From Self-evaluation to Accreditation for Quality Improvement in Higher Education: Recent Trends in Iran and Outlines of a Model

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Although, tertiary institutions are expected to be more responsive to the realities of their environments and economic globalization, they are facing numerous problems themselves. To face these problems and meet the expectations, there should be continuous efforts toward quality improvement. This article first, enumerates major problems of higher education systems. Then, introduces the concept of self-evaluation, as a tool for improving higher education quality. After describing the process and outcomes of a pilot self-evaluation project (SEP) at medical universities in Iran, the article analyzes the objectives achieved by the SEP. These includes, among others: i) promotion of trust and cooperation through increased knowledge and understanding among faculty members, ii) improvement of teaching, research and rendering of professional services, iii) facilitating inter-university analysis. Based on the experiences gained in the pilot SEP, an accreditation model, in which self-evaluation plays the major role in quality improvement, is presented.

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1. Introduction

The twenty-first century is characterized as a century in which knowledge-intensive technologies will have a dominant role to play. Development and application of such technologies require highly trained manpower and necessary infrastructure. In this respect, the changing world requires higher education systems to be more responsive to the realities of their environments and economic globaliztion of activities.

Despite such requirement, objectives of higher education programs are usually not well defined, neither in industrialized nor in developing countries. Higher education programs usually don't meet the needs of immediate environments. Above all, the financial resources of higher education institutions have been decreasing (Bazargan, 1997).

Based on the above, quality of higher education has become a major concern. Although from the early days of tertiary education, quality has been an important focus of attention for faculty members and managers, it has become a watch word in the past two decades. The move from an elite to a mass system has changed the nature of student population in many developing countries. This has created a demand for quality higher education that meets a diversity of students needs and abilities.

At the same time, governments have focused more on the need for accountability of higher education institutions (HEI).
Consequently, the HEI are requested to "produce more with less" (Meade, 1995). In such a situation assessing the quality of higher education has become a priority in many countries (Bazargan, 1997; Kells & Stenquist, 1995; Kells, 1995; Vriejenstyn, 1993; Bazargan, 1996; Wolf, 1993).

Reviews of recent practices of assessing quality in higher education indicates that the United States has the longest history in evaluating higher education institutions (Wolf, 1993). Some of the industrialized countries, in the European Community started serious attempts in assessing higher education in the past decade. Such attempts have been expanding rapidly in developed as well as developing countries (Bazargan, 1997).

Here, we first, review and consider what is meant by "quality" in higher education. Then, self-evaluation as an approach to improving quality, is introduced and a pilot project on self-evaluation is described. Based on the results of the pilot project, an accreditation model which starts with self-evaluation and ends up with external evaluation is presented.

Quality, like beauty, means different things to different people. However, in higher education quality may be defined according to factors of educational systems (Bazargan, 1997). In other words, quality may be defined according to the inputs, processes and products of a higher education system (Bazargan, 1996).

In short, quality in higher education may be viewed through two broad approaches (Ecuyer & Peace Lenne, 1994):

i) achievement of stated objectives;
ii) compliance with pre-established standards.

The first approach, when carried out by the staff of an institution under evaluation, is called self-evaluation. But when a peer group judges the quality of a higher education institution, it is called external evaluation or accreditation. This process requires a comparison with pre-established standards. Assessing quality through this approach, requires that national or regional standards for factors related to the goals of evaluation be defined and developed first. Standards may be adopted from similar national practices as well (KCUE, 1991). In the absence of pre-established standards, the first approach to assessing quality is applied.

2. Self-evaluation as a tool for improving higher education quality

Self-study or internal evaluation is a process through which a unit of higher education (program/department/institution) motivates professionals to get enthusiastic, on one hand to reveal the weaknesses of the unit, and on the other hand explore the ways to overcome these weaknesses. It would enable the unit to get most out the present resources and use its strengths to bring about the intended results.

Such a process is carried out through establishing an evaluation infrastructure. This infrastructure is based on promotion of a culture of evaluation among faculty members and other staff, and building an educational management information system (EMIS). The EMIS should provide necessary information for assessing the goals, students, resources, processes and results.
It also facilitates development planning for quality improvement of the unit (Bazargan, 1996b).

Based on the above, the author designed a pilot self-evaluation project for medical education system in Iran in 1996. It was carried out in six teaching, research-treatment (TRT) departments as follows:

1. Nutrition and Biochemistry Dept, Tehran University of Medical Science and Health Services (UMSHS);
2. Dept, of Periodontics (Dental Medicine) Tehran UMSHS;
3. Rheumatology Dept, Tehran UMSHS;
4. Internal Medicine Dept, Shohada Center, Shahid Beheshti UMSHS (SBUMSHS);
5. Gynecology Dept, SBUMSHS;
6. Internal Medicine Dept, Kerman UMSHS.

