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Benchmarking in European Higher Education: a step beyond current quality models

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Abstract

Benchmarking in European Higher Education: A step beyond current quality models

This paper presents the findings of a two-year EU-funded project (DG Education and Culture) *Benchmarking in European Higher Education* carried out from 2006 to 2008 by a consortium led by ESMU (European Centre for Strategic Management of Universities), with CHE (Centre for Higher Education Development), UNESCO-CEPES and the Universidade de Aveiro.

Quality assurance as currently practiced may ensure accountability, yet it does not sufficiently enhance the quality of higher education. The application of industrial quality models has shown its limitations.

Going beyond current quality approaches, benchmarking is a modern management tool to set targets for increased performance through inter-organisational learning.

Presentation

Benchmarking in European Higher Education: A step beyond current quality models

Introduction

Major changes are currently taking place in European higher education. Competition has risen significantly resulting in higher education institutions having to increase their attractiveness on the market and profiling themselves much more significantly. Curricula need to be reformed in line with the Bologna Process and research has become very strategic. Higher education institutions are encouraged to become strong players in the European economy and the global knowledge society.

National governments are increasingly gathering data to support policy, strategic developments and the restructuring of higher education systems. Indicators are defined to measure performance and benchmarks are set for higher education institutions to respond to. At the European level, the Open Method of Coordination is a voluntary process by which EU Member States set quantitative and qualitative benchmarks as a means of comparing their (best) practices linked to progress with the implementation of the Lisbon Agenda.

Quality is key to support these developments and in this context, enhancing university performance and modernising university management is high on the agenda of university leaders and decision-makers in Europe. Yet systematic data collection on institutional performance with a view to set targets to increase institutional performance is not sufficiently developed in universities. The purpose of quality assurance is to ensure accountability, yet it does not sufficiently enhance the quality of higher education itself. The application of industrial quality models to higher education (the EFQM Excellence model, Total Quality Management) has shown its limitations since these models do not sufficiently encompass the whole nature of higher education.

The European standards and guidelines for quality assurance defined by ENQA (2007), the European Network of Quality Agencies provide directions for higher education institutions to improve their internal quality assurance policies and procedures, yet these and the establishment of Quality Agencies in European countries lead to the perception that European quality assurance has become too bureaucratized.

Going beyond current quality approaches, benchmarking exercises take these standards a step further with performance targets set by institutions themselves, thus leading to a strong sense of ownership of results. The systematic comparison of core institutional processes leads to innovative practice for improved performance.

Benchmarking has a strong added-value as a modern instrument and management tool to support leaders in higher education with strategic decision-making based on systematic data gathering for organisational improvement in order to set targets for increased performance.

Benchmarking originated in the private sector. In a context of severe financial difficulties Xerox Corporation started using benchmarking first in 1979. Looking at what competitors were doing led to major changes to improve quality and internal processes and enabled the company to regain market position. Benchmarking has been widely used in industry, manufacturing, finance, transport, logistics, retail and services.

In the public sector, with the development of new public management, benchmarking has been increasingly used in the health sector, in local and regional administrations and the like. At European level, mechanisms have been developed for the benchmarking of labour market policies, to measure Europe's industrial competitiveness or the performance of public transport systems.

Some implicit forms of benchmarking have always been part of higher education with various forms of peer review and site visits encompassing some aspects of benchmarking. What is new is the use of explicit benchmarking and the formalisation of processes. The growth of benchmarking in higher education reflects the search for continuous quality improvement and more effective ways of improving performance in an increasingly diversified higher education sector.

The concrete nature of benchmarking as a self-improvement tool to improve organizational performance is not always fully understood and it is often confused with rankings and league tables which are perceived as false benchmarking, since they do not point to ways of improvement which is the essence of benchmarking. In addition, benchmarking is often performed as a mere data gathering exercise lacking a systematic approach and target setting for improvement. Alternatively it is limited to measuring key performance indicators which is only the starting point of a benchmarking exercise.

