NEED FOR BENCHMARKING NETWORK IN HIGHER EDUCATION

THE EXPERIENCE AT DUBAI MEDICAL COLLEGE

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BACKGROUND: Benchmarking is a tool for continuous improvement driven by assessment in comparison with a common reference point. It involves organizational learning in partnership which provides an incentive to better results. Recently, the Commission for Academic Accreditation (CAA), UAE, has facilitated benchmarking by creating a portal for sharing data among higher education institutions (HEIs).

AIM OF STUDY: This study aims at assessing good practices and challenges in benchmarking of HEIs using the experience at Dubai Medical College as an example and to suggest recommendations relevant to this region, which will drive the quality initiative forward.

The benchmarking process used by Dubai Medical College since 2004 is evaluated for its methodology, challenges and outcomes.

FINDINGS: It is seen that internal and external benchmarks have helped the organization to set higher standards, through matrix-plotting of performance indicators related to administration, education, assessment and resources. Availability of data, inertia in communication and openness among competitors were the major challenges.

CONCLUSION: Commitment and willingness to improve is essential for successful benchmarking at a micro and macro-level. A recommendation is placed for creating a repository of benchmarks in the region for HEIs. This consortium of validated performance indicators will help in identifying the best-in-class in specific categories.

Major challenges can be met by a network of HEIs to share best practices. The CAA has already taken an initiative in this direction, which will be highly beneficial. Whether or not these networks should be under the direct supervision of CAA is to be debated and requires further study. This will foster a culture of openness and a constructive drive for excellence by all institutions.

KEYWORDS: benchmarking, higher education, network, consortium, collaborative benchmarking

INTRODUCTION

Benchmarking is a tool for continuous improvement driven by assessment in comparison with a common reference point. It involves a systematic process of organizational learning in partnership which provides an incentive to better institutional results. Benchmarking provides institutions with external standards for measuring quality of internal processes and functions to identify areas for improvement. It is a means of examining processes and models at other colleges and deriving a judgment as to how to solve problems.

The definition of benchmarking has grown from a way of evaluation of processes with the aim of emulating best practices to that of a continuous comparing with business leaders anywhere in the world for improvement according to American Productivity and Quality Center (APQC). It is not merely a comparative analysis to know where you stand, but an active process which leads to improvement. It does not re-engineer processes but rather defines areas to be acted upon in order to improve. (Alstete, 1995)

Recently, the Commission for Academic Accreditation (CAA), UAE, has facilitated benchmarking by creating a portal for sharing data among higher education institutions (HEI). This portal currently has a list of accredited and licensed organizations and gives the enrollment rates, graduation rates and admission rates for the last three years. This is a promising initiative as more information will be made available in the future as a detailed database preparation has started several years ago. Best practices for internal quality assurance are also being collected for publication in this portal. This will be an early step towards benchmarking with data of high degree of relevance, for HEIs adopting common standards.

HISTORY OF BENCHMARKING

Benchmarking was developed in the 1980s by Xerox in response to the growing competition. The learning was documented to be highly beneficial. Since then, it has been extensively studied and applied in the industry sector. Along with the concept of continuous improvement, the higher education sector has adopted it in varying degrees in different countries.

DRAWBACKS:

The benchmarking tool is not without drawbacks. The inherent conflicts in terminology, between the industrial sector and higher education, which are confronted by Total Quality Management, are also present in the area of Benchmarking. (Arnold, 2011)
In the industrial arena, benchmarking can be limited by conceptual and practical difficulties like the tendency for plagiarism, inhibition to innovation and exposure of institutional weaknesses. Since HEIs exist to disseminate learning and upholds hard data, these factors favor systematic benchmarking in universities and colleges (Alstete, 1995). Good and bad opinions exist about benchmarking in higher education, legality and confidentiality issues noted by American Productivity and Quality Center being examples of the latter.