The purpose of pilot self-evaluation project was to develop a model through which in each TRT department a psychological ownership of proposals for change be developed. Such a change would be produced as a result of self-evaluation.

3. The process of self-evaluation

Activities for carrying out self-evaluation of a department, depended on the size, complexity, and enthusiasm of the professional staff. Nevertheless, decision about elements (factors) to be considered in the process of evaluation was taken without regard to such dimensions as size and complexity. In the pilot project, five sets of factors were considered as follows.

a) organizational structure, administration and resources;
d) student population;
c) degree programs;
d) teaching-learning processes;
e) graduates.

A study group was formed at each participating department. Then, a workshop was held to draw the attention of professionals to the necessity for self-evaluation. It was a joint workshop in which team leaders of the study groups, from each department, participated. Each study group was composed of three to five members, based on the size of department.

Each study group, in turn, conducted a workshop to familiarize their professionals with objectives of self-evaluation. It is evident that a strong leadership, technical expertise, financial resources and internal motivation made self-evaluation an attractive experience.

A steering committee was also set-up at the Bureau of Monitoring and Evaluation of Ministry of Health, Treatment and Medical Education. This committee provided technical support and advice to each of the participating departments.

Based on the instructions of the steering committee, 36 indicators were considered for the five sets of factors. Then each of the study groups arranged for data collection through four sets of questionnaires (students, faculty members, graduates, employers) and interview. But, due to the fact that all the participating departments lacked clearly defined objectives, each one first attempted to define its objectives in three areas: teaching, research and treatment services. These objectives were used as reference Point for making judgement about the present
and possible developments of the department in the future.

In the pilot-project, the data items collected included those that indicated trend information. Therefore, it was attempted to collect data for each item on the three previous years plus current year and possible projection for next year.

The major data items in each of the five sets were as follows:

a) **Organizational Structures**
- Chairmanship of the department;
- Number of professionals by age, sex, status, major role and area of major expertise;
- Number of support personnel by position, sex and age;
- Teaching hours per FT instructors
- Number of sponsored research projects;
- Scholarly productivity by type,
- Operational budget by major expense category;
- Instructional cost per student;
- Overall instructional cost per student graduates.

b) **Student population**
- Characteristics of entrance;
- Achievement by type of entrance;
- Utilization of admission capacity;
- Student-faculty interaction;
- Number of students per FTE instructor;
- Students’ opinion on the teaching-learning processes of their programs.

C) **Degree programs**
- Demand: applications (as first choice) per program;
- Student enrollment by sub-major;
- Opinion of faculty members on the demand for graduates;
- Opinion of faculty members on the relevance and efficiency of the programs;

**d) Teaching - Learning processes**
- Teaching- learning strategies usually applied in each course;
- Type of Teaching materials and facilities used in each course;
- Evaluation of students learning;
- Frequency of feedback to students about their achievements.

**e) Graduates**
- Number of graduates by program;
- Number and proportions employed;
- Number and proportions continued their studies in the program;
- Graduates’ opinion about their knowledge, attitude and skills developed in the program and the relevance of the curriculum to the market needs.
- Opinion of employers about the abilities of graduates;
- Frequency and range of scientific productivity of graduates;
- etc.

Data collection through questionnaires and interviews was carried out by the study group in each of the participating departments. Then the collected data were analyzed. For each factor, judgement was made whether the situation is: satisfactory, nearly satisfactory or unsatisfactory. Based on the results of judgements, a self - evaluation report was prepared for each of the departments.

In general, it is expected that the practice of self - evaluation in
a department has a "substantial impact on the organizational improvement from the high level of staff participation resulting in deepened staff members' commitment to change" (Kells & Stenquist, 1995:42). Such commitment was promoted among the professionals of the six participating departments.

The reports of the pilot self-evaluation was presented at a national seminar in February 1998. The participants confirmed that self-evaluation can achieve the following objectives:
- to promote trust and cooperation through increased knowledge and understanding among professionals;
- to improve the quality;
- to make possible the inter-university analysis.

4 - Accreditation: inter-university comparison in higher education

Improvement of the quality in higher education requires continuous assessment. International practices on assessing and improving higher education institutions, indicates that self-evaluation is the first phase of any attempt in improving the quality of higher education.

