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Evaluation of Components Affecting the Promotion of a Service-oriented University: A Qualitative Analysis of the Views of Higher Education Experts

Khadijeh Azar¹ , Yousef Namvar^{*1} , Azam Rastgoo¹ , Javad Hatami Sadollahi² , Sadraddin Sattar¹ ,

¹ Department of Educational Sciences, Ardabil Branch, Islamic Azad University, Ardabil, Iran.

² Professor of Department of Educational Sciences, Tarbiat modares University, Tehran, Iran.

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*Corresponding author:

Yousef Namvar, Department of
Educational Sciences,
Ardabil Branch,
Islamic Azad University, Ardabil, Iran.
Email: y.namvar@iauardabil.ac.ir

Abstract

Background & Objective: The service-oriented method is a strategy based on responding to the needs of stakeholders that emphasizes processes such as the link between the world of research and business, introducing the capabilities of the university and dissemination of knowledge in society. Therefore, this study aimed to recognize and determine the components affecting the improvement of a service-oriented university (by serving the community).

Materials and Methods: This qualitative study was performed using a content analysis technique. Data were collected via semi-structured interviews, and data analysis was carried out following coding and analyzing the content of the themes. Overall, 15 experts in the field of the higher education system were selected by purposeful sampling based on the “theoretical saturation” rule.

Results: In this study, the main components involved in the improvement of a service-oriented university included human resources, responsiveness and transparency, service methods, university autonomy, and academic freedom, university culture, flexible structure, leadership and university management, standardization and needs assessment, service quality regulation system, and technology and innovation.

Conclusion: According to the results of the present study, it is crucial to strengthen the components affecting the improvement of a service-oriented university. Accordingly, it is suggested that the foundation be laid by the higher education authorities of the country to realize this goal.



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Introduction

Universities play a fundamental role in the development of a country as a part of the higher education system and have always taken steps toward the enhancement of the society by training and preparation of efficient human resources and their outputs (1). Due to their role and position in the production of knowledge and innovation, universities must acquire the necessary abilities to respond to society's needs (2). According to Oosterlinck, the concept of service in a university is the result of efforts to link the world of research and the world of business, establish active communications with the society, introduce the abilities of the university to the society, disseminate knowledge through involving students in social situations, and create long-line learning via the education of learning and how to learn (3). The service-oriented method is a strategy based on responding to the needs of an organization's members. The method emphasizes

the actual organizational processes and their changes, which are known as “services” (4). One of the most important goals of service orientation (SO) is improving services and the ability to establish compatible technology systems that easily adapt to change (5).

By integrating services with technology systems, service orientation can result in the provision of new abilities in an organization (6). Some of the SO components include intelligence, collective cooperation, culture building (7), skill learning, value creation, new knowledge acquisition, and participation (8). Therefore, moving toward service orientation can be a smart method to achieve new competitive advantages and maintain profitability (9). Moreover, other effective applications of SO are ease of service, communication with customers, and proper response (10). Therefore, in addition to conflicts with environmental changes, universities can increase flexibility and develop interaction with

other universities and organizations by applying the service orientation method (11). Service orientation is an important issue since it is a part of the strategic values of the university system and the organizational culture of universities and its improvement can lead to customer attraction and satisfaction (12). As such, unity of direction and integration can be achieved in universities by improving service orientation. In addition, employees can be awarded to stimulate service provision motivation in these individuals. All of these show that the provision of excellent services is a strategic priority for each organization (13).

Overall, educational organizations have discovered the SO method to improve internal processes and quality, use technologies, and reduce costs (5, 6). A SO-based organizational climate can improve organizational power by affecting organizational behavior (14). In a medical community, the SO-based approach is recognized as a type of experimental learning that links people to the actual world. In addition, there has been a great emphasis on the self-organization of students in society, which can facilitate learning at the end (15). Despite the importance of SO use in universities, little attention has been paid to this topic in the country. Nevertheless, some of the studies performed in this area were reviewed. For instance, in a study entitled "the model of university graduates' competencies for service-orientation", Bagheri, Abaspoor, and Agazadeh reported the skills required by graduates to meet the society's need to be boosting accountability, intelligence, adaptability and the ability to perform interdisciplinary work, creativity, entrepreneurship, and teamwork spirit. Therefore, students must acquire the necessary skills through participation in academic education and transfer them to the community (16).

