

**Missions of Future Curricula for Realizing the Visions of Iranian Higher Education on the horizon, 2025**Hamid ABDI<sup>1</sup>, Seyed Ebrahim Mirshah JA'FARI<sup>2</sup>, Mohammad Reza NILI<sup>3</sup>, Saeid RAJAEIPOUR<sup>4</sup>**ARTICLE INFO****Article History**

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**ABSTRACT**

**Problem Statement:** To Iranian policy makers, higher education plays a key role in realizing the country's development visions. This has led to the mapping of visions of higher education in upstream resources. In this regard, curriculum is an essential tool for higher education to fulfil its functions optimally. However, despite its significance, the clarification of the missions of future curricula is almost entirely neglected in Iran as the subject of research. **Purpose of Study:** This study aimed to clarify the missions of future curricula of Iranian higher education based on

the visions of the country's higher education on the horizon of 2025 (Iran's 20-Year Vision Plan). **Research Methods:** The present research was developmental in terms of purpose, and was conducted through a combined exploratory method in the academic year 2014-15. The qualitative method was used to analyse the qualitative content of the upstream resources (e.g., artefacts and policy documents) as well as interviews with 14 experts from higher education. In addition, the quantitative method was used to collect data from 338 faculty members and PhD students. In this research, the data obtained from qualitative content analysis of the interviews was used to build the questionnaire. **Findings:** Findings indicated that the emphasis on research and technological functions, alongside that of education and service, pursues the goal of translating the knowledge acquired in the country into product. The results also revealed that, the approach to future curricula is society-oriented, and the accountability to the society should be at the centre of strategies of curriculum development. **Implications for Research and Practice:** The present study emphasized making Iranian universities more mission-oriented and aligned with the realization of higher education perspectives as well as the realization of sustainable development through following the established missions for the curriculum.

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## Introduction

Today, governments are aware of the crucial and vital role of higher education in advancing the national and international goals and pay special attention to the quality of the programs of higher education. As they consider higher education as the most important system for realizing a desired future, they formulate visions for this system. These visions are regarded as indicators to ensure the effectiveness and efficiency of higher education (Antonakis & Hooijberg, 2007). Without a clear vision, higher education institutions lose their concentration, which in turn makes it difficult to move towards the path of improvement (Waas, Verbruggen & Wright, 2010; Wright, 2010).

In order to understand vision, a clear definition would be useful. A vision can be defined as a picture of what an organization wants to become and what it finally wants to achieve (Hitt, Ireland & Hoskisson, 2011). It is not only an estimation of the future but also decision-making for the future. It indicates an appropriate and desirable future to which an organization can direct its studies and activities (Yoon, 2006). To realize its visions, an organization also needs to decide on the required instruments.

An essential instrument for a higher education organization to realize its vision is curriculum (Ratcliff, 1996). It is one of the main sub-systems of higher education, and it naturally undergoes changes when universities change their main topics of interest (Khaghanizadeh & Fathi Vajargah, 2008). Curriculum as the heart of a higher education system follows the policies taken by universities and helps to realize them. As a tool in the hands of higher education leaders, it is used to plan either to meet future changes or to change the future. The adopted purpose affects the approach taken to curriculum planning (Darden, 2009). Thus, a curriculum planner in higher education needs to be familiar with curriculum planning research to recognize the future possibilities depicted through visions of higher education as well as to consider them in the process of curriculum planning and development.

Before dealing with implementation procedures, a curriculum planner should decide on the components of the curriculum, such as, objectives, content, learning activities, teacher's role, materials and resources, grouping, location, time and assessment. Akker (2010) also adds "rationale" to the components of a curriculum is important. The rationale makes all the other components of the curriculum connect to each other around a major orientation point. It answers the question of why each component should be included in the curriculum. From this viewpoint, the rationale serves as the major mission of the curriculum (Thijs & Akker, 2009), acting as a component that gives orientation to the process of decision-making in curriculum planning and development.

