Monitoring and Evaluation of Higher Education in Islamic Republic of Iran

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Abstract

This study analyzes the monitoring and evaluation of higher education in the field of higher education development program, evaluation and monitoring procedures and standards, including the different actions taken by evaluation and monitoring agencies and association in Islamic Republic of Iran (governmental and nongovernmental). In an indirect process for determining the eligibility of higher education institutions to participate in state development higher education programs it has directed that institutions are eligible for participation if they meet two fundamental conditions:

1. Be able to evaluate, monitor, analyze and predict fundamental changes in science and technology in order to keep abreast of the global fundamental changes in science and technology.

2. Be able to develop priorities to plan and organize technological activities of the country to reengineer nationwide development of science and technology and to provide a sustainable structure for higher education developmental program. It emphasizes the choices made by monitoring and evaluation agencies at different times as how they would conduct evaluations and what standards they would use. This issues and circumstances are surrounding the initial development of evaluation and monitoring and major changes in procedure and standards. Also attention is given to some of the challenges that presently are posing for evaluation procedures as growing complexity, globalization and advances in instructional uses of electronic technology allow new forms of higher education provision to emerge. The existing policies need to be re-examined, and new policies be developed. While higher education innovations must be recognized, it is also true that monitoring agencies have greatly assisted their career. In this process monitoring agencies serve as a public brain system to advocate changes that will improve higher education practice.

Key words: Higher Education development, Monitoring, Evaluation

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Introduction
The introduction of evaluation as a policy instrument in higher education has been associated with the value of efficiency and the language of performance measurement and quality (10). In some cases it has been focused on quality assurance systems. In other words it has strong affiliations with the concepts and methods of private sector management and with concepts that in themselves represent no substantive values on management itself (Vaezi, 2005)).

Sustainable development and improvement of every country is due training, preserving and maintaining its technological, educational, research and scientific assets, research improvements, promotion of scientific technology, higher education development of the country and finally its widespread sustainable development (Morris & Foard, 1999). Therefore identifying, making contact and supporting this powerful stratum of the society in order to make use of their scientific cooperation and participation in various fields to produce science and technology is a strategic trend for sustainable development based on a national research development program (Schiavo, 2000) To achieve this objective in line with the stated national development program, the monitoring and evaluation program approved to provide and direct higher education and appropriate organizations to produce science and technology through directing educational activities to achieve sustainable development of the country (Vught & Westerheijden, 1993).

The objective of this program is offering assistance, financial and spiritual supporting services to the state higher education section including legal and real ones so that higher educational affairs bloom in accordance with production of sciences and technology and results in public utilization of higher education in the country. (figure 1)

Figure 1
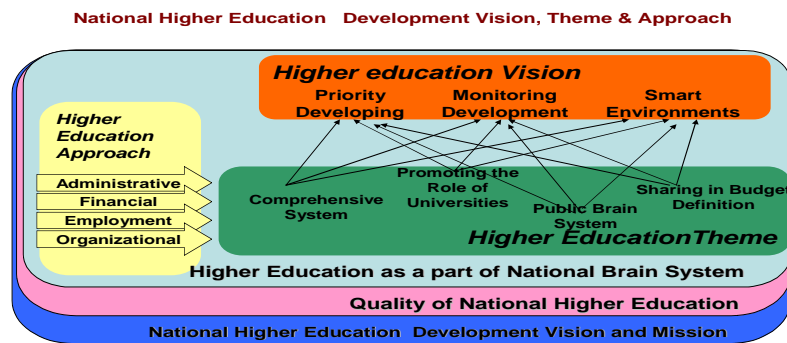
Through the last two state developmental programs, research centers, universities and governmental research agencies have raised new questions about the quality and relevance of their systems and approach for program evaluation of higher education development program .

This trend can be seen as a response to the increased size, complexity and diversity of the universities and higher education centers in terms of human resource capacity, administrative, financial, employment and organizational affairs.

It also reviews the effect and roles of monitoring and evaluation on the ways that universities and higher education centers do their research activities.

This paper reviews several new developments in higher education developmental program with special attention to the issues that accredit state long term national higher education developmental program for monitoring and evaluation policy and practice.