CHALLENGES:

The outcome based measures used as indicators for benchmarking are more quantitative than qualitative and consequently, they have to be extrapolated to make them more qualitative (Peischl, 1995). Other challenges are related to finding common outcomes applicable to many universities and the time and energy consumed in applying across different units. For these reasons creation of an effective benchmarking system is very complex (Manning, 2007).

The Innovations Network (1997) identifies seven critical mistakes which are typically made in the process of benchmarking. These are poor leadership, inefficient team preparation, weak support for teams, unclear objectives and expectations, lack of understanding and inappropriate follow up.

Despite the reported difficulties of benchmarking, interest in it is expected to grow significantly as more universities become aware of its potential (Kettunen, 2010). As departments can define their levels of quality, it gives ownership and accountability to the institutions. It is typically used in strategic planning, and forecasting the future. (Peischl, 1995)

While trying to develop the new mission and strategic plan, performance indicators are required. The difficulties in establishing classification criteria for performance indicators arise from the fact that there is no agreement in this regard. (Garcia-Aracil & Palomares-Montero, 2010)

COLLABORATIVE BENCHMARKING

Benchmarking has been organized in different countries on an individual scale as well as collaborative. If the process has to be effective, the institutions should have an approach of integrity, transparency and openness.

Consortium benchmarking for many organizations are done for a cost, or individual institutions pay for their benchmarking. These collaborations reported considerable success in arriving at data comparing different universities. The challenges for this method of benchmarking comprise difficulty in arriving at consensus regarding priority and scoring of contextual indicators. In medical education, a great deal of information is disseminated by American Association for medical education (AAMC) through its annual report.

Ranking is different from benchmarking as it ranks the top universities which are highly funded and have adequate resources. The universities which may not reach up to the parameters set by the ranking criteria may not be crucial for quality in all contexts. So also, we find that universities in the middle level too need to benchmark themselves with the best in class for improvement. University rankings have disadvantages such as the inability to reach certain levels due to dearth of funds, but benchmarking which is a voluntary process where the university can set its own targets/benchmarks will be beneficial to all levels (Sheil, 2010)

We find that benchmarking will succeed in organizations which have a drive for improvement and a culture of openness. Staff empowerment is needed to make the benchmarking process operational.

INTERNATIONAL EFFORTS IN COLLABORATIVE NCHMARKING

The benefits of collaborative learning, as a win-win method of benchmarking, have been identified in the construction industry and the partnership thus created accelerates the improvement process (Costa, Formoso, Kagioglou, & Alarcón, 2004). KPI Benchmarking Club is another example of collaboration reported in the benchmarking in the industry sector. (Construction Excellence, 2004). Collaborative benchmarking has been successful in automotive industry where more and more companies are joining the initiative. (Alarcón, Grillo, Freire, & Diethelm, 2001)

In the education field, the process of obtaining data by a network of many institutions is sometimes called consortium studies. One example is the University of Delaware national study of Institutional goals and Productivity for 160 institutions formed by members of their institutional effectiveness units (Alstete, 1995). The operation of an international benchmarking 'Club' organized by the Commonwealth Higher Education Management Service (CHEMS) is also described. Another example of collaborative benchmarking is the pioneering activity of the Commonwealth University Management Benchmarking Club, formed by universities from six countries working collaboratively. (Benchmarking in Higher Education, 1998)

The APQC, which has been alluded to earlier in this article, is a non-profit corporation founded in 1977. Being the top benchmarking organization of America, it started the Baldrige Award which is co-administered for two years. It functioned through the formation of International Benchmarking Clearinghouse in 1992.