The clarification of the missions of future curricula of higher education toward realizing the ideals and visions of higher education is a fundamental issue, especially for those involved in the field of higher education in Iran. On the one hand, because of the social demand for higher education from the younger generation in Iran, higher education is supposed to play a vital role in realizing the country's development visions. Thus, the planning of effective curricula should be based on the visions of higher education. On the other hand, pursuant to the regulations of the Iranian

Ministry of Science, Research and Technology (MoSRaT, 1999), some higher education institutions have the authority to review or modify the curricula approved by the ministry. This might cause inconsistencies among the higher education institutions, so clarification of the missions could prevent these inconsistencies by providing the higher education institutions with a general principle and framework for curriculum planning.

However, despite its significance, the clarification of the missions of future curricula is almost entirely neglected in Iran as a subject of research. There are just a few studies that have examined the general aspect of future higher education (Mehdi, 2013; Ferasatkhah, 2013), and there is no research that deals directly with the future study of curricula based on the visions of higher education. Therefore, the present research intends to answer the following questions:

1. What are the Iranian visions of higher education on the horizon of 2025?
2. What are the missions (e.g., rationales) of future curricula in Iranian higher education based on the orientations of upstream resources?
3. How do faculty members and PhD students prioritize the missions (e.g., rationales) of future curricula for higher education?

## Method

### *Research Design*

The present study was developmental in terms of purpose (Desai and Potter, 2006: 3), and was conducted through a combined exploratory method. Through mixed method research, qualitative and quantitative tools are used and in its exploratory type, qualitative data was used to build a quantitative scale (Creswell & Plano Clark, 2007). In this regard, in the first stage, by analysing the qualitative content of the upstream resources, higher education perspectives were extracted. In the next stage, by interviewing experts from higher education, the mission of the future higher education curriculum based on the perspectives was clarified. In the third step, a quantitative (e.g., descriptive-survey research) method was used to collect data from faculty members and Ph.D. students concerning the mission of future higher education curriculum. In this research, the data obtained from the qualitative content analysis of the interviews was used to build the questionnaire.

### *Population and Sampling Method*

The first statistical population for this present research included the upstream resources that had been oriented toward the visions of higher education. From this population, seven upstream resources were selected using the purposive sampling technique and then analysed qualitatively. These were Iran's 20-Year Vision Plan (2005), Science and Technology Development Document (2009), Comprehensive Scientific Map (2011), General Policies of the Government for Development of Science and Technology (2004), Islamic University Document (2013), General Policies for Science and Technology (2014), and the Sixth Plan of Development (2015). These

resources were chosen because they could provide a more accurate answer to the first research question (e.g., clarification of the visions of higher education).

The second statistical population of the research consisted of Iranian experts in higher education and curriculum development. From this population, 14 experts were purposefully selected because they had valuable information about the subject of the research, and often had a position in management, policy-making of science and technology, higher education planning and curriculum development within the field of higher education. They participated in a semi-structured interview regarding the orientation of future curricula in order to realize the visions of Iranian higher education, and a theoretical saturation was obtained.

The third statistical population of the research was full-time faculty members and PhD students during the 2015-16 academic years at the University of Isfahan, which consisted of 2699 people (e.g., 2042 PhD students and 657 faculty members). From this population, 338 people were determined as the sufficient sample size according to the Morgan table. Then using stratified random sampling and according to the proportion of the faculty members and PhD students in the population, a total of 256 PhD students and 82 faculty members were selected to participate in the research and answer the research questionnaire.

### *Instrumentation*

A content analysis form and an interview form were used to collect the qualitative data. The content analysis form of upstream resources contained the components of vision as well as the related aspects to examine them, and the interview form included questions about the missions of future curricula based on the visions of higher education. The content and face validity of the forms were evaluated by using six experts' comments. To this end, the primary drafts of the forms were modified and corrected by the experts, and then they confirmed the final forms. The reliability of the forms was also evaluated via the inter-coder reliability method. To this end, the summary of the materials and the categories obtained from analysis of the upstream resources and semi-structured interviews were examined and confirmed by five people who were familiar with qualitative research methods. The extracted codes and categories, in the next phase, were corrected according to the comments of six higher education experts who had also evaluated the validity of the forms. The corrected version was again reviewed and confirmed by the experts.

