

Leading Higher Education in Iran during COVID- 19 Pandemic: Reporting the Policies and Progresses

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Abstract

Background: After the COVID-19 pandemic and the consequent restrictions assigned by the National Committee on Combating Coronavirus (NCCC), the Ministry of Science, Research, and Technology (MSRT) set up committees to trace and analyze the outcomes of the pandemic.

Objectives: This paper aimed to explain the policies, programs, and activities executed by MSRT and analyze the points of strength and weakness.

Methods: In this report, the MSRT experience during the first wave of the COVID-19 pandemic in the Iran higher education (HE) system is briefly reported by referring to pieces of evidence documented by MSRT and analyzing strengths and, predicting the outcomes toward the future. The evidence was analyzed descriptively.

Results: The policies, plans, and actions were based on three key policies including participation, adaptation, and tolerance.

Conclusion: Iranian HE system has changed in many aspects during the recent months due to the COVID-19 pandemic. MSRT instantly reorganized its activities to coordinate its decisions with NCCC.

Keywords: Higher Education, Coronavirus Pandemic, Iran.

Background

Higher education (HE) in Iran is governed by the Ministry of Science, Research and Technology (MSRT) and Ministry of Health and Medical Education (MHME). MSRT covers around 85% of the total enrolled students at non-state and state-dependent universities, in all disciplines excluding medical studies. (1) After the coronavirus pandemic and the consequent restrictions assigned by the National Committee on Combating Coronavirus (NCCC) for all state ministries and organizations, MSRT set up committees to trace and analyze the outcomes of the pandemic outbreak signified by NCCC and reliable global sources such as World Health Organization (WHO). More than 2000 HE institutes are active in different parts of Iran. The quarantine condition raised limitations and serious concerns over the next step policies of the HE system. The MSRT required pertinent policies to direct the universities in their decision makings about their contingencies. The pressing conditions of vague information and unpredicted factors affected an effective and operational decision-making process. Hence, MSRT built its decision-making

process on the wide participation of the universities and HE institutes, where all the beneficiary parties were encouraged to be engaged in the process and this wide participation could be led to more accurate decisions.

The other key MSRT policy was to shift to distance learning substituting the in-person classes and in particular emphasizing the e-learning options. However, there were meaningful differences regarding the capabilities and experiences of different distance learning methodologies within the HE institutes under MSRT. The final and main option for distance learning was e-learning for the HE system. The main concern was that only a handful of universities and HE institutes were previously engaged in presenting modules and courses based on the e-learning techniques which dated back to 2003. These were among the well-rooted universities which were highly equipped with required software and hardware to support the e-learning substitutes. These universities immediately shifted to the e-learning process with minor educational regulatory modifications. Other universities and HE institutes needed support to shift their status towards the e-learning paradigm.

To facilitate a fast and reliable transition from the traditional learning systems to the new e-learning methodologies required a review of the regulations and mandates of the HE institutes. This led to reviewing the decision-making process in the MSRT and raised the second major policy shift of a decentralized and adaptable decision-making process. In this framework, MSRT recognized the institute-driven characteristics and moved towards decentralizing the decisions. By the adaptable decision policy, the institutes were able to alter decisions and certain regulations to handle the many unpredicted individual consequences of the pandemic in different parts of the country.

The third and last policy under the restrictions of coronavirus pandemic was toleration and consideration. It was revealed to MSRT that the pandemic has effected many students and their families in multiple ways, affecting daily actions, and everyday activities of thousands across the nation. This implied that the institutes should show more flexibly into various students' requests for various exemptions. This covered a wide range of possibilities such as students in the deprived sector of the society that could not easily access the internet or students that declared they were not satisfied by the newly adopted e-learning modules and prefer to apply for omitting one or more existing modules or opted for omitting the whole semester. The policy could respond to the needs and requests of students unions and different student sectors in the face of the coronavirus pandemic crisis.

These three policies could reduce the impact of coronavirus pandemic as a calamity on the national HE system and lead to the plans and activities to assist in preserving the HE system on a safe and assured operational path.

Emerging crisis and the initial activities

The coronavirus pandemic might have derived the national HE system towards canceling the semester and gradually halting all academic events and activities across the nation. To prevent this, upon receiving the news from the international and initial nation impacts of the coronavirus pandemic crisis, MSRT planned to take an active role in handling the crisis as early as just 24 hours after NCCC first coronavirus pandemic notifications and regulated social restrictions as quarantine at February 24, 2020. The key policies and actions adopted by MSRT are as follows:

1. Rearranging regulations. MSRT formally sets academic rules in general and delivers them to the universities and HE institutes where they are customized and adapted to the particular needs and requirements of the institutes. Due to the coronavirus pandemic crisis, the regulations were rearranged under the adaptability policy to make it applicable for the fluent continuation of the semester. Rearranging covers a wide range of rules from the minimum allowed study units to tuition fee reductions and e-learning regulatory facilities.

2. Reorganizing managerial essentials. Committee of Electronic HE (CEHE), was reorganized to accomplish assigned missions to study and assess the technical challenges of e-learning in nation-wide universities and

HE institutes; directing universities and HE institutes towards activating electronically teaching frameworks; providing counsel to universities and HE institutes for re-arranging the curricula based on e-learning contingencies; presenting technical workshops and short courses for academic and non-academic staff in universities and HE institutes to prepare them to engage in e-education programs; data gathering and monitoring the e-education activities of the universities and HE institutes and sending progress reports for MSRT, and finally providing policy and decision making support and advise to MSRT in the dynamic and fast-changing environment following the coronavirus pandemic. Moreover, CEHE supervised the operations to keep the expected ratio of the coverage rate of students under the e-learning program. CEHE supported the universities and HE institutes permanently solving their technical problems and finding the best way to manage the program effectively.

