

## Studying Faculty Members' Perspectives on the Current Status of Indicators in Education and Research for the Fourth Generation University in Iranian Higher Education

Majid. Kahrazahi<sup>1</sup>, Mahboubeh. Arefi<sup>2\*</sup>, Abasalt Khorasani<sup>3</sup>

<sup>1</sup> Master's Student in Higher Education Management and Planning, Department of Educational Sciences, Faculty of Educational Sciences and Psychology, Shahid Beheshti University, Tehran, Iran

<sup>2</sup> Professor, Department of Educational Sciences, Faculty of Educational Sciences and Psychology, Shahid Beheshti University, Tehran, Iran

<sup>3</sup> Associate Professor, Department of Educational Sciences, Faculty of Educational Sciences and Psychology, Shahid Beheshti University, Tehran, Iran

\* Corresponding author email address: m-arefi@sbu.ac.ir

### Article Info

### ABSTRACT

#### Article type:

Original Research

#### How to cite this article:

Kahrazahi, M., Arefi, M., & Khorasani, A. (2026). Studying Faculty Members' Perspectives on the Current Status of Indicators in Education and Research for the Fourth Generation University in Iranian Higher Education. *Quarterly Journal of Research and Planning in Higher Education*, 32(1), 65-78.



© 2026 the authors. Published by Institute for Research and Planning in Higher Education (IRPHE), Tehran, Iran. This is an open access article under the terms of the Creative Commons Attribution 4.0 International (CC BY 4.0) License.

In today's changing world, many universities around the world have moved towards realizing the indicators of the fourth generation university. One of the important areas of universities that plays a prominent role in moving towards this generation of universities is the field of education and research. The aim of this study is to examine the position of the indicators of the fourth generation university in the field of education and research from the perspective of the faculty members of Shahid Beheshti University. The research method is applied in terms of purpose and is a survey in terms of data collection. The statistical population in this study; faculty members of Shahid Beheshti University (Velenjak Campus) in the academic year 2023-2024, numbering 603 people, and the sample size was 234 people using the statistical sample size formula (Cochran formula) and the proportional stratified sampling method. The data collection tool was the use of a researcher-made questionnaire with 30 questions that was distributed among the faculty members of the university. In order to check the reliability of the questionnaire, content and face validity were used, and Cronbach's alpha test was used to calculate the reliability of the questionnaire. The alpha coefficient of the questionnaire was 89%. Data analysis from the questionnaire was performed using SPSS version 26 and descriptive statistics (central and dispersion indices) and inferential statistics (single-sample t-test and sign test). The results of data analysis indicated that from the perspective of the faculty members of Shahid Beheshti University, the position of the fourth generation university indicators in Iranian higher education is at an average level. In particular, the status of these indicators, including the ratio of the educational index to the development of knowledge at the local, national and international levels and the ratio of research indicators such as supporting knowledge-based companies in science and technology parks and increasing the efficiency of growth centers and launching scientific and applied startups, is not at a desirable level. Of course, several factors have been involved in the realization of this situation, which can be examined in their own right. A study of the views of the faculty members showed that Iranian universities, in accordance with the developments in today's world, must play a role in realizing the indicators of the fourth generation university as responsive and community-oriented universities as quickly and with the highest quality, and this is inevitable and very necessary in the two main sectors and arms of every university, namely education and research.

**Keywords:** Higher education, Fourth Generation University, Education, Research, Faculty members, Iranian higher education.

## Introduction

To achieve dynamic and effective higher education, we must move towards the fourth generation university. In today's changing world, many universities in the world have moved towards realizing the indicators of the fourth generation university. Universities that have specific indicators and can play an important role in sustainable development. One of the important areas of universities that plays a prominent role in moving towards this university generation is the field of education and research. This study aims to identify these indicators of the fourth generation university in the field of education and research in Iranian higher education and to examine the views of professors regarding the gap between the current situation and the indicators of the fourth generation university. Therefore, the research questions are as follows.