Self-evaluation, which is also called internal evaluation, provides an "institutional portrait" depicted by the staff. However, an external evaluation should also be carried out, as the second phase of quality improvement. This phase is aimed at inter-university comparison and rating of institutions on the basis of specific standards.

In the process of second phase, the status of the institution under evaluation, is re-examined by a visiting team from out-
side of the institution. The status which is judged in the report of self-evaluation would be either confirmed or recommendation for remedial actions made. In such a case, the visiting team would visit the institution again, after a spell of time, and make the final judgement.

As an example from the Asian higher education systems, we may consider the process of external evaluation in Korea. In this country, accreditation of departments of physics has taken place in 1991. For this purpose, 125 evaluation items for undergraduate education and 76 evaluation items (standards) for graduate education were established (KCUE, 1991 & 1992). In other words, six sets of factors were considered for external evaluation and accreditation. These included the following categories:

1) objectives of department; 2) curriculum; 3) student, 4) faculty, 5) facilities, 6) administration and finance. Each of these were divided into sub-categories. For instance, the first category was divided into the following:

- content of objectives,
- implementation of objectives,
- design of objectives,
- realization of objectives.

Then for each sub-category some evaluation questions such as "Has the curriculum been improved during the last five years?" are seeking qualitative information; others, for example, "what is the average teaching load of faculty members in the department?" are obtaining quantitative information.

In the Korean accreditation project, for each evaluation item,
a scale with three points is applied to identify: good (A), moderate (B), and poor (C) departments. For example, for the item "What is the rate of doctoral degree holders among faculty members?" (A) is over 90 per cent, (B) 70 - 80 per cent and (C) below 70 per cent. "A" counts as 1.0 and "B" and "C" are 0.7 and 0.4 respectively. The score of any one item is calculated by multiplying the result by a weighting for the item. By summing up the score of each item in each major subcategory, the total score for any one department is obtained.

In the United States, accreditation practices are usually summarized in a scale with more than three categories for rating of institutions of higher education. For instance, Gourman Report (Gourman, 1987: 211) provides a rating scale which includes seven categories of graduate institution: 1) very strong, 2) strong, 3) good, 4) acceptable plus, 5) adequate, 6) marginal, and, 7) not sufficient for graduate programs. In this report, score for any institution falls in the range of 0.0 to 5.0.

In the pilot project of self-evaluation of Iranian medical education departments, the second phase of evaluation has started in March 1998. On the bases of experiences gainde in the first phase, all the departments of internal medicine have been conducting self-evaluation. They are expected to present their self-evaluation report by February, 1999. Then based on the results of such exercise, those departments which would be in the "good" or "moderate" categories and willing to participate in the accreditation process, apply for external evaluation. The total number of internal medicine departments in Iranian Medical
Education system is about 30. It is expected that the accreditation process takes place in the course of 1999.

5. Conclusions

The changing world requires higher education systems to be more responsive to the realities at the national and international level. In this context, quality has become a watchword. The policy of assessing programs and departments is intensified almost in every country around the world in past ten years. Several countries in the Asian region have embarked on making national benchmarks for the knowledge and skills required in the disciplines (departments) of priority, such as physics and mechanical engineering (e.g. KCUE, 1991). This process has made it possible to establish national accreditation systems in several countries (Wolf, 1993).

However, prior to accreditation, there should be an experience of self-evaluation in each department to make quality improvement as a continuous activity.

A pilot project in self-evaluation in Iran was carried out among a number of medical education departments during 1997 and 1998. Major results of this experience are as follows:

a) Professionals in each of the departments gained awareness and readiness concerning quality improvement;

b) data bases as an infrastructure for transparency and quality improvement of the process, product, and output of departments, were established;

c) the spirit of team work was strengthened and culture of evaluation promoted;
d) each department obtained an overview of current status of resources, activities and their relevance to the developmental targets of the department; then, accordingly planned future activities for continuous quality improvement.

Although at the beginning of self-evaluation there was the feeling that the results might be used for reward or penalize the department, as the project went through, such feeling disappeared gradually. The results of self-evaluation created an improved self-image for the professionals. In other words, the initial response from faculty members for self-evaluation which was one of reserve, it gradually turned into an active and energetic attitude toward evaluation and quality improvement.

The evaluation model presented here includes self-evaluation as the first phase and external evaluation as the second phase. While, in the first phase, a ground for collective responsibility for action is developed, in the second phase peer judgement for continuous improvement of higher education is made. As such, this model facilitates quality improvement in higher education in the coming century.
References


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