Benchmarking to improve efficiency

Status Report
November 2010

HESA

HIGHER EDUCATION
STATISTICS AGENCY

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1   Executive summary

HESA was commissioned by HEFCE to provide an assimilation of current activity within the UK HE sector in relation to benchmarking, under the title of Benchmarking to improve efficiency – Status Report. This was envisaged as a first phase project to draw together information on available and potential data sources and services for benchmarking, produce an inventory of benchmarking activities across the sector and generate some more in-depth case studies of selected benchmarking initiatives. It was envisaged that this would point the way to a second phase project which would aim to improve and increase benchmarking capacity and capability in the sector to support increasing efficiencies.

The project team conducted a rapid appraisal of benchmarking data, activities and research, against a challenging timescale. The HESA HEI User Group, which includes representation from a broad range of sector associations, acted in a steering capacity.

Information was gathered through contact with relevant HE representative bodies, funding bodies and data providers, focused around the HESA HEI User Group but supplemented where appropriate by a range of other contacts. Semi-structured interviews were held by telephone or in person with members of staff at HEIs and key organisations who are involved in benchmarking activities and initiatives. Key information was gathered by means of a questionnaire to the planning community. Reference was also made to academic and other studies on benchmarking.

Section 2 of the report provides an introduction: background, project team membership, project methodology, and acknowledgements.

Section 3 discusses definitions of benchmarking, in particular:

- **Benchmarks** are purely measurements used for comparison,
- **Benchmarking** is the process of finding best practices and of learning from others.

Definitions of benchmarking include that of HEFCE

"A process through which practices are analysed to provide a standard measurement ('benchmark') of effective performance within an organisation (such as a university). Benchmarks are also used to compare performance with other organisations and other sectors."[1]

Key outcomes from benchmarking have been recognised as: a means by which an institution can demonstrate accountability to stakeholders; improved networking, collaborative relationships and mutual understanding between participants; management information (in the form of text, numerical or graphical information about the area of study); a better understanding of practice, process or performance and insights into how improvements might be made.

Section 4 examines the main data sources and services available generally to the HE sector for benchmarking.

Section 5 provides an inventory of activity-based benchmarking undertaken by various organisations and associations which is categorised into broad headings in relation to the functional areas concerned:
'strategic planning and administration', 'student administration', 'careers and campus services', 'teaching', 'research', 'estates', 'finance', 'human resources' and 'library and IT'.

Section 6 provides more detail on a selection of benchmarking case studies. The case studies include examples concerning institutional planning and monitoring, and process benchmarking to improve efficiency and to enhance the student experience. Also included is a case study involving collaborative benchmarking and one relating to a commercial consultancy.

Section 7 concludes the report by assessing the benefits of benchmarking and the barriers to further use of the technique. A set of recommendations is framed to address these barriers.

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[1] http://www.hefce.ac.uk/aboutus/glossary/glossary.htm#b

Brief Overview and Recommendations

Benchmarking is a valuable tool for HEIs in conducting comparative analyses of institutional and external information in order to identify efficiencies and cost reductions and to target these to best effect. As such, it is a key element in the 'toolset' for HEIs. There is a range of data sources and services for the production of benchmarks in the sector, and data published by HESA feature significantly amongst those sources.

The succinct comments of two respondents to the planning community survey, quoted in section 7 of this report on the value and use of benchmarking, are repeated here:

"Benchmarking is an important tool in evaluating institutional performance and one which, given the reductions in public spending, is going to become increasingly important."

"The overarching aim of a benchmarking process is to place performance in perspective against the sector or a more specific group of institutions. A key element of benchmarking is the identification of institutions that achieve high levels of performance which can act as examples of good practice. By analysing, assessing and implementing actions based on examples of good practice, institutions can achieve more efficient processes and ultimately higher levels of performance. Sensible benchmarking can lead to realistic target setting processes in relation to a broad spectrum of performance indicators, which encourages a more efficient environment."

This report shows, through its overview of activity and case studies, that there is evidence of extensive activity across the sector in benchmarking, in gathering, analysing and sharing data, and in identifying best practice; that may be formal or informal, in many cases based on collaboration and cooperation.

However the sector should look to greater use of benchmarks and benchmarking in order to respond, rapidly but in an informed way, to the economic climate. Responses to the planning community survey and comments by interviewees highlighted certain 'barriers' which must be overcome.

Firstly, senior management engagement and leadership is required in order to ensure that resources are appropriately allocated to support benchmarking, that institutional practices that might impede benchmarking (e.g. unwillingness to share data) are addressed and that the results of benchmarking activities are properly applied to effect operational and strategic improvement. There is an important message to be promoted about the value of benchmarking, the benefits to be gained, and the consequent priority to be attached by some HEIs.

Recommendation 1

Leadership and governance is required for a programme of work to increase the adoption and impact value of benchmarking, in collaboration with UUK, GuildHE and other bodies seeking to improve the efficiency of operations in the higher education sector.

The second main barrier relates to the sharing of know how about benchmarking. There is evidence that although extensive benchmarking activity is taking place a good deal of work is taking place in relative isolation, leading to dangers of duplication of effort and inefficiencies (e.g. use of external consultancies). There are opportunities for increasing sector capacity by sharing expertise and good practice.

Recommendation 2

A programme of activities should be developed to share good practice and inform the sector about methods, resources and cost effective services available for effective benchmarking. Options should be considered for developing a knowledge base to be disseminated through appropriate communication channels with focused training and advice to build sector capacity for benchmarking.

Benchmarking delivers through working with understood methods and tools such as a key set of reports. There is scope to improve benchmarking activities in a very cost-effective way by greater shared development of methodologies, tools and benchmarking frameworks.

Recommendation 3

Investment is needed in the development of accessible methodologies, tools and benchmarking frameworks (including reference to the published national PIs) as a shared services approach to benchmarking activity. This will allow the sector to benchmark in a cost effective way, thus conserving resources for the application of benchmarking to the purposes of efficiency gain and change.

The next barrier identified concerned availability and the range of data to support benchmarking. Responses from contributors to the research for this report cited a number of barriers in relation to the data available. These included the difficulty of knowing what data are available – for example data to allow benchmarking the cost of teaching, as well as issues about access to data that may be held by a particular organisation or needs to be provided with managed security. Many other problems were expressed, such as changes in data over time, lack of granularity, comparability, accuracy and timeliness, for which solutions may be found.

Recommendation 4

A map of current relevant information sources should be drawn up and made available. This would identify more clearly where benchmarking is not supported by adequate data. In addition by referencing work being undertaken by the HE Better Regulation Group looking at information being collected in the sector there may be further scope for benchmarking intelligence. Action should be taken to rectify essential data gaps, improve access to existing resources, and where possible enhance comparability, quality and timeliness.

The heidi (Higher Education Information Database for Institutions) provided by HESA was the subject of much feedback from contributors and is acknowledged as one of the key sector services to support benchmarking. Although a great deal of the feedback was positive further demands for improvement were expressed, mainly regarding the user interface, the further provision of benchmarking reports and depth and flexibility of data content.

Recommendation 5

As a priority heidi should be further developed with a particular focus on the support of benchmarking activity, guided by the HE user community. The depth and flexibility of data contained within the system should be reviewed and extended. HESA should explore and take opportunities to integrate other information sources and undertake relevant collaborations with other service providers as well as provide advice, guidance and training to enhance the use of heidi for benchmarking purposes.

A number of existing published references to HE sector benchmarking cite the potential benefits of examining benchmarking activities within the public and private sectors, both within the UK and transnationally. There may be much to learn from such activity.

Recommendation 6

A study should be undertaken to identify the scope for benchmarking against relevant public and private sector bodies and cognate activities outside the sector, also exploring the benefits of transnational benchmarking. This should provide insights into benchmarking that takes place outside the HE Sector.

2   Introduction

2.1   Background

The University Modernisation Fund was announced by the Secretary of State for Higher Education following the Budget statement on 24 March 2010[2]. One of the imperatives listed for this was to support universities and colleges to take the robust action needed to increase efficiency and reduce cost over the medium term. Benchmarking has been identified as a valuable tool for HEIs in conducting comparative analyses of institutional and external information in order to identify efficiencies and cost reductions and to target these to best effect.

Within this context, HESA was commissioned by HEFCE to provide an assimilation of current activity within the UK HE sector in relation to benchmarking, under the title of **Benchmarking to improve efficiency – Status Report**. This first phase project has drawn together information on available and potential data sources for benchmarking, produced an inventory of benchmarking activities across the sector and generated some more in-depth case studies of selected benchmarking initiatives. The formal scope was as follows:

- A mapping of HE relevant data sources for benchmarking,

- An inventory of current benchmarking activities across the HE sector,

- Selected case studies to illustrate a cross section of benchmarking activities,

- Recommendations for further action to be taken to develop benchmarking practices.

It is envisaged that this will point the way to a second phase project which will aim to improve and increase benchmarking capacity and capabilities in the sector, to support increasing efficiencies. Comment has been made by HE staff in preparation of this report on the value of this first phase in prompting thought on benchmarking.

The project team was informed by sight of a paper for the HEFCE Chief Executive's Group (CEG 41/10) which provides a comprehensive overview of benchmarking, and that overview has been expanded and supplemented by this project. Attention is drawn to a 2008 European Commission sponsored project report on Benchmarking in European Higher Education[3] (cited as ESMU 2008 throughout), although there appears to have been little input from the UK to that report. Helpful input was gained through two publications by Professor Norman Jackson, Professor of Higher Education and Director of the Surrey Centre for Excellence in Professional Training and Education (SCEPTrE) at the University of Surrey.

Parallel activity must be noted, coordinated through the HESA HEI User Group, from JISC and UCISA (the latter on the initiative of the HE Better Regulation Group and AHUA):

- JISC: study of Strategic Management Information needs http://www.jiscinfonet.ac.uk/smi,

- UCISA: survey of the range of statutory and other returns made across the sector
  (an initiative of the HE Better Regulation Group with a questionnaire to be issued through AHUA).

The results of the initial JISC information needs survey show considerable interest in benchmarking, especially amongst respondents in the planning and finance functions, and amongst Registrars and Secretaries.

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[2] HEFCE circular letter 07/2010 http://www.hefce.ac.uk/pubs/circlets/2010/cl07_10/
[3] http://www.education-benchmarking.org/

2.2 Project team

The project team consisted of the following members:

- Graham Fice, Senior Researcher (formerly Director of Student and Academic Services, University of Chichester and Chair of the Student Records Officers' Conference),

- Jonathan Waller, Director of Information and Analysis, HESA.

2.3 Project methodology

The project team conducted a rapid appraisal of benchmarking data, activities and research against a challenging timescale. Information was gathered through contact with relevant HE representative bodies, funding bodies and data providers. Semi-structured interviews were held by telephone or in person with members of staff at HEIs and key organisations who are involved in benchmarking activities and initiatives.

The HESA HEI User Group acted in a steering capacity; members of that Group acted as key contacts and the Group commented on a draft of this report. The HESA heidi User Group was also appraised of the project.

Key information was gathered by means of a questionnaire to the planning community distributed to the planning community mailbase by Vikki Goddard, Director of Planning at the University of Liverpool, Chair of the National Planners' Group and a member of the HESA HEI User Group. With a relatively short timescale for completion, 42 responses were received. Questions posed in the questionnaire are set out in Appendix C.

2.4 Acknowledgements

The HESA HEI User Group and other contacts have generously given time and information to aid preparation of this report and that input is gratefully acknowledged by the project team.

All contacts are listed in Appendix B.

3   What do we mean by benchmarking?

The report on benchmarking in European higher education (ESMU 2008) underlines the difference between benchmarks and benchmarking:

- **Benchmarks** are purely measurements used for comparison,
- **Benchmarking** is the process of finding best practices and of learning from others.

While there appears to have been little input from the UK, that report also comments that 'throughout the project it became clear that benchmarking in higher education lacks coherent and broadly accepted definitions for key aspects (such as: what is benchmarking at all) and that there are no standard sets of concepts for benchmarking as they exist in business and industry.'

A research report from the Chartered Institute of Management Accountants' on benchmarking in the finance function (CIMA 2001) identifies the following key features of benchmarking:

Inherent attributes

- Systematic/organised/structured,
- Continuous/ongoing/long term,
- Formal,
- Consistent,
- Analytical.

Output of the activity

- Challenging and attainable goals,
- Realistic course of action,
- Identification and documentation of best practices,
- Identification of gaps in performance,
- Identification of future priorities.

Outcome of the activity

- Improved performance,
- Organisational improvements,
- Improved competitive position,
- Adaptation of best industry or world-class practices,
- Adoption of good features of products, processes or services.

Jackson (2001) identifies three key products of benchmarking:

- Improved networking, collaborative relationships and mutual understanding between participants,
- Benchmark information (in the form of text, numerical or graphical information about the area of study),
- A better understanding of practice, process or performance and insights into how improvements might be made.

The University of Bristol states on its Planning, Performance and Project Support web pages: 'Benchmarking the University's performance against other higher education institutions (HEIs) allows the University to get a sense of where it is performing well in relation to others.' Views from respondents to the questionnaire distributed via the planning community survey largely supported the above comments, and Bristol's succinct statement. Respondents' views ranged from full and formal definitions to use of key words or phrases about benchmarking as follows:

- Systematic comparison of performance and process with the sector and more specific groups or institutions possessing similar characteristics leading to a better understanding of relative performance in an increasingly competitive market,

- Comparison of the performance of an institution relative to benchmark established in a number of different ways such as best institution(s), sector averages, performance of competitors or subject comparators,

- Systematic comparison of data (a summary statistic) against other comparable data for other similar organisations/activities to contextualise the data and to enable judgements on performance,

- Comparing the performance of one unit against the performance of another unit which can be small, from individual to research group, to department to University; internal benchmarking is the comparison of departments or faculties (or other organisational units) to each other,

- A process of self-evaluation (reflection) and self-improvement using standardised metrics to allow meaningful comparisons,

- Identification of institutional 'position',

- Setting institutional performance in a wider context,

- Identification of areas of strengths and weakness and highlighting areas for potential improvement,

- Identification of best practice,

- Market intelligence.

Some respondents did not specify HEIs as comparators in benchmarking, and one specifically commented that similar institutions need not always be other HEIs. The paper submitted to HEFCE CEG suggests that it might also be helpful if the sector were to attempt some benchmarking with the private sector. Benchmarking outside the sector is discussed in the final section of this report, and is the subject of a recommendation.

