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Designing a University Education Pattern based on Industry Needs in the University (Case Study: Islamic Azad University of Damavand Branch)

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Purpose: Today, policymaking has a great value and importance to improve the relationship between university and industry, and university education should be based on the industry and society needs. Therefore, the aim of this study was designing a university education pattern based on industry needs in the university.

Methodology: This study in terms of purpose was applied and in terms of implementation method was qualitative. The research population consisted of 15 university and industry experts who were selected by purposive sampling method. The research tool was an in-depth interview, which its validity was confirmed by the triangulation method and its reliability was calculated by the agreement coefficient method between two coders at 0.86. Data were analyzed by open, axial and selective coding method in MAXQDA software.

Findings: The findings showed that the university education pattern based on industry needs in the university had 30 open codes (or indicators), 7 axial codes (or components) and 3 selective codes (or categories). In this study, the selected codes were included the contextual category (with three axial codes including structural component of university, structural component of industry and psychological component), the causal category (with two axial codes including legal and lawful component and cultural and social component) and the strategic category (with two axial codes including policy and government support component and managerial component). Finally, the university education pattern based on industry needs in the university was designed.

Conclusion: According to the results of this study about the university education pattern based on industry needs in the university, can be taken an effective step to improve the current state of university education in the three categories of contextual, causal and strategic through their components and indicators.

Extended Abstract

Purpose: Human resources play an important and fundamental role in the circulation of affairs and organizational management, and investing in the training of human resources in various social, cultural, economic and industrial sectors is means long-term investment, and to understand this long-term investment is needed to foresight that among different organizations, the organization University or university education plays a big role in making this happen. Today, the role of universities in the establishment of a modern and advanced society is not hidden from anyone, and to achieve this goal, efforts must be made to educate active, responsible and democratic people on the one hand, and efforts to solve cultural, social, economic and industrial issues and problems and helping to promote science and expanding the boundaries of science on the other hand, is on the agenda of most universities and higher education institutions in the world. Therefore, the university is considered the most important and valuable institution responsible for providing specialized, skilled, thoughtful and efficient human resources; So that on the one hand, it is responsible for preserving and promoting the cultural values of the society, and on the other hand, it responds to the social needs of the society for the acquisition, dissemination and expansion of science and technology. The officials of the higher education and university education system always sought to achieve the best and most appropriate performance and output with the available facilities. Therefore, knowledge of the functioning of the educational system and subordinate units is always at the top of their demands. The university education system should be able to be effective in developing the characteristics of progressiveness, independence, creativity, internal control and risk-taking in students by providing suitable educational programs and identify the potential abilities of students and create the ability among them to instead of looking for their own as work productive force in addition to creating a business, the can work for themselves and others. Today's universities are in a situation where they spend most of their time on scientific and purely theoretical activities, and industries are busy with scientific and production activities. The produced knowledge in universities can create a competitive advantage for the industry, and the relationship between the industry and the university takes place in the four main areas of basic research, collaborative research, knowledge transfer and technology transfer. In a situation where the universities spend most of their time on scientific and theoretical activities, industries are engaged in practical and production activities, and the produced knowledge in the university can be considered a competitive advantage for the industry. The cooperation between university and industry can lead to promotion of research and innovation and increase of capital through providing capital through industry and providing faculty members and producing science from the university side. University education can help industries in the areas of precise training of scientific concepts and models and conducting applied research required by industries in all specialized areas such as policy and strategy, innovation and research, innovation research and development, transformation of experimental knowledge into academic knowledge, fundamental and infrastructure research, problem solving that require more knowledge, scientific and practical and workshops training, areas of product and tool design, production processes design, areas of production and material and strategic planning, administrative and financial areas, training of applied graduates for industry, conducting joint research, theoretical support from the industries and transfer of new technologies and in-service training to industry. The connection between university and industry and university education based on industry needs in the university informs the scientific community about the real needs and problems of various organizations and institutions, and at the same time makes executive managers use scientific capacities in decision-making. Today, policymaking has a great value and importance to improve the relationship between university and industry, and university education should be based on the industry and society needs. Therefore, the aim of this study was designing a university education pattern based on industry needs in the university.

Methodology: This study in terms of purpose was applied and in terms of implementation method was qualitative. The research population consisted of 15 university and industry experts who were selected by purposive sampling method. The reason for choosing 15 university and industry experts is reached the research to saturation. It means, the new samples did not add any new content and findings to the previous content and findings, so sampling and research on more samples ended. Also, in the purposive sampling method, the samples are selected according to the criteria, which the most important criteria in the present study were having sufficient knowledge in the field of university education based on industry needs in the university, willingness to participate in the research and agreement to record the interviews. The research tool was an in-depth interview, which its validity was confirmed by the triangulation method and its reliability was calculated by the agreement coefficient method between two coders at 0.86. Data were analyzed by open, axial and selective coding method in MAXQDA software.

Findings: The findings showed that the university education pattern based on industry needs in the university had 30 open codes (or indicators), 7 axial codes (or components) and 3 selective codes (or categories). In this study, the selected codes

were included the contextual category (with three axial codes including structural component of university, structural component of industry and psychological component), the causal category (with two axial codes including legal and lawful component and cultural and social component) and the strategic category (with two axial codes including policy and government support component and managerial component). Finally, the university education pattern based on industry needs in the university was designed.

Conclusion: The results of this study on the university education pattern based on industry needs in the university can have many practical implications for experts and planners of both the university and industry fields, and they can take steps from the results of this study in order to improve the current situation of the university and industry. As a result, according to the results of this study about the university education pattern based on industry needs in the university, can be taken an effective step to improve the current state of university education in the three categories of contextual, causal and strategic through their components and indicators.