

BENCHMARKING AS A QUALITY ASSURANCE TOOL AND ITS APPLICATION TO HIGHER EDUCATION (A CONCEPTUAL FRAMEWORK)

Assist.Prof.Dr.Hatice SARIALTIN
Vocational Higher School of Sapanca
SAKARYA UNIVERSITY
hsarialtin@sakarya.edu.tr

Abstract: As a descriptive study which focuses on benchmarking literature in higher education (HE); this paper presents a general overview of benchmarking as a quality assurance tool and its application to higher education institutions (HEIs); introducing its true descriptions, its importance for HE and its application stages. The purpose is to draw more academic attention to the benchmarking theme by describing what really benchmarking is for HEIs and questioning how to apply it to HE. The study starts with the role of benchmarking in HE and then explains the relationship between benchmarking and quality assurance models and introduces current benchmarking implementations in HEIs. Finally, implementation stages and related issues relevant to literature findings are discussed.

Key Words: Benchmarking, Benchmarking Application, Quality Assurance, Higher Education.

Introduction

Among several improvement strategies and techniques such as quality management or continuous quality improvement, benchmarking has emerged as a valuable, easily understood and effective tool for ensuring and improving quality (ENQA, 2002; Tempus Focus Project, 2013). The function of quality management to give “trust of quality” to outside “stakeholders” is what is understood under quality assurance. The purpose of quality assurance is to ensure accountability, yet it must also enhance the quality of HE itself. However, there is often a perception that quality assurance has become too bureaucratized, failing to lead to real, deep changes in the sector. (Burguel, 2012, 6). Higher education institutions would need more explicit and concrete management tools for quality assurance and quality improvement. This is where benchmarking comes in. Benchmarking is a systematic-ongoing process which aims to measure and improve the organization’s performance by inter-organizational learning about possible improvements of its primary and/or support processes by investigating these processes in the better performing organizations (Alstete, 1996; UNESCO, 1998; McKinnon et al, 2000; ENQA Workshop Reports, 2012; ESMU, et al, 2008).

Some implicit forms of benchmarking have always been part of HE with various forms of peer review and site visits encompassing some aspects of benchmarking. In other words, improving performance by collaboration or comparisons within other universities is nothing new in higher education. What is new today is the use of explicit benchmarking and the formalisation and institutionalisation of the process (Schofield, 1998; ESMU, et al, 2008).

Perhaps the best way to understand benchmarking is to look at what it is not. First of all, benchmarking is not just comparative data analysis, where the analyst looks at where the institution stacks up to others in terms of measures like the student-faculty ration, productivity, cost per student, graduation rates or student satisfaction? Why, because it does not drive change and does not focus on the practices that leads to good (even best) performance (MCP Insights, 2008: 2). Also, benchmarking is neither a process redesign, nor a survey. Process redesign is a technique for looking at internal processes. Also, survey which is commonly used which for data gathering and can be extremely useful. However, surveys have participants, while benchmarking studies have partners who expect to learn valuable things in return for sharing information.

Many, completely miss the point of benchmarking that; it is not easily accomplished one-time effort. Especially it is not a three-hour “show and tell session” with another institution where they tell what they are doing, and you say; that is a good idea, we’ll copy it? In this way, no improvement mechanism has been developed, nor has a clear path been pioneered for future improvement. Nor have any measurements of success been put in place. The name of the game with benchmarking, therefore, is to institutionalize the benchmarking as a planned ongoing improvement process (MCP Insights, 2008).

The European Association for Quality Assurance in Higher Education (ENQA, 2002), states that the indispensable elements of true benchmarking are; negotiation, collaboration, dialogue and developing a process for mutual understanding. In benchmarking exercise, the question is rather: How can we learn from others; how

to get to where they are from here? Whatever its scope, benchmarking is an important element of the university's quality assurance and quality improvement cycle (<http://www.Adelaide.edu.au/learning/staff/benchmarking/>). Recently, the concept has been used at the level of single discipline or management approach (Vlasceanu, et al, 2007: 19).

Concrete nature of benchmarking as a management tool to improve operational performance, is not always fully understood. It is often performed as a mere data collecting and rank-oriented exercise without interest in learning from each other and also lacking a systematic approach for quality improvement. In higher education, many people still confuse about benchmarking whether it is collecting statistics or comparing performance indicators. Establishing or measuring externally visible performance through key performance indicators (KPIs), is only the beginning of benchmarking (ESMU, et al, 2008: 6). Although it has been in use in many countries since early 1990s, relatively little has been written on how to apply benchmarking to HEIs (ESMU, et al, 2010).

According to literature (<http://www.yok.gov.tr>; <http://www.kalder.org.tr/>), its use is also too limited in Turkish HE sector. This study, therefore, focused on literature review into benchmarking concepts, descriptions and its implementations in HE by analysing samples of individual and collaborative benchmarking practices which have been conducted by leading HEIs in the US, Australia, UK and the other European countries.

The underlying purpose is to draw academic attention to the benchmarking theme by describing what does benchmarking mean for HE; revealing its importance, components and application stages and open a discussion on how to apply benchmarking to Turkish HE. The study starts describing benchmarking and its importance in HE; and then presents the relationship between benchmarking and quality assurance models and current implementations. Finally, implementation stages and related issues relevant to literature findings are discussed.

