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Five Functions for Suporting Productive Employment and Entrepreneurship of Universitys Graguates
(Case Study: Iran's University of Applied Scince and Technology)

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Abstract

The purpose of the article is to design the main functions of a system to support job-search, career advancement, self-employment, job-creation, and entrepreneurship of university graduates, with an emphasis on graduates of higher education centers of scientific-applied. The article has been conducted with an analytical approach using a mixed method including lived-management experience, a non-systematic review of scientific documents, learning from the experience of some foreign universities and applied science institutions, and additional knowledge acquired in a number of previous studies. Based on the findings of the study, targeted and systematic support for the employment and entrepreneurship of graduates of the higher education centers of applied science and technology requires the design and implementation of a support system consisting of five important functions, including the promotion of employability knowledge and skills, career counseling and guidance, preparation and support for innovative and entrepreneurial graduates, general support for graduates of the higher education system, and monitoring the employment status and destiny of graduates. The establishment of the system and the actual application of its five functions will eliminate or reduce the severity of some issues and harms related to the chronic problem of obtaining an academic degree and promote a focus on skill-based and applied knowledge. It is the serious responsibility of policymakers and leaders of the higher education governance to support the establishment of a comprehensive support system for university students and graduates in general and the scientific-applied education subsystem in particular.

Keywords: Employment of Graduates, Industry-University Relations, Scientific-Applied Education, Scientific-Applied Graduates, Skill-Based

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Introduction

After the relatively successful experience of the Tehran Academy of Arts (Dorolfonon), other technical institutes were established in Tehran and some main cities. The process of establishing and developing technical and vocational schools and scientific-applied education changed somewhat with the establishment of the University of Tehran in 1934 and shifted away from the focus of political and social attention. Perhaps after the establishment of the University of Tehran, the most obvious policies related to the development of technical and vocational and scientific-applied education can be attributed to the establishment and development of technology institutes in big cities of Iran [1, 2]. In the late 1980s, in response to the problem of the weak connection between industry and university, science and practice, and the problem of employment of educated and job-seeking youth, with the establishment of the Supreme Council for Scientific-Applied Education by the Supreme Council of the Cultural Revolution, scientific-applied education returned to the center of attention of the government. In 1992, the statute of the Comprehensive University of Applied Science (Technology) was approved with the aim of providing the basis for the participation of governmental and non-governmental organizations and executive institutions in training specialized human resources (skilled individuals at the associate and technical levels). According to this resolution, graduates of scientific-applied centers must have acquired the necessary "knowledge" and "skills" for the work assigned to them [3]. In addition to the problem and chronic harm of credentialism and *paper qualification* one of the fundamental concerns of the higher education system and the scientific-applied education subsystem is the employment of university graduates in the best and most productive form possible, including self-employment and entrepreneurship [4]. Entrepreneurship in line with the field of study is one of the clear and concrete examples of productive and effective employment of graduates. Guiding students and graduates towards entrepreneurship is one of the dozens of important and key responsibilities and tasks of policymakers and leaders of higher education. In order to address some of the existing challenges and problems, this article has attempted to present the main functions of a comprehensive system of targeted support for the processes of job search, career advancement, self-employment, job creation, and entrepreneurship of graduates of scientific-applied higher education centers in the country [14].

Methodology

The research resulting from the article has been conducted using a mixed method and an analytical approach for the use of policymakers, leaders, and managers of scientific-applied higher education centers and institutions. In this article, knowledge gained from a) the researcher's lived-management experience, b) a non-systematic review of available scientific documents, c) observation and learning from the experience of some non-Iranian universities and scientific-applied higher education institutions, and d) peripheral knowledge acquired in several previous studies has been combined and analyzed with a focus on extracting operational findings that can be applied in the country's official scientific-applied education centers. The lived-management experience includes four years of cultural and student vice-chancellorship at a technical and vocational university and judging several rounds of selecting the top entrepreneur at a comprehensive scientific-applied university. The non-systematic review of scientific documents includes obtaining and studying scientific articles from reputable domestic and foreign journals in the last decade with the keyword and concept of scientific-applied universities supporting their students and graduates on the path to employment and entrepreneurship. To observe and learn from the experience of some foreign universities, country evaluation reports of the innovative and entrepreneurial university model in

some European countries and member states of the Organization for Economic Cooperation and Development, such as Italy, Romania, Croatia, and Hungary, have been used [5, 6, 7]. In addition, the secondary knowledge acquired in the research "Reviewing and describing the experience of entrepreneurial universities; comparing successful and unsuccessful cases in Iran" has been a valuable source and guide for conducting this research and completing its process [8].