In higher education, the predominant agent in benchmarking is probably the National Association of College and University Business Officers (NACUBO) (Benchmarking for Process Improvement in Higher Education, 1995). In Australia, the Australasian Association of Higher Education Facilities Officers (AAPPA) conducts annual benchmark surveys for 36 institutions in Australia and New Zealand. The survey concentrates on university facilities and services. To ensure that the information is comparable, the survey provides precise definitions of the terms used in the collection of data and to that extent it is regarded as accurate. (Higher Education in the learning society, 1997)

Figure 1: BENCHMARKING PROCESS & RELATION TO PLANNING CYCLE
(Benchmarking process is adapted from Peischl, 2003)
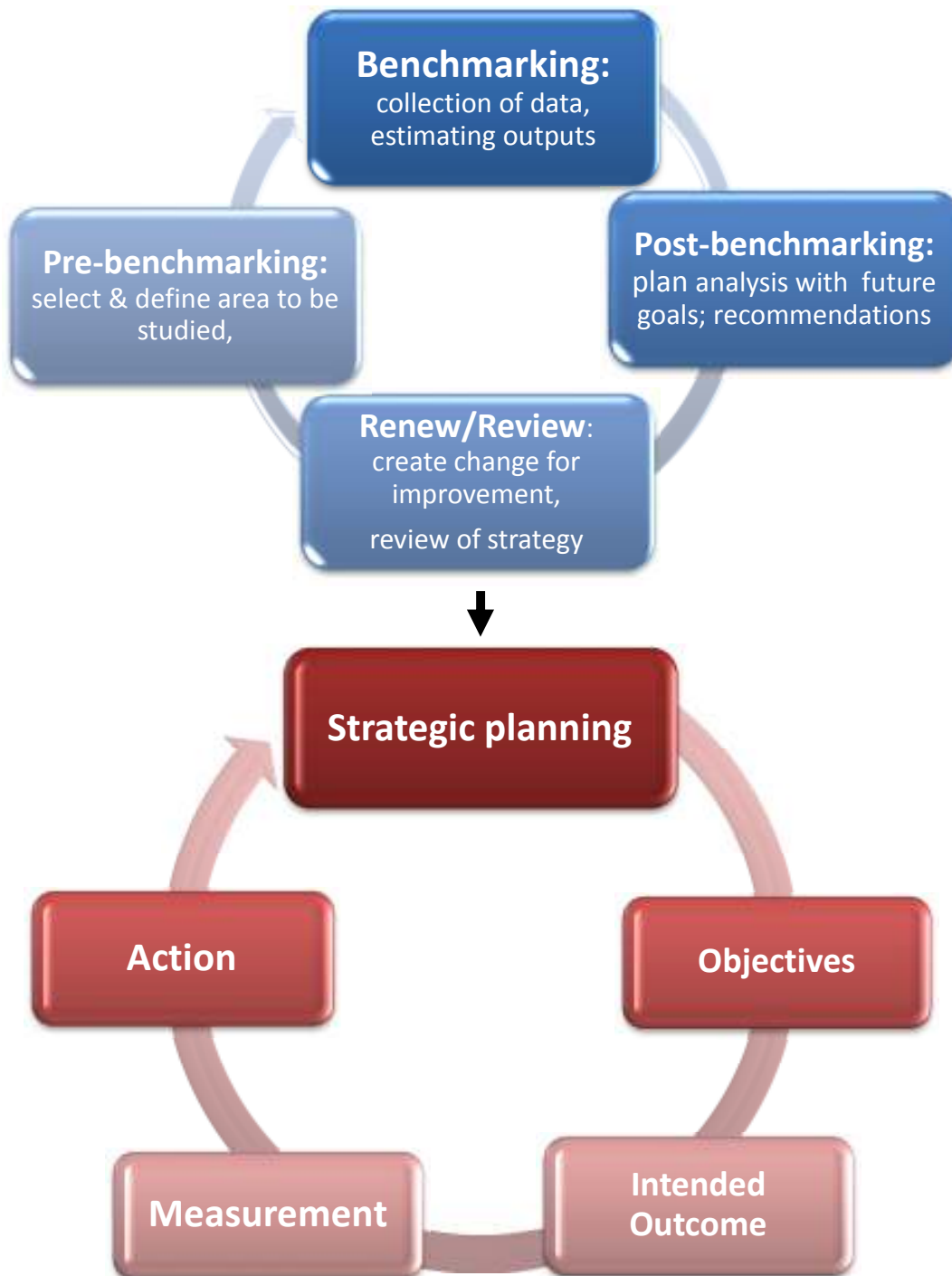
Benchmarking at DMC