Parandeh, Rejhe, and Sharifnia concluded that learning is associated with the provision of services based on the society's needs since it prepares students to acquire occupational skills and allows them to actively participate in society's affairs. Moreover, it results in effective learning, gaining communicative skills, and creating a sense of social accountability (17). Presenting a "model to

improve SO in universities", Afkaneh et al. reported an unfavorable status for the components of SO quality, SO leadership, organizational climate, SO learning, and customer communication management. These scholars recommended that the mentioned components be improved to develop SO in universities of the country (18). In addition, Cuper pointed out the abilities of university staff and graduates that affect the SO cycle (19). In a research entitled "a service-oriented University", Mircea & Andreescu mentioned that organizations should create techniques to improve the quality of their services. In this regard, the service-oriented technique was recognized the best method for automation of the quality of processes (4).

According to Kysilka & Medinschi, SO in a university included the creation of competent human resources, training for research, efficient education provision management, expanding life opportunities, and higher education as a product, which means the provision of all services at the level of global standards (20). Davis et al. emphasized that society helps students gain useful experiences by applying a SO approach and students take reciprocal steps to meet their needs (15). In a study entitled "service orientation quality", Berry & Zetthaml reported that components such as status of facilities, reliable service, and employees' willingness to respond, staff skills, honesty, customer relationship, and knowledge affected the quality of services (21). In another study, Fajar & Norcahyo reported that transformation in education can lead to effective learning regardless of the cost and time and by using new technologies. Ultimately, this innovation provides a rich opportunity for community development, new learning experiences, scientific participation, and cost-effective education needs (22).

According to the results of studies, the higher education system of universities has fallen behind, compared to the universities in developed countries, where universities have experienced new functions in these societies. Today, the higher education system of the country deals with problems such as unequal growth of quantitative

and qualitative dimensions of services, decreased comprehensiveness and scientific legitimacy, and inability to respond to various needs of the society (23). As such, our universities can move towards meeting the needs of society by applying service-oriented strategies, in addition to increasing their share in the production of science, with quality and constructive interactions. Given the importance of SO and its use, it can be considered suitable in the excellence of higher education services. With regard to the current status of academic services of the country, attempts were made to identify the components affecting the improvement of service-oriented universities in the present study. Therefore, we aimed to use the views of higher education experts to have a deep understanding of the components affecting the improvement of a service-oriented university using a qualitative approach.

Materials and Methods

This was a qualitative study performed by the content analysis method. The exploratory nature of the present study made the necessity of a qualitative study inevitable. Data were collected using semi-structured interviews. The main question was related to the components affecting the improvement of a service-oriented university in Iran. Complementary questions included: what are the necessary contexts for improving service-oriented components in a university? What strategies do you suggest to improve a service-oriented university? The research population included higher education experts, and the inclusion criteria were having experience and expertise in the field of higher education. The subjects were selected by purposeful sampling from those introduced by advisors based on their articles and works in the field of higher education. The sample size was estimated at 15 using a theoretical saturation rule (24). In total, three subjects were heads of the university, whereas three were top professors and nine were researchers in the field of higher education. In terms of gender, three participants were female and 12 were male, who had a work experience of 4-28 years.

The interviews were made during July 27th-September 6th, 2020, and were recorded and transcribed. Some of the characteristics of the interviewees are shown in Table 1. After conducting the interviews and setting up the initial editing of the data, the text of the interviews was classified according to the purpose of the research and analyzed using information coding. Creswell highlights strategies such as organizing data for analysis, reducing data to content through the coding process, and finally presenting data in tables (25). Therefore, Creswell method was used in data analysis, and coding methods were used to construct categories in this study. Thus, after summarizing and categorizing the answers based on the purpose of the research, all the answers of the interviewees were rewritten as short phrases or themes. Finally, the main categories were identified in order to recognize the components affecting the improvement of the service-oriented university.

Afterwards, these categories were presented by describing, analyzing, and quoting relevant statements in the report. In addition to the main theme, the following themes were also mentioned, which indicate the extraction of the main themes. In order to validate the components affecting the promotion of service-oriented university, the concepts and categories were carefully reviewed and adjusted. Afterwards, the necessary measures were taken, as described in Table, based on the criteria provided for the validation of qualitative research (2). To adhere to ethical considerations, the researcher explained the study's objectives and the importance of providing an accurate response to achieve useful results. In addition, written informed consent was obtained from the interviewees and they were ensured of the confidentiality terms regarding their personal information. The questions were sent to the academic experts via emails and the duration of interviews was determined based on the interviewees' opinions so that they would have sufficient time to respond.