Jackson (2001) underlines that 'UK universities are under increasing pressure to show how they perform relative to universities in the global community and there is growing interest in transnational benchmarking to make reliable international comparisons and learn from other HE systems'. Transnational benchmarking is also considered in the final section and is the subject of a recommendation.

Published formal definitions of benchmarking include the following:

HEFCE

"A process through which practices are analysed to provide a standard measurement ('benchmark') of effective performance within an organisation (such as a university). Benchmarks are also used to compare performance with other organisations and other sectors."[4]

CIMA (Chartered Institute of Management Accountants)

"Open, systematic, continuous and integrated searching to identify and compare elements of business results, procedures or processes against those of best-practice peer or parallel organisations, with the aim of identifying performance gaps, setting challenging but attainable targets, and adopting best practices so as to improve the organisation's competitive performance." (CIMA 2001)

Jackson and Lund

"A process to facilitate the systematic comparison and evaluation of practice, process and performance to aid improvement and regulation." (Jackson and Lund 2000)

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[4] http://www.hefce.ac.uk/aboutus/glossary/glossary.htm#b

European Centre for Strategic Management of Universities (ESMU)

"A process of self-evaluation and self-improvement through the systematic and collaborative comparison of practice and performance with similar organisations in order to identify strengths and weaknesses, and to learn how to adapt and improve organisational processes." (ESMU 2008)

Both Jackson and Lund and the European benchmarking project identify the use of benchmarking to demonstrate accountability to stakeholders. Comments from a Vice-Chancellor quoted in section 4 underlines that use of benchmarks, and as a consequence 'demonstrating accountability to stakeholders' should perhaps be added to the above definitions. As noted in the paper submitted to HEFCE CEG, benchmarking is also used to support academic quality and Jackson (2001) suggests a continuum thus:

Accountability and standards ←——————————————→ **Development and competitive advantage**

Noting that many benchmarking exercises will combine a variety of approaches and straddle different categories of a scheme, Jackson (2001) identifies the following types of benchmarking:

- **Implicit** (bi-product of information gathering) or **explicit** (deliberate and systematic),

- Conducted as an **independent** (without partners) or a collaborative (partnership) exercise,

- Confined to a single organisation (**internal** exercise), or involves other similar or dissimilar organisations (**external** exercise),

- Focused on the whole process (**vertical** benchmarking) or part of a process as it manifests itself across different functional units (**horizontal** benchmarking),

- Focused on **inputs, process or outputs** (or a combination of these),

- Based on quantitative (**metric data**) and / or qualitative (**bureaucratic information**).

4   Sector data sources and services for benchmarking

The basis of benchmarking is access to data that provides for systematic comparison and evaluation by which performance can be measured and assessed. The widely available data resources to support this requirement are considered below, and the issues concerned with data sources are explored in Section 7 and Recommendation 4.

4.1   heidi (higher education information database for institutions)

heidi is a web-based management information service for HE institutions and approved HE stakeholder organisations. It aims to provide easy 'one stop' access to a wide range of national quantitative data about higher education, and provides functionality for analyses and presentation of such data. Data available from the service cover the main HESA collections, student, destinations of graduates, staff, finance, as well as a range of non-HESA data sources such as UCAS, Estates Management Statistics, Funders Forum Metrics, National Student Survey/Teaching Quality Information, RAE 2001 and 2008. heidi is provided by HESA, funded by subscriptions from user organisations and is non-profit-making.

At the time of writing, 84% of HE institutions who are eligible to subscribe to heidi (those that submit data to HESA) do so. Among the 16% of institutions that do not subscribe, many are smaller and more specialist in nature. The subscription cost (which is modest) is not thought to be the main barrier for these institutions, but rather issues such as lack of available staff resource for analysis of data, or a perception that use of such a comprehensive information system is unwarranted for a specialist HEI that may only be interested in a handful of other 'peer group' HEIs. HESA is currently developing initiatives to meet the needs of such institutions specifically.

heidi includes some functionality specifically designed to support benchmarking analyses, including the facility to define groups of HE institutions (or indeed groups based on other variables such as Mission Group, subjects or cost centres). The value of cost centre analysis would be increased if the current cost centre list was reviewed to align it more closely to institutional structure. heidi also incorporates charting functionality which allows users to set their own institution against a chosen peer group and the entire sector for any given statistical measure (this is illustrated in the Universities UK 'Patterns of higher education institutions in the UK').

The case studies in section 6 evidence the use of heidi which is the principal tool used for comparative benchmarking available to the sector, but requires further development including content and analytical tools and reporting to increase its value to institutions.

An extensive survey of all heidi users was carried out during November 2008 and results from that survey have been published on the heidi website (www.heidi.ac.uk).

4.2   Other HESA publications, ad hoc information services and Performance Indicators

Although the heidi system has become the main dissemination channel through which HESA provides data from its annual returns to HEIs, there remain alternatives offered by HESA. These include a range of published statistical material as well as ad-hoc information provision and analytical services. HESA's other publications cover a range of material some shown at HE level and some at HE sector level.

Two products are particularly worthy of mention in relation to benchmarking: 'HE Planning Plus' and the national 'Performance Indicators'. HE Planning Plus is a CD-based product that contains data on students, staff and finance of HEIs, much of which is provided in Microsoft Excel PivotTable® format. This allows users to generate bespoke tabulations from the data and to generate their own peer groups of HEIs if desired. The publication of this product pre-dates the heidi system by some margin. It is marketed mainly to managers and planners within HEIs.

HESA's ad-hoc information and analysis services aim to complement the range of published material by offering bespoke quantitative information for HE and other organisations. The information provision service aims to provide data tailored to each user's requirements whereas the analytical service aims to undertake more in-depth analysis and reporting on the raw information.

For the purposes of this report, HESA analysed the most significant ad-hoc data requests from HEIs which were known to be used for institutional planning and marketing purposes. The range of institutions requesting such data was seen to be representative of all the major Mission groups and of institutional size; the complexity of the data requested was significant. Results from the planning community survey also suggested strong usage levels for the HESA data sets and products.

The national 'Performance Indicators' have been produced and published by HESA since 2002/03, with HEFCE publishing prior to that. They are produced on behalf of the Performance Indicators Steering Group which is a nationally representative group comprising HE funding bodies, Government education departments (including the Devolved Administrations) and HE representative bodies. The defined indicators cover four main areas: access to HE, learning outcomes and non-completion, research inputs compared with research outputs and employment of graduates. This publication uses a technical definition of benchmarks which aims to make adjustments to sector averages to take into account some of the factors that explain differences in the indicators between HE institutions. The main factors allowed for in this calculation are subject of study, qualifications on entry and age on entry. Some indicators draw upon further factors such as location of the HE institution.

4.3   UCAS information

UCAS provides data nationally on applications to HE, principally full-time undergraduate. The relevant pages of the UCAS website (http://www.ucas.com/he_staff/stat_services1/) identify the range of statistical services provided, where applications are made via UCAS. UCAS provides an online postgraduate application service in UKPASS and that delivers management information to subscribing institutions. Many HEIs require direct application for postgraduate taught courses although there is some voluntary sharing of applicant data amongst Postgraduate Admissions Officers. Some Drama schools also admit direct to undergraduate level study, and not via UCAS/CUKAS.

HEIs include 'marketing' broadly in their understanding of benchmarking. Admissions data may feed into institutional KPIs such as Entry tariff score and Applications: Acceptances ratio. Supporting Professionalism in Admissions (SPA) has studied the use of data and statistics, and a helpful summary is on the SPA website (http://www.spa.ac.uk/data-statistics/index.html), together with links to sources of relevant data, principally HESA, heidi and the Funding Councils. Data may often be used by staff involved in functions other than admissions, and used for benchmarking, trend analysis and for monitoring.

Some application data are available publicly while some is restricted to HEIs in membership of UCAS; the UCAS Statistical Reports Calendar sets out the publication schedule and an indication of availability to public or to institutions only. From October 2011 UCAS will be covered by the Freedom of Information Act; UCAS has been careful to date in its release of data at institutional level due to concerns that data could be used for competitive advantage.

UCAS also offers bespoke analysis and a suite of analytical products aimed at HEI's, Sector Bodies., Schools, Local Authorities, Research Groups and Commercial Organisations. Services range from trend analysis of an HEI's own data through to market scanning and competitor (aggregated) analysis. UCAS report that this is an area experiencing a rise in interest.

4.4   Unistats

Unistats is delivered by UCAS on behalf of HEFCE, HEFCW, DEL(NI) and the Scottish Funding Council with a Technology partner, Hotcourses. As noted on the HEFCE website (http://www.hefce.ac.uk/learning/qual/tqi.asp), the publication of teaching quality information forms part of the quality assurance framework. As a result of the Quality Assurance Framework (QAF) review outcomes, from 2007 the TQI data have been published on the Unistats website. Data on Unistats include the National Student Survey results, and data on students' qualifications held on entry, progression through course, degree results, and data showing what students go on to do including careers and further study.

4.5   National Student Survey

Results from the National Student Survey are publicly available on the Unistats website. HEFCE publishes a national and public overview when the results are available, for example the 2010 NSS (http://www.hefce.ac.uk/news/hefce/2010/nssresult.htm). NSS data are also available in heidi for institutional analysis. Ipsos MORI releases data to institutions for their analysis. Considerable analysis is undertaken annually within HEIs on publication of NSS results although more specifically for quality enhancement purposes and this data source was not highlighted by respondents to the planning community survey or by interviewees in preparation of this report as a resource for benchmarking. There may be further opportunities for using this data in benchmarking teaching costs, efficiency and effectiveness that have yet to be exploited.

4.6   Data.gov.uk

The former Government launched the data.gov.uk initiative (http://data.gov.uk/) 'to give a way in to the wealth of government data'. Some existing published HESA data is referenced by the site. However UCAS staff report that no request has been received for that organisation to make data available to Data.gov.uk.

It would appear that the new Government wishes to continue to move ahead with the initiative and the Prime Minister wrote to Government departments on 10 May 2010 to say:

"Greater transparency across Government is at the heart of our shared commitment to enable the public to hold politicians and public bodies to account; to reduce the deficit and deliver better value for money in public spending; and to realise significant economic benefits by enabling businesses and non-profit organisations to build innovative applications and websites using public data. To oversee the implementation of our transparency commitments, a Public Sector Transparency Board will be established in the Cabinet Office… The Board will also be responsible for setting open data standards across the public sector, publishing further datasets on the basis of public demand, and – in conjunction with the Ministry of Justice – will further develop the Right to Data and advise on its implementation." [5]

Some individuals within the planning community in HE have initiated debate about a possible HE 'equivalent' or extension of data.gov.uk, and one (at the University of York) has published a list of data resources relevant to HE, and has invited contributions in a Wiki-style initiative [6]. This is identified in the final section of this report as a valuable initiative which could be expanded.

4.7   Other sources identified in planning community survey

The survey amongst the planning community identified the following sources of data used within the community, in addition to sources set out immediately above and below, and these include: Universities UK (UUK), Higher Education Policy Institute (HEPI), the British Council, Research Libraries UK, the Universities Health and Safety Association (UHSA), County Councils, Office for National Statistics (ONS) (demographic data and employment trends), HM Treasury, Department for Education, CBI, OECD, World Statistics com, the all Wales Sickness Survey (Welsh HEIs). The Student Loans Company (SLC) has been identified as a potential source of valuable data and it has also been suggested that Transparent Approach to Costing (TRAC) data would form a valuable addition to the more widely available datasets. Another source of information might be UK Borders Agency (UKBA) and the British Council notes in a letter sent to HEIs in March 2008, launching a voluntary collection of data relating to students from overseas from their HESES population as at 1 December, that it might be superseded in due course by information expected to be available from operation of the Points Based Immigration System. Information is also available to participants in the i-Graduate international and home students surveys that collects experiential data that might inform benchmarking if used in tandem with other information sources.

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[5] http://www.number10.gov.uk/news/statements-and-articles/2010/05/letter-to-government-departments-on-opening-up-data-51204
[6] http://spreadsheets.google.com/ccc?key=0ArE5BrCzW9KudHpUQVB0WkJFTUhwUndKR3V3RE4wNlE&hl=en_GB#gid=0

4.8   Sector-related consultancies: the 'brokered' approach to benchmarking

Jackson (2001) categorises the use of consultants as a 'brokered' approach to benchmarking, commenting that the approach (at the time of publication of the study) was relatively underused:

"This type of benchmarking combines the metric/bureaucratic or collaborative approaches with the intervention of a consultant or expert panel who act as facilitator and/or adjudicator. This approach to benchmarking may involve the use of data sets that are constructed by an agency or consultant that are then used to compare performance without the collective and interactive involvement of partners… A variant on this theme is where an agency constructs a national data base that can then be made available interactively to contributors. Users can then use the information to compare / evaluate their own practice and performance using comparators that they define."

As noted in the European report on benchmarking in universities (ESMU 2008) sometimes "carefully selected and trained experts or external facilitators seem to have a positive impact on a benchmarking process, while also being cost-efficient."

4.9   SUMS Consulting

SUMS Consulting works for universities and is owned by universities. SUMS is a membership model where members join and pay an annual subscription for services, enhancing the ability to develop and promulgate best practice through the members themselves sharing the findings from SUMS work through its 'information repository', or by attendance at good practice workshops and seminars. When joining SUMS, members commit to the values of SUMS, giving a unique, engaged comparator group which enables good ongoing benchmarking. Membership spans all the UK HEI representative groups and is listed at http://www.sums.org.uk/members.

Benchmarking is undertaken by SUMS either as a discrete benchmarking study or embedded within a consulting assignment. The outcomes of both are shared with members. Discrete benchmarking studies include performance and process benchmarking with, typically, all SUMS members invited to participate; where value is seen, other non-SUMS member HEIs may be invited to participate.

Studies have included residential accommodation and benchmarking of security services; the aims of both was to promote best practice across the breadth of provision in the respective services and identify key trend information or measures to help members understand and improve the service which they offer.

SUMS undertakes for its members individual and collaborative consulting assignments. Typically sector best practice is examined, usually involving working with the client to identify good comparators for their institution and drawing upon SUMS' sector knowledge to identify institutions which are known to offer exemplars of good practice. A focused benchmark study is then undertaken. Typically key performance indicators are determined for comparison and understanding, and appropriate data then collected. All members who contribute to a study share in the benchmark findings. SUMS updates and maintains benchmark data that is drawn upon regularly, for example for:

- IT spend and delivery models,
- Timetabling,
- Students Union services and funding.