Methodology

We started our project with a desk research and a major literature review in benchmarking in higher education. We identified two types of benchmarking approaches in higher education. In the first non-collaborative type, higher education institutions call on consulting firms for specific services to find out about their market position or buy data from private companies to compare their performance with other institutions. In the second type, benchmarking is carried out in a voluntary collaborative way. In this case, co-operation and collaborative inter-organisational learning between institutions is at the core of the approach in order to improve procedures and modes of operation. This approach requires a high level of trust and confidentiality between participating institutions. This second approach was the focus of our project.

We identified the following eighteen collaborative benchmarking groups in Europe, Australia, and the United States: The Northern European University Network (started by the University of Aarhus); ACODE – Benchmarking in Higher Education (Australia), ACU Commonwealth University Management Benchmarking Club, Benchmarking Club Fachhochschulen (Germany), Benchmarking Club Technical Universities (Germany), European Consortium of Innovative Universities –two benchmarking initiatives were investigated, ESMU (European Centre of Strategic Management of Universities), HESA Higher Education Statistics Agency – HEIDI tool (two approaches investigated), HIS (Higher Education Information System) Process-oriented benchmarking (Germany), HIS (Higher Education Information System) Indicator-oriented benchmarking (one university), HIS (Higher Education Information System) Indicator-oriented benchmarking (several universities), IDEA League (network of leading European universities in science and technology), Italian University Benchmarking, Leipzig Group (Germany), NACUBO (National Association of College and University Business Officers) - two approaches investigated.

These groups were analysed with questionnaires and interviews according to the following fourteen criteria : institutional nature (does the benchmarking approach cover the whole institution or does it focus on specific areas), group character (does the benchmarking group consist of an homogenous group of similar institutions or of an heterogeneous group), management (is the group self-steered or managed with the support of an external moderating organization), size (is the group of a small or large nature), targets/goals (are these clearly identified or rather vague), membership (does the benchmarking group accept new institutions or not), is the benchmarking exercise performance based, has a timeline been defined (i.e. has the exercise been conceived as a one-off or a continuous exercise), does it have a regional, national or international geographical scope, is the methodology based on quantitative or qualitative data analysis, does the exercise focus on inputs, outputs or processes, is the level of participation low or very high between the institutions involved, is the outcome of the benchmarking exercise kept within the group or disseminated widely and publicly, and finally does the group rely on membership fees to meet the cost of the benchmarking exercise.

Further information on benchmarking concepts and practices was gathered through a symposium in Brussels (November 2007) and three workshops in Bucharest, Berlin and Brussels (spring 2008).

All the project activities led to a report on the project findings, guidelines, an online tool and a handbook with a step by step approach to benchmarking.

Project findings – Benchmarking concepts and practices

Although there is an enormous literature on benchmarking in higher education there are very few theoretical publications since the majority of publications focus on the practice of benchmarking.

Stressing the wide-range of diversity between higher education institutions, Yorke (1999:91) claims that there “can be no single reference point for the purposes of benchmarking”. Yasin (2002) who analysed more than 5 000 items of literature on benchmarking published in the period between 1986 and 2001 also remarks on the absence of an explicit theory of benchmarking. He points to the remarkable rise in the publications related to benchmarking although indicating that “in this expansion of benchmarking information, innovations and case studies occurred primarily in practitioner publications”. Yasin also stressed that benchmarking evolved with little input from the academic community.

This wealth of information and definitions can make it difficult for the newcomer to benchmarking since standard concepts do not exist and information on existing benchmarking initiatives is often scarce and incomplete. The term is used for very different practices from the mere comparison of statistical data and indicators to detailed analysis of processes within institutions and there is therefore a danger that the term is used for a whole range of management instruments. We have so far compiled some 150 articles and references on benchmarking in a database as a central place for information available on our project website www.education-benchmarking.eu. Our handbook *Benchmarking in European Higher Education* (2008) produced a review of the literature.