It is expected to find proper answers to the following research questions:

- What is true benchmarking and why is benchmarking process vital for quality assurance cycle in HEIs?
- What is special about benchmarking with the quality assurance models?
- Where is benchmarking being used in HE sector?
- How to apply benchmarking to a higher education institution?
- What are preferred types of benchmarking currently conducted in HEIs?
- Where is benchmarking being implemented in Turkish HE sector and How?

Practitioners at universities have found that benchmarking at HEIs helps overcome resistance to change, provides a structure for external evaluation, and creates new networks of communication between institutions where valuable information and experiences can be shared (McKinnon, et, al, 2000; ENQA, Workshop Report, 2002; ESMU, et al, 2008). Benchmarking provides objective measurements for goal setting and improvement tracking, which can lead to innovations (Alstete, 1996). In addition, Quality strategies and quality assurance efforts are both enhanced by benchmarking, because it can identify areas that could benefit most from quality assurance models and make it possible to improve operations with often dramatic innovations.

The Role of Benchmarking in Higher Education

No single university, however large, can encompass all knowledge. It is demanding to be world class in even a few academic fields. Each university has to prioritise the use of its resources and use them to best effect. Knowing whether it is succeeding in its aims is another more demanding level of difficulty. Considering these issues, the key question is, how university leaders will know where their institution stand and how they can be improved (McKinnon, et al, 2000: 1). The answer comes with benchmarking.

The Public Sector Benchmarking Service in the UK describes benchmarking as involving regularly comparing aspects of performance (functions or processes) with best practitioners identifying gaps in performance, seeking fresh approaches to bring about improvements in performance, following through with implementing improvements, and following up by monitoring progress and reviewing the benefits (Inglis, 2005). In a broad sense, benchmarking is an ongoing systematic process for measuring and comparing the work processes of one institution to those other institutions, bringing an external focus to internal activities, functions

or operations (Kempner, 1993). It is a process of self-evaluation and self improvement through systematic and collaborative comparisons of process and performance with similar organizations or cross-sector organizations in order to identify strengths and weaknesses; to learn, to adapt and then to set new targets to improve performance (Burguel, 2012: 8; ESMU, et al, 2008; ESMU, et al, 2010).

Some implicit focus of benchmarking have always been part of higher education. Peer reviews and site-visits have encompassed some aspects of benchmarking for the reviewers and the visitors. Both the peers and the institutions evaluated acquired insights into other institutions could make comparisons with their own institutions. What is new today is the use of explicit benchmarking and the formalisation and institutionalisation of these processes (UNESCO, 1998; ESMU, et al, 2008). The growth of benchmarking in HE reflects the search for continuous quality improvement and for a more effective way of improving performance in highly diversified HE sector in order to ensure that resources are used effectively and to support process improvements and outcomes of HEIs. As such, it is strongly encouraged by policy makers. Kwan (2006) claims that benchmarking must be seen as an integral part of the continuous quality paradigm of TQM. Indeed, the readiness to learn from other's experience through external benchmarking has been identified as one of the organisational characteristics of an academic 'learning organisation'.

In June, 2002, European Association for Quality Assurance in Higher Education (ENQA) organized a workshop about benchmarking in HE in Finland, and produced the second workshop report entitled "Benchmarking in the Improvement of HE". Almost ten years later, in the same country, ENQA held its fifth annual Internal Quality Assurance Seminar on benchmarking in internal quality assurance of agencies. This demonstrates that benchmarking is still considered as a strategic subject to promote (ENQA Workshop Reports, 2012). Now, in the HE sector, benchmarking is recognised as a valuable modern management tool for institutions eager to steer their institutional development in a strategic way. It involves a process of target setting by the universities looking to increase their performance through inter-organizational learning (Burguel, 2012; ESMU, et al 2008). In June 2011, the annual seminar of the ENQA, focus was on the theme of learning from each other using benchmarking to develop internal quality assurance (Hopbach, 2012, 4).

On the other hand, due to its reliance on hard data and research methodology, benchmarking is especially suited for Higher Education Institutions (HEIs) in which these types of studies are very familiar to faculty members and university administrators (Alstete, 1996). Benchmarking is a structured and collaborative learning exercise which would help HEIs identify and disseminate good practices and develop new ways of addressing specific problems. Such inter-organizational learning between universities within the context of quality assurance would enhance their reputation in demonstrating a continuous effort to improve the way in which quality assurance is performed.

Edith Cowan University (ECU) (2011) defines benchmarking as a continuous and systematic process of comparing services, processes and outcomes with other organizations or exemplars, for the purpose of improving outcomes by identifying, adapting and implementing best practice approaches (Edith Cowan University, 2011). Comparisons may be made against individual benchmarking partner or groups or other programmes within the university; sets of accepted standards; or data from past performance (Learning and Teaching Unit, 2012). For the Adelaide University, benchmarking is a means of comparing the university's performance or standards, or both, with those of its peers that have better practices. It is a means by which the university can monitor its relative performance, identify gaps, seek and learn fresh approaches to bring about improvements, set goals, establish priorities for change and resource allocation and follow through with change processes based on empirical evidence (<http://www.adelaide.edu.au>).

It can be about broad university-wide issues or specific matters affecting only one area; it can be strategic (addressing priority issues), or cyclical (addressing a number of areas on a regular basis), or ad hoc (taking advantage of an opportunity). Whatever its scope, or subject matter, benchmarking is an important element of the university's quality assurance cycle, focusing on answer following questions:

- How do the standards we have set ourselves compare to our peers?
- How does our performance measure against the outcomes of national and international comparator institutions?
- How can we adapt good practice examples from other institutions to our own organization?

