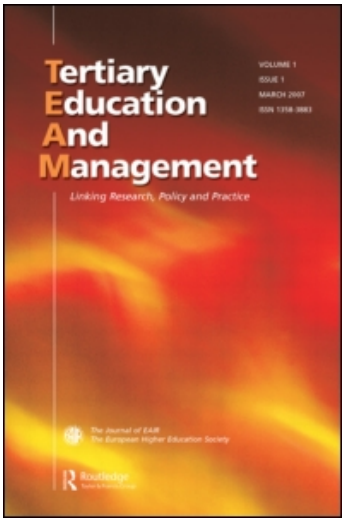
This article was downloaded by: *[Burquel, Nadine]*
On: *25 August 2010*
Access details: *Access Details: [subscription number 926160721]*
Publisher *Routledge*
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Tertiary Education and Management
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t777285712

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

Nadine Burquel[a]; Frans van Vught[a]
[a] European Centre for the Strategic Management of Universities, Brussels, Belgium

Online publication date: 23 August 2010

To cite this Article Burquel, Nadine and van Vught, Frans(2010) 'Benchmarking in European Higher Education: A step beyond current quality models', Tertiary Education and Management, 16: 3, 243 — 255
To link to this Article: DOI: 10.1080/13583883.2010.497398
URL: http://dx.doi.org/10.1080/13583883.2010.497398

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Tertiary Education and Management
Vol. 16, No. 3, September 2010, pp. 243–255

Routledge
Taylor & Francis Group

FORUM

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

Nadine Burquel* and Frans van Vught
European Centre for the Strategic Management of Universities, Brussels, Belgium

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

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 the European Centre for Strategic Management of Universities (ESMU), with the Centre for Higher Education Development, UNESCO-CEPES, and the Universidade de Aveiro. Quality assurance as currently practised 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.

Introduction

European higher education has been undergoing major changes in the last decades, accelerated by the Bologna Process and the Lisbon Agenda. The European higher education sector is highly fragmented and the main drivers underlying European policies are to support a shift towards a more powerful and integrated knowledge economy, building on the diversity of institutions. European higher education institutions are seen as crucial players in this process of supporting European competitiveness, economic growth, job creation, and social cohesion, resulting in the need to strengthen governance structures, professionalise university management, and focus on quality, efficiency, and excellence. In this context, we have observed a changing role between nation states and their higher education institutions with an increase in institutional autonomy linked to accountability, different funding arrangements based on output or contractual arrangements and an overall shift from

*Corresponding author. European Centre for the Strategic Management of Universities, 31 Rue Montoyer, B-1000 Brussels, Belgium. Email: nadine.burquel@esmu.be

ISSN 1358-3883 (print)/ISSN 1573-1936 (online)/10/030243–13
© 2010 European Higher Education Society
DOI 10.1080/13583883.2010.497398

state control and collegial governance to more market-oriented and modern types of institutional governance (ESMU, 2009).

With the increase in competition in the higher education sector, it is no surprise that instruments such as classifications, rankings, and benchmarking exercises have proliferated, making the system more transparent while at the same time urging institutional leaders to search for new tools for strategic planning to improve and demonstrate their performance to a multiplicity of stakeholders, to build a strong strategic profile for their institution, and maintain (or further develop) their position in the market.

At national levels, governments are demanding institutional data to support policy, strategic developments, and the restructuring of higher education systems. Indicators are defined to measure performance and benchmarks set for higher education institutions to respond to. The European Commission has issued several Communications and a Report along these lines (2006, 2007, 2008). 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, 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 bureaucratised.

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.

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

In the public sector, with the development of new public management, benchmarking has increasingly been 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 are new are 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 (ESMU, 2008a).

The concrete nature of benchmarking as a self-improvement tool to improve organisational performance is not always fully understood and it is often confused with rankings and league tables, 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 (KPIs), which is only the starting point of a benchmarking exercise.

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

Methodology

Our project started 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 are 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 18 collaborative benchmarking groups in Europe, Australia, and the USA: 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); Higher Education Information System (HIS, 2005)—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); and NACUBO (National Association of College and University Business Officers)—two approaches investigated.

These groups were analysed with questionnaires and interviews according to 14 criteria defined on the basis of our review of the literature as the descriptive features for these groups in terms of size, approach, and focus. More specifically the 14 criteria were: 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 a homogenous group of similar institutions or of a heterogeneous group?); management (is the group self-steered or managed with the support of an external moderating organisation?); 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 (in spring 2008).