This literature comprises publications focusing either on the character of the benchmarking process (i.e. approaches of a cooperative nature involving partners compared to approaches focusing on beating competitors) or on the aim of the benchmarking exercise (being either mutual improvement or competition). The direct aims can be to compare and learn from others, in order to better identify processes inside the organisation, strengths and weaknesses and subsequently improve practices, while the indirect aims can be to develop management abilities, increase client satisfaction and gain advantage over competitors.

In *Benchmarking in Higher Education, An international review*, Schofield (1998) points to the difficulties with definitions by highlighting that “the term can vary considerably between different approaches and practitioners, causing problems to institutions investigating the subject for the first time”. In the same publication, Massaro points to the term being used “fairly loosely to cover qualitative comparisons and statistical comparisons with some qualitative assessment of what the statistics mean and the simple generation of statistical data from a variety of sources which are then published as tables with no attempt at interpretation”.

Jackson (2001) points out that many benchmarking exercises combine a variety of approaches but can be classified according to the nature of the underlying processes, i.e. whether they are implicit or explicit, conducted as an independent or collaborative exercise, specific to a single organisation (and internal), or involving other types of organisations (as an external exercise), focusing on the whole process (vertical) or being horizontal across different functional units, focusing on inputs, outputs or processes, or based on quantitative or qualitative information.

UNESCO-CEPES (2007) uses similar descriptions referring to internal benchmarking (comparing similar programmes in different components of one higher education institution), external competitive

benchmarking (comparing performance in key areas based on institutions viewed as competitors), functional benchmarking (comparing institutional processes), trans-institutional benchmarking (across multiple institutions), implicit benchmarking (quasi-benchmarking looking at the production and publication of data/performance indicators which can be useful for meaningful cross-institutional comparative analysis; these are not voluntary exercises like the other types but are the result of market pressures and coordinating agencies), generic benchmarking (looking at basic practice process or service) and process-based benchmarking (looking at processes by which results are achieved). Benchmarking is defined as a diagnostic instrument, a self-improvement tool, a collaborative learning exercise, on-going evaluation involving a systematic approach of continuously measuring work processes.

Alstete (1995) defines four types of benchmarking linked to the voluntary participation of institutions, i.e. internal benchmarking (with the comparison of performance of different departments), external competitive benchmarking (comparing performance in key areas based on information from institutions seen as competitors), external collaborative benchmarking comparisons, with a larger group of institutions who are not immediate competitors, external trans-industry (best-in-class) benchmarking (looking across industries in search of new and innovative practices). Alstete adds a fifth category, the so-called implicit benchmarking, which results from market pressures to provide data for government agencies and the like.

In its report *Benchmarking in the Improvement of Higher education* (Hämäläinen, Kauko et al., 2002), ENQA attempts an understanding of the principles of true benchmarking, providing concrete examples and conclusions on perspectives for European benchmarking within higher education. ENQA provides a list of 32 attributes given to benchmarking, the main ones being collaborative/competitive, qualitative/quantitative, internal/external, implicit/explicit, horizontal/vertical; outcome-oriented or experience-seeking, with various purposes (standards, benchmarks, best practices) and interests (to compare, to improve, to cooperate), depending on the owners of the benchmarking exercises. The list does not provide a systematic thinking about different approaches to benchmarking and remains rather vague. ENQA concludes that “good instruments are needed for useful benchmarking exercises” and that “current benchmarking methodologies in Europe must be improved”.

Many approaches developed in the United States are not true benchmarking but “the generation of management information which produces performance indicators and may lead to identification of benchmarks, but do not often extend to benchmarking by identifying best practice and adapting them to achieve continuous improvement in institutional contexts” (Farquhar, 1998).