Question 1: From the perspective of faculty members, what is the status of fourth-generation university indicators in the field of education in Iranian higher education centers?

Question 2: From the perspective of faculty members, what is the status of fourth-generation university indicators in the field of research in Iranian higher education centers?

## Methodology

The research method is applied in terms of purpose and quantitative in terms of data collection. The statistical population in this study was 603 faculty members of Shahid Beheshti University (Velenjak Campus) in the academic year 2023-2024, and the sample size was 234 using the statistical sample size formula (Cochran formula) and the proportional stratified sampling method. The data collection tool was a researcher-made questionnaire with 30 questions that was distributed among the faculty members of the university. In order to examine the reliability of the questionnaire, content and face validity were used, and to calculate the reliability (reliability) of the questionnaire, the Cronbach's alpha test method was also used. The alpha coefficient of the questionnaire was 89 percent. Data analysis from the questionnaire was performed using SPSS version 26 and using descriptive statistics (central and dispersion indices) and inferential statistics (one-sample t-test and sign test).

## Findings

The results of data analysis indicated that from the perspective of faculty members of Shahid Beheshti University, the position of the fourth generation university indicators in Iranian higher education is at an average level. In particular, the data analysis in the first question showed that from the perspective of faculty members, the performance of Iranian higher education centers in relation to the fourth generation university indicators in the education sector is at an average level. The indicators of the education sector in the fourth generation university that were most considered in this study are; knowledge development (local, national and international), attention to innovation in knowledge creation, attention to the applicability of knowledge and production of up-to-date knowledge, skill development in student curricula, continuous improvement of the quality of curricula and revision of academic fields in line with the needs of the labor market and demand-oriented. Among these indicators, universities have had an average performance and have not had an acceptable performance only in relation to the knowledge development index at the local, national and international levels. Also, in the second question, the results of data analysis showed that, according to the perspective of faculty members, the position of the fourth generation university indicators in the research sector in Iranian higher education is generally at an average level. ). Among the important indicators in the research section are creating added value for society, supporting knowledge-based companies and science and technology parks, increasing the efficiency of growth centers and launching applied science startups, and paying attention to the principle of entrepreneurship and creative skills for developing entrepreneurship, which were also addressed in this study. In more detail, the performance of universities in the two indicators of supporting knowledge-based companies and science and technology parks and the indicator of increasing the efficiency of growth centers and launching applied science startups is not at a desirable level. In contrast, the two indicators of creating added value and paying attention to the principle of entrepreneurship and creative skills for developing entrepreneurship were reported to be at an average level. Of course, several factors have been involved in achieving this situation, which can be examined in their own right.

## Conclusion

A review of the views of faculty members showed that Iranian universities, in line with the developments in today's world, must play a role in realizing the indicators of the fourth generation university as responsive and community-oriented universities as quickly and with the highest quality, and this is inevitable and very necessary in the two main sectors and arms of every university, namely education and research. Therefore, to upgrade universities to the fourth generation by strengthening the education sector, the following suggestions are made:

Knowledge development: Creating scientific and research cooperation networks (local, national, and international) and increasing access to scientific resources.

Innovation development: Creating and strengthening innovative centers with the aim of producing innovative and applied knowledge using new technologies.

Knowledge application development: Supporting applied research and project-based learning.

Knowledge development: Designing skill-based courses, creating internship and practical learning opportunities, and expanding cooperation with industry.

Improving the quality of curricula: Developing continuous feedback and evaluation and using industry and community opinions.

Reviewing academic disciplines: Strengthening interdisciplinary approaches.

Also, to strengthen the indicators of the fourth generation university in the research sector in Iranian higher education centers, it is suggested:

Supporting knowledge-based companies and science and technology parks: creating a supportive ecosystem and developing investment funds.

Increasing the efficiency of growth centers and startups: developing infrastructure, creating accelerators and monitoring their progress.

Paying attention to entrepreneurship: holding networking events, seminars and related training workshops.