Benchmarking at DMC was undertaken using the 4 steps of Peischl.
- Pre-benchmarking: selection & defining of area to be studied,
- Benchmarking: collection of data, estimating outputs
- Post-benchmarking: analysis with future goals are planned and recommendations are placed
- Review/Renew: creating change for improvement, review of strategy and resetting of goals. (Peischl, 1995)

A. Pre-benchmarking: This step was relatively simple as the TQM model was accepted and a drive for continuous improvement was present. Several indicators were identified which could be used for measuring performance. The areas of top priority were selected and areas to be studied were defined.

1. Admission
2. Strategic Planning process
3. Faculty recruitment
4. Curriculum
5. Record management
6. Teaching & learning methods
7. Examination System
8. Student counseling system
9. Alumni relations
10. Student affairs
11. Faculty affairs
12. Community service

Leading and lagging indicators were developed for these areas. Performance levels and satisfaction rates were included. These were arrived at based on the Standards of Accreditation and Licensure set by CAA and European Foundation for Quality Management principles.

B. Benchmarking: The step which had the largest challenges as data regarding excellent institutions was relatively lacking. Information was collected by the freely available data on the internet from various universities. These data were many times not relevant to the culture and organizational structure or the standards followed by us.
   - Information which were available were the
   - It was rarely possible to get a good partnership with the best in class.
   - Outcomes could not be obtained from local sector. Process benchmarking was possible through sharing of best practices

C. Post-benchmarking: This involves an analysis of the data obtained in our college with that of the benchmark which was set. If the results were up to the benchmark, the concerned staff was appraised and if still behind the benchmark, actions were planned to achieve better results in the next evaluation. The interesting point is that by the time the next measurement takes place fresh benchmarks will be set as it is a continuous process. In the case of internal benchmarks, we had a great deal of interdepartmental

learning and cooperation. In the case of external benchmarks, the scarcity of data has made it less effective.

D. Review/Renew: The learning from the previous step has led to areas for improvement and has helped us prioritize planning and allocate resources.

BENCHMARKING OUTCOMES AT DMC

At Dubai Medical College, benchmarking was confronted with several challenges. The biggest challenge was that data about other institutions in the region was lacking. The only option was to benchmark with data available from international medical schools, even though it did not cover most of the crucial areas. A large amount of data was available from American Association of Medical Colleges (AAMC) mostly relating to student satisfaction rates. This data is published in their annual report. Results on a 5 point Likert scale were now comparable with the results of 13000-odd students who graduated from the United States.

The financial, administrative and academic parameters were very difficult to obtain. This could be attributed to the potential drawbacks, which have been alluded to earlier in this article.

BENCHMARKING OF SPECIFIC AREAS

Data related to medical curriculum was available from North America, Europe and Australia for free. Very little material was available from Asia and Africa in 2003, when benchmarking was first undertaken. Recently, more data has been available from Illinois, California, India, Boston, and the UK through professional interactions between faculty members of Dubai Medical College with institutions from these areas.

Data regarding faculty opinion was very difficult to obtain. This is an area where benchmarks from any HEI would have been sufficient. However, most top institutions preferred not to disclose data. Some data has been freely available from free sources in the internet. However, these are rarely relevant to this region. Policies and procedures are freely shared by international institutions. This been very helpful to Dubai Medical College for benchmarking, but this data would have been much more valuable if it was from UAE or from the Middle East. One area where tremendous information would have been obtained is sharing of innovative teaching methods. Sharing of pedagogical innovations could lead to historic breakthroughs as each institution would not have to re-invent the wheel from time to time.

