily from capability maturity models that have been under development for some time (Paulk *et al.*, 1993; Crawford, 2006; Rendon, 2009) (Figure 1).

As illustrated in the model each level represents a measure of the effectiveness of any specific process or programme:

- initial (ad hoc), where low level work is often repeated as there is limited time to document procedures so that a process can become repeatable;
- repeatable (documented), where the process is at least documented sufficiently such that it can begin to become standard procedures;
- defined (confirmed), where the process is defined/confirmed as a standard business process;
- managed (measured), where the process is quantitatively managed in accordance with agreed-upon metrics and required outcomes; and
- continuous improvement (optimised), where process management includes deliberate processes to incorporate continuous improvement and organisational optimisation.

Drawing on this work and building on the Matariki benchmarking activities, using the project data and resources, we intend to map out an assessment and performance measurement capability maturity model. This work will inform each of the libraries with examples and practices that each is able to adopt and embed. The project to date has helped each library understand the environmental factors of one another, which should help support easy adoption of each other's tools and initiatives.

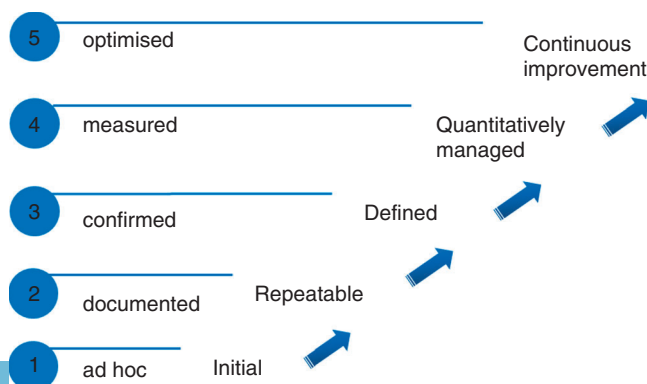


Figure 1.  
Capacity maturity model

### **Where next?**

These issues, along with the focus and operational aspect for the next survey cycle, will be on the agenda for a face to face meeting of the partners planned for September 2013. This will run as part of a wider network meeting that will focus on Research and the Humanities. This event will provide a valuable opportunity for the partners to extend networking, acquire tacit knowledge and build mutual understanding whilst identifying further collaborative endeavours.

This will be a critical time in the future of the project: through advancing this face-to-face meeting we increase the risk of questioning the project's continued viability and the on-going participation by all the partner libraries. Each of the partners is now being asked to invest further in order to advance the project and extend the partnership. It is hoped, however, that the benefits to the partners of participating are now evident. An infrastructure for sharing information and resources has been established, and the partners have all contributed to the first survey cycle, and have shared in creating a data set that they can all learn from. The reward from sharing in the development of a series of common international performance measures now depends upon harnessing this collaborative activity.

### **Lessons from administrating the project**

In administering the project the findings are consistent with those reported in other benchmarking projects:

- defining the scope of the project can be the most challenging but also the most important step (Epper, 1999);
- benchmarking partners need to agree on common definitions, objectives and practices (Schreiterer, 1998; Fielden and Carr, 2000);
- consistency should be encouraged as much as possible by providing detailed definition and instructions (Voorbij, 2009);
- benchmarking as a self-improvement tool to improve the organisational performance is not always fully understood and it is often confused with rankings and league tables (Burquel and van Vught, 2010);
- allowing sufficient time for individual members to allocate resources to contribute to the project is an important factor to the success of a project (Epper, 1999);
- benchmarking can serve to legitimise internal plans and provides a glimpse into the future (Löfström, 2002); and
- involvement of staff at all levels is essential to their ownership and in turn the long-term success of the project (Town, 2000).

Throughout the process, we have found it useful to remember that “the benchmarking approach is as much a state of mind as a tool; it requires curiosity, readiness to copy and a collaborative mentality” (Town, 2000, p. 164).

In our approach we have aimed to keep it:

- real: with a focus on activities that support wider institutional strategic imperatives;
- flexible: through providing time for each partner to allocate resources;
- simple: through identifying service components and focusing on a single aspect of that component; requesting that each partner report on a single cohort that is representative of activity in that aspect; and

- open: by providing a space and process to share in the development of the project; and in the development of a shared language.

The administration of the project will be developed over time with improvements fed back into the process as it advances. It is intended that further survey cycles are undertaken with a focus on activities that support wider institutional strategic imperatives. Sharing more detail about assessment processes used across each library and further work on measuring the effectiveness of activities will allow the testing of the application of a maturity model for quality improvement of library assessment practices. This will offer a development path, and a better understanding of progress, to demonstrate value and provide evidence of successful outcomes. This will facilitate developing a shared response to the question “if we enable and support the academic endeavour how do we measure our effectiveness?”

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