Extracting Interdisciplinary Criteria for Higher Education Curricula from the Documents and Ratifications

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Abstract

The study has been organized to evaluate the focus on interdisciplinary criteria in the higher education curriculum in the Supreme Council of the Cultural Revolution of Iran via qualitative and documentary analysis with inferential and conceptual analysis. As a result, in Supplementary ratification No. 679 of Supreme Council of Cultural Revolution, attention has been paid to curriculum components that are clearly visible in this movement. In conclusion, interdisciplinary and intradisciplinary criteria have been used in the current and distinct sense of term, such as interdisciplinary tendencies in humanities, and intradisciplinary humanities with other sciences.

Keywords: Higher Education, Ratifications, Supreme Council.
Extracción de criterios interdisciplinarios para el plan de estudios de educación superior de los documentos y ratificaciones

Resumen

El estudio se ha organizado para evaluar el enfoque en los criterios interdisciplinarios en el plan de estudios de educación superior en el Consejo Supremo de la Revolución Cultural de Irán a través del análisis cualitativo y documental con análisis inferencial y conceptual. Como resultado, en la ratificación complementaria No. 679 del Consejo Supremo de la Revolución Cultural, se ha prestado atención a los componentes del currículo que son claramente visibles en este movimiento. En conclusión, los criterios interdisciplinarios e intradisciplinarios se han utilizado en el sentido actual y distinto del término, como las tendencias interdisciplinarias en humanidades y las humanidades intradisciplinarias con otras ciencias.

Palabras clave: Educación Superior, Ratificaciones, Consejo Supremo.

1. INTRODUCTION

Higher education system plays an important role in the training of professional, yet prospective, human resources for today's and tomorrow's society. Given that science is rapidly expanding in various educational and research fields, the higher education system plays a significant role in reconciling with this acceleration, so that, while emphasizing the development and promotion of science in the core of its goals, the expansion of various needs of society along with the training of skilled people, with interdisciplinary and creative mental
power. On the other hand, interdisciplinary criteria can be interconnected, while removing the gap between different sciences, so that each one can share their knowledge and achievements with others. So, given the extent and complexity of various sciences, from one side; And responding to the diverse needs of society on the other; the need for the benefit of interdisciplines is prioritized by the country's higher education system. In this regard, one of the experts in the field believes that from the policies of higher education, the development of interdisciplines, which sought the community's need for new specialties. An interdisciplinary orientation in the future academic study is not an option, but coercion and a requirement. In other words, filling human knowledge gaps or responding to the needs of human societies more efficiently and more satisfactorily does not leave a way for scientists and researchers (Mehrmohammadi, 2009). Therefore, the entry of interdisciplines into various fields of society, such as the scientific and social fields, and the consideration of needs of the human day and the various branches of emerging knowledge of human societies in them, is more important.

The history of interdisciplinary criteria in the scientific world as a new branch of human knowledge has been around for hundreds of years. Some scholars believe that the term “interdisciplinary” refers back to the 1920s, which was raised in the field of social science research and the General education movement. According to Klein:

Some originated this term in the 1940s and in the Manhattan Project, the origins of the atomic bomb were rooted in many of
its origins in the events of 1960s and 1970s, and the establishment of a flow of educational innovation and experimentation. Nowadays, the interest and tendency to interdisciplinary criteria have grown and, in modern times, it is considered a new knowledge of basic pillars of knowledge and research. Johan Heilbron believes that interdisciplinary extension to educational centers, from the 1960s and writes: This is probably the most obvious sign of the collapse of scientific disciplines (disciplines) as the dominant way of organizing educational centers (2010: 19).

Subsequently, other researchers have taken positive steps to introduce, expand and express interdisciplinary strengths that the teaching and research in the field of interdisciplinary criteria are currently one of the significant components and attributes of changing university systems. In other words, this approach means the need for the interdisciplinary presence in the Higher education system to be the main factors behind its evolution. As the increasing growth in collaborative research, managerial support, financial allocation, and the existence of literature on interdisciplinary scientific activities is the corollary of the above statement. Klein also describes the multidisciplinary implications of reasons for the intensification of interest in it, and writes:

The interdisciplinary, with significant advances in the fields of knowledge production, the solution to immediate social problems, the significant advances in technological innovation, and more integrated training experience; it has the authentic relationship. The faculty members pay attention to its ability to pursue new intellectual questions, work in the new areas of education and research, creating balance in the absence of specialized isolation, to inspire the spirit of innovation, and the methods of active training in curriculum, growth and
developing combined and participatory skills among students, and responding to social issues (2010: 22).