Findings

The five main functions of the support system for graduates of scientific-applied educations are: a) Improving knowledge and employability skills, b) Career counseling and guidance, c) Preparing and supporting innovative and entrepreneurial graduates, d) General support for graduates of the higher education system, and f) Monitoring and supervising the employment status and fate of graduates. The function of improving knowledge and employability skills of graduates is one of the key tasks of scientific-applied education centers in order to support and provide fundamental support to students and graduates. Improving knowledge and employability skills begins during university studies and continues until graduates feel the need at every stage of work and life. The function of career counseling and guidance for students and graduates is another key task of scientific-applied education centers in order to support students and graduates. This function should begin during the study period (even from school and general education) and gradually increase its quality. To prepare and support innovative and entrepreneurial graduates, scientific-applied education centers can focus on realizing six main areas and elements, including increasing awareness of the value of entrepreneurship and stimulating entrepreneurial intentions to start a business or invest, supporting idea generation and business creation, training to start, sustain, and grow a business, and facilitating students and graduates' access to business growth centers. The function of general support for graduates of the higher education system is for all graduates of universities and higher education institutions, which the responsible institutions, including the National Foundation for Elites, the Innovation and Prosperity Fund, the Fund for Supporting Researchers, the Law on Supporting Knowledge-Based Companies, the Ministry of Cooperatives, Labor, and Social Welfare, the Social Security Organization, the Conscription System, the Omid Entrepreneurship Fund, and operating banks such as the Bank of Industry and Mines, perform and must perform. Scientific-applied education centers should activate the important function of monitoring and supervising the employment status and fate of their graduates and, based on this situation, design and implement new policies and programs [9, 10, 11, 12, 13].

Conclusion

One of the fundamental issues and concerns of higher education and scientific-applied education in the country is the employment of university graduates in the best and most productive way possible, including self-employment and entrepreneurship. Also, mass credentialism and *paper qualification* instead of skill-oriented and practical and problem-solving knowledge is one of the challenges and dilemmas of higher education governance. In this article, to support the processes of job search, career advancement, self-employment, job creation and entrepreneurship of scientific-applied education graduates, a comprehensive system consisting of five basic functions has been designed and presented, including a) Promotion of knowledge and employability skills, b) Career counseling and guidance, c) Preparation and support of innovative and entrepreneurial graduates, d) General support for graduates of the higher education system, and finally f) Monitoring and surveillance of the employment situation and fate of graduates. Improving the employability knowledge and skills of graduates of scientific-applied education is one of the key tasks of scientific-applied education

centers. This function should begin during the university education period and continue until the graduates feel the need at every stage of work and life. It is a vital responsibility of policymakers, leaders and managers of the higher education system to support the establishment of a comprehensive system of support for students and graduates in a comprehensive, continuous and long-term manner.

References

1. Institute for Scientific and Educational Research and Planning. (1976). Statistics of Higher Education in Iran from 1939 to 1976, Tehran: Ministry of Science and Higher Education.
2. Seddigh, Isa. (1976). A Brief History of Iranian Culture, Tehran, Publishing Company of Tabee Ketaab.
3. Mahdi, Reza and Keykha, Ahmad. (2020). The Employability status of technical and vocational graduates from the perspective of cultural and student assistants, Journal of Iranian Engineering Education, No. 86, pp. 99-116.
4. Barani, Sepideh. (2019). Report on the study plan of vocational guidance in the Technical and Vocational University, Tehran, Technical and Vocational University.
5. EU/OECD (2018). Supporting Entrepreneurship and Innovation in Higher Education in The Netherlands, OECD Skills Studies, OECD Publishing, Paris/EU, Brussels, https://doi.org/10.1787/9789264292048.
6. EU/OECD (2019b). Supporting Entrepreneurship and Innovation in Higher Education in The Italy, OECD Skills Studies, OECD Publishing, Paris/EU, Brussels, https://doi.org/10.1787/43e88f48.
7. EU/OECD (2019c). Supporting Entrepreneurship and Innovation in Higher Education in the Croatia, OECD Skills Studies, OECD Publishing, Paris/EU, Brussels.
8. Mahdi, Reza (2019). Research project report on reviewing and describing the experience of entrepreneurial universities; Comparison of successful and unsuccessful cases in Iran, Tehran, Institute for Social and Cultural Studies.
9. Pradhan, H., Neupane, B. R., & Sapkota, H. (2014). Analysis of skills gaps between selected CTEVT curricula and demand in labour market. Kathmandu, Nepal: Swiss Agency for Development Cooperation.
10. Adelaida C. G. (2014). Tracer Study of PNU Graduates, American International Journal of Contemporary Research, Vol. 4, No. 30, pp. 81-98.
11. Daguplo, M. S., Capili, Lee G., Estrella, Rose C. (2019). Tracking the Employment and Employability Characteristics of the Graduates of the College of Teacher Education Asia Pacific Journal of Multidisciplinary Research, Vol. 7, No. 2, Part III, pp. 67-74.
12. OECD/EU (2019). Supporting Entrepreneurship and Innovation in Higher Education in Austria, OECD Skills Studies, OECD Publishing, Paris, https://doi.org/10.1787/1c45127.
13. Catacutan, K. J. A., Maramag, F. R., Bartolome, M. A., Hiquiana, R. M. & Mendezabal, M. J. (2020). Employability Study of the Business Administration Graduates of Catholic Educational Institution, Universal Journal of Educational Research, 8 (1), pp.156-161.
14. Boden, R. & Nedeva, M. (2010). Employing discourse: universities and graduate employability, Journal of Edu