Creating added value in society: developing social responsibility, promoting a culture of innovation and strengthening cooperation with industries and social institutions.

## References

- Ahmadian Chashmi, M., Niazazari, K., & Salehi, M. (2019). Designing the role model of the fourth generation university in order to improve the quality of education and research in higher education. *Development of Jundishapour Education*, 11(4), 913-901. <https://doi.org/10.22118/edc.2020.241717.1477>
- Alipour, A. (2022). Valuable Innovative University, moving towards the generation of university soft technologies. *Iranian Islamic Development Model Studies*, 10(2), 113-134. <https://doi.org/20.1001.1.23295599.1401.10.2.8.4>
- Alipour, A., & Enayati, T. (2016). Commercialization of research of fourth generation universities. *Quarterly Journal of Interdisciplinary Studies of Strategic Knowledge*, 7(26), 53-76. <https://doi.org/10.22047/ijec.2016.31970>
- Barnett, R. (2019). *Ekologicheskij universitet. Osushchestvimaya utopiya [Ecological University: The Realized Utopia]*. Tomsk: Izdatelskij Dom Tomskogo gosudarstvennogo universiteta. [https://jam.uok.ac.ir/article\\_64268\\_a9aa53c74f3f23be305ec89ac16b72f2.pdf](https://jam.uok.ac.ir/article_64268_a9aa53c74f3f23be305ec89ac16b72f2.pdf)
- Beloev, H., & Venelinova, N. (2022, 7-8 March, 2022). A Roadmap for planning and implementing the Successful transition to fourth Generation University: The case of Ruse University, Bulgaria. 16th International Technology, Education and Development Conference.
- Blain, J. (2011). Training today, training tomorrow: An analysis of learning trends across Europe and global comparisons. <https://rimag.ir/fa/Article/29319/FullText>
- Cham Asemani, M., Farasatkah, M., & Khatami, S. H. (2024). Designing a Model of an Innovative University in Relation to Society: a Strategy for the Management and Development of Fourth-Generation Universities. *Journal of New Approaches in Educational Administration*, 15(1), 50-69. [https://jedu.marvdasht.iau.ir/m/article\\_6342.html?lang=en](https://jedu.marvdasht.iau.ir/m/article_6342.html?lang=en)
- Darabi, M. (2022). Design and validation of a model for managing the quality of educational activities of university faculty members. *Quarterly Journal of Research and Planning in Higher Education*, 3(28), 55-83. <https://doi.org/10.52547/irphe.28.3.55>
- Derrida, J. (2005). The Future of the Profession or the Unconditional University (thanks to the "Humanities," What Could Take Place Tomorrow)
- In Deconstructing Derrida: Tasks for New Humanities. In K. Peggy (Ed.), (pp. 11). New York: Palgrave-MacMillan. [https://link.springer.com/content/pdf/10.1057/9781403980649\\_2?pdf=chapter%20toc](https://link.springer.com/content/pdf/10.1057/9781403980649_2?pdf=chapter%20toc)
- Eidi, N., Nourian, M., & Moghadasi, J. (2022). Curriculum Competencies of Bachelor's Degree in Petroleum Engineering with a Fourth Generation University Approach. *Teaching & Learning Research*, 17(72), 1-28. <https://doi.org/10.22099/jsli.2021.6059>
- Enayati, T., & Alipour, A. (2013). Proposing the model of reproductive growth centers of academic humanities, moving towards the fourth generation universities. *Roshd Technology Quarterly*, 10(39), 20-28. <http://www.roshdefanavari.ir/Article/20401>