Because the curriculum is the essence of any kind of university education that, in combination with effective teaching methods, it ensures the efficiency and effectiveness of university educational system and is considered a component of higher education and university system (Amery et al., 2015). On the other hand, there are students who need to create appropriate opportunities for learning and teaching about a wide range of scientific disciplines, in accordance with needs of the day, studying the problems of the real world, establishing a link between their field of study and other scientific disciplines. It uses creativity in order to integrate and advance the knowledge of diverse scientific disciplines and to acquire high-level thinking skills such as critical thinking, composition, and engagement for group activity. It seems that having the interdisciplinary knowledge and attempting to establish and apply it can meet the needs and problems created in various aspects of the scientific community. It should be noted that any training is done in the social context. Planners and educators should pay attention to the social context in which they work. If their goal is to empower their audience, they must try to understand the existing social structure and determine which components hinder the ability to influence their lives in the audience (Salehi et al., 2017).

Researchers, while studying and analyzing different higher educational courses, consider it to be effective in changing the
university system. Therefore, Klein while pointing to the research of Carol Geary Schneider and Robert Schoenberg and also Minnich, writes:

The new Academy is a broad-based movement that has grown around the edges and has grown increasingly within the academies of the older academy. This academy includes new methods of research and teaching and learning practices, reorganization of scientific disciplines and a new communicative pluralism. He sees interdisciplinary as a fundamental change in higher educational centers, and the factor facilitating the creation of an academic culture based on interdisciplinary education and research calls for the identification of points of convergence, distribution and proper use of available resources, capacity building and the creation of minimum requirements, the architecture of university campus, and the adoption of best practices, the creation of a reference database, and the deep organization of a rich set of strategies for the purpose of programmatic strength and sustainability (2010: 20).

Today, the importance of interdisciplinary criteria in higher education is felt more and more because this educational system, which consists of several institutions and educational centers, seeks to achieve goals such as education, research, developing creative and critical thinking, lifelong learning and problem-solving methods, developing knowledge boundaries and solving various educational, social, cultural, economic and political issues. And as the most striking feature of human capital investment, it plays a key role in educating and providing the necessary and efficient human resources to the various sectors of society (Mehrmohammadi, 2008). It is worth noting that over thirty years of producing and implementing interdisciplinary
curriculum in Iran (for example, Imam Sadeq University that founded in 1983).

In addition to the higher educational system, institutions and research institutes also pay attention to studying and benefiting from the interdisciplinary and the results of interdisciplinary research. Because of imperative of comprehension in solving problems and understanding the complexity and multidimensionality of problems facing human societies, it is thought that if scholars of a scientific discipline engage in the study of important problems on the basis of its own insight and without the help of specialists, other scientific disciplines; they take action without consideration and scrutiny in all aspects and dimensions of problem (Etemadizadah & et al, 2011). Now, according to the presented issues, the question comes to mind; in Iran, the Supreme Council of Cultural Revolution, which is responsible for passing laws to align with the changes of society and university day, what has been done in this regard? Has the interdisciplinary debate been taken into account? In the second task of the council, which is the preparation and compilation of a comprehensive scientific map of the country; has the provisions of a document such as the development of interdisciplinary and their research been fulfilled? If the answer is yes, what is the result?

2. METHODOLOGY

According to the nature of the subject, the objectives, the questions of present research, and the sources, this study is qualitative
research and descriptive-analytic research. The descriptive research methodology has described the conditions and importance of interdisciplinary in higher education, as well as the Supreme Council of Cultural Revolution. Considering that the purpose of analytical research is to understand and improve the set of conceptual concepts or conceptual structures according to which the interpretive experiences, the intentions are clearly expressed, the constructed problems and the researches are conducted (Short, 2008); we explain the concepts associated with interdisciplines, we present a detailed and informative picture of the nature of the concept above. The method of document analysis has been selected of various types of content analysis methods, which means the documents of the Supreme Council of Cultural Revolution. In this paper, analyze the status of interdisciplinary in the Supreme Council of Cultural Revolution after describing the central components of paper. In this documentary analysis, we seek to answer this research question. Given the increasing emphasis and use of interdisciplinary, especially in higher education in Iran, are these interdisciplines reflected in the Supreme Council of Cultural Revolution? So, how to focus on the interdisciplinary in higher education in the Supreme Council of Cultural Revolution from 1979 to 2018, with the keywords of higher education and its curriculum components, interdisciplines and interdisciplinary. Then a report is presented and in the final step, the results have been analyzed and interpreted in order to answer the research question. The council’s resolutions were also revised at the time when it was headquartered in the Cultural Revolution (between
1979 when the Cultural Revolution Headquarters was reviewed before the 1984 Supreme Council of Cultural Revolution).

