REVIEW ARTICLE

The Position of University Classification in Iran and International Arena; A Systematic Review

Background: Providing an appropriate background is essential for necessary changes and innovation in the higher education, the need to review the classification criteria and development of the type of native criteria and local standards which match the cultural and scientific requirements of the country. Investigating the possible types of indicators to adjusted accurately and objectively is important to be effective.

Methods: In this systematic review we used 10 primary keywords to study the existing documents and links to related databases in the period of 2000-2011.were studied and classified information with international universities in the structure collection and content analysis was carried out during the process.

Results: In this study of the original documentary (3954), 19 articles were found completely relevant to the topic. These articles points to four domains such as; influential presence of the international arena, the improvement of higher educational system and research centered. Conventional university classification is solely in Iran but there are some similarities between the frameworks in China and the United States. For example the Carnegie Classification of colleges and universities in the United States and the Chinese university in 2000 introduced two groups; Pole key universities and other universities. The comparison and assessment of the performance of universities in the international arena must be considered important.

Conclusions: The university classification process should clarify university management, extent and scope of work, university influence over the country, and the role of university in long-term goals of the country. If we accept it, we will be able to set it up with a better and more efficiently. Therefore we need to define indicators of functional types as transparent, scientific and consistent with the native culture and new combinations in universities. It is necessary to combine the international indices with the combination of native priorities.

Keywords: Classification, Categorize, Systematic Review, University, International Arena.

Masoumeh Nazari Chamak[1], Ali Akbar Haghdoost[2,*], Tahereh Islaminejad[3]

[1]Student Research Assembly, Kerman University of Medical Sciences, Kerman, Iran

[2]School of Health, Kerman University of Medical Sciences, Kerman, Iran

[3]Education Development Center, Kerman University of Medical Sciences, Kerman, Iran

*Department of Epidemiology and Statistics, Kerman University of Medical Sciences, Haft Bagh Alavi Blvd, Kerman, 7616913555, IRAN
Tel: +98 341 320 5135
Fax: +98 341 320 5134
Email: ahaghdoost@kmu.ac.ir
Received: MARCH 17,2012
Accepted: APRIL 11,2012

أنواع الجامعات فى ايران والمسرح الدولى، مراجعة هادفة

الخلفية والأهداف: إن التغيرات الضرورية الحاصلة فى نظام التعليم العالى. يثبت ضرورة اعادة النظر فى قواعد التقسيم والأسس المحلية متناسباً مع المقتضيات الثقافية والعلمية للبلد. فدراسة طرق تقسيم جامعات الدول الخارجية لها دور مؤثر فى تنظيم أسس دقيقة لهذا الموضوع.

المواد والطرق: تم دراسة المستندات الموجودة فى قاعدة البيانات فى فترة ٢٠٠٠ – ٢٠١١ فى هذه المقالة بالاستفادة من ١٠ كلمات رئيسية. حيث تم جمع المعلومات المتعلقة بتقسيم الجامعات فى الميادين الدولية. وبعد عدة مراحل تم تحليل محتوى هذه المعلومات.

النتائج: فى هذه الدراسة تم الحصول على ١٩ مقالة مرتبطة بشكل كامل من مجموع ٣٩٥٣ مستند أولى. بالرغم من أن التقسيم فى الميادين الدولية أقل مما هو متعارف فى ايران. لكن تم الحصول على بعض الحالات المشابهة فى أمريكا والصين، حيث يمكن الاشارة الى مؤسسة كارنيغى للتصنيف فى أمريكا وتقسيم الجامعات فى الصين فى عام ٢٠٠٠. فالرقابة والمنافسة بين الجامعات على الساحة الدولية بين الجامعات تعتبر هامة جداً.

الاستنتاج: إن التقسيم يجب أن يوضح الإدارة العملية للجامعات، وتأثير الجامعات فى البلد وتحقيق الأهداف طويلة الأمد فيه. كما يمكن أن ننظم عملية التقسيم بشكل أفضل وأدوم. فالتقسيم اليوم بحاجة إلى تعريف مؤشرات فنية، شفافة، وعلمية ومنطابقة مع ثقافة البلد المحلية. ففى التقسيم الجديد للجامعات يجب تركيب الأسس العالمية مع المحلية.

الكلمات الرئيسية: تقسيم، التصنيف، مراجعة هادفة، الجامعة، المسرح الدولى.

جايگاه تيپ‌بندى دانشگاه‌ها در ايران و عرصه بين‌الملل؛ مرور ساختارمند

زمينه و هدف: تغييرات ضرورى در نظام آموزش عالى، لزوم بازبينى معيارهاى تيپ بندى و تدوين معيارهاى بومى كه منطبق با مقتضيات فرهنگى و علمى كشور باشد را بيشتر نمايان مى‌كند. بررسى شيوه احتمالى تيپ بندى دانشگاه‌هاى خارج مى‌تواند در تنظيم شاخص‌هاى دقيق و عينى براى اين مهم مؤثر باشد.