In this way and due to its methodology, benchmarking allows the university to identify and monitor standards and performance in order to improve university outcomes, processes and practices; discover new ideas for achieving the university's core objectives as outlined in its strategic plan; provide an evidence-based

framework for change and improvement; improve strategic planning and goal setting; improve decision making through referencing comparative data.

Relation Between Quality Assurance and Benchmarking

Benchmarking has emerged in the world of business together with the quality movement. According to literature, it is obvious that; quality assurance and benchmarking has an important part to play in the European HE response to the Bologna process. Quality assurance and recognition of qualifications is the one of the three main objectives of Bologna process. In the Bucharest Communiqué (April, 2012), Ministers identified three key priorities: Mobility, Employability and Quality. Ensuring a quality HE system is the first priority among the Bucharest Communiqué priorities for the period 2010-2020 (<http://www.ec.europa.eu/education/higher-education/bologna.en.htm>); Tempus, Focus Project, 2013; Jones et al, 2006).

Major changes have taken place in HE, resulting higher education institutions having to enhance their attractiveness on the market and profile themselves much more strategically. Quality is a key to support these developments, and in this context, improving university performance through strategic performance became crucial. However, systematic data collection on institutional performance to improve decision-making is still lacking in many HEIs (Burguel, 2009:6). In the literature, related to quality in HE, three terms commonly appear: Quality assurance, quality improvement and benchmarking. Quality assurance is a process oriented to guaranteeing that the quality of a product or service meets some predetermined standard set either by the provider or by some external government or industry standards authority. The aim in quality assurance is to ensure that a product or service is fit for the market (Inglis, 2005). Benchmarking is different to using quality assurance (QA) models, as QA models generally focus on minimum acceptable standards and compliance and they are often imposed by management or external inspection requirements (Scott, 2011). In contrast, benchmarking sits within a broader framework of quality management and improvement. Kalder (<http://www.kalder.org.tr>) concludes this aspect of benchmarking as; From product-focus – to customer focus; From internal centre – to external centre; From organisational effectiveness – to accepted superiority; From incremental improvement – to quantum leap improvement; From TQM – to benchmarking excellence. Benchmarking helps an institution both recognize and achieve the situations where a “quantum leap” in performance is needed. Quantum leaps frequently require a “clean sheet of paper” and rethinking the basic assumptions about how you operate (MCP INSIGHTS, 2008: 2). Continuous incremental improvement will never get the institution there if major fundamental change is needed.

The purpose of quality assurance is to ensure accountability, yet it must also enhance the quality of HE itself. The standards and guidelines for quality assurance in the European Higher Education Area defined by ENQA, provide directions for HEIs to improve their internal quality assurance policies and procedures (Tempus, Focus Project, 2013: 8). However, there is often a perception that European Quality Assurance has become to be bureaucratized, failing to lead to real, deep changes in the sector. Not all higher education institutions take sufficient ownership in the process (Burguel, 2012, 6). Benchmarking exercises on quality assurance can take these standards and guidelines a step further. Tempus Focus Project (2013: 32) expresses the reasons as “benchmarking at HEIs helps overcome resistance to change by providing real - life examples of success, provides a structure for external evaluation, creates new networks of communication and facilitates sharing valuable experiences.

The Manual for Australian Universities (McKinnon, et al, 2000: 7) reports that higher education institutions are complex organizations. To keep relevant they must respond successfully to the massive changes now challenging them. Benchmarking thus needs not only to identify successes to date, but also vital signs of adaptation to the future. A university's dynamism is as important as its current achievements, a better guide to its performance. The best universities are those that combine high achievements with extensive evidence of dynamism and rapid rates of adaptation to new challenges. But how are the latter features best measured? If it is true that an institution cannot be sure that it is changing in particular dimensions unless it can measure that change, identification of appropriate performance measures becomes of crucial importance. However, for many HEIs measuring the success of past activities by outputs (or outcomes), have been the only performance measures used. While such *lagging* indicators provide useful information, there is also a need for *leading* indicators, that is measures of the drivers of future performance, and *learning* indicators, measures of the rate of change of performance. Benchmarking is a valid way of measuring dynamism and innovation. As change must be in particular directions if it is to be effective, there needs to be direct links between the benchmarking process (evaluates all performance measures) and the strategic plan of the institution.

What is special about benchmarking with the industrial quality assurance models (TQM, BALDRIGE Model, EFQM Model, ISO 9000) First, in benchmarking the focus is on the process of inter-organizational learning. It requires, just like quality assurance, an aim to improve performance of the institution. Also, it

requires methods to know about the current state of institution through some form of evaluation or measurement. Yet, benchmarking sees the measurement as a tool to know where improvements are needed, not as an end in itself, and gives more attention to the process of learning about ways towards achieving improvements than most quality assurance models do. In benchmarking exercise, the question is rather: How can we learn from others; how to get to where they are from here? Establishing or measuring externally visible performance through key performance indicators (KPIs), is only the beginning of benchmarking. The real issue of benchmarking process is how to achieve high performance which needs information of a much more detailed type than KPIs can give, from deep within the organization. Aim is to find out about good practices rather than only good performance (ESMU, 2008:6).