Context and issue

This study analyzes the reasons for evaluation and monitoring and also the problems that policy makers are confronting in the process of monitoring and evaluation of state higher education development program, evaluation and monitoring procedures and standards, including the different actions taken by evaluation and monitoring governmental and nongovernmental agencies and association. (Figure 2)
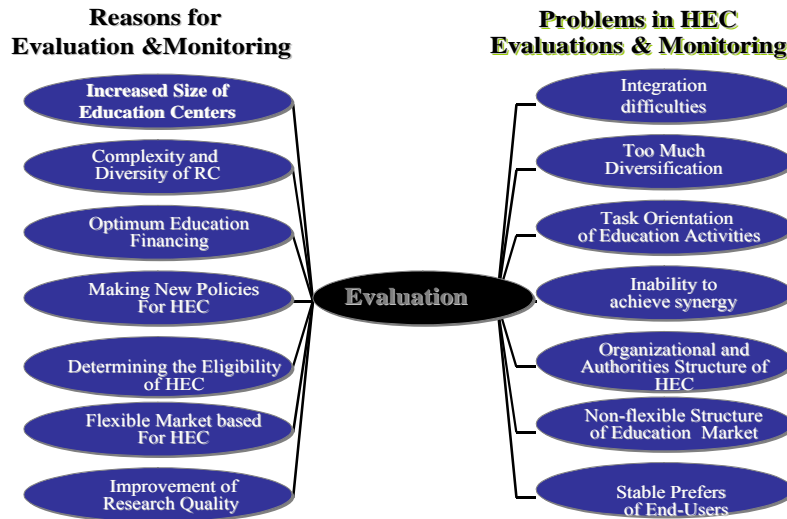
**Reasons for
Evaluation &Monitoring**

**Problems in HEC
Evaluations & Monitoring**

Increased Size of
Education Centers

Complexity and
Diversity of RC

Optimum Education
Financing

Making New Policies
For HEC

Determining the Eligibility
of HEC

Flexible Market based
For HEC

Improvement of
Research Quality

Evaluation

Integration
difficulties

Too Much
Diversification

Task Orientation
of Education Activities

Inability to
achieve synergy

Organizational and
Authorities Structure of
HEC

Non-flexible Structure
of Education Market

Stable Prefers
of End-Users

Figure 2: Reasons and problems for evaluation and monitoring

In this paper attention is given to the questions of decentralization and independence of universities and research centers in terms of administrative, financial, employment, human resource management policies and organizational affairs which can facilitate the national trend of higher education program (El-khowas, 2001).

In developing countries, monitoring and evaluation of higher education has a 50 year old record of experiences, extending back to the early years of the establishment of the former Iranian ministry of culture and higher education which was reformed and renamed to Ministry of Sciences, Researches and Technology (MSRT) to strengthen and execute, assist, monitor, evaluate and make a policy for evaluation at the ministerial level .

At that time higher education monitoring and evaluation was directed towards budget allocating to education and monitoring but today this process has changed in the way of efficiency and effectiveness evaluation and monitoring (Morris et al, 1999).

The policy issues that these new approaches raise are challenging, but they can also be seen as variations as the long standing tensions

that evaluation and monitoring agencies have faced. Significantly, the questions for evaluation activities still focus on the adequacy and appropriateness of university practices and whether these practices are efficient and effective and achieve national higher education program results.

Monitoring an evaluation process in Iran is centralized. Some governmental agencies carry out this role under the supervision of the following organizations:

1. Iranian Ministry of Sciences, Research and Technology,
2. Supreme Council of the Cultural Revolution,
3. Research Monitoring Affairs Forum in Iranian Ministry of Sciences Researches and Technology.

On the other hand, two different types of organizations carry out the evaluation and monitoring roles:

- Institutional evaluation agencies, which monitor the higher education capability of universities and research centers. This monitoring is organized by some internal monitoring agencies like the Research Monitoring Affairs Forum.
- Programming agencies for higher educational development in which their monitoring and evaluation roles focus on education policy making and long term programming.

This monitoring is organized by two organizations: Iranian Ministry of Sciences, Research and Technology and Supreme Council of the Cultural Revolution .

A critical element in evaluation and monitoring of the national higher education program is the use of standards to evaluate and monitor the research development program. Four aspects of the development of programming accreditation are distinctive .