3. DISCUSSION

In the analysis of the Supreme Council of Cultural Revolutions and their interpretation to explore interdisciplinary topics, the first trail of term interdisciplinary, goes back the Cultural Revolutionary Staff, dates back to 1979. On 28/10/1979, a bill titled the bill on the integration of some higher education institutions and higher education institutions was approved by the members of headquarters. During the bill, the members of headquarters were allowed to seek the founding of a Big University. Because they did not see the ground for continuing the current conditions of universities and Higher education institutes. One of the reasons for the formation of a big university can be pointed out by factors such as cultural-scientific disorders, the irregular growth of high schools and colleges and universities without academic and educational content, which in the two decades of 40’s and 50’s was in the country's Higher educational system. In this resolution, while listing the benefits of this university, in No. 5, on interdisciplinary services, states: For many higher educational institutions, it is currently not possible to hire full-time students in the sub disciplines and optional courses. As a result, many of them resort to lawyers and sometimes amateurs to meet their needs, which often degrade the quality of education (Ibragimova et al, 2018).
With the focus of various faculties at a university, interdisciplinary Services reached the desired level between colleges. At that time, considering the turbulent state of the academic system, interdisciplinary look at university affairs was one of the possible solutions to reducing problems. This type of view emerges in the form of interdisciplinary services, and services also include all activities that increase the quality of the university’s education. First, they have applied this insight to the university's faculty, including the professors of colleges of a university, in order to benefit from the expertise and knowledge of each faculty member at different faculties, the relationship between them is also established. As a result of scientific interactions, there is a significant scientific advancement in the new dimensions of science, especially the interdisciplinary sciences. The other benefits of ratifying this bill are to avoid giving away the teaching of elective courses to novice and unfamiliar with teaching techniques on the one hand and the importance of choosing optional units on the other hand. It is a matter of great thought that the importance of optional units is to the point where the selection of professors with scientific nobility on the subject has been emphasized by members of the headquarters of Cultural Revolution. Ultimately, all of the cases of decision making with the interdisciplinary insight led to increasing the quality of training. The economic savings through the use of interdisciplinary vision were other benefits of this bill. Because, given the fact that the Islamic Revolution of Iran had just come to a victory, as it should and maybe, significant amounts were not considered for various government sectors, including the higher educational system. In terms of financial and budget problems, by
choosing the interdisciplinary look in the academic system and interacting with colleges of a university, especially in terms of expert human resources, savings were also made in financial problems.

In the further analysis of documents in the Supreme Council of Cultural Revolution, these ratifications were studied from 1984 to 2018 with interdisciplines, interdisciplinary, and higher education keywords. Problems related to the purpose of article, which had a closer relationship with the quality dimensions of higher education and research changes, were selected and analyzed. Selected ratifications include:

- Ratification No. 143 sessions dated 09/03/1987; The Great Cultural Revolution; as the style of development of higher education.

- Ratification No. 165 sessions dated 03/10/1988, the great Cultural Revolution, titled the Country Research Policy.

- Ratification No. 223 sessions dated 18/09/1990, the Great Cultural Revolution; as a confirmation of the policy of the Ministry of Culture and Education in relation to the quality enhancement of existing universities and institutes of higher education and the adoption of the policy of the expansion of universities and higher education institutions of the country.

- Ratification No. 430 sessions dated 03/10/1998; The Great Cultural Revolution; as revised by the Supreme Council of the Cultural Revolution on Higher Education.

- Ratification No. 530 sessions dated 18/09/2003; The Great Cultural Revolution; as well as the Implementation Strategies for Promotion of Science and Technology of the Country.

- Ratification No. 550 sessions dated 18/05/2004; The Great Cultural Revolutionary School, titled Higher Education Assessment Indicators.

- Ratification No. 679 sessions dated 27/10/2010; The Great Cultural Revolution, titled Resolution of the document of the comprehensive scientific plan of the country (Secretariat of the Supreme Council of the Cultural Revolution).