روش: در اين مرور ساختارمند با استفاده از ١٠ كليدواژه اوليه مستندات موجود در پايگاه‌هاى اطلاعاتى در فاصله زمانى ٢٠١١-٢٠٠٠ مورد بررسى قرار گرفت و اطلاعات مرتبط با دسته‌بندى دانشگاه‌ها در عرصه بين‌الملل به طور ساختارمند جمع‌آورى و طى مراحلى تحليل محتوا صورت گرفت.

يافته‌ها: در اين بررسى از بين ٣٩٥٤ مستند اوليه يافت شده،١٩ مقاله كاملاً مرتبط يافت شد.اگر چه تيپ‌بندى به شكل مرسوم در ايران، در عرصه بين‌الملل كمتر ديده مى‌شود، در برخى كشورها مانند چين و آمريكا مواردى كمابيش مشابه يافت شد كه مى‌توان به طبقه‌بندى بنياد كارنگى در آمريكا و دسته‌بندى دانشگاه‌هاى چين در سال ٢٠٠٠ اشاره كرد. رقابت و سنجش عملكرد دانشگاه‌ها در عرصه بين‌الملل مهم انگاشته مى‌شود.

نتيجه‌گيرى: تيپ‌بندى بايد مديريت فرايندهاى دانشگاه‌ها، تاثيرگذارى دانشگاه در سطح كشور و نقش دانشگاه را در تحقق اهداف بلند مدت كشور روشن كند. مى‌توانيم تيپ‌بندى را با نگاهى بهتر و عملياتى‌تر تنظيم كنيم. امروزه تيپ‌بندى نيازمند تعريف شاخص‌هاى كاربردى، شفاف، علمى و منطبق بر فرهنگ بومى كشور است در دسته‌بندى جديد دانشگاه‌ها، لازم است شاخص‌هاى بين‌المللى با اولويت‌هاى بومى تركيب شوند.

كليدواژه‌ها: تيپ‌بندى، دسته‌بندى، مرور ساختارمند، دانشگاه، بين‌الملل

ايران كى يونيورسٹيوں كى قومى اور عالمى سطح پر رتبہ بندى۔ سسٹماٹيک اسٹڈى

بيک گراونڈ: ملک كے اعلى تعليمى نظام ميں رتبہ بندى كے معيارات پر نظر ثانى كرنا، مقامى ضروريات اور ملک كى ثقافتى اور علمى تقاضوں كے مطابق منصوبہ بندى كرنا نہايت ضرورى ہوتا ہے۔ ديگر ملكوں كى يونيورسٹيوں كى رتبہ بندى كا جائزہ لے كر ملک كى اعلى تعليم كو مزيد ترقى دلانے كے معيارات معين كئے‌جاسكتے ہيں۔

روش: اس تحقيق ميں عالمى ويب سائٹوں ميں موجود دس كليدى الفاظ سے جو كہ ان ويب سائٹوں پر موجود دستاويزات ميں تھے مدد لى گئي يہ تحقيق دوبار دس اور گيارہ ميں انجام دى گئي۔ عالمى سطح پر موجود يونيورسٹيوں كى رتبہ بندى كى معلومات كو سسٹماٹيک طريقے سے جمع كيا گيا اور مختلف مراحل ميں ان كا تجزيہ كيا گيا۔

نتائج: اس تحقيق كے دوران تين ہزار نو سو چون دستاويزات حاصل ہوئيں جن ميں انيس مقالے موضوع سے مكمل طرح سے مربوط تھے۔ گرچہ ايران ميں رائج رتبہ بندى كا سسٹم عالمى سطح پر بہت كم ديكھنے كو ملتا ہے تاہم چين اور امريكہ ميں بھى كچھ مثاليں مل گئيں جو ايران كے سسٹم سے سے مماثلت ركھتى ہيں۔ امريكہ ميں كارينگى فاونڈيشن اور چين كى بعض يونيورسٹيوں اس كى اچھى مثال ہيں۔ ياد رہے يونيورسٹيوں كے درميان مسابقت اور ان كى كاركردگي عالمى سطح پر رتبہ بندى ميں اہم كردار كى حامل ہيں۔

سفارشات: يونيورسٹيوں كى رتبہ بندى ميں يونيورسٹيوں كے مينيجمينٹ اور ملک كے طويل مدت اہداف كو پورا كرنے ميں يونيورسٹيوں كے كردار اور اثرات كو واضح كياجانا نہايت ضرورى ہے۔ اس طرح ہم رتبہ بندى كو بہتر طريقے سے انجام دے سكتے ہيں تاكہ اس كے عملى ثمرات حاصل ہوسكيں۔ آج كى دنيا ميں يونيورسٹيوں كى رتبہ بندى كے لئے عملى معيارات، علمى شفافيت جو كہ ملک كى مقامى ثقافت پر مبنى ہو نہايت ضرورى ہوتے ہيں اور يونيورسٹيوں كى رتبہ بندى كے لئے عالمى معيارات كو مقامى تقاضوں كے ساتھ ہم آہنگ كرنا ضرورى سمجھا جاتا ہے۔

كليدى الفاظ: رتبہ بندى، تحقيق، عالمى سطح۔

INTRODUCTION

Since the vision (20-year) has clarified achieving the goals of the Islamic Republic of Iran in 1404, there are a lot to do to achieve the top position in all aspects of economic construction, scientific progress and social development in the region. A new approach and special attention to development and implementation of educational and research infrastructures is required. We need to design the reform programs.