Results

According to the research question, the data from the interview with the country's higher education experts were coded based on Creswell's approach, followed by discovering the main themes. Finally,

the main components of service-oriented university promotion in the context of community service were extracted by reviewing the findings of coding and the research literature. This process is briefly mentioned below.

Table 3: Coding results

Components affecting service-oriented university promotion	Main components	Secondary components (themes)	Participant-specific codes
	Human resources (employees and professors)	Commitment to the community, respectful treatment of customers, meeting the needs of students, accountability toward stakeholders, having professional skills and job capabilities	6,8,12
	Responsiveness and transparency	An effective response to community needs, having university-based ecosystems, ecosystem development, building trust and transparency, ensuring the welfare and health of the community, sustainable development of the community, effective interaction and communication between the community and the university, and having an open space to respond to customers	8,10,3,9,7
	Academic culture	Meeting the needs of stakeholders, paying attention to public interests, developing public culture, believing in moral beliefs and values (moral commitment), establishing a collective attitude and collective trust, strengthening the spirit of students' scientific socialization, human capital development, education, and awareness, creating justice and equality	5,8,6,2,7
		Creating a demanding feature for stakeholders: the characteristic of being demanding for academic activists (professors and students), being critical, engaging in solving community problems, being interested in participatory activities	5,9,7,5,1
	Service methods	How to serve and inform the community, providing direct education or distance education (online education to reduce costs and transfer information quickly), providing retraining courses for graduates, holding specialized meetings with stakeholders, providing research and consulting services	2,3,6
	Establishment of a quality assurance system	Increasing service quality, developing competitiveness, meeting the needs of society, attracting and increasing customers, achieving sustainable development	15,8,13

Innovation and technology development	Developing information and communication technology, integrating services, innovative interactions, expanding technological businesses, entrepreneurship, developing professional skills and innovation, growth and knowledge-based centers	11,7,4,1
University leadership and management	Participatory decision-making, meritocracy, justice, and equality, preferring personal interests over public interests	10,9,8
Standardization and needs assessment	Defining the services required by the university-government-society (ecosystem), standardization in service delivery, multiplicity and diversity in services, continuous reflection and evaluation in services	9,3,5
Decentralized structure	Flexibility, adaptability to change, agile transformation and capacity liberalization, decentralization	9,7
Maintaining academic independence and scientific autonomy	Having independent and diverse financial resources, maintaining organizational independence, employment autonomy, respect for academic rules, independence from government, legal ownership, providing the necessary infrastructure, privatization, competitiveness, the need for an open society, democratic society, developing criticism and freedom of action	3,4,1

Based on the data obtained from Table 3 and the documentary studies, the components extracted are analyzed as follows:

- Human resources: given the key role of the university in producing knowledge and training a skilled workforce, the university is expected to ensure society by attracting efficient manpower. According to a participant: "human resources means the staff and professors of the university, who must have the necessary skills and competence to provide favorable services and

increase customer satisfaction with a suitable attitude and a sense of responsibility" (participant No. 6). Meanwhile, not only most human resources lack the required knowledge and competence, but also disrespectfully treat clients and cause dissatisfaction and organizational inefficiency" (participant No. 5). Therefore, the development of the higher education system in all aspects directly depends on the activities of the human factor and its intellectual capital. Undoubtedly, the mission of

higher education is realized with the role-playing of human resources.

- Responsiveness and transparency: these are two important elements of management that can promote a sense of trust between academic activists and responsiveness (26). According to the participants, in today's changing environment, universities must inevitably take steps to ensure the welfare and health of society (participant No. 3). A service-oriented university must respond to various needs of society and involve stakeholders in decision makings to gain trust (participant No. 9). Therefore, one of the most important goals of service orientation is responding effectively to customers' needs.