All the project activities led to a report on the project findings (ESMU, 2008b), guidelines, an online tool, and a handbook with a step-by-step approach to benchmarking (ESMU, 2008a).

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

Review of the Literature on Benchmarking Concepts and Practices

Our review of the enormous literature on benchmarking in higher education leads us to conclude that there is a lack of theoretical publications, since the majority focus on the practice of benchmarking.

Stressing the wide range of diversity between higher education institutions, Yorke (1999b, p. 91; see also 1999a) 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. We find in the literature that 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* (ESMU, 2008a) produced a review of the literature, of which the key findings are provided in the following sections.

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 (1998) 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 (1998, 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

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

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), and 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 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 USA are not true benchmarking but: "the generation of management information which produces performance indicators and may lead to identification of benchmarks, but does not often extend to benchmarking by identifying best practices 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 & Woodhouse, 2007), the Australian Universities Quality Assurance Agency (AUQA) 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-1990s 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. Trans-national level exercises have so far remained limited.

Our review of the literature has demonstrated a wealth of information on concepts and practices of benchmarking and the need for clarification in order to avoid confusion and stimulate the effective use of benchmarking as a powerful management

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

tool. As with quality tools, this broad diversity of definitions and approaches can only be explained by the diversity of national and institutional contexts with regard to quality enhancement and performance, but overall benchmarking exercises are conceived as performance enhancement exercises and follow two main paths, run either as collaborative or one-to-one exercises. A more systematic, standardised, and professional use of benchmarking will contribute to reducing the fragmentation of the current approaches.

Going a Step Further: The purpose of our EU-funded project

Building on our literature review, for the purposes of our EU-funded 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 bureaucratised into a large number of procedures at the national and the institutional levels. 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 and 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 and 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, counselling, 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, the key is to use what makes sense for each institution in its own context.

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

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 ways towards achieving improvement than with other quality approaches. Measuring externally visible performance through 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 goes 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, 1989), 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 18 collaborative benchmarking groups, we could not identify a range of models or small clusters of common characteristics. All benchmarking groups 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 18 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 are providing some examples of these groups, which illustrate the different approaches we have identified.

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

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 other things, 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 USA 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

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

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.

Arnaboldi and Azzone (2004) describe the benchmarking initiative established in Italy in 1999. 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 18 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 and focus areas, choosing the right benchmarking approach, gaining commitment, and selecting partners. As the 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 steps, the fourth step remains the least 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.

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

Conclusions

From the analysis of the literature and of the 18 collaborative groups investigated, it is evident that the development of benchmarking in higher education is still 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. 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.

As we have found out, whether carried out at the national or at the institutional level (within or between several higher education institutions), benchmarking always lies in the identification of strengths and weaknesses and a better understanding of institutional processes, with a view to setting targets and benchmarks for improvement. The literature highlights that benchmarking requires a key focus on continuous improvement through a comparative approach, the search for best practices, and is more than a mere comparison of statistical data. From the practice of benchmarking in the 18 groups investigated, we have seen that effective benchmarking exercises are always conceived as dynamic exercises with the definition of relevant indicators and benchmarks against which institutional performance is measured in comparison with the competition and good practices identified, leading to implementation of change.

Within higher education institutions, our study has demonstrated that 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, our survey has shown that benchmarking exercises will only produce valuable results if these are placed in a context of transformation and progress, with efforts placed on maximising results by constantly setting new targets for institutional improvement.

Furthermore, we noticed that the successful benchmarking exercises are grounded on commitment to change, investment in financial and human resources, and the 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 results.

The literature tells us that benchmarking exercises should not be conceived as "quick fixes" to tackle organisational underperformance but be conceived as a continuous, long-term approach embedded in institutional strategic development, to sustain the effort of continuously improving institutional performance.

All these results are currently taken further in a second EU-funded project phase (2008–2010), with groups of 10–15 universities applying the step-by-step approach on four different themes crucial for the modernisation agenda of European universities: governance, lifelong learning, university–enterprise cooperation, and curriculum reforms.

In an increasingly competitive higher education sector with so much pressure placed on universities to be accountable and deliver what society needs, we have found that benchmarking exercises offer a strong contribution to more effective governance arrangements and a more transparent system by building on improved institutional data gathering, which is currently underdeveloped in most European universities. Our project has demonstrated that in the context of European and national reforms and increased institutional autonomy granted to higher education institutions, ultimately the quality of the reforms will depend on the institutional capacity of universities to make effective use of transparency tools such as benchmarking exercises, take into their own hands their strategic developments and build their own strategic profile.