In 2010, the CAA made data regarding enrollment graduates and admissions available at their portal, which was a very big relief as the data had high degree of contextual relevance. The CAA initiative of sharing best practices is commendable and training provided to HEIs in this regard has created a great extent of openness among institutions.

LEARNING FROM DMC EXPERIENCE

It is clear that collaborative benchmarking is the way forward in the context of UAE. Quality initiatives will not serve their purpose if not backed by inter-organizational learning and comparison with benchmarks (Burquel & van Vught, 2010). This study brings out the fact that data has to be processed in light of contextual factors to be effective (A Practical Guide to Benchmarking in European Higher Education, 2008). In the light of competition pressures

and rapid advances in higher education, it is imperative to create a sense of social responsibility and commitment to the intellectual community among institutions. Benchmarking in collaboration may help in these ways if implemented effectively. (Nazarko, Kuzmicz, Szubzda-Prutis, & Urban, 2009)

RECOMMENDATION FOR A BENCHMARKING NETWORK:

The results show that the major challenge is in obtaining relevant data which can be applied in conditions prevailing in the UAE are not available to date. There is a clear need for honest data and this can be obtained only if there is mutual trust among HEIs. The only solution would be to form a network where HEIs striving for excellence will share data. This will go a long way in raising the bar for all member institutions, as most of these are doable in their existing scenario. The existing conditions for all institutions will be similar as all of them come under the umbrella of CAA, which means that the same standards are applied.

Figure 2: SUGGESTED STEPS FOR FORMATION OF A BENCHMARKING NETWORK

Introductory meeting

All HEIs participate to frame mission, vision & values

Formation of a steering committee.

•Drafting of guidelines for participation, bylaws,
 Organization chart, Terms & conditions

Formation of standing committee

Election/ Nomination of members

Call for participant institutions

Set deadlines, shortlist & select participant HEIs

Implement, Communicate & review

Collection of Data and Dissemination to members

STEPS IN FORMING A NETWORK (See Figure 2):

The author attempts to put forward some steps which can help in formation of a network of HEIs for Benchmarking.

1. Introductory meeting with all HEIs

2. Formation of a steering committee.
   a. Drafting of guidelines for participation
      i. Criteria for participation (must be accredited by CAA etc.)
      ii. Expectations from participants
      iii. List of compulsory data to be provided by HEIs.
      iv. List of best practices (optional)
      v. Participant fee.
      vi. Deadlines for submission of documents
   b. Prepare Bylaws -Define duties and responsibilities.
   c. Prepare Organization structure for the network (terms and conditions).
3. Formation of standing committee (Election/ Nomination)
4. Call for actual participants with a deadline.
5. Implementation
   a. Publish member-list and Bylaws on Website
   b. Annual data collection and dissemination.
   c. Assess, Review and improve

CRITERIA FOR SUCCESSFUL NETWORK

1. Commitment for excellence
2. Institutional integrity
3. Openness
4. Willingness to share
5. Trust between institutions
6. Sense of belonging

CONCLUSION

Commitment and willingness to improve are essential for successful benchmarking at a micro- and macro-level. It is seen that CAA has promoted a drive for self-improvement and fostered a culture which emphasizes that benchmarking will help in setting targets. The most important challenge is non-availability of data relevant to UAE, so the only solution is open sharing of data among HEIs in UAE.

A recommendation is placed for creating a repository of benchmarks in the region for HEIs. This consortium of validated performance indicators will help in identifying the best-in-class in specific categories.

The best way forward would be to form a network of HEIs with common areas of concern. Alternatively, several small focused networks for specialized fields could function, with CAA as moderator. The CAA has already taken an initiative in this direction, which has been highly beneficial. Whether or not these networks should be under the direct supervision of CAA is to be debated and requires further study.

The network should be formed of institutions which voluntarily opt for sharing data for this noble cause. This will foster a culture of openness and a constructive drive for excellence by all institutions.

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