SUMS has also recently undertaken for a member two discrete benchmarking studies, which were reported as being very successful:

- **Academic Division benchmarking:** to benchmark the resources devoted to each area of activity supported by the Academic Division and by Research Services, delivered centrally and where evidently identifiable in Faculties and Schools, against broadly comparable institutions, in terms of staff FTE, grades, and cost,

- **Academic Services expenditure:** to confirm University spend on student facilities, academic services and general educational expenditure and to compare this to information available on expenditure levels at comparator universities, in order to explain whether differences relate to the measurement and recording of data or whether other factors underlie these differences and what these factors are.

The output from SUMS work is largely restricted to members, although SUMS does mount workshops and seminars which are open to non-members. SUMS Good Practice Guides, which include Process Review and Teaching Space Management, are available to non-members at a cost.

4.10   Commercial consultancy companies

TRIBAL

TRIBAL acquired the consultancy Ben Johnson-Hill in 2001; Ben Johnson-Hill formerly provided a benchmarking service to HE. The company is actively marketing its service and a number of universities have contracted TRIBAL to carry out financial benchmarking. TRIBAL services are described on the Group's website (http://www.tribalgroup.com/Services/Pages/Welcome.aspx). TRIBAL describes its financial benchmarking service thus:

"The service can be used to benchmark anything from a single support function to the whole institution with a total institutional benchmark providing over 700 objective measurements covering every aspect of an institution's activities. Comparisons are made against other similar HE institutions that have been objectively assessed using our benchmarking model. Over 35 per cent of the sector is included within our database and we are able to provide a number of robust like-for-like benchmarks. A series of different benchmarks are available, including internal comparisons between individual departments and external comparisons against similar departments in other institutions."

CaritasData (www.CharitiesDirect.com)

Incorporating **Charity Financials.**

Extracted from the Charity Financials Website:

"A total solution for charity professionals and advisers, this powerful tool allows you to:

- Interact with the latest detailed financial information for all 169,000 UK charities,

- Compare and benchmark charities or groups of charities by your chosen criteria, e.g. charitable expenditure, income revenue streams and reserve values,

- Analyse the performance of leading charity advisers,

- Utilise key performance indicators to define strategic goals,

- Export findings as dynamic tables and graphs or actionable lists".

5   Activity-based benchmarking

This section examines sector specific benchmarking activity, through the professional and other bodies. This has been broadly categorised as follows:

5.1   Strategic planning and administration
5.2   Student services
5.3   Research
5.4   Teaching
5.5   Estates
5.6   Finance
5.7   HR
5.8   Library and IT

Case studies of institutional benchmarking activity are presented in section 6.

5.1   Strategic planning and administration

Typical use of the national Performance Indicators and benchmarking in a university can be illustrated by the following summary provided by a university Vice-Chancellor:

- "The Indicators and the university's performance against the benchmarks is included in the suite of Performance Management Information, which is shared routinely with the Board of Governors,

- Benchmarks and relative performance are good and objective ways of assuring that the university keeps on track with its plans,

- The Indicators help to provide assurance to stakeholders including the public and policy makers."

The Committee of University Chairs (CUC) has promoted the monitoring of institutional performance against plans and approved KPIs, 'which should be, where possible and appropriate, benchmarked against other institutions' (CUC 2006).

However few respondents to the planning community survey identified benchmarking being used for efficiency gains although increasing process review and adoption of "lean" methodologies for efficiency gains may indicate a change of emphasis (see Case Study from Cardiff). The majority of respondents who testified to a significant amount of benchmarking activity taking place in HEIs considered benchmarking as most useful to measure performance across a wide spectrum of activities (see below and as illustrated in Section 6 – Case Study re. Research from Liverpool University).

5.2   Student services

Student administration

Members of the Academic Registrars Council are engaged in benchmarking within their institutions. ARC is a membership organisation made up of the Academic Registrars, or equivalent, of the United Kingdom's publicly funded Higher Education (HE) institutions. ARC promotes and shares best practice in the academic administration of the UK higher education sector and provides a source of operational knowledge and experience (http://www.arc.ac.uk/). This provides a helpful environment in which benchmarking might develop beyond the current levels of activity, particularly making use of the student administration data sets that are available in the institution or held by HESA. ARC has a number of specialist Practitioner Groups, of which the Student Records Officers Conference (SROC) promotes good practice via conference workshops which have included sessions on formal Business Process Review and Process Mapping.

Careers Services

AGCAS is the professional association for higher education (HE) careers practitioners, and the quality of service provided by HE Careers Services is externally benchmarked through MATRIX[7] accreditation, and that accreditation is a condition of membership of AGCAS. Heads of Careers engage in informal benchmarking and sharing of good practice through Mission groups, regional and local meetings.

AGCAS conducts a biennial member survey of the resources available in institutional Careers Services which is made available in confidence to Heads of Service for benchmarking purposes, although some 'interpretation' must be used in staff resource devoted to careers. However it forms a valuable tool when used in conjunction with student FTE and DLHE data in judging performance of the institutional service.

AGCAS worked to produce benchmarks on Careers Education[8] and to contribute to the QAA Code of Practice on Career education, information, advice and guidance (revised 2010)[9].

Campus Services

AMOSSHE which describes itself as the UK Student Services Organisation, conducts a regular user survey which collects basic data used by the membership for benchmarking purposes, including the range of services provided, reporting lines, staffing, and budget data.

AMOSSHE has recently gained funding through the HEFCE Leadership, Governance and Management fund (LGM) (LGMF-214) towards a national project looking at the value and impact of student services. The project will run for 15 months, and result in a publicly available toolkit that HEIs can use to measure and benchmark their services. The project is stated to have wide sector support from HEIs and sector bodies such as AHUA, AUA, BUFDG, ECU, GuildHE and NUS. UUK has been key in championing the work.

Measures for Student Services – which may encompass much of the whole student journey and student experience – can be difficult to define. The project will therefore develop a holistic approach to understanding and evaluating the value and impact of services that support students. It will:

- Identify meaningful ways to measure and demonstrate the impact and value of services in HEIs,
- Develop potential measures and pilot them in at least four HEIs,
- Produce and disseminate tools and techniques to measure value and impact of services.

Outputs will:

- Include a toolkit offering a basket of approaches to evaluation which will form another part of a manager's suite of tools,
- Improve universities' understanding of the value of their support services,
- Increase efficiency and professionalism,
- Improve the quality of services and the student experience.

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[7] The matrix Standard is the national quality standard for any organisation that delivers information, advice and/or guidance on learning and work.
[8] http://www.agcas.org.uk/agcas_resources/33-Careers-Education-Benchmark-Statement
[9] http://www.qaa.ac.uk/academicinfrastructure/codeOfPractice/default.asp

Accommodation, Catering and Conferences

CUBO is the association for staff engaged in the management of accommodation and the provision of catering and conferences and it conducts a voluntary (and unaudited) annual survey to produce KPIs. Data is collected and published relating to student and staff numbers, finance, the environment, external accreditation of the services, pay (of cleaning staff), residences and catering. The survey is voluntary and achieves a 57% return rate of CUBO members. Outputs are confidential to CUBO members; managers are able to examine data for other comparator and competitor institutions such as location (campus characteristics are important in such exercises).

CUBO members also make use of the International and (Home) Student Barometer surveys in relation to catering and residential provision. Commercial surveys are also utilised; the former UNITE survey of student experience has been discontinued but Sodexo has for example published a Student Lifestyle survey http://uk.sodexo.com/uken/media-centre/press-releases/university-lifestyle.asp.

5.3   Teaching

Benchmarking the effectiveness of teaching, or teaching quality, was identified as a common activity through the survey. This has been made possible in particular through the use of the NSS and other QA mechanisms. However there was little evidence of benchmarking the cost of delivery of teaching. Beyond the funding formulae for different subject areas, institutionally derived and widely available and comparable sources of data about actual teaching costs were not identified, other than with reference to TRAC or with reference to institutional resource allocation methodologies. There is limited evidence of more thorough full economic costing for teaching being undertaken and the need for providing comparable data for teaching costs is identified as an information gap for benchmarking teaching activity. This is therefore an aspect of benchmarking that requires further attention in the sector.

5.4   Research

Benchmarking research activity is widespread, undertaken at the level of inputs, outputs and grant awards. Full economic costing has also provided a potential resource of comparable data. Some HEIs have Research Management Systems (UCISA recently held a seminar on such systems) to monitor and manage their research activity, thus allowing for available management information. The research-intensive HEIs (largely the Russell Group) in the so-called Brunswick group share application and award data at institutional level on a collaborative and confidential basis.

The Chair of **ARMA** (at the University of Sussex) underlines the extensive analysis undertaken across the sector of RAE2008 performance and a case study from the University of Liverpool is attached at Appendix A. ARMA is the professional association for research managers and administrators in the UK (http://www.arma.ac.uk/). Members work in a variety of organisations, including universities, funding bodies, the NHS and independent research organisations, as well as organisations providing services to research support offices.

There are a number of commercial companies that offer specialist benchmarking services to assess research activity and performance in HEIs.

A benchmarking service is provided by **Researchresearch** http://www.researchresearch.com/, Their website observes:

"Universities and HEIs have an increasing need to benchmark their performance against their peers" and benefits listed include "Inform the development of your institutional strategy" and "Identify new trends early and gain an advantage" among others.

Companies such as Thomson Reuters and Elsevier are heavily involved in publishing research-related data, and offer bespoke services to HEIs in the UK and internationally. Thomson Reuters is now involved in publication of the Times Higher Education World University rankings. Thompson Reuters also owns Evidence which has offered benchmarking services for some years. In addition to publishing the UK Higher Education Research Yearbook, and offering Incites 'a comprehensive tool for citation-based research evaluation', Evidence also offers bespoke services such as subject-based analysis of research performance and peer benchmarking with RAE and HESA data (http://www.evidence.co.uk/).

5.5   Estates

AUDE (Association of University Directors of Estates) states that it promotes excellence in the strategic planning, management, operation and development of Higher Education estates and facilities (http://www.aude.ac.uk/home). AUDE is critically involved in the Estate Management Statistics (EMS) collection, now transferring to HESA from IPD Occupiers; a technical implementation group has been set up and a member of the AUDE Executive Committee sits on the HESA HEI User Group. In the area of estates and facilities, it is common to benchmark against commercial sector standards.

As noted on the AUDE website:

"Institutions are increasingly being asked to demonstrate performance through improved efficiencies, return on investment, use of space, contributions to a sustainable estate and progress towards providing effective and attractive environments, amongst other issues. Estate Management Statistics (EMS) was established in 1999 to provide the HE sector with standardized, reliable and useful property information to help managers understand current performance, promote sharing of best practice and drive improvements. The main objective of EMS is to give UK Higher Education institutions access to relevant information to enable better strategy and decision making."

HEFCE has supported a number of projects under LGM including an AUDE estates management good practice tool (LGMF-106), Review and promotion of SMG space management tools (LGMF-202), Effective space analysis and allocation techniques (GMP-220), and SpaceMAP (East Midlands consortium study group) (GMP-273).

5.6   Finance

BUFDG represents Directors of Finance in UK Higher Education, providing a strategic financial perspective on higher education activities (http://www.bufdg.ac.uk/). BUFDG members are closely involved in benchmarking in their institutions. BUFDG operated a 'special interest' group on costing and pricing, but this is no longer active and its role has been subsumed within the role of the TRAC (Transparent approach to costing) Development Group and regional TRAC Self-Help Groups. BUFDG may support benchmarking activity being driven by other organisations.

Information may be shared by Directors of Finance on a confidential basis through its network of Regional Groups; Directors may refer to the published accounts and financial statements of other HEIs and HESA finance returns. Confidentiality for some types of financial benchmarking data is a key concern, for example with the HEFCE financial benchmarks issued to each HEI as part of its assessment of institutional risk.

5.7   Human Resources

Benchmarking for human resources has been supported through the development of a flexible tool by **Universities Human Resources (UHR)**, which is the key organisation for human resources professionals in higher education in the UK (http://www.uhr.ac.uk/). UHR led, with PWC, on the People Management Framework (LGMF-196) which will be used by all types of institutions regardless of size, geography or strategic focus, to:

- Monitor and measure the impact of people management practices across the institution, including but not limited to the effectiveness of the HR function itself;

- Help HEIs demonstrate the link between people management and institutional objectives with a view to enabling more informed decision making in planning and prioritising HR / people management initiatives; and

- Reassure governing bodies, senior management and other stakeholders that people management issues are important to HEIs and are being measured and assessed in a systematic manner at all levels within an institution.

A key part of the work involved engaging a range of stakeholders from across the sector, including Vice Chancellors and Pro-Vice Chancellors, University Secretaries and Registrars, Governors, the HR community and representatives of bodies such as AHUA, GuildHE, BUFDG and UUK.

Each institution will use the Framework for its own purposes; linked to HESA data, data is collected at a greater level of granularity for example relating to sickness, absence, and staff turnover.

DLA Piper provides a commercial service, as described on the UHR website:

"DLA's HR Benchmarker service provides a HR measurement and benchmarking service for HE institutions. It undertakes two surveys each year:

- HR Performance Indicators,

- Workforce Performance Indicators.

The HR Performance Indicators Survey includes metrics such as HR staff ratios and costs, recruitment and training costs/days, HR focus, HR outsourcing and HR initiatives. The Workforce Performance Indicators Report provides an in depth analysis of such issues as equality and diversity (e.g. gender, age, ethnicity), absence and staff turnover, employee communication and consultation, tribunal and grievance cases and workforce satisfaction. In addition to Survey Reports, subscribers also receive an organisation Scorecard which allows them to compare their HEI with other Institutions."

ECC is a consortium of universities and colleges of higher and further education, set up in 1994 to create an approach (Higher Education Role Analysis – HERA) for the analysis and sizing of roles.

A number of HE institutions subscribe to the ECC (http://hera.ucea.ac.uk/members-benefits/index.php?page=1) which provides a labour market survey in conjunction with Capita. Institutions are also able to access data as part of the HERA job evaluation scheme.