In Australia, as elsewhere, the development of benchmarking has been linked to the quality enhancement movement and the need to demonstrate comparative quality and efficiency of university operations. In its report on *Benchmarking in Higher Education* (Stella and Woodhouse, 2007), AUQA, the Australian Universities Quality Assurance Agency concluded that much more needs to be done since there is little systematic use of benchmarking to monitor institutional performance.

In Europe, benchmarking approaches in the higher education sector have developed from the mid-nineties at the national level, either as an initiative launched by a national body, by one or a group of institutions or by an independent body. These have usually only involved a small number of institutions. Transnational level exercises have so far remained limited.

Benchmarking – Going a step further

Building on our literature review, for the purposes of our project, we have defined ‘benchmarking’ as the 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, to learn how to adapt and improve organisational processes. In this sense, benchmarking goes beyond current quality approaches in setting targets for improvement based on inter-organisational learning.

Despite the heavy investment in quality assurance, improvement in higher education has indeed remained sporadic across the board. Quality has become bureaucratized into a large number of procedures at the national and institutional level. The purpose is to ensure accountability, yet these procedures do not sufficiently enhance the quality of higher education itself.

In our handbook on benchmarking in European higher education, we argued that one of the difficulties is that there is no single leading definition of quality and the major issue is whether quality was part of the product or service (the quality of higher education) or whether it should depend on the customer (the student satisfaction).

The ISO 9000 definition of quality that “the totality of features of a product/service bears on its ability to satisfy stated or implied needs” has elements of both views in so far as it points to the ‘characteristics of a good or service’ and ‘satisfied stated or implied needs’, although it is not clear whether those are customers’ needs or for example needs of accreditors. Harvey & Green (1993) refer to quality as exceptional (‘excellence’), perfection or consistency (‘zero errors’, achieving standards), fitness for purpose (mission-based ‘do what you promise’, ‘delight customers’), value for money and transformation (in Harvey & Green’s words: ‘Education is not a service for a customer but an ongoing process of transformation). In all definitions about quality, there is no mention about what is an acceptable or competitive level of quality, with the exception of what is provided from the outside in the form of standards or benchmarks. Yet these are often too vague for higher education institutions to work from for their own quality improvement.

The application of industrial models to higher education institutions works well for standardised services such as student administration, counseling, library and ICT services. Approaches such as TQM have brought about some successful and less successful examples of change in higher education. With all approaches, key is to use what makes sense for each institution in its own context.

The growth of benchmarking in higher education reflects the search for continuous quality improvement and for a more effective way of improving performance in a highly diversified higher education sector in order to ensure that public funding is used effectively to support higher education. As such, it is strongly encouraged by policy-makers. Benchmarking also serves the needs of individual institutions to learn in order to improve, to change and to manage operations in a more professional way.

Benchmarking can be undertaken to increase quality or attain certain standards, either for regulatory purposes (for accountability purposes at sector level to ensure that public funding is used in an effective way) or for institutional development (with or without defined objectives or standards, measures of customer satisfaction, expert assessment and comparison with other organisations to investigate how an institution is performing in relation to others and where it wants to go).

By focusing on inter-organisational learning, benchmarking goes a step further than existing quality approaches. Both aim at improving the performance of an institution and require methods to know about its current state. Benchmarking requires some form of evaluation or measurement which is not an end in itself but a tool to find out where improvements are needed. More attention is paid to the process of learning and about ways towards achieving improvement than with other quality approaches. Measuring externally visible performance through key performance indicators (KPIs) such as educational performance (retention rates, student satisfaction) or research and innovation performance (such as the number of publications) is only the beginning of the benchmarking exercise as the real issue is in achieving high performance which requires much more detailed information than the identification of KPIs and go very deep within the organisation. The aim of a benchmarking exercise is to find out about good practice rather than (only) good performance.

Benchmarking should not be a mechanism for cost reduction (Camp, 1990) even if resources may be reallocated as a result of a benchmarking exercise to increase institutional performance. It is an ongoing management process using a structured methodology in order to build realistic plans for higher

education institutions to achieve higher performance goals.