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

References

Alstete, J. W. (1995). *Benchmarking in Higher Education: Adapting best practices to improve quality.* (ASHE-ERIC Higher Education Rep. No. 5). Washington, DC: The George Washington University. Retrieved April 20, 2007, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/24/3d/97.pdf

Arnaboldi, M., & Azzone, G. (2004). Benchmarking university activities: An Italian case study. *Financial Accountability and Management, 20*(2), 205–220.

Burton Clark, R. (1998). *Creating enterpreneurial universties: Organizational pathways of transformation.* New York: Elsevier/Pergamon.

Camp, R. (1989). *Benchmarking: The search for industry best practices that lead to superior performance.* Milwaukee, WI: ASQC Quality Press.

ENQA (European Association for Quality Assurance in Higher Education). (2007). *Standards and guidelines for quality assurance in the European Higher Education Area.* Helsinki: ENQA.

ESMU (European Centre for Strategic Management of Universities). (2008a). *A practical guide: Benchmarking in European higher education.* Brussels: ESMU.

ESMU (European Centre for Strategic Management of Universities). (2008b). *Benchmarking in European higher education: Findings of a two-year EU-funded project.* Brussels: ESMU.

ESMU (European Centre for Strategic Management of Universities). (2009). *MODERN European platform higher education modernisation, higher education governance reforms across Europe.* Brussels: ESMU.

European Commission. (2006). *Communication. Delivering on the modernisation agenda for universities: Education, research and innovation.* Brussels: Commission of the European Commission.

European Commission. (2007). *Communication. A coherent framework of indicators and benchmarks for monitoring progress towards the Lisbon objectives in education and training.* Brussels: Commission of the European Commission.

European Commission. (2008). *Progress towards the Lisbon objectives in education and training, indicators and benchmarks 2008* (Annual report). Brussels: Commission of the European Commission.

Farquhar, R. (1998). Higher education benchmarking in Canada and the United States of America. In A. Schofield (Ed.), *Benchmarking in higher education: An international review* (pp. 21–33). London/Paris: CHEMS/UNESCO.

Hämäläinen, K., Hämäläinen, K., Dørge Jessen, A., Kaartinen-Koutaniemi, M., & Kristoffersen, D. (2002). *Benchmarking in the improvement of higher education.* Workshop reports no. 2. Helsinki: ENQA.

Harvey, L., & Green, D. (1993). Defining quality. *Assessment and Evaluation in Higher Education, 18*(1), 9–34.

HIS. (Ed.). (2005). *Benchmarking von Hochschulverwaltungen.* Hannover: HIS Kurzinformation (B5/2005). Retrieved April 23, 2007, from http://www.his.de/pdf/pub_kib/kib200505.pdf

Jackson, N. (Ed.). (1998). *Pilot studies in benchmarking assessment practice in UK Higher Education.* Gloucester: Quality Assurance Agency for Higher Education.

Jackson, N. (2001). Benchmarking in UK higher education: An overview. *Quality Assurance in Education, 9*(4), 218–235.

Massaro, V. (1998). Benchmarking in Australian higher education. In A. Schofield (Ed.), *Benchmarking in higher education: An international review* (pp. 34–45). London/Paris: CHEMS/UNESCO.

Schofield, A. (1998). *Benchmarking in higher education: An international review.* London: Commonwealth Higher Education Management Service.

Stella, A., & Woodhouse, D. (2007). *Benchmarking in Australian higher education: A thematic analysis of AUQA audit reports* (Occasional Publications Series No. 13, 1–62). Melbourne: AUQA.

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010

UNESCO-CEPES. (2007). *Quality assurance and accreditation: A glossary of basic terms and definitions*. Bucharest: UNESCO-CEPES.

Yasin, M. (2002). The theory and practice of benchmarking: Then and now. *Benchmarking: An International Journal, 9*(3), 217–243.

Yorke, M. (1999a). Assuring quality and standards in globalised higher education. *Quality Assurance in Higher Education, 7*(1), 14–24.

Yorke, M. (1999b). Benchmarking academic standards in the UK. *Tertiary Education and Management, 5*(1), 81–96.

Downloaded By: [Burquel, Nadine] At: 07:26 25 August 2010