5.8   Library and IT

SCONUL states that it promotes excellence in library services in higher education and national libraries across the UK and Ireland (http://www.sconul.ac.uk/). Benchmarking is made possible by virtue of an extensive database, maintained by LISU (Library Information and Statistics Unit) in the Department of Information Science at Loughborough. The annual Higher Education Library Management Statistics (HELMS) derived from this survey are now also available through heidi.

As many Library/Learning Resource Services provide a 'converged' service, including IT and Media provision, Heads of Service may also contribute to surveys by UCISA and by SCHOMS. Libraries will also actively monitor and respond to student comment on the service, through internal or external surveys such as NSS and LibQUAL+® (www.libqual.org).

Priority Research Limited is a research organisation specialising in the public sector. The company has a long-term relationship with SCONUL and their library and converged services satisfaction templates comprise part of most of the surveys they conduct. The Priority Research website states:

"Priority Research has been commissioned by a number of libraries to evaluate their services. In the 2003 Survey of Surveys Christopher West discovered that the most popular user survey platform is the Libra package from Priority Research. They provide a tailored service to meet the needs of the library, and work with the library on:

- questionnaire design and development,

- sampling, fieldwork, data cleaning and entry,

- reporting and statistical analysis,

- recruitment of focus groups, preparation of workshop and interviewer guidelines,

- facilitation of groups and in-depth interviews,

- overall benchmarking and tracking of results."

UCISA states that it represents the whole of higher education, and increasingly further education, in the provision and development of academic, management and administrative information systems, providing a network of contacts and a powerful lobbying voice (http://www.ucisa.ac.uk/).

The Higher Education Information Technology Statistics (HEITS) are collected annually and around a third of UCISA's institutional members submit information (c.45/140). This is then collated and analysed, enabling universities and colleges to compare themselves with, for example, those of a similar size or mission-type (research-intensive, 1994 group etc). Further information is available at www.ucisa.ac.uk/members/statistics.aspx.

6   Case Studies

Section 6 of this report provides an overview of benchmarking activity in a number of areas across the sector. Three case studies are given here on benchmarking activity in strategic planning and institutional management, one study concerns process benchmarking, a further looks at an example of collaborative activity and the final case study looks at a commercial sector benchmarking service.

Case study: the University of Greenwich

The Chair of the national heidi User Group is Director of Planning at the University of Greenwich. The University is a member of the Million+ Group. There is a wide range of HEIs in the Million+ Group, and Greenwich would not benchmark solely within that Group. Greenwich has a unique set of buildings, and Oxbridge and Durham may be comparators for estates maintenance for example. There are some factors unique to institutions in London which means that Greenwich would choose London-centric benchmarks for some measures.

Greenwich has an ambitious programme sponsored by a Deputy Vice-Chancellor to train staff (currently 60) across the University and to roll out access to heidi.

Greenwich has developed – and is further developing – a data warehouse for internal MI needs; uses include:

- Information on progression required for QAA Collaborative Audit needed detailed analysis of Greenwich' Partner College data which is not available through HESA sources,

- Detailed 'cradle to grave' type analyses e.g. applicants to enrolled student to graduation (HEFCE Widening Participation Strategic Assessments focus on whole student experience and journey),

- Greenwich has extensive overseas partnerships and data cannot be derived in sufficient detail from HESA sources (from data contained in the Aggregate Overseas return).

Greenwich can derive KPIs from its returns to HESA but prefers to gather that data from heidi as a consolidated data source. However a key requirement is that data must be available to feed into the round of committees in the second half of the academic year. Action is being taken following the HEFCE Data quality and efficiency report to improve the timeliness and accuracy of HESA returns.

The Professional Bodies' requirements impose a load on HEIs, and progress has been made through HESA with TDA and NHS; however the Professional Bodies each have their requirements and it is likely that HEIs will have to continue to utilise internal data sources to satisfy the Professional Bodies.

Case study: the University of Liverpool

The University of Liverpool carried out detailed analysis of RAE 2008 performance for each UoA using the following sources of information, and intended to support preparation for Research Excellence Framework (REF):

- RAE2008 results,

- RAE2008 submission data from individual institutions (staff numbers, students, income, outputs, RA5a narrative sections),

- Subject overview report from sub-panel and main panel,

- Confidential UoA feedback to the UoL unit,

- RAE2001 relative positioning.

An example – for just one UoA (30) – is attached at Appendix A. The University emphasizes the effort required to analyse RAE performance, which was replicated to an equal or lesser extent across the sector.

While RAE is an example of a one-off and focused analytical exercise, the University also emphasises the amount of 'manual' manipulation that has to take place after (say) extracting data from heidi or some other source. The Director of Planning (and Chair of the National Planners' Group) underlines a significant variation in the amount of management information produced by institutions which is a factor of:

- The perceived value of the information to the institution,

- The resource available to produce it.

Liverpool has recently invested c£1m in a new system to deliver the information to support its devolved management structure.

Case study: the University of Surrey

The Executive Board at the University of Surrey presents Council regularly with a Balanced Scorecard of 15 KPIs, with supporting graphical 'dashboard.' Sources of data are shown including: EMS, HE-BCIS, HESA, NSS, RAE, UCAS and internal sources. Responsibility for each KPI is taken by a senior member of the Executive Board. Scorecards are also produced for each Faculty with a slightly reduced set of KPIs for which Deans take responsibility for delivery.

Annual analysis of the HESA PIs is made and graphical PIs are produced, derived from HESA and UCAS data, showing the relative position of the University against other HEIs, categorised by: Russell Group, 94 Group, Other Chartered and Non-Chartered. The 94 Group forms an immediate set of comparator and competitor institutions, for example for analysis of NSS and RAE performance.

The KPIs and the graphical PIs form a key part of the strategic planning process, and have informed dedicated programmes to improve efficiency, although these PIs may themselves be only the starting point for further enquiry about performance or suggesting areas where further efficiencies may be explored; they do however point to areas to be prioritised for attention.

The University submits to its Finance and Audit Committees annual benchmarking data on its financial performance from both HEFCE and KPMG (the University's External Auditors) with a commentary on key points including, for example, surplus as % income, Funding Council grants as % income, research and endowment income, and borrowings/interest payable. The Auditor's data is drawn from KPMG's client base of 67 universities with income ranging from £3m to nearly £600m. The University draws on other sector-wide financial benchmarking data where appropriate, including, for 2008/09, the analysis of all HEI accounts carried out by Grant Thornton and published in Times Higher Education.

The University has recently made use of SCONUL data (section 5) in planning a new Learning Centre; SCONUL data is also used routinely in the University's planning process where appropriate. QAA Institutional Audit in 2009 identified as a feature of good practice the integrated approach to the resource planning and management of library resources in meeting student needs.

The University also utilises data from the International Student Barometer and (Home) Student Barometer surveys. The University has adopted a strategy to improve the student experience and progress is monitored through a range of tools and measures including the International and (Home) Student Barometers, NSS, and application and admission rates over time.

EMS data underpins the University's Strategic Plan and the Estates Strategy. The Director of Estates regularly monitors operational costs such as heat, light and power (in year and through year) and uses EMS data to support modelling of estate development.

As a member of the 94 Group of HEIs, the Director of Strategic Planning meets regularly with other Directors in that Group (the Directors of Planning of the Russell Group meet similarly on a regular basis). There is sharing of information, good practice and data on the basis of partnership; confidentiality can be preserved where necessary within the Group. The Directors of Planning of the 94 Group are considering further collaborative activity on benchmarking.

As noted in section 3 above, benchmarking can be defined as a process of finding best practices and of learning from others (ESMU 2008). Respondents to the planning community survey referred to process benchmarking as an example of activity. Amongst the issues identified by Jackson and Lund (2000) as a potential 'barrier' to benchmarking is the relative absence (at the time of publication of that study) of generic process benchmarking.

In preparation of this report, one respondent to the planning community survey acknowledged that little work was taking place to look at processes within the respondent's HEI. However another respondent pointed specifically to a new project to compare costs of all support functions in the university with a number of competitors as an example of benchmarking. SUMS Consulting suggested in preparation of this report that real benefits can accrue from process benchmarking 'to understand why the numbers differ.'

The case study below illustrates how the University of Cardiff is seeking to improve efficiency through process benchmarking. The University of Bristol also has a current and extensive website devoted to Support Process Review (http://www.bristol.ac.uk/supportprocessreview/). As stated by the Vice-Chancellor of Bristol on that website, the Support Process Review 'is one of a number of strands we are working on to ensure that the University emerges from the current financial turbulence fitter than ever to maintain, and even improve, its position of international excellence.'

Case study: Cardiff University

Cardiff University began its Lean University Project in 2006. It is strongly supported by the Vice-Chancellor who sees the project as playing a vital role in the University's strategic development and shaping the way the University works, and creating momentum that secures and sustains external recognition as one of the 50 World Leading Universities by 2020 (http://www.cardiff.ac.uk/lean/index.html). The Vice-Chancellor is familiar with LEAN from his engineering background, and the University has a LEAN Enterprise Research Group in its Business School; however an acknowledged challenge has been applying the five key Principals of LEAN in an academic environment. The five principals are:

- Identify customers and specify value,

- Identify and map the value stream,

- Create flow by eliminating waste,

- Respond to customer 'pull',

- Pursue perfection.

Those challenges have included the concept of the student as a 'pure' customer and customer 'pull' – producing only what the customer wants when the customer wants it. The complexity and interrelationship of processes in HE have also been a limiting factor, but this has been overcome by application of process mapping techniques. There have been positive benefits in engaging all individuals involved in a process ('bringing everyone together in one room') to generate an awareness of the 'big picture' and the impact of the actions of one member (or unit) on others.

The University began by identifying three key areas for attention: programme approval, purchase orders and payments, and the development needs of new researchers. The second area was prompted by installation of a new computer system. Recommendations from the first area, programme approval, were not implemented but a new manager has embraced them and the University has now been supported by JISC in the Programme approval lean electronic toolkit (PALET)[10].

Utilising the Lean Thinking methodology for process improvements, the PALET project will develop revised procedures for the approval of new programmes to create a more agile, efficient and flexible approach to the design of curricula and the subsequent approval process. In the context of the University's Modern IT Working Environment (MWE) project, a service-oriented approach will be utilised to develop a toolset to support academic and support staff through each stage of the new programme approval process, which will also ensure that the resulting programme and module information is clearly defined and can be seamlessly utilised by other business applications.

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[10] http://www.jisc.ac.uk/whatwedo/programmes/elearning/curriculumdesign/palet.aspx

The four key aims of the project are:

- Improvements to the business case developed to support a new programme proposal,

- Consideration of the processes used to design programmes,

- A streamlining of the information required in a new programme proposal and enhancements to the links between this and a programme's operation,

- Implementation of a revised procedure for the approval of new programmes.

The University's central LEAN Unit has supported some 40 programmes to date, and a major review of the student lifecycle is now in progress. Emphasis is placed on the fact that the Unit does not carry responsibility for implementation; implementation is for the manager(s) of the relevant area(s).

The University has mounted a LEAN Skills for Management Programme, and engaged staff in implementation of the outcomes of reviews in order to sustain implementation and ongoing improvement.

The new Head and the new Manager of the University's School of Nursing and Midwifery initiated LEAN review to produce a new Strategic Vision for the School, to identify what the School does well and less well, and to produce a 'route map' of School-owned projects to achieve the Vision. Coupled with the championship of the Vice-Chancellor, it is very clear that 'top-down' drive is needed, although successful implementation and ongoing improvement very much depends on wide-spread ownership at all levels.

One of the first reviews undertaken by the School of Nursing and Midwifery with central LEAN Unit assistance was a review of the committee structure; this has now produced a very significant saving of 33% in time. This is now being prepared as a case study for the informal group of HEIs using LEAN including: Cardiff, Napier, Plymouth and St Andrews (www.st-andrews.ac.uk/lean/).

This group shares information and good practice but emphasis is laid on the fact that benchmarking is not necessarily carried out between the HEIs. The focus is within each HEI, and on staff 'owning' benchmarking and benchmarks.

Case study: AMHEC (Association of Managers in HE Colleges)

AMHEC is a long established Association for Managers in HE Colleges (http://www.amhec.org.uk/). Originally founded for managers in higher education colleges and universities to be able to share information and solutions across a wide range of disciplines, the Association states that it prides itself on its networking between members in a diverse range of colleges and universities.

The following information has been provided by Aspect Management on behalf of AMHE, in relation to the AMHRC benchmarking project, but has been edited. AMHEC works with Aspect Management to take forward benchmarking work developed under an earlier HEFCE Good Management Practice funded project (GMP-005). Information has also been taken from the recent successful submission under LGMF (LGMF-21), involving the smaller HEIs and Church of England Foundation members of AMHEC.

The original benchmarking project was based on partnership between nine members of AMHEC (http://www.hope.ac.uk/amhec/pages/links.html). It involves the collection of data on income, expenditure, staff and staff FTEs using bespoke software. Data is shared in a transparent way between institutions in the benchmarking group and AMHEC states that this is particularly valuable in cost control. For the existing partners, the software contains over 500 benchmarks and eight years of historical data. It is stated to be complementary to HESA and heidi, but provides greater granularity.

Benchmark reports can be produced for the following categories:

- Income,

- Expenditure,

- Balance Sheet,

- HESA finance ratios,

- Student FTEs.

There are two additional new sets which will shortly be recommended by the public sector audit bodies. These relate to Legal Services and Communication and will be adopted when they are announced.

The new LGMF project aims to refine and expand the existing project by developing a number of new indicators. BUFDG are stated to have expressed a wish to develop the NAO/CIPFA benchmark indicators, and the current Chair of BUFDG is supportive of the new project. The NAO/CIPFA indicators relate to HR, Finance, ICT, Procurement, Estates. The full indicators are set out in the NAO report Value for Money in public sector corporate services (NAO 2007).

The sector also requires indicators that will enable HEIs to measure the carbon emissions in response to recent sector carbon targets. The aim is stated of extending use of the AMHEC tool beyond the AMHEC community, to clusters within BUFDG and to staff engaged in carbon management. It is anticipated that these clusters will have around 8 to 12 institutions in them; work may take place with groups like Million+ and the 94 Group.

In the existing AMHEC benchmarking group, the tool and associated workshops are claimed to have contributed to improvement of processes in: marketing, residences management, resource allocation, budget management, corporate planning, computing, IT and information systems, HR, graduation processes, registries, student services, and procurement.