Rankings and league tables of universities are in this sense, perceived as false benchmarking, since they do not point to ways improvement which is the essence of benchmarking. Rankings which are already in use in many HEIs, contain no information about good practices. Although rankings are popular for comparison, they provide little information about how the university reached the score and if they do, indicators are often irrelevant to quality improvement of HEIs. Rankings can, however, initiate benchmarking by serving as a starting point in identifying benchmarking partners. Also, reliable rankings can be at the starting point of benchmarking exercises for those institutions willing to increase their performance in the rankings (ESMU, 2008: 6; Burguel, 2012, 3).

Current Benchmarking Implementations in Higher Education

Benchmarking was first adapted to business practices in 1979 by the then almost-bankrupt Xerox. Through the systematic and collaborative comparison of performance with its competitors, Xerox's aim was to evaluate itself, to identify its strengths and weaknesses and adapt to constantly changing market conditions. Benchmarking approaches have been gradually adopted by many businesses and higher education institutions in the context of the quality assurance and quality enhancement movements, facing the need to ensure productivity and effectiveness in the face of increasing competition (ESMU, et, al, 2008: 23).

Traditionally, educational organizations are natured for spreading and sharing of knowledge, collaboration in research and assistance to each other. Several authors advocated that benchmarking is more suitable in higher education than business sector, due to its collegial environment, which encourages easily to collaborate and cooperate (Pulatkhon, 2001). According to literature review Professional associations such as NACUBO, ACHE, ACU, ESMU, CHEMS and ENQA, independent data sharing consortia, private consulting companies, and many HEIs are all conducting either individual benchmarking implementations or collaborative benchmarking projects. Individual benchmarking implemetations between two institutions or among a group, called a partnership approach while collaborative benchmarking projects called a template approach in that benchmarking carried out among a large group of universities, usually at the initiative of a third party such as an association (mentioned above like NACUBO, ACU, CHEMS, ENQA, ESMU).

As Pulatkhon, (2001) stated, The NACUBO (National Association of College and University Business Officers) benchmarking program was begun in late 1991, and it seeks to provide participants with an objective basis for improved operational performance by offering a "pointer" to the best practices of other organizations. The Association for Continuing Higher Education (ACHE) and graduate business schools have also conducted specialized benchmarking studies that focus on the processes and practices concerning their particular institutional departments. A review of the benchmarking literature finds independent benchmarking projects are also in use by a wide range of higher education institutions.

The growing concern with quality in HE has led institutions to look for ways of managing quality processes effectively and efficiently. In Australia, the quality improvement framework described in McKinnon, Walker and Davis (2000) have offered A Benchmarking Manual for Australian Universities. In this manual sixty-seven benchmarks were identified with contribution of thirty-three participating universities, emphasis was on the drivers of future qualitative performance. Meetings and discussions were arranged by the Commonwealth Higher Education Management Service (CHEMS), Benchmarking Club in London and some UK universities (<http://www.acu.ac.uk/chems/>). According to Higher Education Statistics Agency (HESA, 2011) Association of Commonwealth Universities (ACU) maintains a higher education benchmarking programme through a series of collaborative reviews of selected business processes, through annual round of focused reviews involving 16 universities from Australia, Canada, Hong Kong, New Zealand, the African Continent and the UK. Universities share information on their activities in the selected themes regarding approach, application and outcome. Through these benchmarking exchanges, information about good practices are also identified and shared using the structure and criteria of the EFQM framework for instnutional process comparisons. According to HESA Status Report (2010), universities (Greenwich, Liverpool, York, Surrey), and many others in England are conducting benchmarking on strategic planning and administration, student services (career services, campus

services, accommodation, catering, conference services), research, teaching, estates, finance, human resource, library and IT across.

In the mid 2000s, Austria carried out a benchmarking exercise on the mobility of its scientists, Spain has benchmarked performance of a group of HEIs in terms of their research and training capacities. Sweden has benchmarked research management. Such sector-wide benchmarking exercises are setting performance targets for changes. At the European level, the open method of coordination between EU member states sets quantitative and qualitative benchmarks as a means of comparing best practices (ESMU, et al, 2008).

In Europe, collaborative benchmarking approaches in HE sector have developed from the mid-nineties as initiatives launched at the national level by groups of institutions or by independent institutions. Transnational level exercises have so far remained limited. But, collaborative benchmarking projects in European Higher Education was implemented by four partner organizations. These are European Centre for Strategic Management of Universities (ESMU), The Centre for Higher Education Development (CHE), The Unesco European Centre for Higher Education (UNESCO-CEPES), and University of Aveiro. This first phase of European HE benchmarking project (2006 – 2008), studied the concepts and practices of benchmarking in order to increase their usage in European HE. They analysed 18 collaborative benchmarking groups worldwide in Europe, Australia and the US (ESMU, et al, 2008). Second phase of European HE benchmarking project (2008-2010), involved 41 universities, divided four groups “on university governance, lifelong learning, curriculum reforms and university-enterprise cooperation”. The outcome is a handbook titled “benchmarking in European Higher Education” (ESMU, et al, 2010). These four benchmarking groups of HEIs studied on wide data exchange, advice and best practices in workshops and produced benchmarking tools (questionnaires, reports, handbooks of good practices).

According to paper of HEFCE (Higher Education Funding Council for England (2003), a number of studies undertaken and networks exist to share good practice in UK. At least two of the HEFCE Good management practice projects focus on benchmarking. This publication looks at the general principles of benchmarking and how the EFQM Excellence Model can provide a route into benchmarking (Pulatkhon, 2001).