Development of science and technology infrastructures of the country is an important mechanism to compete in various fields. Therefore it is extremely important to develop the quality of higher education through a major effort in curriculum reform because higher education has played an important role in the cultural and social development (1).

Educational system and consequently the scientific development of our country have faced with many barriers. To improve the current educational system and research-oriented developments, an innovation process is necessary. In addition to innovative design, to implementation of successful innovations created in the country and its integration with the older patterns and appropriate management in university environments seem necessary (1, 2).

There are 50 universities and colleges of medical sciences in Iran now. According to the approval in Deputy of Education of Ministry of Health and Medical Education, there are three types in universities. Every college or university of medical sciences is placed in one of the three categories.

In this classification, the first type includes the bigger and older universities, the medium universities are placed in the second type, and type three includes newer and smaller schools (3).

The reason behind the classification is related to some challenges in the past and now. The medical sciences universities always try to improve their status, but there are not any accurate and objective criteria and indices. Regarding these problems taking a look at out of the country and reviewing the methods of classification in other universities is necessary and could be helpful to set and make out some accurate and objective indices.

Since a large number of constraints that directly or indirectly affect this process it's better to classify universities based on some objectives and its results will certainly be effective to improve the performance system. These objectives are 1- reviewing opportunities and constraints in order to help building a momentum in the university 2- a better comparison of performance with regard to infrastructure, 3- compliance with the requirements of the organizational chart; 4- creating an atmosphere of healthy competition and motivation 5- providing the perfect platform for the necessary change and innovation of higher education system in the process input and output conditions; 6- the need to review the type and formulation of local standards that comply with the requirements of the cultural and scientific status of the country.

METHODS

The aim of this study was to carry out a systematic review of the literature to appraise the data existing about the position of classification of universities in Iran and international arena in international documentation and management policies that are applied for the reform and improvement of higher education system by outstanding universities in the world. This systematic review study has executed in the following four steps (4).

Step 1: Search for relevant studies:

As the type of classification described, is still at a relatively pioneer stage in Iran and there was no documents about this key word in the native and international sites, thus the review includes all data that screened for the purpose of this review, the concept of classification includes the following definitions and concepts: "classified", "level" and "categorized".

We searched in all fields relevant to provide evidence of the classification strategies that have been implemented by universities, focusing on classification strategies in developing higher education international arena, a systematic review of the literature that was limited to publications between 2000-2011that appeared to target. Databases searched included: Iran Medex, Magiran, SID, IranDoc and medical education journals, Science direct, Google scholar, Eric, PubMed using validated search strategies identifying the following keywords: "(Classification) AND (Medical university) OR (National policies to universities excellence) OR (Initiatives) OR (Successful experience pursuing) OR (World class university) OR (Vision) OR (Mission) OR (Category) OR (Level of classified) "

Title and abstracts were downloaded and duplicated. All potentially relevant papers were retrieved. Data was extracted and coded by reviewers with using a standard process checked. The purpose was to ensure that, as far as possible, all literature in the field was identified, this research yielded 3954 articles, out of these which 122 met the inclusion criteria described.

Step 2: The quality evaluation of the study: we categorized and analyzed the review findings (122 full texts) according to the study design employed, the study quality (low to high relevant studies) ,and the method reported in the primary studies. We presented the results of studies in Figure 1.
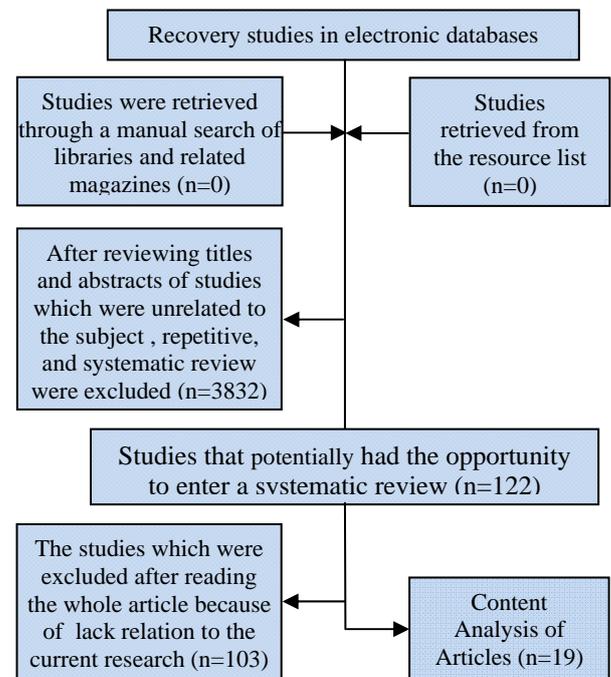
Figure 1. Flowchart of selection for systematic review

Step 3: The findings from this review were summarized and critically reviewed to identify the key concepts (Table 1).