Financial benefits are said to include:

- A 1% saving in non-pay expenditure, equating to £1M,

- Review of corporate services (example cited of managing a £1.9M deficit into a breakeven position),

- Purchasing negotiations (example cited of a reduction in prospectus costs),

- Review of pricing (example cited of review of accommodation fees).

Tribal Benchmarking Case Studies

In its HE benchmarking newsletter, published on its website, TRIBAL claims that the company's clients are improving their financial performance faster than the rest of the sector; that newsletter illustrates typical outputs from a benchmarking exercise.

Three examples are given below (provided by TRIBAL but edited) of the use of the company's services by Coventry University, TVU and the University of York:

Coventry University

"The Tribal benchmarking product and service was used as a precursor to a major corporate planning exercise. The information and analysis obtained from Tribal gave a greater understanding of the cost base, allowing the University to confirm or challenge views, and giving a useful picture of how the University compared to similar institutions. Coventry now has a base-point derived from a rigorous and replicable methodology that can be used to monitor the impact of changes that have to be made to resource distribution and procurement spend. Briefing sessions led by Tribal on the results of their work were valued by senior managers and have enabled them to take a more sophisticated approach to planning, resourcing and managing their area of responsibility."

Thames Valley University

"An independent review of the University's costs relative to similar institutions was very helpful particularly at this time of funding cuts. The real value of the exercise was its analysis on a functional and not an organisational basis, ensuring that comparisons of the costs of an operation between institutions are 'like for like'. The benchmark work has been performed twice, covering 2006/7 and 2008/9 data, and the University has signed up for 2010/11."

The University of York

"The Registrar and Secretary has been involved in commissioning Tribal to undertake a benchmarking exercise in other universities, and most recently at York. In both instances, the exercise has been useful in informing decision making about the allocation of resources and their deployment across the institution."

7 Benefits, barriers and recommendations

7.1 Benefits of benchmarking

Clearly any activity that requires investment of resources must have demonstrable benefits. Such demonstration of benefits forms a key component in the drive to engage senior managers and leaders in higher education institutions.

The European report on benchmarking in universities (ESMU 2008) identifies the following benefits of benchmarking:

- Measurement and comparison of performance to the competition,
- Self-assessment of performance in selected areas,
- Support for strategy formulation and implementation,
- Strengthening institutional identity,
- Obtaining data for decision making,
- Better understanding of processes,
- The setting of targets for improvement,
- The sharing of good practice and enhancement of learning from others on how to improve,
- Responding to national and international performance standards,
- Demonstrating accountability to stakeholders,
- Setting new standards for the sector.

Drawing on research, CIMA (2001) identifies a fuller set:

- Facilitating development of an externally focused ethos,
- Promoting a shift in corporate mindset to learning from and building upon the wisdom of others and being open to adopting best practice and innovative ideas from elsewhere,
- Accelerating organisational learning,
- Enhancing creativity,
- Enabling change,
- Providing a systematic means for developing a better understanding of competitors' strengths, weaknesses and behaviour,
- Facilitating identification of gaps across a wide range of business elements based on objective evaluation,
- Enabling establishment of effective performance targets,
- Helping identify valid best practices,
- Facilitating planning and implementation of proven and state-of-the-art ideas, processes, practices, equipment and technologies,
- Providing an effective and efficient means for the attainment of business goals,
- Accelerating the rate of improvement,
- Helping to identify breakthroughs,
- Enabling the organisation to become (and remain) a leader,
- Enabling prioritisation of improvement projects,
- Helping gain consensus data and information rather than personal opinion on the best way of doing things,
- An integral component of Total Quality Management,
- Helping the organisation attain superior performance and customer satisfaction,
- Can be integral to attaining external quality marks/judgements.

Research undertaken during the course of this study largely reinforce elements of these listed benefits.

The Vice-Chancellor of a post-92 university commented as follows on the value of benchmarking as used within the national PIs:

"The aims and approach have remained consistent throughout. This consistency, together with the robust and sophisticated methodology on which they are based, provide a credible and objective way of looking at trends and performance within the sector.

We include the Indicators and our performance against the benchmarks in our suite of Performance Management Information, which is shared routinely with our Board of Governors.

The data time-lag does mean that the benchmarks reflect past rather than current performance, but the ability to look at our position relative to others in the sector and to the sector as a whole helps to make up for this.

We are always trying to improve our participation, retention and employment rates. We would do this with or without the HESA/HEFCE Performance Indicators. However, benchmarks and relative performance are good and objective ways of assuring that we keep on track with our plans. We also use financial benchmarks for the same monitoring purposes. The Indicators also help to assure the public and policy makers that these things are being addressed and monitored."

Two respondents to the planning community questionnaire commented on the value of benchmarking thus:

"Benchmarking is an important tool in evaluating institutional performance and one which, given the reductions in public spending, is going to become increasingly important.'

'The overarching aim of a benchmarking process is to place performance in perspective against the sector or a more specific group of institutions. A key element of benchmarking is the identification of institutions that achieve high levels of performance which can act as examples of good practice. By analysing, assessing and implementing actions based on examples of good practice, institutions can achieve more efficient processes and ultimately higher levels of performance. Sensible benchmarking can lead to realistic target setting processes in relation to a broad spectrum of performance indicators, which encourages a more efficient environment."

Only AMHEC has provided a quantification of a benefit, although the planning community survey and interviewees were not specifically asked to attempt to quantify benefits in the time available for response. AMHEC claims in its LGM Project bid (LGM-211) that a 1% saving in non-pay expenditure has been achieved (2007/8), equating to £1M as a consequence of using benchmarking data and attending appropriate workshops. Review of corporate services is also claimed by AMHEC to have enabled management of a £1.9M deficit for a member institution into a breakeven position.

Respondents to the planning survey raised a number of additional benefits that are worthy of note:

- Identification of efficiencies and cost reductions,
- Identification of key areas upon which to focus resources,
- Assisting in building robust business cases for developments,
- Better understanding of risks.

7.2   Barriers and recommendations

This report has shown through its overview of activity in section 5 and case studies in section 6 that there is evidence of extensive activity across the sector in benchmarking , in gathering, analysing and sharing data, and in identifying best practice; that may be formal or informal, in many cases based on collaboration and cooperation. However a number of barriers to greater use of benchmarking have been identified through the course of research for this report. These are discussed below and recommendations are framed to address them.

The first barrier concerns 'making the case' for benchmarking in the face of increasing pressure on resources. Senior managers and leaders in higher education institutions are of critical importance here, in ensuring that appropriate resources are allocated to the activity and that the resulting intelligence gained from the activity is properly applied at both strategic and operational levels for the benefit of the institution. Senior management engagement in therefore a key success factor.

On resourcing, the Committee of University Chairs report on KPIs (2006) notes that all case study universities agreed that there would be a significant resource implication for universities in preparing KPIs; however this was seen as an 'inevitable and necessary' part of strategic management, and that, even without KPIs, most universities should already be incurring much of this cost.

The 2008 report of the Financial Sustainability Strategy Group 'The financial sustainability of learning and teaching in English higher education' (http://www.hefce.ac.uk/finance/fundinghe/trac/fssg/) suggests that there is scope for HEIs to do more work to understand their costs of sustainable teaching and to manage their portfolios, and one suggested approach is to assemble better evidence of need through benchmarks.

Jackson and Lund (2000) referred to the need for top management involvement and drive, not least to apply notions of benchmarking in a diverse and complex higher education context. The case study presented in section 6 on the introduction of LEAN methodology by the University of Cardiff also demonstrates that the 'championship' of senior staff is important in progressing benchmarking programmes.

Respondents to the planning survey talked about "inadequate resources, institutional inertia and growing economic uncertainty" and the requirement for "clear indication of benefits to justify increased use [of benchmarking]".

Some additional related comments made by respondents to the survey concerned increasing competition between HEIs driven by changes in the external environment and the negative impact this may have on their willingness to share data for benchmarking purposes. The HE sector must be assured of the net value of benchmarking and the benefits of working collaboratively to overcome such concerns.

There is an important message to be promoted about the value of benchmarking, the benefits to be gained, and the consequent priority to be attached by some HEIs.

Recommendation 1

Leadership and governance is required for a programme of work to increase the adoption and value of benchmarking, in collaboration with UUK, GuildHE and other bodies seeking to improve the efficiency of operations in the higher education sector.

The next barrier identified concerns the sharing of knowledge about benchmarking.

While characterising benchmarking as 'a very young child with little experience', the European report on benchmarking in universities (ESMU 2008) also notes 'even less publicity'; that report claims there is a 'profound difficulty' in the lack of information on benchmarking initiatives and the ensuing challenge in locating them.

CIMA's earlier (2001) survey has a similar message, with specific reference to the finance function: 'Despite the popularity of benchmarking and its simple logic, the concept is not well understood... this lack of understanding is propagated by the paucity of empirical and case-based benchmarking research.

As noted above, while this report has presented an overview of extensive sector benchmarking activity, responses to the planning community survey and comment from interviewees in preparation of this report indicate that some work is taking place in relative 'isolation', or that knowledge of activity may be concentrated within some of the sector professional groups, or within Mission groups. The size and diversity of the HE sector is acknowledged as one factor but comments from respondents to the planning community survey and from interviewees point to the risk of 'reinventing the wheel'.

Note should be taken of the LGM-funded AMHEC project highlighted in section 6 which has, in addition to the enhancement of the current AMHEC benchmarking tool, the aim of creating a website which will provide a focal point for benchmarking activities across the sector and promote value for money and best practice.

In addition training should be addressed. The HEFCE report on implementation of PIs (HEFCE 2007/14) observes: 'Several times in the course of this review people have suggested that training in the use and interpretation of the PIs, and the associated information, would be helpful'. In the 2001 CIMA survey, 14.8% of respondents cited lack of knowledge of technique or benefits as a barrier to benchmarking

A national website or portal dedicated to benchmarking may be one of the solutions, but resource would be needed, not only to set up such a development but to maintain it. However it would be possible for HESA to expand its online information base and to enhance its well-established (and well-received) training programme to support benchmarking.

In summary there is considerable scope for better sharing of knowledge and good practice regarding benchmarking.

Recommendation 2

A programme of activities should be developed to share good practice and inform the sector about methods, resources and services available for effective benchmarking. Options should be considered for developing a knowledge base to be disseminated through appropriate communication channels with training and advice to build sector capacity for benchmarking.

There are a range of different approaches to benchmarking within HEIs, as noted by ESMU (2008): 'The most decisive finding of the group analysis was that there is no single dominant model or even a small group of archetypes of benchmarking groups. Benchmarking approaches in higher education vary by their aims, objectives, structure of the groups, their methods, and the kind of data used.'

There is scope for some sharing of methodologies, tools and benchmarking frameworks, to avoid duplication or isolated activity and thereby to reduce the associated costs. While the HEFCE Higher education workforce framework 2010 does identify as a future challenge the capacity and capability of the sector to support shared services, a collaborative approach must be the way forward. Such an approach could potentially offer a range of facilities to the HE sector to support benchmarking and lessen the need for costly commercial sector benchmarking services.

Several communities across the HE sector keep informed about tools, and exchange information about developments; there has been a relatively recent exchange of information through the planning community mailbase for example. There may be also be scope for development of a 'toolkit' to support benchmarking (see for example the current list of 'infokits' at http://www.jiscinfonet.ac.uk/infokits).

Recommendation 3

Investment is needed in the development of accessible methodologies, tools and benchmarking frameworks (including reference to the published national PIs) as a shared services approach to benchmarking activity. This will allow the sector to benchmark in a cost effective way, thus conserving resources for essential external services and data that may need to be 'bought in' from outside the sector.

There is a good deal of evidence to suggest that some data-related issues form a significant barrier to further use of benchmarking and these are considered next.

The 2001 CIMA survey identified lack of readily identifiable or easily obtainable data as a barrier, cited by 15.8% of respondents to that survey. In the 2008 CUC report on implementation of KPIs, case study universities agreed that amongst issues that would need further attention as universities implement KPIs would be 'the availability and harmonisation of published sources of higher education data.'

There were a significant number of comments from respondents to the planning community survey and from interviewees in preparation of this report on issues relating to data. These issues can be categorised as follows:

- Lack of granularity in available data – limited ability to 'drill-down' into the data,

- Problems with comparability. A particular example cited here was the difficulty in mapping institutional structures onto the HESA cost centres and the inconsistencies in doing this between institutions,

- Questions of accuracy and quality for some data sources,

- Problems with access and availability,

- Timeliness of data – difficulties in obtaining up-to-date information,

- Changes in data structures and definitions over time negatively impacting on time-series.

The section immediately below considers heidi in detail; heidi is a key part of the sector sources of data available to HEIs. Section 4 of this report provides an overview of data sources and services in the sector for benchmarking. However while one respondent to the planning community survey provided a very comprehensive list of organisations and data used in their HEI, two responses suggested that there could be better information on the range of data sources, and that some sources could be more accessible. The Wiki style initiative begun by a member of the planning community, highlighted in section 4.6, is relatively recent and there is scope for further important work to which Phase 2 of this Project can contribute.

Phase 2 of this project should construct a more detailed map with reference to the two studies highlighted in the Introduction to this report, by JISC and by AHUA/ UCISA on the initiative of the HE Better Regulation Group, and with reference to data sources and needs identified in this report. That mapping should include heidi (see also recommendation 5 below).

Recommendation 4

A map of current relevant information sources should be drawn up and made available. This would identify more clearly where benchmarking is not supported by adequate data. In addition by referencing work being undertaken by HE Better Regulation Group looking at information being collected in the sector there may be further scope for benchmarking intelligence. Action should be taken to rectify essential data gaps, improve access to existing resources, and where possible enhance comparability, quality and timeliness.

As noted above, heidi is acknowledged as one of the key sector data services to support benchmarking. It is therefore worthy of particular scrutiny.

Section 4.1 of this report notes the 2009 HESA survey of heidi users (http://www.heidi.ac.uk/). In that survey, 77.9% of respondents agreed or strongly agreed that heidi assists with benchmarking. The extensive take-up of heidi within the HE sector demonstrates that it is a very valuable resource. Efforts to develop usage of the system beyond the traditional areas of planning have also been underway. For example the Equality Challenge Unit has been working with HESA to develop an equality function within heidi, and together have been successful in promoting use of the system to equality and diversity professionals.