3. Continuing education amid the crisis. Concerning the negative impact of halting the universities and HE institutes activities, MSRT tried to actively handle the emerging crisis by calling the national proficiencies of related expertise and experiences. All universities and HE institutes which already had powerful e-learning programs and infrastructures shared their knowledge and abilities with other small or newly established universities and HE institutes. At least twenty universities were called in and planned to assist others which applied for technical support.

4. Coordinating with authorities. To keep and enhance coordination, MSRT made the decisions with absolute harmony to the NCCC and MHME, as the focal managerial units of the Covid-19 crisis. Rationally, MSRT insisted on the objectives to prevent increasing tension among students and their families.

5. Publicizing decisions. With a deep understanding of the anxiety, stress, and impatience following the coronavirus crisis in the society and among the students, MSRT directed all the new notifications and information flow from a single validated official source.

6. Promotion of public information on e-learning. A majority of universities and HE institutes attendees and audiences had no sufficient and background knowledge about electronic and distance learning. This was a hardly-known area in higher education. It is believed that the academic staff is the first respondents while most of them are not qualified for e-learning. Before the coronavirus pandemic, a few Iranian universities and HE institutes run on-line courses where some of them implemented the courses entirely based on the e-learning methods mainly in postgraduate programs. Given that at least until the COVID-19 vaccine is found, much of the training will continue electronically, it is necessary that Iranian universities and HE institutes need to be familiar with e-learning. (2)

7. Facing the challenges. The main challenges faced by the HE system in pursuing the e-learning programs are the lack of knowledge and experience in the majority of universities and HE institutes; resistance to change, and

circulating dissatisfaction among students and employees. To manage these challenges, MSRT produced and distributed informative documents in the different forms of pamphlets and brochures on e-learning features and requirements, focusing on teaching in the virtual environment. Also, a specialized webpage on different aspects of e-learning news, courses, workshops and seminars, and other related issues were designed and activated on the MSRT Website.

The achievements

MSRT monitored the results of the policies implemented in the universities and HE institutes to evaluate their performance confronting coronavirus pandemic crisis. The initial reports were notable because of the excellent coverage of students under the e-learning program. The following table shows the data up to May 1, 2020.

Table 1. Number and students' coverage ratio of e-learning in various universities and HE institutes in Iran (February-April 2020)

The Universities and HE institutes	Number of students	Number of certain e-classrooms	The number of students under e-learning	The percentage of covered students
State universities	542500	52422	454130	83.7
"Payam Noor"	430000	4000	400000	93
Technical & Vocational	136000	12600	90000	66.1
Decentralized universities				
Applied Science and Technology	250000	21000	125000	50
Farhangian	85000	100	85000	100
Al-Mostafa Society	44000	6980	44000	100
Non-profit universities	148000	27400	110000	74.4
Shahed university	5500	1300	3500	63.7
Islamic Azad University	1056000	97458	950000	89.9
Sum	2680000	223260	2372300	86.2

The other distance learning activities of universities and HE institutes not reported in the above table include learning material distribution as hardcopy packages for students who lived in areas with no internet access; off-line primitive digital courses offered to students. MSRT considered these as achievements to preserve the education quality when simultaneously keep the education ongoing.

Adaptability and sustainability of the MSRT crisis policies

Converting the coronavirus pandemic threat to an opportunity for HE promotion is the main achievement of the MSRT. This promotion includes the break from the traditional classroom-based on teaching to the new e-learning programs and regulations that would be costly and time - consuming under normal conditions. By this approach, the coronavirus crisis inspired MSRT for being sustainable on the initiative plans and achievements, especially on the e-learning methodologies. During the period of quarantine, the capacity of Iran HE for adaptability was assessed considerably. The short-time results showed the potential of Iranian HE for adaptability when confronted with forced and inevitable changes. MSRT could shift the teaching-learning process to a feasible process during the COVID-19 pandemic. Despite the inherently centralized system, MSRT showed the power of its flexibility regarding rules and modifying regulations. Moreover, MSRT introduced a new face of experience and knowledge sharing among universities and HE institutes.

Results

Iranian HE system has changed in many aspects during the past 3 months due to the coronavirus pandemic.

MSRT instantly reorganized its activities to coordinate its decisions with NCCC. The outcomes could be summarized as follow:

1. Sustaining teaching-learning process by e-learning;
2. Adjusting different HE sub-systems to changeable conditions;
3. Preparing HE system toward the paradigm of learning-teaching;
4. Preventing a forced pause in the education stream.

Conclusion

The coronavirus pandemic has affected the educational systems worldwide. MSRT polices led to a uninterrupted continuation of the teaching-learning process in HE institutes and universities. Iran was encountered with the virus at the very early stages around 20th Feb 2020. This implied that were no reliable reported experiences of tackling the crisis from the global HE systems. In this paper, the MSRT experience during the first wave of coronavirus pandemic in the Iran HE system is briefly reported. The policies, plans, and actions were based on three key policies including 1) participation; 2) adaptation; and 3) Tolerance. Finally, the HE system achievements in handling the coronavirus pandemic are briefly presented.

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Conflict of Interests: Non

Ethical Approvals: Data and information were gathered from authentic origins to present the right and credible analysis.

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