- Service methods: education is always identified as one of the most important service tools to develop the abilities of human resources in today's world (27). According to the participants, "one of the important components for the improvement of SO in universities is using effective service methods through effective educational programs (both directly and remotely) to share knowledge and experiences or by holding conferences" (participant No. 3). Moreover, research and counseling services are other methods that must be prioritized by universities to develop their services (participant No. 10). As such, universities, as an educational and research environment, are a suitable place for knowledge sharing. It is essential to share the knowledge created in this environment among individuals in the community.

- University autonomy and academic freedom: university autonomy is defined as independence and decision-making capacity for the internal structure and a specific mission in the university (28). According to the participants, university autonomy and academic freedom (including financial independence) are important in the development of a service-oriented university and expansion of democratic values (participant No. 4). Universities need open space and academic independence to communicate with society, while the dominance of ideological thinking and the involvement of political groups in the affairs of our country's universities have prevented its independence (participant No. 3). Therefore, the

country's universities need academic and critical independence to be service-oriented. This is mainly due to the fact that the prevailing political climate in university management, including the lack of independent financial resources, has hindered the development of university independence and its relationship with society.

- University culture: in this study, the participants mentioned that "promoting a service-oriented university depends on having an extrovert academic culture, improving human and ethical values among academics, respecting the cultural beliefs, providing security and creating trust in the society" (participant No. 10). Moreover, changes in attitudes and procedures, and the application of laws to support professors and researchers, and to strengthen the demanding nature of beneficiaries should be promoted to develop the academic culture (participant No. 11). As such, SO in the universities and academic education must not only increase individual skills but also must result in the training of students and citizens who are accepted by the community and are competent in terms of ethical principles.

- Flexible structure: in the current era, the academic ecosystem and its functions are extremely changing in line with the increasing global developments. According to the participants "during this changing time, universities must be flexible and able to deal with constant challenges. Overall, flexibility is important in the university's structure in terms of meeting the diverse needs of society (participant No. 13). Nevertheless, the policies and structure governing our universities are still centralized and consider this type of structure to be the cause of incompatibility and dysfunction of the organization (participant No. 12). Therefore, decentralization in the structure of the higher education system seems to be necessary to achieve service-oriented improvement (which requires a compatible structure and environment).

- Leadership and university management: with regard to the effective role of leadership and management in universities, the participants emphasized that "to develop a service-oriented university, leadership and management must be sensitive to the community's affairs and prefer the

interests of others to their own". (participant No. 14). Observance of the principle of meritocracy in selection, transparency, and public participation of academics in decision-making (participatory management) and planning are other influential characteristics in the management of the university (Participant No. 10). As such, the management of a service-oriented university must be always committed and responsible to society.

- Standardization and needs assessment: organizations that set a standard for service delivery are confident that the service provided meets the needs of customers. According to the academic experts' opinions, "in order to promote a service-oriented university, attention should be paid to the importance of standardization in providing services and needs assessment of customers" (participant No. 9). Therefore, due to the lack of attention or overlooking of standardization and needs assessment in services, the country's universities should pay attention to the necessity of this component in the development of service orientation." (participant No. 3).

- Service quality regulation system: is an important strategy to create a competitive advantage and provide high-quality services. In general, quality is a type of judgment that customers make based on their perception after the service receipt process (29). Interviewees emphasized that "in order to satisfy the customers of the present organizations, including the universities and higher education institutions of our country, it is necessary to focus on the quality of services by providing the necessary facilities to guarantee and increase their revenue sources while maintaining their competitiveness" (Participant No. 15). Due to the lack of quality services in the country's universities (due to mass production and reduction of financial power), the university should take steps to improve the quality of services towards customer orientation and meet the demand of stakeholders" (Participant No. 8).

- Technology and innovation: in parallel with the recent developments in technology and its impact on the process of knowledge creation, higher education experts participating in the present

study emphasized that "expanding the production of new knowledge and technology has provided the grounds for progress and innovation in the university and society. Today, the use of technology has enabled access to new services such as providing e-learning and developing innovative skills, accelerating information transfer, and reducing costs" (participant No. 7). Therefore, the country's universities can provide new findings to stakeholders by paving the way for the development of technology, which leads to the development of technology businesses (turning knowledge into wealth) and employment of graduates and creates new sources of income (participant No. 10).