	Table 1. The main findings	
Row	**As a study / country / year**	**The main findings**
1	International strategies of universities in England/2007	England aims to compete successfully in the international arena, having focused more on research in universities and in the strategic plans of entering the country since 1980 and strengthened it in 1992. Active marketing of the world, especially China and India, focusing on opportunities such as English language, and international agencies
2	Convergence and Diversity: The Role and Influence of University Rankings/2006	Investment, creating incentives for research and its conduct, ranking with an emphasis on community needs
3	University Ranking Systems: A Critique/2007	Indicators of performance rankings for all educational institutions to the difference in mission objectives, Necessary to modify the ranking method, Emphasis on horizontal and indicators of academic rankings.
4	Higher aspirations: An agenda for reforming European universities/2008	Performance of the top research universities in America, Improving the performance of universities in Europe; increasing funding and university autonomy, constructive competition between students and professors.
5	Emerging regulatory regionalism in university governance: a comparative study of China and Taiwan/2010	Efforts to promote global ranking of universities in global marketing, moving from the traditional models of internationalization and higher education reforms in China and Taiwan.
6	.Rankings and the Global "Battle for Talent"/ United States/2009	Rankings in recent years caused widespread restructuring of higher education, removing barriers to academic education and research. Economic engine of higher education.
7	Seeking Excellence in the Move to a Mass System Institutional Responses of Key Chinese Comprehensive Universities/ China/2010	Excellent position in the global rankings, with an emphasis on business development, international cooperation and exchange of students in academic environments, integration of universities, meeting the Chinese model of development.
8	Globalization, national development and university rankings /Australia/ 2008	National ranking based on the necessity of classifying universities according to the mission and a separate group, using the rating unit for all causes of decline to lower levels
9	China's Higher Education Excellence in the Context of Globalization: The World-Class University/China/2006	Privatization, clarification of University assessment, student exchange, and close relationship with university, industry reform and upgrading the main causes of Europe. Landscape of higher education inevitably moving towards globalization.
10	A Great Leap Forward to Excellence in Research at Seoul National University/ South Korea/2006	Strengthening infrastructure in secondary education, Quality of higher education, independent university, the role of the private sector and focus on improving educational policies of the World Top Ranked University in Seoul.
11	The application of balanced scorecard in the performance of evaluation of higher education Taiwan/2006	Achieving the goals of higher education management system capable of promoting technology and staff awareness and standard of performance appraisal system.
12	Academic quality, league tables, and public policy: A cross-national analysis of university ranking systems/ 2005	Emphasis on the ratio of output and input processes, role of government policy in promoting university rankings
13	University ranking using research, educational and environmental indicators /2010	In an effort to evaluate the scientific and objective ranking of universities, providing valuable information about the university and a better understanding of their development
14	2006 Academic Ranking of World Universities by Broad Subject Fields	Efforts to improve the ranking system for higher education. Performance of measurement research of university rankings.
15	Academic Ranking of World Universities And the Performance of Asia Pacific Universities /china /2007	Managers do not need to rely on rankings and use various types of comprehensive evaluation and comprehensive analysis
16	Institutional Mission vs. Policy Constraint? Unlocking Potential', Higher Education Management and Policy/ U.S/2005	Emphasis through the establishment of research institute, supporting active researchers, communication training and research, grant funding and research, use of operational indicators for internal and external evaluation processes. Use of research results.
17	New Carnegie Classification Places WSU in Highest Research Category 2006	Carnegie classification of institutions in the United States in 1970; divided into four categories of universities and colleges and each of the four geographic regions, anticipating future needs and planning for higher education
18	Japanese flagship universities at a crossroads/ Japanese /2007	Strengthening the relationships in Asia, Europe, and America, giving scholarships to attract outstanding students and providing enhanced facilities for students. The world's top research universities in an effort to join the union
19	University in China.2004-2012	Project 211: enhanced 100 key institution in China, reforming their management systems, 985 Project: To establish a world-class university degree

Table 2. Integrating the main findings of selected studies	
Key Concepts	**Results**
Effective presence in international arena	The majority of countries compete successfully in the international scientific arena as their main goal. Active marketing in other countries, focusing on opportunities, reform of educational policies, attracting outstanding students, giving scholarship, facilities for students, the world's top research universities to join the union, communication skills in an educational setting, the main provisions of international human resource development prospects of countries in this field.
Promoting higher education system	Landscape of higher education is moving toward globalization. The powerful management system, technology promotion, University privatization and transparency, making relations with both industry and academia, integration of universities as the main factor correction.
Acquisition of the superior position in world rankings	Popularity ranking has restructured higher education. Developing a global partnership, exchanging students integration of academic disciplines, establishment of international agencies, emphasis on academic outputs and processes, strengthening infrastructure in secondary education, professors and students to promote cooperation, independence of universities, focus on policy reform of important policies of the countries of the world.
Focus on research	The strategy of : giving priority to their education as the key to the success of the educational system, investment, motivation to do research, research funding, research establishment, application of research results, operational indicators used to assess internal and external factors are the most important actions in this regard.
Classification of educational institutions	211 new projects, the Chinese government's efforts aimed at strengthening about 100 institutions of higher education as a key national priority for the 21st century is of great importance in improving higher education and increasing the capacity of China's international competitiveness. Change of Carnegie's classification to another classification in order to promote higher education institutions in the United States.