After studying and analyzing the documents of aforementioned resolutions, the problems raised and questioned by this study, in addition to the 1979 ratification, were issued in 2010 and in ratification No. 679, entitled the comprehensive scientific plan of the country will be analyzed in the following: The third chapter of this document is titled The priorities of the country’s science and technology, and in the
second part of priorities, as ensuring the growth and prosperity of some priorities requires attention and guidance. At the master level of country and in some others, development will be obtained with the support of middle management and decentralized allocation of resources. Priorities are arranged in three levels, A, B and C respectively. This category looks at how resources are allocated, both financial and human, and the attention of managers and officials, which at level B interdisciplinary studies has been referred to:

The priorities are as follows: In the humanities and Islamic sciences: Islamic ethics and its interdisciplinary studies - Theology - Islamic mysticism - Philosophy - Critical westernism - Entrepreneurship and aptitude facilities - History of Islam and Iran and the Islamic revolution - Women and family studies based on Islamic foundations - History of science (with the approach of Islamic and Iranian history) - Political geography; In the Art: Critical Studies of Modern Art - Comparative studies of fields of art - traditional arts and crafts - calligraphy - performing arts - interdisciplinary arts and branches of science with an emphasis on Islamic insights. And in the priorities of C; in the health sector: interdisciplinary science between basic sciences and clinical sciences - dealing with various types of addiction - food safety - food security.

From the positive points of above-mentioned ratification, it is noteworthy that for the development of science and technology, a separate section has been devoted to the comprehensive scientific plan of the country and this indicates its high position in advancing the
long-term goals of national interests, especially in the country's educational system. Meanwhile, the role of interdisciplinary is undeniable. In the second part of priorities of country's science and technology, and in the priorities of B, it is named three times from the interdisciplinary with the terms studies, discussions and sciences; in other words, the title interdisciplinary studies In the Supreme Council of Cultural Revolution in 2010, it has been used in the field of humanities and Islamic teachings. Interdisciplinary in this section is the same as the general mean of interdisciplinary. The attention to this problem, the interdisciplinary studies, has given rise to the development of science in general, and humanities and Islam are in particular. For example, attention to the common core of two branches of science, for example, theology and mysticism, which is theology or knowledge, which, in addition to contributing to other riches, leads to the creation of new areas of human knowledge. At the same time, in the art sector, Interdisciplines have been referred to as Interdisciplinary topics. This view reflects the constructive interaction between art and the field of Islamic sciences. Finally, the term science of interdisciplinary has been used in the priorities of science and technology for the country's self-sufficiency in the medical and health sector, which has been used here in the true sense of interdisciplinary. It is worth noting that the purpose and aim of application of all three terms of science, studies, and interdisciplinary topics are in the same sense as the intersubjective discipline.

Also in chapter four: National strategies and measures for the development of science and technology in the country; Part two, titled:
National Strategies and Measures in Accordance with the Strategies for the Development of Science and Technology in the Country, and more specifically in paragraph 6 of National Measures, Strategy 7, it is stated that; Supporting the development of interdisciplinary science and technology will direct education, research, technology and innovation, and address the problems and meet the real needs and requirements of the country with respect to the alignment of land and innovation at the borders of knowledge for the realization of scientific authority (Strategy 7). In this strategy, the interdisciplinary has been remembered as a strategy for the development of science and technology in the country. The application of interdisciplinary in this strategy is for the development of science and technology, and it has to be evaluated in the form of a research project whether such developments have taken place. If positive, which science?

In paragraph 4 of National Strategies, the Strategic Plan No. 10, the development of interdisciplinary trends within humanities and interdisciplinary humanities with other sciences, based on the Islamic attitude with the approach to meet the scientific and social needs; It has been said that this expansion is intended to modify and improve quantitatively and qualitatively in humanities and art based on Islamic teachings. As well as Establishing interdisciplinary trends between the branches of Islamic sciences and humanities and other sciences; as well as strengthening and establishing interdisciplinary areas between art and other disciplines based on Islamic teachings, in particular Philosophy, jurisprudence and art has been spoken in paragraphs 12 and 28 of National Action Plan No. 10; In particular, in paragraph 4,
which also applies to interdisciplinary tendencies in humanities, And the interdisciplinary humanities tendencies with other sciences. Here they differ between interdisciplinary and interdisciplinary, and each one has been used in the present and separate meaning of each other. Paragraph 6 of National Action Plan of Strategic Plan 13 states: The networking of educational and research institutions in the field of basic sciences in order to enhance coordination and cooperation and strengthen interdisciplinary research through the sharing of facilities, the division of research work and the attraction of scientific elites, leads to development and deepening and strengthening education and research in the field of basic science. In this strategy, it seems that the goal of communicating and enhancing research between education and research is limited to basic science. Interdisciplinary research here is also synonymous with interdisciplinary.