1- Changes in output of higher education system:
- Implementation of new strategies,
- Managing new executive programs,
- Designing a new organizational structure and also a financial assessment,
- Designing a function evaluating system for all levels of higher education,
- Time limited monitoring and evaluation.

2- Changes in input of higher education system:
- Optimum management of higher education financing,
- New definition of short term higher education programming,
- Define new tasks for higher education manager.

3- Bouracracy decreasing of higher education system:
- Privatization of higher education activities,
- Capacity building in higher education systems to meet national needs,
- Making new chances for higher education competencies.

4- Defining an interactional approach between human resources of higher education centers and research agencies:
- Making new links between bureaucracy and higher education leadership,
- Pay attention to policy making for higher education activities,
- Acceptance of the social and political character of higher education centers.

For evaluation and monitoring focusing on input oriented approach there are four standards based on key elements. (figure 3)

Standard 1: Defining structral purpose and higher education objectives,
- Standard 2: Defining the methods of achieving higher education objectives through core functions,
- Standard 3: Developing and applying resources and organizational structures to ensure sustainability,

Key Elements for national Higher Education development program

Key elements	Requirement
Fundamental Conditions and Eligibility	•Be able to monitor the national Higher Education •Be able to develop priorities •Comprehensive Assessment System •Promoting the role of Scientific associations •Involvement in decision making process •Sharing in GDP and the state Budget
Decentralization	Independence in administrative, financial, employment and organizational affairs of national higher Education development
Role Definitions	•Effectiveness oriented approaches roles. •Efficiency oriented approaches roles.
Effectiveness Oriented Approach	•Changes in the design and performance of higher education agents. •Provide effective bridge between the functional elements. •Understanding national needs for national development. •Exiting evaluating systems. •Devoting a large proportion of resources to the higher education section.
Efficiency Oriented Approach	•Change in national development objectives. •Giving priority to a research development program of rural transformation. •Complexity •Globalization •Instructional uses of electronic technology

Figure 3: Key Elements for higher education evaluation

- Standard 4: Creating a national commitment for higher education development.

In this case different views can be offered about the overall roles and impact of evaluating and monitoring systems in higher education developing program especially based on the governmental monitoring agencies. There are five comprehensive roles: economics, business, end-user oriented roles, governmental oriented roles and cultural ones .

Policies and programs

Monitoring agencies have played a steering role in the area that is helping higher education centers to find methods that adapt to new demands without imposing restrictions or demands for immediate action (Barker, 2000). This view related to the central role of the overall structure of the national higher education development program. At the same time it can also be acknowledged that monitoring agencies have been very instrumental in spurring structural change and improvement within institutions of national higher

education. This trend is based on development of strong internal systems of education and self-assessment (Dumond, 2000). It relates to an institution's overall mission in serving a helpful role in shaping educationally useful innovation. The emphasis they place on developing good evidence has supported better decisions and better planning for new higher education challenges and programs.

To understand the full picture for research evaluation, it is necessary to look at a range of governmental roles in higher education development program. Government is responsible for the financial support of a large portion of the nation's higher education centers especially those carried on by universities. It is responsible too for the great majority of the higher education grants and loans that support national level higher education. Notably, however despite this expansion of the central role, agencies have come to play in supporting the higher education programs while reserving significant oversight responsibilities to the governmental agencies itself (El-khawas, 2001).

The monitoring and evaluation role of government is technically a narrow one, which begins with the necessity that the government must determine whether a higher education institution is eligible to participate in national higher education programs especially development of higher education and if they can achieve the targets.

In an indirect process for determining the eligibility of research institutions to participate in state development higher education programs it has directed that institutions are eligible for participation if they meet two fundamental conditions: (Vaezi, 2003)

1- Be able to evaluate, monitor, analyze and predict fundamental changes in science and technology in order to keep abreast of the global fundamental changes in science and technology.

2- Be able to develop priorities to plan and organize technological activities of the country to reengineer nationwide development of science and technology and to provide a sustainable structure for research development program. Some observers believe that this monitoring role of the states is gradually expanding. To understand another dimension of monitoring and evaluation role and its impact it is necessary to look within higher education to the varied internal processes that support quality assurance and over time the

maintenance and improvement of higher education quality.