Step 4: Meta-synthesis of findings: In this step, we conveyed the results of the corresponding articles and concepts that reported a comprehensive classification of articles (Table 2).

RESULTS

This research yielded 3954 articles. Of these, 122 met our inclusion criteria described at the first stage of a systematic review. 94 articles identified through Google scholar and 28 papers were identified through Eric educational site. Although a large number of papers resulted from our search, only a small proportion of these were of sufficient academic rigout to be included in our review. Even with extensive and lengthy search, the searches resulted in 19 papers being selected for more detailed scrutiny out of 122 citations.

Despite extensive search, deep and detailed analysis, no paper is closely related to this viewpoint "Classification". Only there were two evidences in United States and China universities.

China's University Rankings 2000" was developed with three objectives in mind, in this ranking, the universities in China divided in to two groups: Key Universities (universities participating in the Chinese Government's "211 Education Plan" and "Key Universities" accredited by Education Department of China) and Other Universities (universities not participating in the "211 Education Plan" and "Key Universities"). Universities in these two groups were ranked separately. These rankings were based on 17 indicators in seven categories. In 2001 the indices were adjusted and universities also classified in two categories, as revised all universities were finally in place a floor (5- 6).

The Carnegie universities Classification developed by the Carnegie Foundation (the Carnegie Commission on Higher Education) in 1970. The Basic Classification was published for use in 1973 and subsequently updated every few years. The first classification divided universities and colleges in four categories: national universities, national colleges and universities and regional colleges are divided. Then, each based on geographical regions; North, South, West and Middle West are divided (7-9).

Competition among universities and the evaluation of university performance is a basic priority; it is not a new issue. Each university operated and the priorities of the higher education systems of each country contributed in the development of different approaches for university performance evaluation.

Ranking systems, as appear from literature, are inadequate approaches to evaluate the performance of a university. A

ranking system should emphasize on all educational processes (teaching, research, external engagement) and infrastructure and categorize indicators to inputs, processes, outputs and outcomes. However, if certain changes are incorporated, they can be a useful tool for students and other stakeholders.

Generally, the results of this systematic review can be stated in the form of five following key factors that are the necessary foundations for success.

1. Extending the University's Global Presence

A global university must adopt a perspective that goes well beyond the physical and intellectual boundaries and expand language and cultural literacy, and provide creative opportunities for faculties and students to work and learn together in international settings. Furthermore collaborations with universities from around the world will increase the academic programs and research initiatives. A study in this regard mentioning globalization was a key component to the success of the British Universities counts after 1992 (11-10).

Also globalization is one of the hottest issues for the East Asian universities; Japanese, Chinese and South Korean universities follow different internationalization strategies. It is the mission of the University of Tokyo as the highest in Asia and 21st in the world in 2011 according to Academic Ranking of World Universities to present to the world a new model for a university that re-establishes faith in knowledge. With this mission the university has founded the office for international academic strategy in order to cooperate with the global community and follow these strategies; promotion of an internationality linked education system through promoting educational and study program for sending students overseas and attempts will be made to attract students from around the world, establishment and operation of overseas research bases, formation of an international consortium to develop closer ties to share in research and education at global standards, contribution to maintaining the system of sharing research with overseas organizations on the basis of mutual agreement (12-15).

2. Higher education system promotion

Higher education as an economic engine must adopt a global perspective through creative opportunities for faculties and students to work and learn together in international settings.

In addition, some studies mentioned that higher education promotion enhanced by these strategies: skilled and capable management, using advance technology. Staff training, estimating future needs of higher education system and planning to supply them, close relationship between industry and universities, increasing investment of industrial sectors on universities, integration of universities.

Whereas the superiority is a multidimensional concept in higher education, the world-class universities are recognized in part for their superior outputs such as; highly qualified faculty, excellence in research, quality teaching and excellent faculty members for research published in top scientific journal research, and producing well-qualified graduates.

Goals are to be achieved are as follows; the private universities, clarification in university evaluation, increasing the number of post graduate students and international exchange agreements to promote sending the university students abroad and creating virtual university (9, 13-19).

3. Striving to acquire superior position in the world ranking

The most papers have focused on achieving the superior position in the global ranking as an important issue that must be considered. For instance, in order to transform Seoul National University into a world-class university, the reform of higher education focused on factors such as: improving the educational environment, improving the university curriculum, changes in university atmospheres and improving the research activities, emphasizing on international cooperation for establishing or upgrading research and education capabilities of institutions, creating international collaboration with high quality overseas educational institutions overseas through co-operation in a number of programs, adopting incentive systems for professors who have quality journal publications (15-16, 19-23).

Some studies pointed that the evaluation of universities according to the outcomes should be considered on the world rankings and believed that the assessment of higher education learning outcomes on an international scale by creating measures would be valid for all cultures and languages and it should be considered in the ranking process as well as emphasis on inputs (24- 25).