Expansion of heidi data content continues. This report notes the recent move of the EMS statistics into a HESA data stream, and inclusion of EMS within heidi has been welcomed by interviewees in preparation of this report. SCONUL data on libraries have also been recently introduced in heidi. SLC has been identified as a potential source of valuable data and it has also been suggested that TRAC data would form a valuable addition to the more widely available datasets.

However, although a good deal of positive feedback was received from interviewees and respondents to the planning survey with regard to heidi, some concerns were also expressed which must be addressed. One of the most common problems expressed was a desire for greater granularity, depth and flexibility in the data contained within heidi. Respondents talked about the need to use other sources of HESA data to complement heidi. Another concern related to the heidi interface, which was described by some respondents as 'cumbersome' and 'not user-friendly'. One interviewee talked about the need to manually manipulate data extracted from heidi. Reference was also made to heidi not being a 'one-stop shop' and there being a continued requirement to source other data.

Aided by the heidi Advisory and User Groups, and informed by the heidi User Survey, HESA is actively working on the fourth major version of heidi scheduled for release during the first quarter of 2011. Heidi 4 intends to deliver significant usability improvements and other major changes will include a review of the data architecture, new functionality to support the inclusion of Estates Management Statistics (EMS), and addition of new data.

It will be for HESA to take issues forward in conjunction with the heidi Advisory and User Groups.

Recommendation 5

As a priority heidi should be further developed with a particular focus on the support of benchmarking activity, guided by the HE user community. The depth and flexibility of data contained within the system should be reviewed and extended. HESA should explore and take opportunities to integrate other information sources and undertake relevant collaborations with other service providers as well as provide advice, guidance and training to enhance the use of heidi for benchmarking purposes.

The paper submitted to HEFCE CEG suggests that it might also be helpful if the sector were to attempt some benchmarking with the private sector: 'Comparison with areas which have had to respond to the full force of the recession might help in finding solutions to the challenges that the sector will face as pressure on public funding increases.' Respondents to the planning community survey and interviewees in preparation of this report also suggested benchmarking more widely, outside the HE sector.

SUMS Consulting commented in preparation of this report that as a sector HE should be looking outwards to other sectors; HR services was cited by SUMS, where Marks and Spencer was identified by SUMS as a benchmark for HR websites and virtual services in the course of consultancy for its members. In the area of estates and facilities, it is already common to benchmark against commercial sector standards. There may be opportunities for further benchmarking beyond higher education, particularly for the more business-focused activities and services.

Jackson (2001) underlines that 'UK universities are under increasing pressure to show how they perform relative to universities in the global community and there is growing interest in transnational benchmarking to make reliable international comparisons and learn from other HE systems'. Respondents to the planning community survey highlighted the comparative absence of data for international benchmarking, especially for HEIs with global missions and associated global comparators and competitors. Research is one area where international benchmarks are used, and priority should be given to further study.

Recommendation 6

A study should be undertaken to identify the scope for benchmarking against relevant public and private sector bodies and cognate activities outside the sector, also exploring the benefits of transnational benchmarking. This should provide insights into benchmarking that takes place outside the HE Sector.

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Appendix A

CASE STUDY: UNIVERSITY OF LIVERPOOL – RAE ANAYLSIS
RAE2008 Analysis
Unit of Assessment 30

Introduction

This report contains a summary of RAE2008 performance, using the following sources of information:

- RAE2008 results,
- RAE2008 submission data from individual institutions (staff numbers, students, income, outputs, RA5a narrative sections),
- Subject overview report from sub-panel and main panel,
- Confidential UoA feedback to the UoL unit,
- RAE2001 relative positioning.

It is intended as a desk-based study to support the initial preparations for the Research Excellence Framework. It is not intended to replace the regular review cycle for departments. It could, however, be used to discuss with Executive PVCs and Heads of School which areas of activity might require further scrutiny, and which areas of good practice might be transferred to other UoAs.
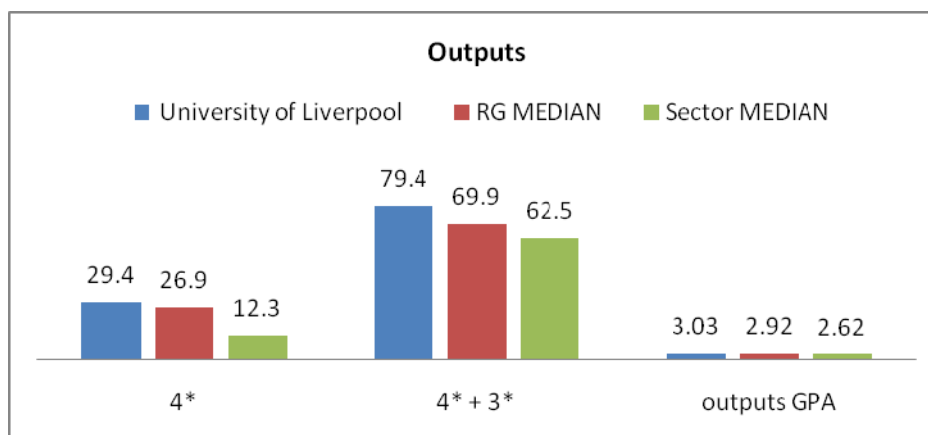
Overall Profile and Sub-profiles

		UoL	RG median	Sector median	RG rank	Sector rank
Overall	GPA	3.00	2.95	2.60	3/9	3/34
	% 4*	30	25	15	3/9	3/34
	% 4* + 3*	75	70	60	2/9	2/34
Outputs	GPA	3.03	2.92	2.62	2/9	2/34
	% 4*	29.4	26.9	12.3	4/9	4/34
	% 4* + 3*	79.4	69.9	62.5	1/9	1/34
Environment	% 4* + 3*	65	77	54.5	7/9	14/34
Esteem	% 4* + 3*	60	55	50	4/9	6/34

The overall grade point average (GPA) for UoL was very strong, ranking 3rd in both the Russell Group and the sector as a whole, and the proportion of 4* activity and 4* plus 3*activity were significantly higher than the Russell Group and sector medians.

The difference between the Russell Group and sector medians for the overall profile measures reflects the fact that submissions from Russell Group institutions dominate the top quartiles of the RAE results tables for this UoA.
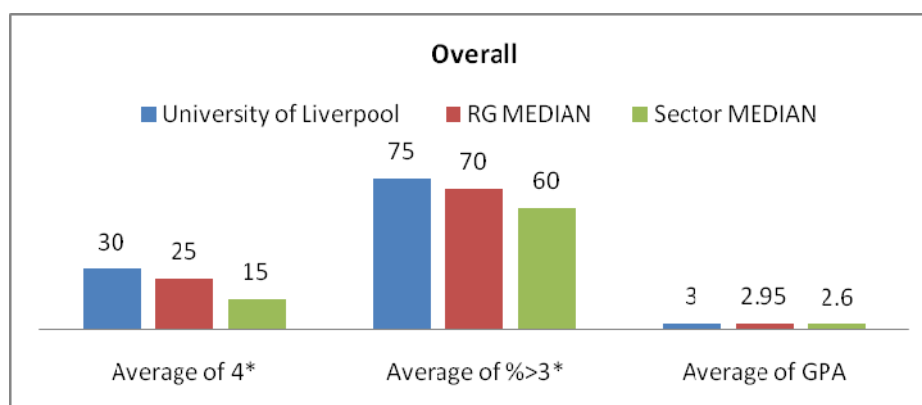
The outputs profile also showed a very strong performance, with the GPA, 4* output and 4* plus 3* output measures being higher than the Russell Group and sector medians. As with the overall profile measures, the difference between the Russell Group and sector medians for proportion of 4* outputs is notable, with the Russell Group median more than double the median for the sector as a whole.

The esteem profile was also strong, above both the Russell Group and sector medians. However, the environment profile was less strong than the sub-profiles for outputs and esteem, placing UoL 7th in the Russell Group and 14th overall but still above the sector median. This was due to a smaller proportion of activity at 4* and a similar proportion of activity at 3* compared to the rest of the Russell Group and other institutions in the top quartile.
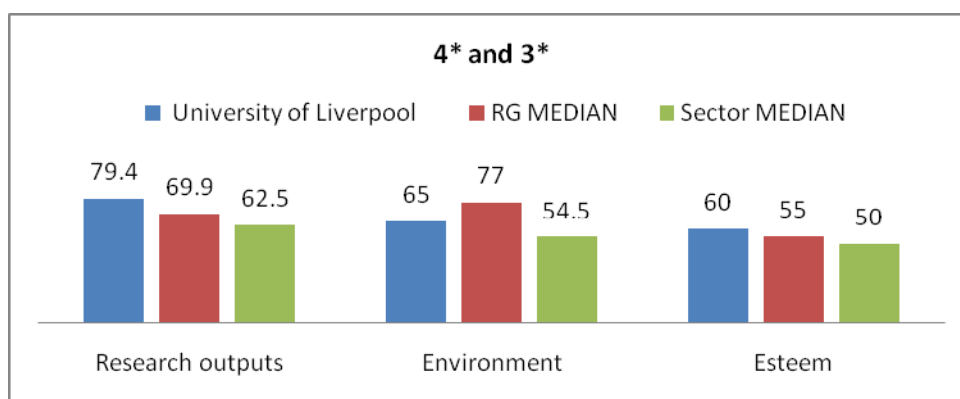
UoL Submission

The submission comprised the School of Architecture and included the following research themes:
Architecture History and Theory (10 staff)

- Staff within this theme were presented in three research groupings – History (8 staff involved), Architecture and the Visual Arts (3 staff), and New Architectures (3 staff),

- Architecture Environment and Process (8 staff),

- Staff within this theme were presented in three research groupings – Acoustics and Lighting (4 staff involved), Computer-Mediated Design (2 staff), and Building-Life Modelling (2 staff).

It was slightly above the average size of Arts, Humanities and Social Sciences submissions made by the University and of a similar size to Politics and Communication Studies (17 FTE). It was larger than the equivalent submission to the Built Environment sub-panel in RAE2001 by 4.3 FTE.

In positioning, the University moved from sitting between the 24th to 46th percentiles of units in RAE2001 to between the 6th and 9th percentiles in RAE2008 for proportion of 4* plus 3* activity and overall grade point average. This was one of the most significant shifts in position relative to competitors in the University.

The results and confidential feedback demonstrated the following:

Positive

- The RA5a was well-written and future plans were presented clearly,

- The research structure was acknowledged for allowing smaller sub-groups to focus on more specialised interests within two main groups with sufficient critical mass,

- The strategy was excellent, well-focussed and sensible, including unique research topics for future development,

- The numbers of research students and degrees awarded were excellent,

- The arrangements for research leave and mentoring were commended,

- The profile for esteem indicators showed good or better impact and recognition across almost all parts of the department.

Other comments

- Research income was considered adequate for the size and needs of the department

Russell Group Performance
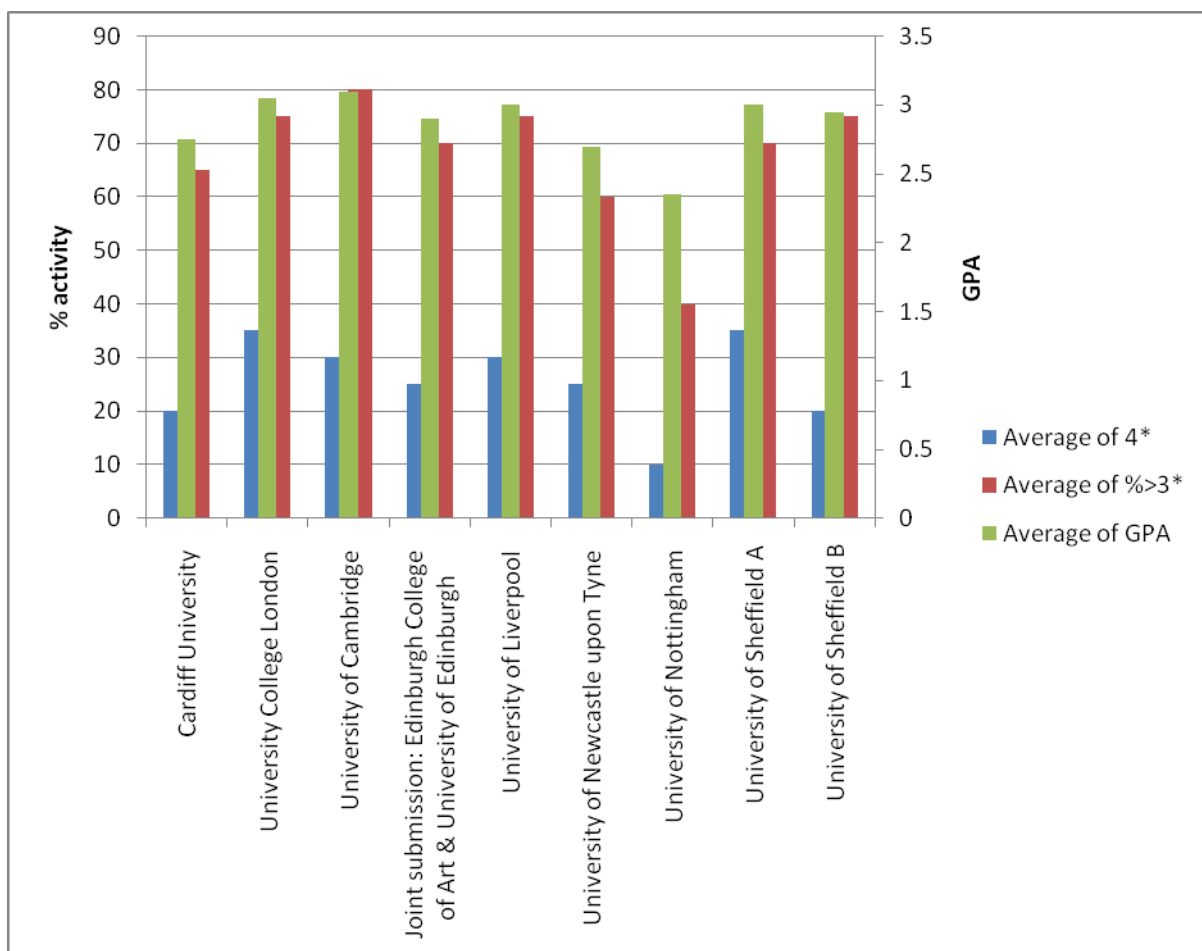
Nine Russell Group institutions in total made submissions to this UoA, with only Cambridge and UCL performing better than Liverpool for overall grade point average, and only Cambridge performing better than Liverpool for the proportion of 4* plus 3* activity.