The internal quality assurance group of ENQA (IQA Group) has been organizing a yearly seminar for its members since 2007. The main objective is to share experiences concerning the IQA of work processes in the participating agencies. The overarching theme of the 2011 seminar was “how to use benchmarking as a tool for developing internal quality assurance system (ENQA Workshop Reports, No.20, 2012). Another collaborative benchmarking project, IMPI is a three-year project funded by the European Commission, the work is coordinated by the Centre for Higher Education Development (CHE) in Germany. IMPI aims to develop and test a set of internationalisation indicators that can be used by European (and other) higher education institutions (HESA, 2011).

Practitioners (ESMU, et al, 2008; HESA, 2011; ESMU, et al, 2010; ENQA Workshop Reports, 2012) often identified two types of HE benchmarking approach in their benchmarking projects. In the first non-collaborative type, higher education institutions call on consulting firms to buy data to compare their performance with other institutions. In the second type, benchmarking is carried out in a collaborative way as an inter-organisational learning process between institutions with a view to improving their modes of operations. This second approach requires a high level of trust and confidentiality between participating institutions. According to APQC (1993), if the Benchmarking Code of Conduct is followed, confidentiality concerns can be reduced. The Code of Conduct calls for benchmarking practitioners to abide by stated principles of legality, exchange, and confidentiality.

Benchmarking Application Stages and Steps

Benchmarking as an improvement strategy and quality assurance tool is used commonly, but differently throughout the world. In the 1990s, benchmarking was defined by many authors as the process of continuously comparing and measuring an organisation with business leaders anywhere in the world to gain information, which will help the organisation take action to improve its performance (Spendolini, 1992; American Productivity and Quality Center, 1993; Watson, 1992). Spendolini (1992) offers five step benchmarking process involving: determining what to benchmark, forming a benchmarking team, identifying benchmarking partners, collecting and analysing information and taking action. Watson (1992) presents a six-step: plan, search, observe, analyse, adapt, improve.

For HE sector, considering the types of benchmarking, Alstete (1996) defines four types of benchmarking linked to the voluntary participation of institutions, i.e. international benchmarking, external competitive benchmarking, external collaborative benchmarking and external trans-industry (best in class) benchmarking. UNESCO-CEPES (2007) uses similar descriptions referring to internal benchmarking, external competitive

benchmarking, functional benchmarking (comparing institutional processes), trans-institutional benchmarking (across multiple institutions), implicit benchmarking (quasi-benchmarking looking at the production of data/performance indicators), generic benchmarking (looking at basic process or services) and process-based benchmarking (looking at processes).

Three types of benchmarking advocated by the Australian Universities Quality Agency (AUQA) are:

Sector benchmarking in which comparisons of ‘whole-of-institution’ or focusing on some function or aspect are made against a benchmarking partner(s) in the same sector;

Generic benchmarking involving comparisons of processes and practices regardless of the industry;

Best practice benchmarking in which the University selects a comparator known to be best in the area to be benchmarked (Stella and Woodhouse, 2007).

Benchmarking process models and methodologies in HE are various with different number of phases and steps. Alstete (1996) suggested a four step approach: Plan – do – check – act (based on Deming’s PDCA cycle). Hacker and Kleiner (2000) suggested a twelve-step benchmarking process which has four phases: Planning; Analysis; Integration; and Action. *Planning* has five steps: determine what to benchmark, identify key performance indicators, identify benchmarking partners, determine data collection method, and collect data; *Analysis* has two steps: understand performance gaps, and predict future performance levels; *Integration* has two steps: communicate findings and gain acceptance, then establish functional goals and implementation plans; and, *Action* has three steps: implement and monitor progress, measure results against stakeholder wants and needs, and then recalibrate benchmarks. MCP INSIGHTS (2008: 3,4) introduces a seven-step process for collaborative benchmarking carried out among a large group of universities, usually at the initiative of a third party such as an association or a benchmarking club. Here is the most important issue is agreeing to exchange data and practices among the participating institutions. A true understanding of good practices can only be gained at the site of benchmarking partner with a well-prepared questionnaire.

All the primary data research requires the use of questionnaires. Developing questionnaires is the main step to gather specific data on the process in the partner institutions involved into benchmarking exercise. Site visits (covering arranged meetings, discussion sessions) and observations are the necessary methods of conducting primary data research. In this way, one can provide insight to real working practices that can be very useful.

As it is seen, the benchmarking process traditionally encompasses four phases: I. Planning the study; II. Collecting data and conducting the research; III. Analyzing the data; IV. Adapting the findings to the situation of the institution. A Benchmarking project by the Australian Universities Quality Agency (AUQA) introduces the major steps for higher education benchmarking as shown below: (<http://www.auqa.edu.au/gp/search/index.php>):

1. Determine which areas to benchmark;
2. Identify benchmarking partners;
3. Determine types and level of benchmarking;
4. Prepare benchmarking documents and templates including the purpose, scope of project, performance indicators, performance measures and performance data;
5. Design benchmarking process;
6. Implement benchmarking process;
7. Review results;
8. Communicate results and recommendations; and,
9. Implement improvement strategies,

This process usually aligns with the Plan/ Do/ Review/ Improve cycle in the Quality model of many universities. Similarly, Adelaide university offers a checklist covers the key activities of benchmarking listed below:

- Identify what is to be benchmarked (project selection),
- Form an internal benchmarking team,
- Select the benchmarking partners (consider the necessary protocols required such as confidentiality arrangement, agreements, code of practice, etc.),
- Finalise benchmarks (measures and indicators),
- Collect data (choose data research methods among emails or mail surveys, telephone or video conferencing, questionnaire design, site visits, discussion meetings or workshops and observations),
- Analyse data (determine performance gaps, reasons for gaps, cost/adapting benefit analysis),
- Communicate findings (gain acceptance from management and area staff),
- Set new targets (implement specific improvement actions),
- Prepare a monitor progress plan (include responsibilities and deadlines).