Also many studies were related to describing the various ranking methodologies and their indexes that address them are beyond the scope of this topic.

4. Research- oriented university (research center)

Another important issue in these studies was to focus on research, comprehensive research-oriented universities. Many universities have a research priority in their education strategy. They pursue frontier knowledge, by promoting excellence in research and consider the establishment of institutes for advanced research to conduct research and educational activities. Some article reviews showed the importance of research more than education (10- 11, 24-26).

5. Classification of universities and institutions of higher education

The Chinese government's aim to promote the higher education system has run various projects; 211 and 985. Project 211 is a project which aims to strengthen approximately 100 key universities and colleges for the 21st century, to improve the quality of education, research, management, and institutional efficiency. University leaders who have made significant contributions to the university and which focused on the improvement of university management and evaluation system.

The goals of Project 985 also include the expectation that will develop universities into a "world-class" university. This plan aims to develop the top 10 universities in the country in to two stages: in the first stage there are nine universities and the second step there are 40 universities that participated in this project (5).

The Carnegie Classification of Institutions of Higher Education is in US News group ranking groups American colleges and universities according to their mission as defined by factors such as the highest level of degrees

conferred by discipline. Fifteen different levels of quality of inputs, process and outputs, and seven variables including: academic reputation, maintenance, faculty, student selectivity, financial resources, added value and contribution rates. Although the Carnegie categories developed for using a multi-measure research index to classify doctorate-granting institutions but it's also used for some application programs in the United States (7- 9).

DISCUSSION

The study aims to investigate the position of classification in international documents. Iran has launched a new classification system for the universities which is solely used in Iran and less can be seen in international arena. As in other countries the ranking category is used for this purpose. The evaluation and measuring performance of universities in the international arena should be considered as an important activity. There are so many criteria for universities rankings, most of them focused on research performance, and are not relevant to the educational performance and quality of learning and curriculum; these factors are not considered as important criteria in the university world rankings. Although, this method has been seen in a few ranking methods in the US and China concerning their universities missions, some countries have recognized a process for university classifications but there are not any clarified criteria for them which could be due to a distinct, exceptional, and challenging opportunity in a number of top universities with an international mission.

Regarding the importance of presence in international arena, some studies pointed to active marketing, focusing on opportunities, reforming educational policies, attracting the talented students, and university autonomy as the strategies which have to be adopted.

In the Health Comprehensive Plan, the presence in international arena is considered as a general aspect for achieving the health comprehensive goals. To achieve this important aim we need to do some activities such as standardization, promotion indicators of quality the same as global level, international interactions, improving the scientific authority and getting to the top of university ranking (10-11, 27).

Regarding the higher education promotion, capable and competent management system, using advanced and upgrading technology, privatization in higher education, clarification in evaluation of universities, closer relationship between industrial and universities are the main strategies for improving and promoting higher education system. Many of the above mentioned strategies are the findings of this systematic review; these strategies are based on the Health Comprehensive Plan as well (1, 9, 13- 19).

The mission of the most outstanding world universities is based on the importance of the development of the level of knowledge through improvement of student learning process, enhancement of education and research activities, benefitting their own country, origin, and the whole world of education and research activities results. Since the competitive environment among the top universities focuses on attracting the talented and capable students and excellent research, the ranking system in these countries is

stronger (30-28).

Acquisition of the superior position in the world ranking is a very important perspective for most countries. Some outstanding countries have followed many policies for gaining the superior position in the world ranking. These policies are; development of the international cooperation, exchanging faculty members and students, integration of university courses and improving the curriculum, founding the international offices and agencies, emphasis on outputs and university processes, reinforcing the infrastructure in middle education, and focusing on policy improvement. Our country's scientific comprehensive plan has been focusing on these policies as well (1, 15-16, 19- 23).

The reform of higher education focused on factors such as: improving the educational environment, improving the university curriculum, changes in university atmospheres and improving the research activities, emphasizing on international cooperation for establishing or upgrading research and education capabilities of institutions, creating international collaboration with high quality overseas educational institutions through co-operation in a number of programs, adopting incentive systems for professors who have quality journal publications (15-16, 19- 23).

The results of this study showed, that the process of the conventional form of the classification in Iran has not been seen in other countries and has been replaced with the kind of ranking in other world universities in the national, original, or international levels. Usually, ranking is associated with classification and categorization such as; the Chinese university rankings based on the 211 and 985 Carnegie classification to another classification in order to promote higher education institutions in the United States. The methodologies used in these classifications are consistent with our country's scientific comprehensive plan (1, 5-6, 7-9).

Also in the country's scientific comprehensive plan, the universities are divided into three categories: international, national, and regional and has emphasized on the specific missions based on countries basic needs and requirements.

As important tasks for the original universities, we can point to education and promotion of the capacities of human resources for growing and extending their talents and capacities. The national university is also obliged to provide the special educational needs and fundamental researches in the country. In addition, the transnational or international universities are required to do some activities that involve basic theories and hypothesis testing, the scientific leading flows and, provide patterns and synergy of modern methods and also international trading (1).