Whilst the Liverpool submission was 4.3 FTE larger than the equivalent submission in 2001, both Cambridge and UCL made smaller submissions in RAE2008 than in 2001, suggesting a change in submission strategy (e.g. applying a greater degree of selectivity, or submitting staff to other UoAs due to better disciplinary fit).

The following submissions had the same proportion of 4* plus 3* activity as UoL:

- UCL (submission comprising the Bartlett Schools of Architecture, Graduate Studies, and Construction and Project Management; the Bartlett School of Planning included in the 2001 UoA30 submission was returned separately to UoA31 in RAE2008),

- Sheffield submission B (Department of Landscape Architecture – submitted with the School of Architecture in a single submission in 2001).

Lower ranked submissions from the Russell Group were:

- Sheffield submission A (School of Architecture – submitted with the Department of Landscape Architecture in a single submission in 2001),

- Edinburgh's joint submission with Edinburgh College of Art (based on the academic federation between the College of Art (landscape architecture, design and conservation) and Edinburgh (architectural design, history and technology) launched in September 2007),

- Cardiff (the Welsh School of Architecture, including the Low Carbon Research Institute and the Centre for Sustainable Design),

- Newcastle (small submission of 7 Category A staff FTE, part of the School of Architecture, Planning and Landscape – the Tectonic Cultures Research Group forms the UoA30 submission, with the Applied Research in Architecture Group not submitted in RAE2008 and the Global Urban Research Unit submitted to UoA31),

- Nottingham (School of the Built Environment, including Building Services, Sustainable Energy Technology, Environmental Design and Tectonics, Urban Design, and Architectural Humanities).

Other trends in the Sector

Submissions outside the Russell Group that were ranked in the top quartile of this UoA for grade point average included:

- Loughborough (Built Environment Unit of the Department of Civil and Building Engineering) (5* in RAE2001),

- Bath (Department of Architecture and Civil Engineering) (5 in RAE2001),

- Reading (School of Construction Management and Engineering) (5 in RAE2001).

Both Loughborough and Bath submitted significantly larger submissions in RAE2008 than in 2001 whilst maintaining their position in the top quartile of the UoA (+14 FTE or 107.7% and +9.3 FTE or 66.4% respectively).

Size and Shape of Submission

	UoL	RG median	Sector median	RG rank	Sector rank
Category A FTE	17.3	18.45	14	6/9	15/34
Research Assistants FTE per Cat A FTE	0.25	0.37	0.33	7/8	20/33
Research Support Officers FTE per Cat A FTE	0.06	0.03	0.02	4/8	14/33

In terms of size, the UoL submission was one of the smaller Russell Group submissions; however, it was above the median for the sector as a whole, and it was noted in the confidential feedback that the two research groups submitted were 'large enough to provide critical mass'.
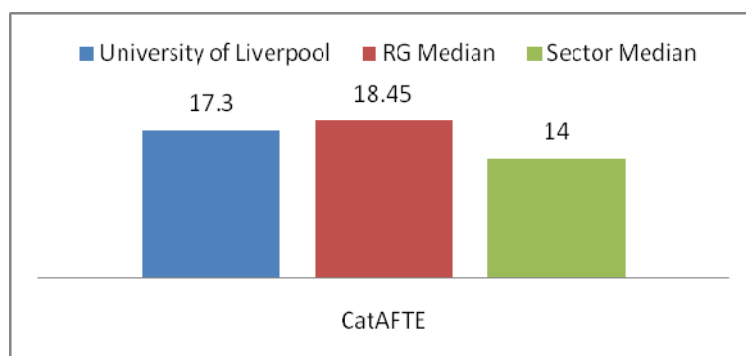
There were three Category A members of staff who were classed as early career researchers. This amounted to 17.34% of the total submitted Category A staff FTE. The subject overview report notes 'the presence of a significant proportion of early career researchers across the field as a whole' but does not specify what this proportion is, so it is not possible to assess whether this submission has a higher proportion of ECRs than average for the sector.

However, information contained in RA5a documents suggests that the proportion is comparable to other Russell Group institutions; Cardiff and UCL had similar proportions at 17.17 and 18.14% respectively, with Nottingham and Cambridge having higher proportions at 25 and 26.37% and Newcastle and Sheffield A having lower proportions at 14.29 and 15.31%.
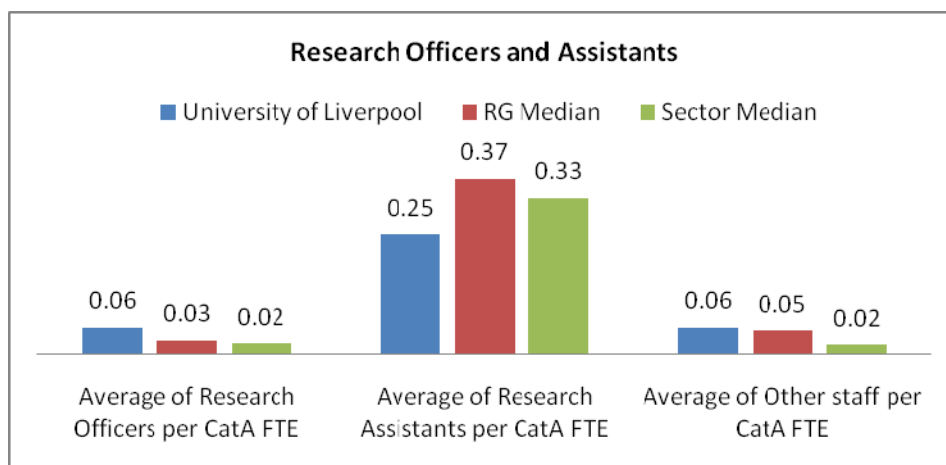
Research assistants per Category A staff FTE were below the Russell Group and sector medians. Other research support staff (technicians, experimental officers, etc.) per Category A staff FTE were higher than the Russell Group and sector medians, but the overall numbers were low across the sector. There was some variability in the data on research staff per Category A staff FTE, which may be due to the range of departments submitted to this UoA, from architectural design schools to units focussing on construction engineering and technologies.

Outputs

	UoL	RG median	Sector median
Proportion of assumed journal articles (%)	50	52.02	66.67
Proportion of authored books	20.59	12.69	5.21
Proportion of book chapters	22.06	11.35	8.00

The significant majority of outputs in this UoA were journal articles (65.64%). Other minor publication types for the UoA (in volume order) were:

- Conference contributions (8.4%),

- Book chapters (8.3%),

- Authored books (6.5%),

- Designs (4.4%),

- Research reports for external bodies (1.9%),

- Edited books (1.8%),

- Software, Exhibitions, Artefacts, Patents, Digital/Visual Media (less than 1% each).

The number of non-traditional research outputs, such as designs, exhibitions and artefacts, was low overall.

Analysis undertaken by the sub-panel in the subject overview report provides additional information on the quality of the outputs submitted by output type (including confidential outputs, for which data are not publicly available and therefore not included in the other analyses here):

Output type	4*	3*	2*	1*	U	Number	Proportion
Journal articles	16%	50%	26%	7%	1%	1,705	64.27%
Chapters in books	9%	42%	39%	8%	3%	240	9.05%
Conference contributions	2%	13%	51%	30%	4%	221	8.33%
Designs & other non textual outputs	20%	32%	26%	19%	3%	183	6.90%
Authored books	35%	44%	16%	5%	1%	175	6.60%
Edited books	17%	40%	31%	8%	4%	52	1.96%
Reports for external bodies	10%	36%	32%	14%	8%	50	1.88%
Internet publications	17%	17%	35%	22%	9%	23	0.87%
Patents	25%	0%	75%	0%	0%	4	0.15%
Whole UoA	**16%**	**43%**	**29%**	**10%**	**2%**	**2,653**	**100.00%**

The sub-panel also observes that the outputs submitted to the UoA 'represented a highly diverse field of activity', and categorises them by the following subject areas:

	Number	Proportion
Architecture, Landscape, Theory and History	932	35.13%
Construction Management, Property, Surveying & FM	786	29.63%
Building Science, Environment & Engineering	935	35.24%
Whole UoA	**2,653**	**100.00%**

The sub-panel notes

An analysis of profiles by the three sub-disciplinary areas based on output content showed the proportion of internationally recognised research in each field to be approximately the same at between 87% and 90%, with construction management, property, surveying and FM showing a profile close to the average for the whole UoA, a higher proportion of outstanding outputs in architecture, landscape, theory and history and a somewhat lower proportion in building science and engineering.
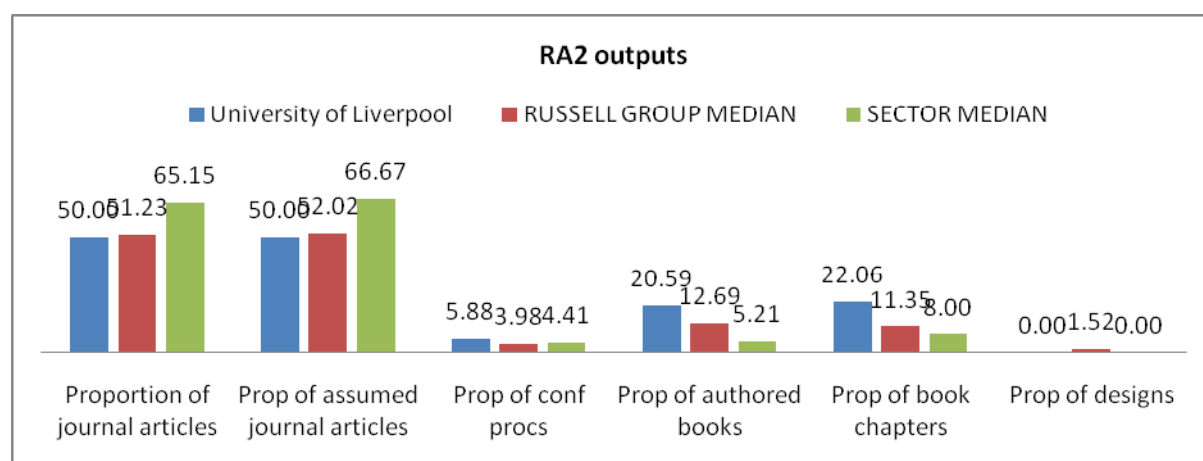
UoL had a smaller proportion of journal articles than the medians for the Russell Group and the sector, with correspondingly high proportions of other types of output submitted, in particular authored books, book chapters and conference proceedings.

In the sub-panel's analysis, authored books, edited books and journal articles scored particularly well, with a higher proportion at 3* and 4* than the UoA average, but conference proceedings and book chapters appear to have been of a lower quality overall than other outputs types, with below average proportions at 3* and 4* for the UoA. The high proportion of outstanding outputs in architecture, landscape, theory and history may indicate a need to maintain a very high level of output quality within this subject area to remain competitive. Whilst the UoL submission performed particularly well in the assessment of its research outputs, this analysis might help to inform the School's publication strategy for the future.

Research Students

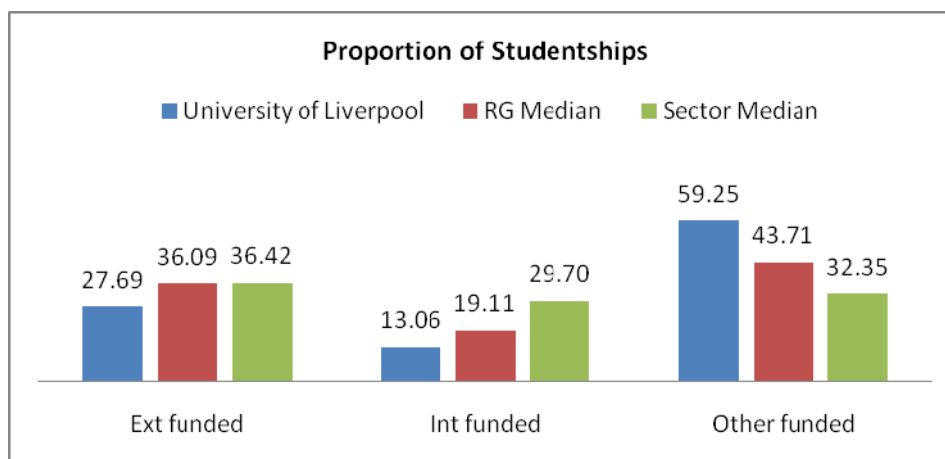|	UoL	RG median	Sector median	RG rank	Sector rank
RA3a PGR FTE per Cat A FTE for whole period	7.76	10.60	6.71	7/8	13/33
RA3a PGR FTE per Cat A FTE for 2007	1.16	1.58	1.02	6/8	12/33
RA3b New Studentships per Cat A FTE for whole period	2.85	3.71	2.32	8/8	14/33
Proportion of externally funded studentships	27.69	36.09	36.42	8/8	26/33
Proportion of internally funded studentships	13.06	19.11	29.70	5/8	28/33
Proportion of other funded studentships (predominantly self-funded)	59.25	43.71	32.35	1/8	3/33

It was noted in the sub-panel feedback to UoL that the numbers of research students and degrees awarded were excellent, and this is reflected in UoL's position in relation to the rest of the sector. UoL was above the sector median for PGR student numbers per Category A staff FTE over the period, with a slight improvement in UoL's relative positioning in the final year of PGR data.

However, it is also clear from the subject overview report that the sub-panel took the nature of the department into account when assessing data for the research environment sub-profile, and it may therefore be worth identifying a sub-group of comparators based on the type of department or unit submitted in order to undertake further, more meaningful analysis.
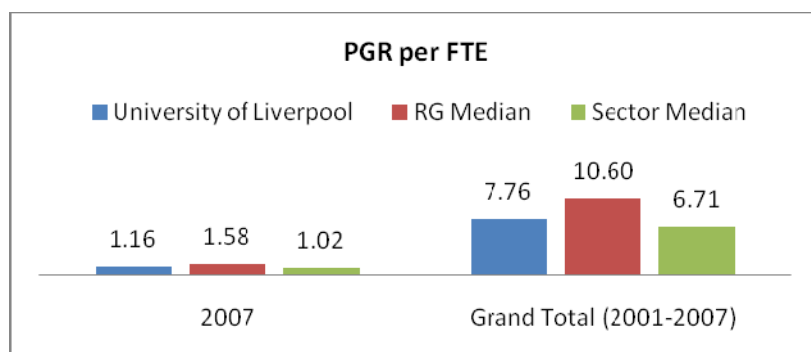
The number of new students starting their research degrees in the period (indicated by the number of new studentships) was also above the sector median but below the median for the Russell Group. In terms of sources of funding for studentships, UoL had significantly lower proportions of externally and internally funded studentships in comparison with the Russell Group and the rest of the sector, and relied more heavily on students funded from other sources (generally self-funding).