- Etuk, G. K. (2015). Innovations in Nigerian Universities: Perspectives of An Insider from A "Fourth Generation" University. *International Journal of Higher Education*, 4(3), 218-234. <https://doi.org/10.5430/ijhe.v4n3p218>
- Etzkowitz, H. (2003). Innovation in Innovation: The Triple Helix of University-Industry-Government Relations. 42(3), 293-337. <https://doi.org/10.1177/05390184030423002>
- Farasatkah, M. (2018). *Occasions of the University in Iran (New and Critical Discussions on Institutional Research, Science and Higher Education Studies)*. Tehran: Agah Publications.
- Farasatkah, M. (2022). *Sometimes and sometimes the university in Iran (new and critical debates about the research university, studies of science and higher education, 5th edition)*. Tehran: Agah Publications. <https://www.agahbookshop.com/>
- Farzaneh, M., Zeinabadi, H., EbrahimNaveh, & Abdollahi, B. (2023). Extracurricular Responsibilities of Faculty Members in the Context of a World-Class University: Introducing the Concept of Scientific Extraversion. *Journal of Management and Planning In Educational System*, 16(1), 65-96. <https://doi.org/10.48308/mpes.2023.103237>
- Ghafarian Ghadim, M. (2021). *A Thesis Submitted in Partial Fulfillment of the Requirements for the Doctor of Philosophy in Accounting* Doctoral thesis, Department of Accounting, Faculty of Social Sciences, Imam Khomeini International University, Tehran]. <https://ganj.irandoc.ac.ir/#/articles/7952fce5564de2b62d8e80f3bbbe716c>
- Goodarzvand Chegini, M. (2018). The fourth generation university labor; and action approach (case studies: Cambridge, Stanford, and Harvard universities). *Iranian Engineering Education Quarterly*, 20(78), 1-16. <https://doi.org/10.22047/ijee.2018.128487.1541>
- Irina, A. P. (2020). Revisiting Functions and Roles of the Entrepreneurial University in Social and Economic Systems in the Regional Context. In. <https://www.igi-global.com/chapter/revisiting-functions-and-roles-of-the-entrepreneurial-university-in-social-and-economic-systems-in-the-regional-context/238509>
- Jahangiri-Fard, S., Shafizadeh, H., & Soleimani, N. (2021). Promoting Spiritual Health in the Fourth Generation University. *Journal of Research in Religion and Health*, 7(3), 110-193. <https://doi.org/10.22037/jrrh.v7i3.34965>
- Khorsandi Taskoh, A., & Panahi, M. (2017). Critical analysis of international university ranking systems; Policy suggestions for Iran's higher education. *Iran's Higher Education*, 8(3), 11-136. <http://ihej.ir/article-۱-۹۱۳-fa.html>
- Khoshnejad, Z., Salimi, M., Jahanian, R., & Abdollahi, M. (2022). Presenting the Fourth Generation University Model (Case Study: Islamic Azad University). *Jundishapur Center for Studies and Development of Medical Sciences Quarterly*, 13(1), 206-193. <https://doi.org/10.22118/edc.2022.317210.1951>
- Mahdi, R., & Shafiee, M. (2017). Role creation and capacity building of fourth generation universities for local and regional development. *Industry and University Quarterly*, 10(53), 1-22. <http://jiu.ir/Article/193>
- Mosadeghrad, A. M., & Isfahani, P. (2024). Towards fifth generation universities of medical sciences. *Journal of the Iranian Institute for Health Sciences Research*, 23(6), 923-927. <https://doi.org/10.61186/payesh.23.6.923>
- Mshvildadze, S. (2025). Education Reform and the Fourth Generation National Curriculum. *Georgian Scientists*, 7(2), 39-42. <https://doi.org/10.52340/g.s.2025.07.02.04>
- Nabipour, I. (2019). The fifth generation university: based on Carayanis and Campbell's pentagonal spiral model. *Bimonthly Journal of Southern Medicine*, 23(2), 165-194. <https://doi.org/10.52547/ismj.23.2.165>