To collect the quantitative data, an 8-item researcher made questionnaire on the missions of future curricula of Iranian higher education was compiled based on the findings of the qualitative content analysis from the interviews. The questionnaire asked the respondents to rate each item in terms of its priority for future curricula based on the visions of Iranian higher education. The validity of the questionnaire was evaluated and confirmed by six higher education experts who had also evaluated the validity of the forms. The final Cronbach's alpha coefficient for the questionnaire was equal to 0.77.

### *Data Collection*

In the first qualitative part of the research, the content of the upstream resources was analysed in order to extract the codes and categories. In the second qualitative part of the research, 14 experts of higher education and curriculum planning were asked to answer the questions on the orientations of future curricula based on the visions of Iranian higher education on the horizon of 2025.

The quantitative data was collected through the questionnaires, and because there was a possibility of not returning or not completing the questionnaires, the questionnaires were distributed among the greater number of respondents than the sample size. By setting the unreturned and uncompleted questionnaires aside, 338 fully completed questionnaires (e.g., equal to the sample size) were obtained.

### *Data Analysis*

The method of qualitative content analysis was used to analyse the qualitative data and to extract the categories. For analysing the interviews, the texts of the interviews were first explored in order to find the meaningful sentences. Then the major categories of the missions of future curricula of higher education were determined. Finally, descriptive statistics (e.g., mean and standard deviation) and inferential statistics (e.g., Friedman test for ranking) were used to analyse the quantitative data.

## **Results**

In this section, the findings related to the three research questions are presented and discussed under three main headings. The findings are illustrated by using tables and incorporating selected excerpts from the interviews.

### *The Visions of Iranian Higher Education on the Horizon of 2025*

To identify the visions of Iranian higher education, the content of the upstream resources that had orientations towards the visions of higher education were subjected to analysis. To this end, the texts of the documents and policies were explored accurately, and 69 codes were extracted in the first level. After analysing the content of the codes and combining the duplicated codes of a resource with one another, 52 codes and 43 codes were obtained in the second and third levels, respectively. Accordingly, the major categories of the visions (e.g., education, research and service) were obtained based on three functions of higher education. In each category, more important and general issues were specified separately and considered as the subcategories of the visions of higher education. Table 1 indicates the results of the qualitative content analysis from the upstream resources with respect to the visions of higher education.

**Table 1**

*Qualitative Content Analysis of The Upstream Resources With Respect to The Visions of Iranian Higher Education on The Horizon of 2025*

Category	Subcategory	Code
Education	1. To develop lifelong learning, 2. To achieve educational equity, 3. To develop and promote Human Sciences, 4. To consider cultural values, 5. To benefit from efficient professors.	1. Lifelong learning opportunities (1), 2. Access to information and knowledge for all people (1), 3. To develop the higher education system qualitatively and quantitatively (7), 4. To develop and promote Human Sciences (2, 5 & 7), 5. To clarify and develop the Islamic world culture (3), 6. To benefit from wise, religious, justice-wanting and open-minded professors educated in the school of Islam and the Islamic Revolution of Iran (3 & 7), 7. Responsible professors in political, social and economic arenas (3), 8. Professors able to educate religious and committed experts and top scientists (3), 9. Professors advocating the Islamic Revolution of Iran (3 & 7), 10. Professors active in research (3), 11. Professors producing beneficial knowledge (3), 12. Sciences based on religious and divine teachings and the principles of the Islamic Revolution of Iran (2 & 3), 13. To recruit talented and motivated faculty members (5 & 7), 14. Professors capable of producing educational content based on Islam (3), 15. To promote the professors' status and to improve their quality of life (7), 16. To consider Persian language and literature (7), 17. To educate world's top scientists (4).
Research	1. To consider religious and cultural values in the production and development of technology, 2. To lead the frontiers of knowledge and technology in the world, 3. To benefit from efficient human resources in the arena of research and technology, 4. To benefit from efficient scientific and technological institutions and networks, 5. To develop the software movement, 6. To emphasize developmental and applied research in higher education.	1. Capable of producing and developing science, technology and innovation (4, 6, 5 & 7), 2. To lead the frontiers of science and technology with scientific authority in the world (4), 3. Efficient scientific and technological institutions and networks (1), 4. The first status of science and technology in the Middle East (1 & 7), 5. Universities and research institutes leading in the production of knowledge (3), 6. To expand applied knowledge and sciences based on divine attitude (3), 7. To lead the software movement (3), 8. To educate and recruit creative researchers capable of resolving scientific and international challenges (3), 9. To interact with the seminary (3 & 7), 10. To strengthen the links between the higher education system and applied and developmental research (7), 11. To lead the new technologies (1 & 6).