Content analysis was also carried out in the articles discussed in this article. In this regard, the first sections of study were selected in terms of research purpose and, in other words, the units analyzed, including curriculum, interdisciplinary curriculum, interdisciplinary curriculum in higher educational, 5 curriculum elements including goal, content, teaching method, evaluation, and time category in the curriculum along with the category of higher education. In the next step, their content analysis was done, which included counting the incidence of each category in the selected laws. The result of the above analysis shows that in any of approved drafts, there is no direct reference to the selected categories. But also, has been specifically used with other words in the general education system and curriculum.
Another result is that in Supplementary ratification No. 679 of Supreme Council of Cultural Revolution, entitled National Comprehensive Science Schedule Document, attention has been paid to curriculum components that are clearly visible in this movement. This finding points to the importance of curriculum and its elements in recent years.

4. CONCLUSION

According to the increasing use of interdisciplinary curriculum, especially in the higher educational system of Iran, the present paper sought to investigate what interdisciplines have reflected in the Supreme Council of the Cultural Revolution? The analysis of ratification of the Supreme Council of the Cultural Revolutions was done to answer this question. The results of this documentary analysis indicate that the discussion of interdisciplines has been raised since the early revolution, and its history dates back to the ratification of headquarters of the Cultural Revolution, but for some reason, until 2010, and ratification of the comprehensive scientific plan of the country, it was no longer included in documents and continued to move slowly. In light of the above, as well as the content analysis, it became clear that the Supreme Council of the Cultural Revolution was the first to use the term interdisciplinary and its extension. In the interval between 1978 and 2010, we see a drop in performance, but with the creation of favorable conditions and the growth of this
concept in the social space of community, from 2010 onwards, this term has been widely re-worded in the documents.

From the implications of attention to the development of interdisciplinary, it can be referred to the establishment of Imam Sadeq University in 1983, which illustrates the implementation of 1979 Cultural Revolutionary Authority's mandate for the use of interdisciplinary services between colleges of university. Of course, as expected, with the emphasis on the use of interdisciplinary topics in scientific circles in the quantitative and qualitative growth of sciences, its footprint in the council's ratifications on the Ministry of Science, Research and Technology were not so tangible and only the word has been mentioned twice in 1999 and 2010. According to the analysis of documents in this article, it can be concluded that in Iran, the history of studies and activities of interdisciplinary, according to the 1999 Cultural Revolutionary Committee and the establishment of Imam Sadeq University as the first university of interdisciplinary in Iran, more than thirty years; But its practical activities, such as the publication of journals and quarterly reports, and the founding of research institutes, goes back the less than twenty years old. This has been evidence of entry of studies since the Islamic Revolution victory, to master policies and official and national documents, and has been formally accounted to them. It also became apparent that in the first indication of use of term interdisciplinary in the 1979 Cultural Revolution Regulations, the validity of allegations concerning the use of the term for the first time was questioned in 1978 and 1979 and
analyzed with documents and evidence; this goes back the early Islamic Revolution.

Also, the results indicate that the first interdisciplinary application, approved by the Cultural Revolutionary Staff, was referred to the interdisciplinary with the term interdisciplinary Services and the perceptions of members of Cultural Revolutionary Staff have been used from the concept of interdisciplinary as it is today and in the general sense. They have looked at this in terms of services that the interdisciplinary can provide them. It is also noteworthy that, despite the use of various terms with the term interdisciplinary, the main purpose of all is to establish a relationship between two or more disciplines that extends the domain of knowledge, the discovery of new ideas in various fields of science, and the growth and development of science and technology, this will result in the production of community-based products, the training of specialists, the creation of an appropriate labor market for human resources, and the creation of global-level interactions between educational centers and human societies. In this way, the Interdisciplinary criterion has been located next to the words and combinations of topics, sciences and technologies, trends, and domains, and the term intradisciplinary, along with the words of studies and researches located which has been used in both Synonymic with interdisciplinary. But in parts, these two terms have been used in the current and distinct sense of the term, such as interdisciplinary tendencies in humanities, and intradisciplinary humanities with other sciences. Here, there is a difference between
interdisciplinary and intradisciplinary, and each one has been separated from each other.

REFERENCES


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