In our analysis of eighteen collaborative benchmarking groups, we could not identify a range of models or small clusters of common characteristics. Benchmarking groups all vary by aims, objectives, structure and methodology. Many groups struggle to find the right facilitator and lack appropriate human, technical, and financial resources. Even the most successful initiatives often do not sufficiently make use of the results for decision-making purposes in their institutions. Although benchmarking in higher education is still very recent, with the increase of accountability it will gain importance and become a more commonly used management tool.

Some of the eighteen groups have been operating as a one-off activity to provide a snapshot of a given area, while others are an on-going process of measuring and increasing organisational performance to lead to new strategic developments.

In the following paragraphs, we would like to provide some examples of these groups, which illustrate the different approaches we have identified.

Established in 2000, the ESMU (www.esmu.be) benchmarking programme aims at measuring and promoting good practices in university management. The programme works on an annual basis and focuses on management processes such as student services, e-learning strategies, and research management. Quantitative indicators are gathered but above all questionnaires focus on qualitative data gathering related to management processes. In the course of the programme, ESMU experts evaluate higher education institutions against sets of good practices. Participating higher education institutions meet in workshops to discuss and exchange good practices.

Since 1995, CHE (www.che.de) has been facilitating the Benchmarking Club of Universities of Technology in Germany. The Club has among others worked on data analysis, internal budgeting, research funding, patents, and the implementation of Bachelor and Master degrees. The Club works nationally, using both quantitative and qualitative methods, and comprises universities having comparable problems. Since 2001, CHE has also facilitated the benchmarking club of *Fachhochschulen* (universities of applied sciences) which focuses on university administration (student services, personnel, and administration of funding). Key to all these activities is the improvement of university governance and management.

NACUBO (www.nacubo.org) started benchmarking of endowment management in 1971 in the US and has been running annual exercises on this theme since then. In 1990, a second benchmarking exercise was launched on institutional aid. The benchmarking exercise on endowment currently comprises about 750 institutions and the exercise on institutional aid 425 institutions. NABUCO maintains an online benchmarking tool to help colleges and universities compare management strategies with a peer group and industry norms. The first online application of the benchmarking tool on institutional aid was launched in 2007. The tool allows NACUBO members to access the evaluation of conducted surveys online, and to compare critical information against self-selected peer groups. A multi-dimensional analysis can be produced, using the reporting, analysis, scorecard, and business event management functions of the tool. The aim is to identify the strategies that best suit the needs of each higher education institution.

The benchmarking initiative of the European Consortium of Innovative Universities, ECIU (<http://eciu.web.ua.pt>) was established in different phases: the first phase began in 2004 with the project *Administration of innovative universities*; the second in 2005 with the project *International Mobility of Students*; and the third phase started in 2006 with the *Difuse Project: Driving Innovation from Universities to Scientific Enterprises* (www.difuse-project.org). The benchmarking exercises used a mixture of quantitative and qualitative methods and peer reviews. Questionnaires were used for the *Administration* and *Mobility* projects. Regarding the administration benchmarking project, a series of qualitative indicators and quantitative questions were analysed. In the *Student Mobility Project*, no qualitative indicators were used. The task of the peers consisted in answering questionnaires, from which the

Steering Committee chose best practices. In particular in the benchmarking exercise on administration, ECIU used Burton Clark's book on entrepreneurial universities (1998) as a starting point and benchmarks against which to identify how some ECIU universities were performing in developing administrative processes to support fully their mission of being innovative universities.