Table 1 Continue

Category	Subcategory	Code
Service	1. To benefit from rich social and cultural capitals, 2. To improve the quality of people's lives, 3. To create positive changes in people's attitudes to life.	1. To benefit from competent humans educated in the school of Islam and the Islamic Revolution of Iran (3 & 4), 2. Graduates generating wealth and national sovereignty (1), 3. A society benefiting from rich social and cultural capitals (1), 4. Rational, open-minded and creative graduates (3), 5. Graduates with high scientific and national self-confidence (3), 6. Graduates capable of providing Iran with academic independence and self-sufficiency (3), 7. Graduates benefiting from the Iranian-Islamic civilization-making identity (3, 6 & 10), 8. Graduates committed to the ideals of the Islamic Revolution and the Islamic Republic of Iran (3), 9. A model society of the Iranian-Islamic lifestyle (3), 10. A society relying on the contribution of human resources and social capital to the national production (6), 11. A society relying on its own ethical principles and Islamic values (6), 12. To promote religious democracy (6), 13. To expand social justice (6), 14. To develop Iran (6 & 7), 15. To benefit from social security (6).

1. Science and Technology Development Document 2009, 2. The Sixth Plan of Development 2015, 3. Islamic University Document 2013, 4. Comprehensive Scientific Map 2011, 5. General Policies for Science and Technology 2014, 6. Iran's 20-Year Vision Plan 2005, 7. General Policies of the Government for Development of Science and Technology 2004.

As can be seen in Table 1, the categories, subcategories and codes are presented separately in each column. The categories in fact refer to three arms of higher education for realizing its objectives. The subcategories represent the more important and general issues of the codes or a combination of several codes. The codes reflect the statements from the upstream resources. The number in front of each code in parentheses refers to the number of the upstream resources listed beneath the table.

*The Missions (e.g., Rationales) of Future Curricula of Iranian Higher Education*

To clarify the missions of future curricula of Iranian higher education, 14 experts of higher education were interviewed. The texts of the interviews were explored several times to identify the meaningful sentences, and 78 statements (e.g., codes) were extracted. After analysing the contents of the statements, 56 and 39 statements were obtained in the second and third levels, respectively. Accordingly, four major categories were identified as the missions of future curricula. Table 2 indicates these categories and the related statistics.

**Table 2**

*The Most Important Categories of The Missions (Rationales) of Future Curricula of Iranian Higher Education*

Variable	No.	Category	Frequency	Percentage
Missions (Rationales)	1	The social missions	14	100
	2	The economic missions	12	85
	3	The cultural missions	10	71
	4	The environmental missions	9	64

In the following, the viewpoints of the interviewees regarding each of the categories of the missions of future curricula of Iranian higher education will be briefly presented.