Increasingly too it has become a normal practice for most state universities and research centers to employ strategic management procedures: identifying priorities , planning carefully to promote those priorities, monitoring operations more closely and establishing various benchmarks and indicators for their own use. This increased self-security extends not only to administration but also to research programs and is conducted wholly apart from monitoring (Henkle, 1998).

It is necessary to consider that public and private higher education centers have a significant role in innovation cycle of developing countries .

Application of new public management paradigm as a comprehensive trend is a systematic approach for transferring from the hierocracy system to a flexible market based structure to achieve efficiency and effectiveness in the higher education development program.

In this process there is a consideration on the education management instead of education career and the necessity of education functional evaluation and also distribution of responsibilities .

The need for evaluation
The implementation of an evaluation and monitoring plan thus entails a wide area of public and private educational activities. A systematical method evaluation of education both short term and long term is an essential means of plan implementation.

Evaluating the national higher education system for developing strategic priorities towards science, research and technology emphasizes on decentralization and independence of universities and research centers in terms of administrative, financial, employment and organizational affairs. It also devises a comprehensive assessment system for research and technological affairs in national level for improving information technology through supervision of higher education programs for promoting the role of scientific associations and higher education organizations through their involvement in the decision-makings and supervision processes and also planning to boost the share of public and private research in the GDP and the state budget (Glanfield, 2001).

In this process supporting the implementation of state-run research projects by universities and research centers as a means to diversify their financial resources and also encourage faculty members and students (graduate and undergraduate) to play more effective parts in national higher education activities is a strategic career (Mierlo, 2000).

Research results
The research key finding involving strategic policies and roles stipulated in the national development plan in higher education sector:

• Updating higher education matter subject in conformity with the diverse national needs and authorizing universities and research centers to develop their carrier and innovate approaches in order to train more skillful, innovative and independent human resources.

• Developing and strengthening the Centers of Excellence in the pioneer universities and research centers.

• Expanding international collaborations to make more efficient use of global higher education achievements and to have easy access to the international scientific achievements.

• Making a more efficacious internal and external assessment system.

• Modifying the structure of national higher education system via authorizing higher education centers in order to provide a more dynamic, flexible, and competitive and integrated system.

• Providing secure financial resources for national higher education.

• Developing and strengthening the spirit of research and scientific thinking in the society.

• Making regular and continuous effort in order to respond to the present and future needs.

• Increasing the national sovereignty through the process of higher education and technological development.

• Organizing the higher education and development facilities in order to make connection between university skills, sources and research and also industrial centers.

• Giving effective orientation to the scientific society of the country toward the research in needed majors.

• Planning and creating a suitable ground in order to make the results of training applicable and commercial.

• Creating suitable research and scientific environment for absorbing domestic and foreign scientists and specialists.

• Promote the technical knowledge of specialists in order so that creativities and innovations in technology emerge.

• Getting access to the latest information and technical knowledge in order to acquire and create superior technology in the area of international competition.

• Disseminating culture and organizing the collective research activities and making use of the facilities.

• Giving suggestions about the suitable strategies for absorbing and transferring technical knowledge.

• Creating balance between the higher education development program plan and that of the nation's, paying attention to societal needs, development ratio and higher education quality enhancement both in public and nonpublic center.

• Multiplying the ways and fostering public cooperation to offer a new paradigmatic national research to be responsive to the ever increasing research demand for higher education promotion.

The recommendations in this paper have been compiled from the monitoring protocols, policies and procedures submitted by governmental monitoring organizations (Barker, 2000).

These recommendations focus on project level monitoring. Organizations should consider reviewing their governance arrangements in a wider systematic context to ensure that the organization is able to achieve higher education governance based on a hierarchy of policy making to stipulate standards of roles, practice and higher education manual to assign responsibilities and finally through a standing operation procedure to achieve uniformity of the performance of a specific function (Vaezi, 2005).

Thus the monitoring organization should consider reviewing policies and procedures as well as governance practices, and also ensure that research governance and research monitoring align closely and practically with other appropriate procedures such as human resource policies, finance policies, health and safety policies and complaints etc (Schiavo, 2000).