- Nesterov, A. Y. (2021). Problems of knowledge management at a Fourth-generation university. *Baltic Humanitarian Journal*, 10, 10.26140/bgz26143-22021-21001-20043. <https://doi.org/10.26140/bgz3-2021-1001-0043>
- Pawlowski, K. (2012). The 'fourth generation university' as a creator of the local and regional development. *Higher Education in Europe*, 34(1), 51-64. <https://doi.org/10.1080/03797720902747017>
- Pourezzat, A. A., Fathi, F., & Ghasemi, F. (2017). Imagery of excellence-oriented and knowledge-based libraries along the development of new generations of university. *Academic Librarianship and Information Research*, 51(4), 13-38. <https://doi.org/10.22059/JLIB.2017.61316>
- Rezaei Noor, J., & Rouhanipour, S. M. (2022, Tehran - Sharif University of Technology, February 2022). Designing assistantship courses with the current approach of the fourth generation universities  
The Fifth National Entrepreneurship Conference.
- Rezaian fardoi, S., Hourali, M., & Behroozi, B. (2023). Assessing the status of Payame Noor University of Tehran in becoming the fourth generation of universities using fuzzy ANP technique. *Social and Cultural Strategy*, 12(1), 1-30. <https://doi.org/10.22034/scs.2022.154828>
- Riabchenko, V., & Bulvinska, O. (2023). University Autonomy for Sustainable Development: Results of the times higher education Impact rankings 2022. *Continuing Professional Education: Theory and Practice*, 73, 77-86. <https://doi.org/10.28925/1609-8595.2022.4.8>
- Sagitova, G. K., & Mukhamedzhanova, G. S. (2023). Features of the systematic approach of the organization of universities for the construction of the fourth generation: the Kazakhstan case. *Central Asian Economic Review*, 6, 18-29. <https://doi.org/10.52821/2789-4401-2023-6-18-29>
- Seifi, E., Ahmadi, A., & Moazzami, M. (2024). Identifying the dimensions and components of the application of new technologies in the fourth generation university. *Management and Educational Perspective*, 5(4), 24-51. <https://doi.org/10.22034/jmep.2024.426783.1282>
- Sepehri, Y., Liaghatdar, M. J., & Esfijani, A. (2021). Approaches and Methods of Teaching and Learning in Fourth Generation Universities from the Perspective of Faculty Members: A Qualitative Case Study. *Studies in Learning & Instruction*, 12(2), 137-161. <https://doi.org/10.22099/jsli.2021.6059>
- Sotodeh Asl, N., Ghorbani, R., & Rashidy pour, A. L. (2014). Viewpoint of faculty members of Semnan University of Medical Sciences about research barriers. *Koomesh*, 16(1), 1-7. <http://koomeshjournal.semums.ac.ir/article-1-2422-fa-html>
- Vaezi, H. (2020). *Analyzing the Effective Factors on the Formation of Entrepreneurial Behavior of Students of Sistan and Baluchestan University*  
*Master's Thesis in Entrepreneurship Management (New Business)* Faculty of Entrepreneurship, University of Sistan and Baluchistan, Zahedan]. <https://ganj.irandoc.ac.ir/#/articles/960b10e65d033860447989d3f0407b64>
- Van Dalen, M. (2024). *Educational Innovation in Transdisciplinary Hubs: Microcosms of the Fourth Generation University*  
*Master's thesis of Philosophy of Science, Technology and Society* University of Twente]. [https://essay.utwente.nl/fileshare/file/102835/Van\\_Dalen\\_MA\\_BMS.pdf](https://essay.utwente.nl/fileshare/file/102835/Van_Dalen_MA_BMS.pdf)

- Yadollahi Dehcheshmeh, A., Rajaipour, S., & Siadat, A. (2021). Developing a Fourth Generation Model for Iranian Universities. *Journal of Interdisciplinary Studies of the Humanities*, 13(4), 31-57. <https://doi.org/10.22035/isih.2021.375>
- Zarin, A., Yadegarzadeh, G., Khosravi, M., Ghaderi, M., & Khorsandi taskoh, A. (2023). A Review of the Characteristics of Higher Education Curriculum in the Era of the Fourth Industrial Revolution. *Journal of Curriculum Research*, 12(2), 52-74. <https://doi.org/10.22099/JCR.2023.44027.2544>