#### *The Social Missions*

All the interviewees (e.g.,  $n=14/100$  percent) considered the social missions as the most important missions for the future curricula of Iranian higher education. The higher education system has been involved in major social changes because of the necessities of the present era (e.g., the era of information explosion). To cope with these changes, it has relied on its curricula. In this regard, one of the interviewees said:

*The huge amount of knowledge and information and the rapid changes of science and technology have had an enormous impact on the society. Thus, the higher education system should resort to its curricula in order to manage this amount of information and knowledge, to utilize them efficiently, and to educate the correct way of using the new technologies. One of the missions of future curricula of higher education is to prepare the learners for facing the future challenging and competitive environment. The higher education system, via its curricula, should provide the learners with the kind of education required to cope with the process of globalization and social communication networking.*

The experts believed that future curricula of higher education should create a learning community in order to keep in line with the global developments in the field of science and technology. For instance, one of the interviewees noted:

*Future curricula of higher education should make people familiar with the skills and values of continuous and lifelong learning and institutionalize the culture of such learning. They should provide equal opportunities of learning for all members of the society, enable the equalization of the quality of education at various universities and finally pave the way for social justice.*

From the perspectives of the participants of the research, the other mission of future curricula is to develop social capital. This is important because social capital is latent in the relationships between individuals and requires the participation and cooperation of the members of the society. It is thus regarded as one of the fundamental factors in the formation and growth of development and thus promotion of the quality of people's life. In this line, one of the interviewees stated:

*By educating the general skills such as teamwork and social participation and trust via its curricula, the higher education system can act as a very important institution in creating a sense of collective identity and citizenship as well as a sense of belonging to a shared future, all of which are the manifestations of social capital.*

Also another participant who had many publications in Iranian higher education, suggested:



*One of the missions of future curricula for higher education is to raise the intellectual level of people. Due to the social changes caused by the requirements of the present era, people must have a wide understanding and insight into the social problems in order to analyse them in an appropriate manner.*

All the interviewees considered the above-mentioned missions as top priorities, and from their views, it can be perceived that one of the important missions of future curricula of higher education is to address the emerging social issues as well as the major issues concerning the future of the society.

#### *The Economic Missions*

Twelve interviewees (e.g., 85 percent) addressed the economic missions of future curricula in Iranian higher education. From the viewpoints of the research participants, one of the principal missions of future curricula is to educate and prepare students for job requirements of the future labour market. In this regard, one of the interviewees said:

*To keep pace with the changes of the future labour market, the higher education system should review its courses and curricula in order to promote up-to-date technical and specialized knowledge and skills. In addition to providing education that lead to university degrees, the higher education institutions should offer skill-learning and educational courses needed for specific jobs.*

Other participants of the study believed that people need to gain an understanding that their individual interests should be in line with the economic interests of the society, and this requires the higher education system to provide the appropriate education in this regard via its curricula. To their views, developing a knowledge-based economy could be considered as one of the missions of future curricula toward realizing the visions of higher education. In this respect, one of the participants maintained:

*In order to realize the resistive economy and to emphasize the domestic economy, we should appreciate the process of translating science into product and the utilization of our own knowledge. This is made possible by creating a knowledge-based economy and considering its principles in future curricula of the country's higher education.*

According to the concerns expressed by the participants of the present research, it can be said that one of the missions of future curricula is to synchronize higher education with the economic developments of the society and to improve the economic condition of the society.

#### *The Cultural Missions*

Ten interviewees (e.g., 71 percent) referred to the cultural missions of future curricula of Iranian higher education. Above all, the education offered by the society affects the values, beliefs and behaviours of the people more than anything else does. According to the participants of the research, cultural values confirmed by the society as well as cultural innovations are transferred in the society through education, especially higher education via the curricula. For instance, one of the participants said in this respect:

*The wide range of students at different levels provide higher education with the best opportunity to influence the people's attitudes with respect to values, beliefs and behaviours as well as the cultural and historical continuity of the society which are regarded as the cultural grounds for sustainable development.*

Another participant of the research suggested:

*The roles of the curricula are manifested through their contribution to higher education in fulfilling its tasks with respect to major cultural and value needs of the society. Higher education should be active in institutionalizing and educating expert human resources committed to ethical and Islamic values, and it should contribute to cultural unity and consensus. This is primarily made possible through the existence of efficient curricula throughout higher education.*

One of the major features in the remarks above is the role of the curricula in creating a sense of national identity and moral solidarity and order in the society. Higher education can also contribute to the cultural power of the society in the international arena through the presentation of efficient curricula. In this connection, another participant who had several years of management and executive experience in the field of culture in the Iranian higher education, asserted:

*In order to stay dynamic and to make progress on the global stage, higher education should address cultural interaction with other cultures of different nations. The cultural interaction through the curricula is considered an opportunity for higher education to promote and expand indigenous culture and values in the global arena. In addition to promoting scientific exchanges on the international stage and adapting modern sciences, higher education should not overlook the maintenance the local cultural values.*

With careful consideration of the statements by the experts, it seems that it is vital to synchronize higher education with the changes of cultural forces of the society, and the experts agreed that the curricula has a crucial role in this regard.

#### *The Environmental Missions*

Nine interviewees (e.g., 64 percent) noted the environmental missions of future curricula of Iranian higher education. The education offered through the curricula could change students' attitudes towards the environment and help them to understand its value. In this respect, one of the participants believed:

*Incorporating educations about the environment in future, curricula could be considered an opportunity to shape the students' views toward achieving the goals of sustainable development. Currently, environmental issues are not addressed in the curricula of higher education. However, health and the environment are closely interdependent. In order to improve the health of the society, the materials on ecosystems should be included in future curricula of higher education.*

Another participant who was a member of the group responsible for formulating the Iranian Comprehensive Scientific Map, said in this regard:

*The higher education has a fundamental mission to offer educations related to the preservation of natural resources. This role of higher education is often overlooked. The society expects higher education to provide the appropriate ground for using clean technologies and reducing the environmental pollutants by offering the related educations through its curricula.*

Based on what these two experts expressed, it seems that environmental issues were absent in the current curricula of Iranian higher education. Thus, from the perspectives

of the participants of this study, one of the missions of future curricula is to pay special attention to the environmental issues.

*The prioritization of the Missions (e.g., Rationales) of Future Curricula of Iranian Higher Education*

Based on the qualitative content analysis of the interviews, an 8-item questionnaire was compiled and 338 faculty members and PhD students from the University of Isfahan were asked to rate the eight missions of future curricula in view of their priority for realizing the visions of Iranian higher education. After gathering the data from the questionnaires, the Friedman test was used for ranking the missions. The results of this test are shown in Table 3.

**Table 3**  
 Friedman Test Results for The Ranking of The Missions of Future Curricula of Iranian Higher Education (n=338)

Rank	Missions of Future Curricula	Mean	Standard Deviation	Mean Rank	Chi-square
1 <sup>st</sup>	To develop social capital	4.86	0.37	5.10	186.854* Sig: 0.000
2 <sup>nd</sup>	To realize major cultural and value needs of the society	4.79	0.44	4.83	
3 <sup>rd</sup>	To develop a knowledge-based economy	4.75	0.51	4.74	
4 <sup>th</sup>	To educate the learners for job requirements of the future labour market	4.75	0.47	4.72	
5 <sup>th</sup>	To pay special attention to the environment	4.74	0.47	4.64	
6 <sup>th</sup>	To create equal and continuous learning opportunities for all members of the society	4.58	0.60	4.07	
6 <sup>th</sup>	To emphasize the international scientific and cultural exchanges while maintaining and expanding the local Islamic and cultural values	4.58	0.57	4.07	
7 <sup>th</sup>	To prepare the learners for facing the future technological and challenging environment	4.52	0.59	3.85	

\*p<0.05

As Table 3 indicates, the value of Chi-square (= 186.85) is significant at the level of 0.05 ( $p < 0.05$ ). According to the results, "to develop social capital", "to realize major cultural and value needs of the society", and "to develop a knowledge-based economy" are of the highest priority, and "to prepare the learners for facing the future technological and challenging environment" is of the lowest priority from the viewpoints of the faculty members and PhD students. "To create equal and continuous learning opportunities for all members of the society" and "to emphasize the international scientific and cultural exchanges while maintaining and expanding the local Islamic and cultural values" were jointly prioritized at the 6<sup>th</sup> rank.