Recently, collaborative benchmarking models are being used at international level. For instance, EU funded second European HE benchmarking project (ESMU, et,al 2010) was implemented by four partner organisations: The European Centre for Strategic Management of Universities (ESMU, in Belgium), the Centre for Higher Education Development (CHE, in Germany), the International Centre for Higher Education Management (ICHEM), University of Bath and Institute of Education (IoE, from University of London). This benchmarking project in European HE is the pilot project formulated into four stages and thirteen steps as follows (ESMU, et, al 2010: 65-67):

Phase 1-Defining Priorities, Targets, Criteria, Indicators and Benchmarks

- Deciding priority areas,
- Developing the list of potential indicators,
- Agreeing the list of potential indicators,
- Developing expertise level and scoring,
- Creating the balanced scorecard,
- Finalizing the indicators set with senior managers

Phase 2-Data Gathering and Reporting

- Gathering and validating data,
- Scoring the institution against the benchmark

Phase 3-Developing an Action Plan to Introduce Change

- Diagnosis of institutional strengths and weaknesses,
- Developing an action plan around pilot Project

Phase 4-Monitoring and Follow-Up

- Implementing the action plan,
- Reporting back.

Burguel (2012: 9) concludes the success factors of the collaborative benchmarking process as;“It is crucial that the benchmarking group agrees on common priorities based on which a list of performance indicators can be developed. Depending on the nature of the benchmarking exercise, there will be a stronger focus on qualitative or quantitative indicators, or on input, process, output or outcome indicators. A full benchmarking cycle requires all types. The sets of indicators get final agreement from the senior leadership of each participating institution. There is also an agreement on what constitutes good performance with

four “expertise levels”: *basic* performance, *standard* performance, *good* and *excellent* performance. Once the priorities and indicators have been defined, the data gathering can start. The question is how much data should be gathered and how to ensure their validity and reliability. The group may wish to use external experts for this purpose. Once the data have been gathered, institutions are placed and scored against the “*expertise levels*”. The comparative scorecards combining the individual university scores show current performance and provide indications on where individual institutions should place the precise focus for their strategic improvement plan. From a collective exercise the process becomes very individual with institutions drawing their own realistic action plans to address the gaps identified around a pilot project with a precise timeframe, specific tasks, and adequate financial and human resources”.

CONCLUSION

No single university, however large, can encompass all knowledge. It is demanding to be world class in even a few academic fields. Each university has to prioritise the use of its resources and use them to best effect. Knowing whether it is succeeding in its aims is another more demanding level of difficulty. Considering these issues, the key question is, how university leaders will know where their institution stand and how they can be improved (McKinnon, et al, 2000: 1). The answer comes with benchmarking. Benchmarking is an ongoing systematic process for measuring and comparing the work processes of one institution to those other institutions, bringing an external focus to internal activities, functions or operations (Kempner, 1993). It is a process of self-evaluation and self improvement through systematic and collaborative comparisons of process and performance with similar organizations or cross-sector organizations in order to identify strengths and weaknesses; to learn, to adapt and then to set new targets to improve performance (Burguel, 2012: 8; ESMU, et al, 2008; ESMU, et al, 2010).

Improving performance by collaboration or comparisons within other universities is nothing new in higher education. What is new today is the use of explicit benchmarking and the formalisation and institutionalisation of the process as a planned ongoing improvement process (Schofield, 1998; ESMU, et al, 2008). According to The European Association for Quality Assurance in Higher Education (ENQA, 2002), the core elements of true benchmarking are; negotiation, collaboration, dialogue and developing a process for mutual understanding. In benchmarking exercise, the question is rather: How can we learn from others; how to get to where they are from here?

Benchmarking experienced universities in the US, Australia, UK and the other European countries see benchmarking as a quality assurance tool by which the university can monitor its relative performance, identify gaps, seek and learn fresh approaches to bring about improvements, set goals, establish priorities for change and resource allocation and follow through with change processes based on real life experience.

Also, practitioners at universities have found that benchmarking at HEIs helps overcome resistance to change, provides a structure for external evaluation and creates new networks of communication between institutions where valuable information and experiences can be shared. In addition, Quality strategies and quality assurance efforts are both enhanced by benchmarking, because it can identify areas that could benefit most from quality assurance models and make it possible to improve operations with often dramatic innovations. Thus, it is recently defined as a structured and collaborative learning exercise which would help HEIs identify and disseminate good practices and develop new ways of addressing specific problems. Such inter-organizational learning between universities within the context of quality assurance would enhance their reputation in demonstrating a continuous effort to improve the way in which quality assurance is performed.

However, benchmarking as a management tool to improve operational performance is not always fully understood. It is often performed as a mere data gathering exercise or just comparing performance outcomes lacking a well-planned systematic and collaborative approach based on real-life experiences for institutional improvement. Establishing or measuring externally visible performance through key performance indicators (KPIs), is only the beginning of benchmarking. The real issue of benchmarking process is how to achieve high performance which needs information of a much more detailed type than KPIs can give, from deep within the organization. Aim is to find out about good practices rather than only good performance.