It is notable that the sector median was higher than the Russell Group median for the proportion of externally funded and internally funded studentships, and this may be due to the range of disciplines submitted to this UoA. Again, it may be worth identifying a sub-group of comparators for this metric to undertake further analysis.
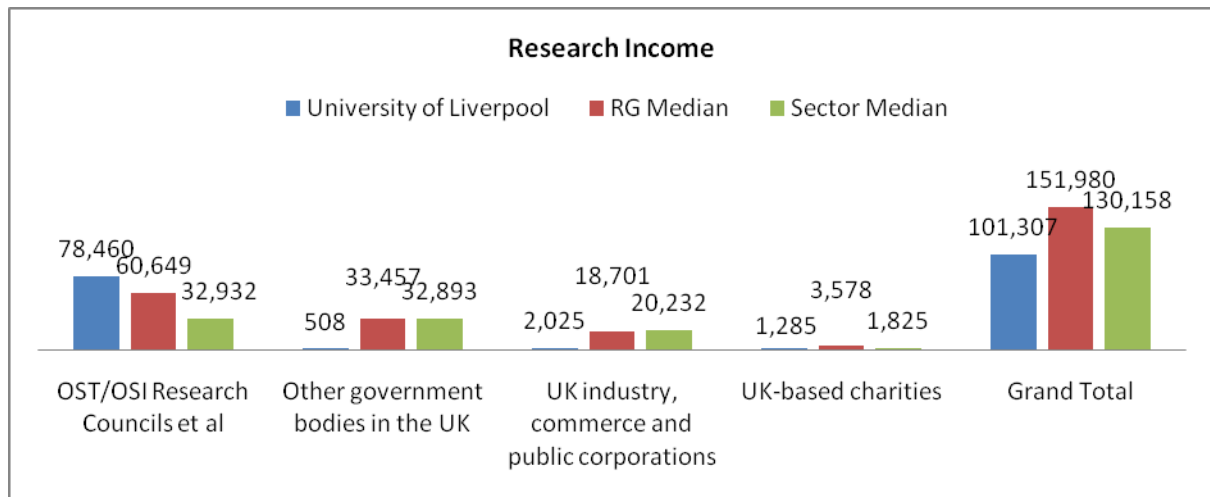
Proportion of Studentships

Research Income

	UoL	RG median	Sector median	RG rank	Sector rank
RA4 income per Cat A FTE for whole period	101,307	151,980	130,158	7/8	21/33
RA4 2006/07 income per Cat A FTE	19,410	29,437	29,955	7/8	22/33
Res Council income per Cat A FTE for whole period	78,460	60,649	32,932	3/8	9/33
Charity income per Cat A FTE for whole period	1,285	3,578	1,825	8/8	22/33
Governmental income per Cat A FTE for whole period	508	33,457	32,893	8/8	31/33
UK industry income per Cat A FTE for whole period	2,025	18,701	20,232	8/8	30/33

Research income per Category A staff FTE for the RAE period and for 2006/07 places UoL in the bottom half of both the Russell Group and the sector. However, this metric is significantly affected by the availability of research funding for the type of research undertaken by each unit. In light of this, the sub-panel feedback to UoL notes that the amount of research income was 'considered adequate for the size and needs of the department'.
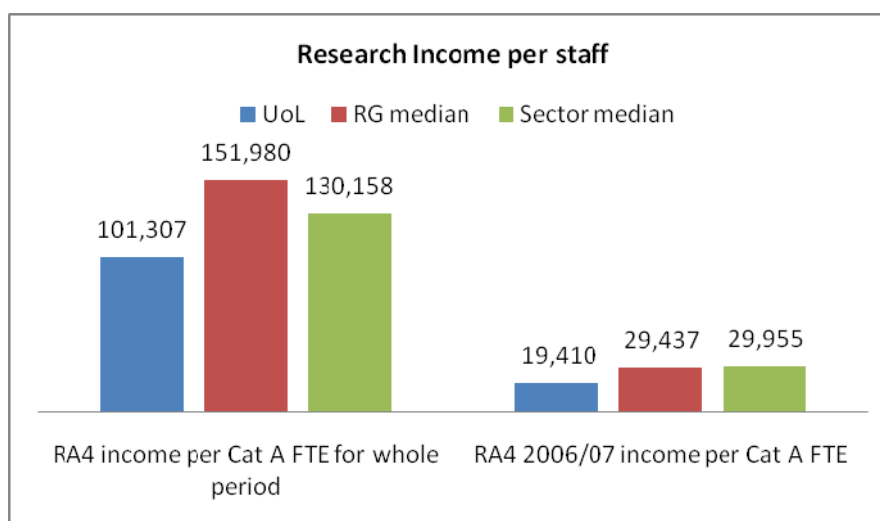
Income from Research Councils placed UoL in a better position, ranking 3rd in the Russell Group and 9th in the sector as a whole and representing more than double the sector median per Category A staff FTE. However, given the likely reduction in and increased competition for Research Council and other Government research funding, it may be sensible to consider targeting other sources of income in order to remain sustainable and competitive.

Research Income

- University of Liverpool
- RG Median
- Sector Median

	OST/OSI Research Councils et al	Other government bodies in the UK	UK industry, commerce and public corporations	UK-based charities	Grand Total
University of Liverpool	78,460	508	2,025	1,285	101,307
RG Median	60,649	33,457	18,701	3,578	151,980
Sector Median	32,932	32,893	20,232	1,825	130,158

Subject Overview Report

The subject overview report for the UoA 30 sub-panel contained a number of detailed observations and analyses of the data, and included the following comments that should be used to guide the ongoing strategy of this unit ahead of the REF:

Research Environment and Culture

- There was much evidence of the integration of internationally leading firms and practitioners within the research structure of a number of submissions, with many submissions citing the **strategic importance of integrating research with teaching and knowledge transfer and exchange.**

- The subject area is characterised by a **great diversity** in disciplines, research methodologies, organisational size and form of research groups as well as in the professional and organisational nature of research users and forms of engagement, which can make for **complexity for research funding agencies, as well as for research assessment.**

- Funding mechanisms designed to encourage user-driven research did not necessarily produce the conditions conducive to challenging existing paradigms and policy assumptions, with research tending to be incremental and responsive to policy rather than transformational and proactive in setting the agenda.

- A **changing mode of research in architecture, design and historical studies** was noted, with increased funding streams from the recently formed AHRC. There appears to be a transition taking place from the single scholar towards more supervised and team-based research in these areas, and this suggests that further improvements in research culture will be seen in future.

- There was a notable **lack of systematic reviews** in the field. This attests to the complexity of the field and the diversity of methodologies used; however, it points towards need for development of research methodologies to allow direct comparison of different built environment interventions, since this is a prerequisite for systematic review methodologies and evidence-based design.

Outputs

- Single discipline submissions and those that submitted outputs of a restricted range of types fared comparatively less well despite often excelling in measures of environment and esteem; **the effective transformation of research inputs**, such as funding, into high quality research outputs is likely to be strengthened by strong single discipline groups within a strongly multidisciplinary research grouping.

- In **environmental and building science**, the focus on ecological and green issues is very strong. There is a need for the development of strategic programmes of research in the building sciences aimed at developing the critical mass amongst interdisciplinary groupings required to tackle research in this wider context.

- In **architecture, and in theory and history**, the number and quality of major monographs gave evidence of the development of a very healthy research culture. It was apparent that relevant subject bodies had played a strategic role over the period in stimulating this development.

- In **design**, the number of internationally outstanding research outputs submitted was much healthier than in 2001.

- In **landscape design**, there is a richness of outputs that was not evident in 2001. However, whilst increasingly strong in terms of the quality of outputs, landscape architecture is in danger of losing a critical mass in terms of numbers of researchers.

Recommendations

- Maintain the unit's clear research strategy and planning (praised in the sub-panel feedback), including the pursuit of unique research topics for future development.

- Ensure that integration with other units under the new organisational structure preserves a research structure that allows demonstrable critical mass and smaller sub-groups that can focus on more specialised interests.

- Continue to build good relationships with the professional community and to integrate learning and teaching, research and knowledge exchange (noted in the subject overview report).

- The following actions might be considered as an outcome of this desk-based review:

  - Continuing support/investment for areas of identified strength,

  - Seeking additional external funding for PGR studentships,

  - Investigating opportunities for more diverse grant funding,

  - Succession planning in advance of REF to ensure continued critical mass.

Times Good University Guide 2010: Research quality

The performance in the RAE is used as a measure in university league tables. This summary statement draws attention to the impact the performance has in the Times subject tables (with the corresponding table in the excel report). For a full account of the construction of the measure see 'data definitions' at the end of this report).

UOA 30: The UOA is used in two Times subjects: **Building** and **Architecture.**

Liverpool appears in the **Architecture** table and has a GPA score for Research quality of 3.7. This was ranked 3rd/10 of the Russell Group, behind Cambridge and ahead of Sheffield, and 3rd/43 for the sector (RG median = 3.3, Sector median = 1.9). Although Manchester and Queen's, Belfast of the Russell Group are listed in the subject table they did not return to this UOA and have no score for research quality.

Times Good University Guide 2010: Research quality (definitions)

The Times publishes an overall institution league table and subject tables. The subject tables are based on 4 measures: Student Satisfaction, Graduate Prospects, Entry Standards and Research Quality. Each measure is given equal weighting when calculating a final subject sum although it is possible to be listed in the table but only have a score for three measures.

To calculate a score for Research Quality, firstly the Times maps UOAs to Times subjects. Universities were given a copy and had the opportunity to suggest alternative/additional mappings. This has resulted in some (Times) subjects having more than one UOA assigned to it. A grade point average (GPA) is calculated from the RAE 2008 university quality profile for that UOA using the following HEFCE weightings: 7 for 4*, 3 for 3*, 1 for 2*, 0 for 1*. When more than one UOA has been mapped, the FTE of staff submitted is used to normalise the final score.

Because it is possible to appear in the subject table with only scores in three of the four measures some institutions may not have returned to the mapped UOA and not have a score for Research Quality.

Care should be taken when viewing comparative rankings. The Times have rounded GPA scores to one decimal place. Consequently, it is not uncommon to find blocks of equal ranked institutions with the same score. This means rankings show big jumps from one score to the next. This is most obvious in the final ranking place which is made up of those institutions that have not returned to the listed UOA and so have a Research Quality score of 0.

The score for Research Quality in future publications will remain the same now until the results of the REF are released, unless there is a change in the way the table is put together. Any effort to improve subject ranking in the next few years would then have to be focused on improving scores in the three other measures.

Data Notes

Data are analysed by normalising against Category A staff FTE – this is full-time equivalent of staff in post on the census date, with an RAE-eligible contract.

Base data for each of the tables included in this report are available in an accompanying spreadsheet.

Analyses of data exclude joint submissions between multiple institutions.

Faye Robinson
Planning and Development
University of Liverpool

Appendix B

Contacts

HEI User Group members

Stephen	Boyd	Huddersfield	AGCAS
Louise	Casella	Cardiff	AHUA
Sue	Grant	Herts	ARC
Ian	Carter	Sussex	ARMA
Sue	Holmes	Leeds Metropolitan	AUDE
Emma	Wollard	Portsmouth	BUFDG
Myles	Danson	JISC	JISC
Vikki	Goddard	Liverpool	National Planners Group
Ruth	Adams	Strathclyde	Scottish Planners Group
Russell	Roberts	Derby	SROC
Peter	Tinson	UCISA	UCISA
Denise	Thorpe	Anglia Ruskin	UHR

Others

Jayne	Aldridge	Kingston	Head of Student Services
Harri	ap Rees	Surrey	Director of Strategic Planning
Graham	Barley		AIMS Consulting
Derry	Caleb	Surrey	AUDE Chair
Charlotte	Cooper	Trinity Laban	Director of Planning
Christine	Couper	Greenwich	heidi User Group Chair
Margaret	Dane	AGCAS	Chief Executive
Bernarde	Hyde		SUMS Consulting
Janet	Isaac	Plymouth	Head of Strategic Planning
Rachel	Lish	UCAS	Data Insight Manager
Elizabeth	Malone	Kingston	SCONUL WGPI Secretary
Mike	Moore	UEL	UHR Chair
Louise	Nadal	Sussex	Director of Strategy, Planning and Governance
Christine	Stewart	Cardiff	LEAN Project Manager
Phil	Vergnano	Northumbria	CUBO
Catherine	Webb	AHUA	Chief Executive
Andrew	West	Sheffield	Director of Student Services
Andrew	Young	Aspect Management	AMHEC

Appendix C

National Planners Group
Questionnaire to Planning Community Mailbase

1   Respondent's name

2   Respondent's department

3   Name of respondent's HEI

4   Are you willing to have the benchmarking activity in your response used as an example and attributed in the report e.g. 'the University of Poppleton has used benchmarking to ...'

5   Do you have a case study on benchmarking that you would be willing to share and have included in the project report?

6   Would you be willing to further discuss your survey responses by email or telephone?

        a.   If so, provide contact details

7   What do you understand by the term 'benchmarking'?

8   What benchmarking activity takes place in your HEI - please give a brief overview including the audience for the benchmarking

9   What benefits do you see or have already seen in benchmarking, particularly in improving efficiency?

10   Please describe the data you consider necessary to support benchmarking indicating what is available to you and what you would like to have?

        a.   Nationally-collected HE sector data (e.g. HESA, heidi, Performance Indicators, SCONUL, EMS Statistics)?
        b.   External/specialist/ad-hoc data collections?
        c.   HEI internal management information?
        d.   Other (e.g. non-HE-sector data)?

11   Can you estimate the person days of effort you devote to benchmarking annually, including activities from data collection and analysis to publication or communication?

12   Are you aware of any notable benchmarking activities involving other HEIs, sector groups or commercial organisations?

13   Do you think there are barriers to current or further use of benchmarking?

14   Any other comments?