Research strategy has been followed and considered as a priority in many universities' education strategies as a key to success. They believed that the universities' senior managers should be institutionalized their research strategies and so established a steadiness between the teachers' activities in research and teaching. Investment, incentives for research, research funding, research establishment, the application of research results, the use of operational indicators for internal and external assessment is the most important activities in this regard.

The faculty members and researchers have a key role

amongst the important factors that could be enhanced and develop the scientific research and institutions' significant achievements in long term.

Therefore, the universities that attempt to attract, maintain and provide the necessary facilities for themselves can make themselves in line with the research institutions in developed countries and communicate with the other worldwide scientific communities (10-11, 24-26).

The most appropriate method in ranking of the higher education system is categorizing the educational departments in universities.

Besides, a perfectly ranking system should have a deep understanding of the characteristics of higher education and cultural requirements of the country (22,24).

After the Islamic Revolution in Iran, the higher education system has been experienced the main changes with Islamic orientation. Values and democracy have been associated with specialization. Several universities affiliated to the Ministry of Health and other ministries and organizations were founded. Nowadays, there are fifteen (50) universities and the Schools of Medical Sciences in many cities in Iran (3, 31).

Regarding the development of universities and higher education institutions, in order to compare the performance of infrastructure, reforming and improvement of the university organizations based on operational indicators, necessary motivation to improve the performance of universities they are classified in to levels two (2) and three (3). This classification system needs to be revised.

Besides, the integration of medical education with other health services in the Ministry of Health in Iran aims to achieve self-sufficiency in the field of medical education and fulfill the needs of the community health services, and train doctors and medical staff in a holistic and community-oriented education system (31).

Certainly, if we use the criteria and indices that are employed for university rankings and classification in other countries, we have to ignore the health services criteria. Thus, in order to achieve the goals of Vision 1404 better and more effectively, we need to define the well-matched criteria. These criteria must involve the health and treatment service indicators and also have to be in accordance with local conditions and cultural characteristics of the country. Indeed, we have to design a comprehensive ranking method that covers all the missions entrusted related to classification in universities of medical sciences. This method not only includes the criteria of teaching and research but also keeps with the indicators in the health and treatment services.

According to the results of this systematic review, for achieving the academic success, education, research, and improving higher education and acquisition the superior position in world ranking, particular attention should be paid to fundamental issues of development such as; planning, strengthening and expanding the academic and technologic international cooperation and adopting the efficient operational methods for progression in them. It should be considered ,as a pre-condition, to develop strategies and to compile flexible institutional policies for succeeding in the optimization of Higher Education,

development of local criteria and adapting them to suit local condition in community culture for fundamental classification.

Development of regional and international cooperation in higher education according to scientific capacities, and the comparative priority of the country can be leading to equitably development and improvement in scope of creativeness.

Thus, creating the research networks and providing necessary facilities for researchers, particular attention to the occurring changes in management of education, research and technology in worldwide universities and institutions, efforts should be made to strengthen international scientific relations in specialized fields of science and technology and international cooperation with the countries that have progressed towards science and technology according to international criteria and indicators.

Moreover, special support should be given to the promotion and development of studies and researches that realize and analyze rapid changes in science and technology; these are the success factors in the development (1,32).

The noteworthy limitations of this study are lack of documentation regarding the university classification and research in this area. Also, in this review the papers and documents have been in English. Certainly, there is a substantial literature in non-English language countries; because of some language limitations such data was beyond the scope of the current study. It's hoped, that this review causes the conduction of further studies in this regards, and leads to more attention to this considerable topic in Iran.

CONCLUSIONS

It seems that the effectiveness of classification hasn't critically investigated the improvement of university management so far. There isn't a compatible relationship about the requirement and the methodology of classification between the scholars and also there aren't comprehensive and clarified criteria in this regard. On the other hand, leaving out it will lead to some problems in the process. Therefore, the first step is the explanation of the reasons and purpose of the university classifications for determining the objective criteria in the management of this process.

So, we must begin with precise plans, functional indices, clear, and consistent with the country's indigenous culture. According to the scientific comprehensive map of the country, the universities of medical sciences have been clustered based on three approaches; the use of provincial capacities, national division of labor, and geographical considerations. International documentation showed that most of universities compete on some cases such as size, scope and depth of research, extension of education, and levels of training. We should look at more indicators regarding the performance of the system in the new universities classification, integrated the native and national priorities with international priorities. Due to the fact, it seems that the available classification isn't based on the objective criteria. This required, changing identity in the scientific map of the country, and so universities should be converted to mission –oriented. In this regard we need to

apply the obvious and functional criteria for having a more precise classification. The classification of our view point, should clarify the management of universities processes, breadth and scope of work, the university's effectiveness in the country, and the role of university in achieving the country's long- term goals. If we accept this, we will have a sound and more operational classification.

Indeed, this systematic review is considered the international evidence and documentations and so educational sites regarding the classification. Therefore if we want to have a comprehensive and efficient understanding of the universities classification, we should consider the other dimensions of this topic such as scholars' opinions for further studies.