Rankings and league tables of universities are in this sense, perceived as false benchmarking, since they do not point to ways improvement which is the essence of benchmarking. Rankings which are already in use in many HEIs, contain no information about good practices. Although rankings are popular for comparison, they provide little information about how the university reached the score and if they do, indicators are often irrelevant to quality improvement of HEIs. Rankings can, however, initiate benchmarking by serving as a starting point in identifying benchmarking partners. Also, reliable rankings can be at the starting point of benchmarking exercises for those institutions willing to increase their performance in the rankings (ESMU,

2008: 6; Burguel, 2012, 3).

According to literature, professional associations such as NACUBO, ACHE, ACU, ESMU, CHEMS DETYA and ENQA, independent data sharing consortia, private consulting companies, and many higher education institutions are all conducting either individual benchmarking implementations or collaborative benchmarking projects. Individual benchmarking implementations between two institutions or among a group, called “a partnership approach” while collaborative benchmarking projects called “a template approach” in that benchmarking carried out among a large group of universities, usually at the initiative of a third party like NACUBO, ACU, CHEMS, ENQA, ACHE, DETYA, ESMU which all facilitate comparisons, and lead directions for the benchmarking exercises or projects. This benchmarking approach requires a high level of trust and confidentiality between participating institutions. According to APQC (1993), if the Benchmarking Code of Conduct is followed, confidentiality concerns can be reduced. The Code of Conduct calls for benchmarking practitioners to abide by stated principles of legality, exchange and confidentiality.

Although benchmarking has been used in Turkish private sector since mid.1990s (Sarıaltın, 2003; <http://www.kalder.org.tr>), there is no institutional initiative to handle Turkish HE benchmarking applications. Also, academic studies on benchmarking on doctorate level is still too limited (Küçük, 2004; Gerek, 2010) and also research papers on benchmarking are just a few articles (Büyüközkan, 1997; Karabulut, 2009). For higher education benchmarking we need more academic studies examining and analysing current benchmarking exercises and practices in Turkish HE and its application to Turkish HEIs.

Contribution and Recommendations for Further Studies

In this study, HE benchmarking literature have been reviewed in order to make researchers and academicians gain better understanding of the subject for HE, and take a closer look at the importance and applicability of benchmarking to Turkish HE. For the newcomer to benchmarking it may be difficult to have a clear idea of how to start and manage benchmarking implementation. This study, therefore would help with a clarification on concepts, definitions and application examples of benchmarking in HE. At the same time, the study will provide valuable information on benchmarking application steps and stages for HEIs which already have experience with some aspects of benchmarking and are willing to take their efforts a step further.

The underlying purpose of this study is to *draw more attention* to the benchmarking theme by describing what does benchmarking mean for HE through revealing its importance, its linkage with quality assurance models, its current implementations and explaining its application stages. In this way, I think first four research questions, given above, have already been answered. The study still continues and, thus last two questions of the study; “what are preferred types of benchmarking currently conducted in HEIs” and “where is benchmarking being implemented in Turkish HE”, need more detailed analysis on both local and international studies and examining good examples of practitioner institutions in Turkish HE sector.

References

- ACU (Association of Commonwealth Universities), “ACU Benchmarking Programme”, <http://www.ac.uk/chems/> access: 21.11.2014.
- <http://www.Adelaide.edu.au/learning/staff/benchmarking/> “Benchmarking at the University of Adelaide”
- Alstete, J.W.(1996), Benchmarking in Higher Education: Adapting Best Practices to Improve Quality, ASHE-ERIC Higher Education Report, No. 5 Washington D.C. <http://www.ericdigests.org/1997-3/bench.html/> access:05.10.2014.
- APQC (American Productivity and Quality Center), <http://www.apqc.org/benchmarking/>
- APQC (1993), The Benchmarking Management Guide, Portland, OR, Productivity Press.
- AUQA (Australian Universities Quality Association), “Good Practices Database”, <http://www.auqa.edu.au/gp/search/index.php/>, access: 22.11.2014.
- Büyüközkan, G. (1997), “Methods and Tools for Benchmarking Process”, PICMET 97, Portland State University, July, 27-31, 1-17.
- Benchmarking for AALL: An annotated bibliography, <http://www.aall.org.au/AALL/docs/bibliography.pdf/> access:15.10.2014.
- CHEMS (1998) (Commonwealth Higher Education Management Service), “Benchmarking in Higher Education”, An International Review, pp.6-12, London, CHEMS.