### **Discussion, Conclusion and Recommendations**

With regard to the visions of Iranian higher education on the horizon of 2025, the results showed that the upstream resources put special emphasis on the development of science and technology as the vision of higher education. This vision could play an important role in higher education planning. The Iranian society has concerns about holding a proper scientific position in the region and the world as well as contributing to the production of knowledge in the global arena. Thus, the emphasis on research and technological functions, alongside with education and service, pursues the goal of translating the knowledge acquired in the country into product. Indeed, translation of science into product is the focal point of the Iranian society, and many efforts are being made in this respect.

As for the missions of future curricula in Iranian higher education based on the visions of the country's higher education on the horizon of 2025, the results indicated that, from the viewpoints of Iranian higher education experts, the missions can be considered from four perspectives; social, economic, cultural and environmental. In other words, future curricula need to address the social, economic, cultural and environmental aspects of the society. The results also revealed that the experts paid more attention to the social missions of future curricula than in the other missions.

In this regard, it should be noted that Iran is a country that has experienced an Islamic revolution in 1979 and is in the process of strengthening the modern state. Social justice, liberty, focusing on social capital, social cohesion, and in general, the establishment of a civil society are among the fundamental demands of this revolution, which fit into the form of social development. Therefore, attention to the social aspect is a priority and is of high importance in Iranian society, which has been emphasized by higher education professionals in this research as well as reflected in the curriculum of higher education. Since the social aspect was given more importance by experts than other aspects, such as economic, cultural and environmental aspects, it seems to provide the context for the realization of other aspects. For example, the growth of social capital was one of the most important factors in the formation, development and improvement of life quality of individuals as expressed by experts in the present study. Social capital can be seen as the result of trust-based relationships in the society. Without social capital, other capitals do not seem to be used optimally, and the realization of the ideals of 1979 revolution, which is the concern of Iranian community, will not be possible. In general, and on the international scene, social capital can in fact afford all the requirements that are necessary for the development, in particular, the rapid development of society. Therefore, that proper utilization of social capital in the development process will boost the country's political, economic, social and cultural dimensions.

The ranking of the missions of future curricula of Iranian higher education based on the views of the faculty members and PhD students revealed that the first priority was "to develop social capital". The first priority was also considered by Iranian science and technology policy-makers as one of the visions of Iranian higher education on the horizon of 2025, so that higher education can be considered as the most important

indicator of social capital. The development of social capital; however, requires the all-encompassing development of cognition, values and skills, and thus the education of general skills and competencies. In present day Iranian society, while the education of expertise and professional skills has become increasingly prevalent, the education of general skills has been neglected. Hence, the education of general skills and competencies should be emphasized in future curricula of higher education. Moreover, it should be noted that the ranking of the missions does not suggest that the missions with lower ranks are not important. Rather, all the missions are of significance and should be considered by Iranian higher education policy-makers. The ranking only indicates the order of priorities, from the perspectives of the Iranian faculty members and PhD students, based on the conditions and requirements of Iranian higher education and the expectations from the Iranian higher education system.

Given that, in the eyes of the experts, the missions of future curricula of higher education involve a comprehensive consideration of the society in its various aspects, it can be said that the approach to future curricula is society-oriented, and the accountability to the society should be at the centre of strategies of curriculum development. Indeed, the accountability of higher education to the society is regarded as one of the quality indicators of higher education. In the same line, Garraway (2016) argues that one of the attributes of the modern university is increasing the expectation that according to which the curriculum should be more responsible to the society. Also in a research project in Walden University, Yob et al., (2016) attempted to develop a curriculum guide for social change. To this end, they aligned university curriculum with a mission of creating positive social change. The guide provides a strong analysis of when and how to include social change in the curriculum of different levels.