REFERENCES

1. The Supreme Council of Cultural Revolution, Vice President for Science and Technology, Ministry of Science, Research and Technology, Ministry of Health and Medical Education, Ministry of Education, Parliament. Documental comprehensive map of the country 2011 Feb: 1-74.

2. Hasani M. A model for promoting innovation in the educational system in Iran. Journal of educational innovations 2007; 5(15): 151-76. (Persian).

3. University types. 2010. Available from: http://behdasht.gov.ir/index.aspx.

4. Hagh Doost AA. Systematic review meta- analysis concepts and applications. Tehran: Teimourzadeh; 2008: 16-32.

5. University in China. 2004-2012. China Education Center Ltd. Available from: http://www.chinaeducenter.com/en/cedu/ceduproject211.AND http://www.ed.ac.uk.

6. China University Internationalization Ranking. 2010. Available from: http://www.arwu.org/Country2010Main.jsp?param=China.

7. McCormick AC, Mei CZ. Rethinking and reframing the Carengie classification. Chance Sep-Oct 2005. Available from: http://www.carnegiefoundation.org/classifications/

8. Driscoll A. Carengie 'S community engagement classification: Intentions and insights. Feb 2008. Available at: http://www.carnegiefoundation.org/classifications/

9. Tinney J, Strenge R. New Carnegie classification places WSU in highest research category 2006. Available from: http://www.carnegiefoundation.org/classifications/

10. Toyoshima M. International strategies of universities in England. London Review of Education. 2007;5(3):265-80.

11. Aghion P, Dewatripont M, Hoxby C, Mas-Colell A, Sapir A. Higher aspirations: An agenda for reforming European universities. Bruegel 2008; 5: 1-70.

12. Yonezawa A. Japanese flagship universities at a crossroads. Higher Education. 2007;54(4):483-99.

13. Fang G, LI J. Seeking excellence in the move to a mass system institutional responses of key Chinese comprehensive universities. Educ China 2010; 5(4): 477-506.

14. Mok KH. Emerging regulatory regionalism in university governance: A comparative study of China and Taiwan. Globalisation societies and education 2010; 8(1): 87-103.

15. Kim KS. A Great leap forward to excellence in research at Seoul National University, 1994-2006. Asia Pacific education review 2007; 8(1): 1-11.

16. Hazelkorn E. Rankings and the global "Battle for Talent". Dublin Institute of Technology 2009: 1-12.

17. Ho C. China's higher education excellence in the context of globalization: the world-class university. ProQuest; 2006:18-222.

18. Hsing Chen S. The application of balanced scorecard in the performance evaluation of higher education. The TQM magazine 2006; 18(2): 190-205.

19. Cheng Y, Cai liu N. Academic ranking of world universities by broad subject fields 2006. Higher education in Europe 2007; 32(1): 37-45.

20. Cheng Y, Cai liu N. Academic ranking of world universities and the performance of Asia Pacific universities. Shanghai Jiao Tong University (SJTU), China 2009 April.

21. Lukman R, Krajnc D, Glavic P. University ranking using research, educational and environmental indicators. J Clean Prod 2010; 18: 619-28.

22. Marginson S. Globalization, national development and university rankings. Centre for the Study of Higher Education University of Melbourne, Australia. Proceeding of the International Symposium VNU Headquarters; 2008 Nov; Hanoi, Vietnam: 2-17.

23. Kalvemark T. University ranking systems: A critique. Proceeding of the Fifth International Conference, Irish Universities Quality Board; 2007 Oct; Irish: 1-12.

24. Dill DD, editor. Convergence and diversity: The role and influence of university rankings. Keynote address presented at the consortium of higher education researchers. University of Kassel, Germany 2006 Sep: 1-22.

25. Dill DD, Soo M. Academic quality, league tables, and public policy: A cross-national analysis of university ranking systems. Higher Education. 2005;49(4):495-533.

26. Hazelkorn E. 'Institutional Mission vs. Policy constraint? unlocking potential'. Higher education management and policy, OECD 2005; 17(2): 43-60.

27. A map of health science. Ministry of Health and Medical Education Supreme council of cultural revolution. Special Committee on Health and Life Sciences. 2010.

28. Strategy document-advancing the Manchester 2015 agenda. Available from: http://www.manchester.ac.uk/aboutus/facts/vision/2015document/

29. The University strategy and supporting strategies. Cardiff University Strategy-2009/10 to 2013/14. Available from: http://www.cardiff.ac.uk/plann/strategicplan/index.html.

30. The University's mission and core values: Notice. 2001. Available from: http://www.cam.ac.uk/univ/mission.html Accessed 2011.

31. Abbasi Moghaddam MA, Razavi SM, Nouraei SM. The attitude of university authorities to integrate the results of medical education with health care field since 2003. Journal of Tehran University of Medical Sciences 2005; 62(1): 80-8. [Persian].

32. Afshari R, Beiraghi Toosi A, Azizi H. Process of Scholarship of Teaching Has Been Successful in Mashad University of Medial Sciences.Future of Medical Education Journal 2012; 2(1): 27-31.