- ECU (2011) (Edith Cowan University), “Benchmarking Policy”, <http://www.ecu.edu.au/GPPS/policiesdb/tmp/ado75.pdf/> access: 21.11.2014.
- European Association for Quality Assurance in Higher Education (ENQA) Workshop and Seminar Reports (2012), <http://www.enqa.eu/index.php/publications/papers-reports/workshop-and-seminar-reports/>
- ENQA Workshop Reports, No: 2 (2002), “Benchmarking in the Improvement of Higher Education”, <http://www.enqa.eu/files/benchmarking.pdf/> access:05.10.2014.
- ESMU, et al (2008), A practical Guide: Benchmarking in European Higher Education, Brussels, <http://www.education-benchmarking.org/> access:14.10.2014
- ESMU, et al, (2010), A University Benchmarking Handbook: Benchmarking in European Higher Education, Brussels, <http://www.education-benchmarking.org/> access:14.10.2014
- Hacker, M.E, Kleiner, B.M (2000), “12 Steps to Better Benchmarking”, Industrial Management, 42 (2), pp.28-32.
- HESA (2011), (Higher Education Statistics Agency), “International Benchmarking in UK Higher Education”, PA Consulting Group, <http://www.paconsulting.com/> access: 05.11.2014.
- HESA Status Report (2010), “Benchmarking to Improve Efficiency”, http://www.hesa.ac.uk/dox/benchmarking_to_improve_efficiency_nov2010.pdf/ 05.11.2014.
- Inglis, A, (2005), “Quality Improvement, Quality Assurance and Benchmarking: Comparing two Frameworks for Managing Quality Processes in Open and Distance Learning”, The International Review of Research in Open and Distributed Learning (IRRODL), (6) 1, March, 2005, available at <http://www.irrodl.org/index.php/irrodl/article/view/221/304/>, access. 28.11.2014.
- INQAAHE (2005) (International Network of Quality Assurance Agencies in Higher Education), “Guidelines of Good Practices”, available online at <http://www.inqaah.org/> access. 19.11.2014.
- Jones, M.L, et. al, (2007), “Quality Assurance and Benchmarking: An Approach for European Dental Schools” European Journal of Dental Education, (11), 137-143.
- KalDer Benchmarking Group Projects, <http://www.kalder.org/>
- KalDer Kıyaslama Komitesi (2000), Kıyaslama (Benchmarking), Kalder Yayınları, No. 15, İstanbul
- Karabulut, T.A, (2009), “Türkiye’nin En Büyük Sanayi Kuruluşlarının Kıyaslama Uygulamaları Üzerine Bir Araştırma”, İstanbul Ticaret Üniversitesi, Sosyal Bilimler Dergisi, (8) 11, 1-16.
- Kempner, D.E (1993), The Pilot Years; The Growth of the NACUBO Benchmarking Project, NACUBO Business Officers, 27 (6), 21-31.
- Küçük, O (2004), Kalite İyileştirme Aracı Olarak Kıyaslama (Benchmarking): Türkiye’de Bir Özel Sektör Uygulaması, (yayımlanmamış doktora tezi), Atatürk Üniversitesi, Sosyal Bil. Enst, Erzurum.
- Learning and Teaching Unit (2012), “Benchmarking”, <http://www.unisa.edu.au/academicdevelopment/quality/benchmarking.asp/> 22.11.2014
- McKinnon, et al, (2000), Benchmarking: A Manual for Australian Universities, Department of Education, Training and Youth Affairs, Higher Education Division, Canberra, available online at, <http://www.deyta.gov.au/highered/> access:24.10.2014.
- Macquarie University, http://www.mq.edu.au/policy/docs/benchmarking_procedureQA.html/
- MCP INSIGHTS (2008), “Applying Benchmarking to Higher Education”, Management Consulting Partners, LLC, Volume: 1, Number:2, 1-6.
- NACUBO (National Association of College and University Business Officers) http://www.nacubo.org/documents/business_topics/benchmarking.pdf/ access:05.11.2014.
- Pulatkhon, L, (2001), “Research on Benchmarking in Higher Education: An Overview”, <http://www.eprints.um.edu.my/2234/1/RESEARCH-ON-BENCHMARKING.pdf/> access:14.10.2014.
- Sarıaltın, H. (2003), Örgüt Performansının Ölçülmesi ve Geliştirilmesinde Kıyaslama Yöntemi ve İmalat Şirketlerinde Kıyaslama Uygulamaları, (yayımlanmamış doktora tezi), Sakarya Üniversitesi, Sosyal Bilimler Enstitüsü, Mayıs, 2003, Sakarya.

- Schofield, A. (1998), “An Introduction to Benchmarking in Higher Education”, in UNESCO New Papers on Higher Education: Benchmarking in Higher Education, Paris, 1998, 6-11.
- Scott, R. (2011), “Benchmarking: A literature Review”, Academic Excellence Centre for Learning and Development, Edith Cowan University, 2011.
- Stella, A, Woodhouse, D. (2007), Benchmarking in Australian Higher Education: A Thematic Analysis of AUQA Audit Reports, AOP Series, No 13, Melbourne, AUQA, available online at <http://www.auqa.edu.au/files/publications/benchmarking-final-text-website.pdf/> access:14.11.2014.
- Spendolini, M.J, (1992), The Benchmarking Workbook, Amacom Books,
- TEMPUS (2013), Benchmarking of Quality Assurance in Higher Education, Experiences from the FOCUS Project, (edited by the University of Alicante), Spain , availble online at <http://www.focusquality.eu/sites/focusquality.eu/files/focus-benchmarking%20%28web%29.php/>
- UNESCO, (1998), New Papers on Higher Education: Benchmarking in Higher Education: A Study Conducted by the Commonwealth Higher Education Management Service, Paris, 1998.
- Vlasceanu et al. (2007), Quality Assurance and Accreditation: A Glossary of Basic Terms and Definitions, UNESCO-CEPES, (editors: Seto, M; Wells, P.J), Bucharest. <http://www.unesdoc.unesco.org/images/0013/001346/134621e.pdf/> access: 05.10.2014
- Watson, G, H. (1992), The Benchmarking Workbook; Adapting Best Practices for Performance Improvement, productivity Press, Portland, Oregon.
- <http://www.ec.europa.eu/education/higher-education/bologna.en.htm>, access: 14.11.2014.