Moreover, considering the links between the social, economic and cultural aspects and the environment, it can be said that the most important mission of future curricula within Iranian higher education is, "to realize sustainable development". In other words, future curricula could facilitate the realization of the visions envisaged for Iranian higher education on the horizon of 2025 through the realization of sustainable development. Sustainable development and sustainability is a plan for thinking about the future and addresses the qualitative development with respect to the environment and social justice (Barlett & Chase, 2004). In this present research, sustainable development refers to the all-embracing national development in social, economic, cultural and environmental aspects. Undoubtedly, sustainable development is an issue of concern among higher education institutions around the world. Many universities worldwide have made a commitment to sustainable development (Lozano et al., 2013), and as a result, have been recognized as vital organizations for the growth of sustainable development (Waas, Verbruggen & Wright, 2010; Shephard, 2010). According to Krizek et al., (2012), during the last two decades, sustainable development has been a central issue of higher education globally. Glasser, Calder and Fadeeva (2005) believe that as higher education institutions are complex systems, integrating sustainable development is essential across all of their activities and missions.

Regarding the missions of higher education curriculum in Iran, an important point to be taken into consideration by policymakers and practitioners of higher education is a special focus on the environment, which has to be considered in the curriculum along with social, economic and cultural missions. In Iran's current higher education curriculum, despite the high importance of the environment in sustainable development, no proper attention has been paid to it. However, from the viewpoint of the experts in this study, according to the current needs of Iranian society, more importance has been devoted to other missions, including the social one, but the situation of biological disasters and its future crisis is a serious issue not only for Iran, but also for the international community. Today, in advanced higher education systems in the world, emphasis on the environment is prioritized in higher education curricula. For example, in universities and colleges in the United States, there is a high commitment to the environment and its inclusion in the curriculum for sustainable development. However, the comparison between the higher education systems of Iranian society with other societies is not correct in terms of the social, cultural and economic conditions in each society, but paying attention to international policies is essential for internationalization of higher education and curriculum as well as keeping pace with the developments of the world. In fact, today in the global arena, the effects of higher education on the environment provide key points in the formulation of policies and higher education activities in line with the principles of sustainable development (Ragazzi & Ghidini, 2017).

As the halfway point of the 20-year perspective (e.g., 2005 to 2025) elapses, although the impact of upstream resources on the curriculum of higher education has always been low, it should be acknowledged that this impact has appeared well in some areas. The most important examples which are mentioned in upstream resources of higher education and its policies are; paying attention to Islamic and national values in the curriculum, the orientation of curriculum towards developmental and technological research (e.g., converting science to product), the expansion of higher education and the organization of these towards applied research, production and enrichment of educational environments with technological equipment, using software and hardware in curriculum, teaching citizenship rights, and promoting people's insight and awareness towards issues in the present situation of the society and the international situation. Another major influence of upstream resources on Iran's higher education curriculum during the last decade was the popularization of educational opportunities. The popularization of educational opportunities is one of the major political goals that, in most countries of the world, the ruling powers accept it at least in the principles. The development of awareness and insight of the people is a means of realizing social justice that can be achieved through higher education. This is possible, as the experts in the present study have argued, through the creation of learning community and accessibility to all. The realization of social justice through equal opportunities for access to higher education is a key element in achieving the ideals of the Iran horizons of 2025 and is one of the basic concerns of Iranian society and their priority for sustainable development. Iran's higher education system has taken strong steps to provide appropriate ground for positive impact of upstream resources on higher education curricula by adopting measures such as:

*Authorizing the establishment of new disciplines and training courses based on the orientations of upstream resources and realization of sustainable development of the country; decentralization and further empowerment of universities in the formulation of their curriculum in other parts of the country, taking advantage of all national experts' views to develop a general framework for higher education curriculum and accommodation of curriculum with the latest scientific developments in disciplines.*

The findings of this research have several implications for Iranian higher education policy-making. Firstly, the Iranian universities should be appropriately directed toward realizing the visions of higher education by following the specified missions of curricula. Secondly, research and educational universities should be specified in the Iranian higher education system, and the missions of curricula as well as research areas of each research university should be clearly specified. Finally, the Iranian higher education system with its various university systems needs fundamental reform. Various university systems, including State, Islamic Azad, Payam-e Noor, Applied Science and Technology, and Vocational should be organized based on the specific missions of curricula in order to avoid the confusion of missions.

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