All research activities should be monitored routinely. In addition, a project might be audited if there is any suspicion of reduced research governance standards in a project. Monitoring and auditing should link together within an organization and both provide vital research governance information and safeguards.

By using a system analysis approach based on role definitions, the problems of development and utilization of national research development program can be monitored in a logical perspective. This perspective falls into two major categories:

- Those relating o effectiveness oriented approach.
- Those relating to efficiency oriented approach.

The first set of roles can be verified through making some changes in the design and performance of agencies providing various kinds of researches and also research monitoring actions and also to provide effective bridge between the functional elements (Vaezi, 2004).

In this process monitoring and evolution of research development program should be better balanced and more effectively geared to the national needs for national development.

Based on the state national development program a large proportion of resources is devoted to the research section and it could

be served best by improving the efficiency of the exiting evaluating system.

The second set of categories can be alleviated by a major change in national development objectives which would give very high priority to a research development program of rural transformation.

Operational Aspects

This paper reviews the evaluation and monitoring and also applied experiences in the national development research program in some detail. It emphasizes the choices made by monitoring and evaluation agencies at different times as how they would conduct evaluations and what standards they would use.

This issues and circumstances are surrounding the initial development of evaluation and monitoring and major changes in procedure and standards, respectively. Also attention is given to some of the challenges that presently are posing for evaluation procedures as growing complexity, globalization and advances in instructional uses of electronic technology also allow new forms of research provision to emerge (Vaezi, 2006).

The existing policies need to be re-examined, and new policies be developed. While research innovations must be recognized, it is also true that monitoring agencies have greatly assisted their career. In this process, monitoring agencies serve as a public brain system to advocate changes that will improve research practice.

For national research development program monitoring and evaluation agencies need the necessary process of innovation and ability of response to changing circumstances to move forward in a national oriented way. These centers may experiment with new approaches but must submit their plans to an outside review by other public or non-public evaluation agencies.

The recommended items for monitoring should be assessed alongside an organization's role for national project, including whether they are fulfilling the responsibilities including monitoring commercial research (figure 4).

**Functional Model for Identifying Monitoring and Ealuation Roles in
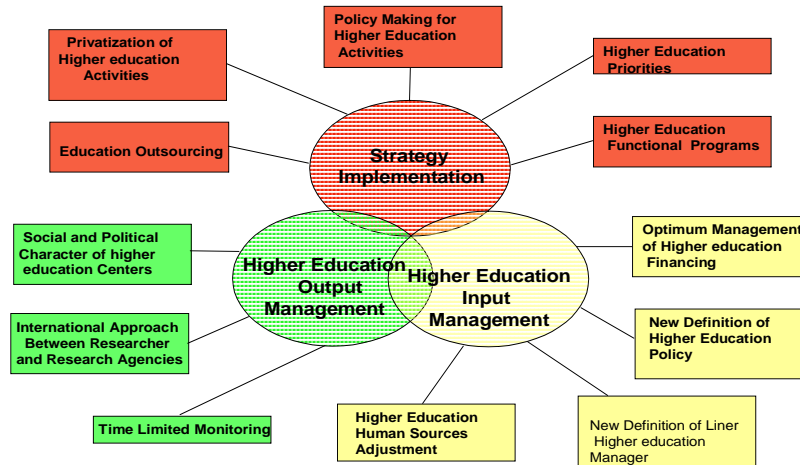Higher Education Development program**

Figure 4

By such methods, monitoring and evaluation agencies not only guide the development of innovative practices but they also serve to lend credibility to emerging forms of research innovation. They need to set certain terms of good practice and encourage certain types of practices, while other practices are discouraged or banned. This represents a soft approach for:

- Achieving mechanisms for carrying out national development plan in research sector:
- Formulating a long term comprehensive plan to train specialized manpower at different levels of public and non-public research sectors to coordinate the National Research Program with the needs of the country.
- Diversifying the development policies via drawing up separate and integrated plans for national research process.
- Determining centers of Excellence to encourage scientific innovations and to develop knowledge and technology.

Conclusion

Based on the state national development program a large proportion of resources are devoting to the higher education section and it could be served best by improving the efficiency of the exiting evaluating system.

The second set of categories can be alleviated through a major change in national development objectives which would give very high priority to a higher education development program of rural transformation.

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