A benchmarking initiative was established in Italy in 1999 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=528357. There have been six Good Practice projects of which the Ministry financially supported the first three for Higher Education. Since 2003, the programme has been self-financed by the participating universities. In total 36 Italian public higher education institutions have been involved in one phase or another, growing from 10 institutions in 1999 to 21 at present. Although Politecnico di Milano provides the coordination, the design and implementation are highly participative, involving both top managers and officers in each participating university. The benchmarking initiative focuses on the university administration (student services, human resource management, logistics and procurement, accounting and research support) and is intended to improve its performance. First viewed as a one-off activity, it became a permanent activity thanks to its success.

Building on the project results and the analysis of the eighteen groups, we identified four steps in carrying out benchmarking exercises. The first one involves the initial steps of starting a benchmarking exercise, by clarifying the contextual and institutional background and existing experience with benchmarking, defining purposes, goals, focus areas, choosing the right benchmarking approach, gaining commitment and selecting partners. As a second step, conducting the benchmarking exercise requires resourcing and managing it as well as choosing a methodology for the data gathering. Reporting results internally and externally (while ensuring that confidentiality is dealt with appropriately with partners) is the third step, which then must lead to the conversion of these results into new approaches and modes of institutional operations.

Out of these four, the fourth step remains the less documented in the groups we have analysed, which leads us to conclude that a lot still remains to be done for benchmarking to be fully used for decision-making purposes in higher education institutions and that an improved framework still needs to be developed.

Conclusions

From what we have outlined in this paper, it is evident that the development of benchmarking in higher education is still work in progress. In an increasingly competitive higher education environment, benchmarking is seen as a modern management tool to support strategic decision-making. Yet its use is still limited and it is still carried out in a sporadic way.

Our focus was on institutional and external collaborative benchmarking in higher education management, in response to external demands for quality and accountability in an increasingly competitive environment. More precisely, we argue that benchmarking should not be an isolated exercise of a few staff but be taken at a strategic level as a core tool to support strategic developments.

Our project was an attempt to review the literature on benchmarking in general and in higher education in particular in order to clarify benchmarking concepts and practices and propose a systematic approach to benchmarking in higher education.

Whether carried out at the national or at the institutional level (within or between several higher education institutions), benchmarking must always lie in the identification of strengths and weaknesses and a better understanding of one's institution, with a view to set targets and benchmarks for improvement. Benchmarking requires a key focus on continuous improvement through a comparative approach and the search for best practices, to be more than a mere comparison of statistical data. A

benchmarking exercise must always be conceived as a dynamic exercise during which relevant indicators and benchmarks are defined against which institutional performance can be measured in comparison with the competition and good practices identified, leading to implementation of change.

Within higher education institutions, successful benchmarking exercises are grounded on a strong institutional willingness to increase organisational performance, to become a 'learning organisation', to review processes on an on-going basis, to search for new practices and to implement new models of operation. Whether carried out at a unit level (benchmarking a department or a faculty) or at the level of the whole institution, a benchmarking exercise will only produce valuable results if placed in a context of transformation and progress. Key will be to define where efforts should be placed to maximize results by constantly setting new targets for institutional improvement.

Benchmarking requires commitment to change, investment in financial and human resources and involvement of senior leadership and staff at appropriate levels in institutions in order to produce efficient results in terms of data collection and the implementation of findings. Financial resource needs will be more limited for benchmarking exercises conducted purely inside the institution than those using an external consultant or a moderator, but will always be necessary at some level.

Benchmarking exercises should not be conceived as 'quick fixes' to tackle organisational underperformance. Although they can be used to produce a snap shot (as a tool to obtain one-off information on a specific issue), they are most valuable as a continuous, long-term approach embedded in institutional strategic development, to sustain the effort of continuously improving institutional performance.

Benchmarking requires a rigorous and professional approach from designing the exercise to the clear identification of processes, data collection, and the implementation of results. It requires planning, senior management commitment and ownership.

All these results are currently taken further in a second EU-funded project phase (2008-2010) with groups of ten to fifteen universities applying the step by step approach on four different themes: university governance, lifelong learning, university-enterprise cooperation and curriculum reforms.

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