Discussion

Given the fact that the new age organizations, especially universities, have aimed to improve their services by considering service-oriented features (e.g., increasing the quality of services, flexibility, and customer orientation) (5), the present study attempted to raise universities' awareness of the importance of service-oriented components and dimensions in addition to determining these elements by recognizing the components affecting the improvement of a service-oriented university (by serving the community) using the opinions of higher education experts. Despite many advancements, the country's universities deal with various challenges, including unbalanced growth of quantitative and qualitative dimensions of services, limited resources, lack of academic independence, reduced scientific legitimacy, and lack of accountability (2). Meanwhile, as a social unit, universities must respond to the needs of stakeholders and lay the foundation for the development of the community by creating new knowledge and technologies. According to the results of the study, the components affecting the promotion of a service-oriented university included human resources, responsiveness and transparency, service methods, university autonomy and academic freedom (dominance of open space), university culture, flexible structure, leadership and university management,

standardization and needs assessment, service quality regulation system, and technology and innovation. In this regard, our findings are in line with the results obtained by Mircea & Andreescu (4).

Utilization of IT resources, improving adaptability to environmental needs, and cost savings were the benefits of using a service-oriented approach, reported by Prakash et al. (30). In a study, Steron et al. emphasized the irreplaceable role of leaders in service delivery since they play a key role in the service orientation path and can create a positive service atmosphere in the organization by timely rewards (31). Employees' willingness to respond to the customer, skills, and competence of human resources, observance of politeness and decency, honesty and trustworthiness of employees, the security of access to services, communication with the customer, and their understanding and knowledge (16). In a study, Pink reported abilities such as intelligence, competencies, collective cooperation, and organizational culture as the components affecting SO in a university (6), which is consistent with our findings. In the current research, the participants believed that the components affecting service orientation in higher education centers of the country have been overlooked, which is congruent with the results obtained by Afkaneh et al., who mentioned an unfavorable status for the components involved in the improvement of SO in universities (18).

According to the participants, higher education authorities can improve SO methods in this system by focusing on the components affecting the enhancement of SO and laying the foundation for modifying and strengthening these components. On the other hand, one of the biggest challenges of universities of the country was reported to be a lack of financial independence, academic freedom, and open space to communicate with society. Therefore, universities need autonomy to attract customers' satisfaction and interact with them properly. In fact, the findings of the present study indicated that if the achieved components are strengthened and the existing challenges are eliminated, the country's

universities can meet the needs of stakeholders by promoting a service-oriented culture. In other words, our universities can fill the gap between the services provided and the needs of stakeholders by improving these components. According to the results of studies performed on service orientation and commitment of universities to responsiveness toward stakeholders, it is essential to use all power of the university and establishing strategies based on customer-orientation values.

Therefore, SO is a determinant and a strategic orientation for the university that must be proportional to the changes and comprehension of the society's needs. This is realized only by using SO in all areas of a university and commitment to this issue by all staff. Universities must be prepared to have an active presence in today's challenging and competitive world. The components affecting SO help universities and higher education institutions gain value and credibility for their organization while respecting the service issue. Service orientation is creating value in an organization through constant changes, a positive attitude toward service, formation of a service-oriented organizational climate, directing service provision, and using the customers' knowledge and attitude. Moreover, universities think about society and the needs of their customers in order to move from thinking about themselves (23). University staff should also be prepared to provide the desired service. Using the service-oriented approach, rewards and motivation can encourage staff to promote this good behavior. Service-oriented learning links community services and learning (33). In fact, it is a type of experimental learning that familiarizes the human resources with the actual world (34).

Therefore, the application of a service-oriented culture provides an opportunity for the higher education system and universities to promote literacy on how to create innovative solutions in the performance of staff, students, and other resources. Synergy, task-oriented, and reward system become more real and the knowledge of university customers becomes better by using the service-oriented approach. Factors such as unfair decisions, accountability, value creation, optimal

use of technology, and quality of services at the university are expected to improve through the implementation of a service-oriented university. Accordingly, our results are important since they lay the foundation for the development of SO culture and can be used as a scientific charter to enhance service orientation in the university. Under such circumstances, it is crucial to move toward a service-oriented university. Some of the major drawbacks of the present study were lack of simple access to the research community, lack of conceptualization of service-oriented in the country's universities, and lack of internal resources. However, attempts were made to gather useful information through in-depth evaluation and analysis of the issue using valid documents and interviews with academic experts.

Conclusion

The current developments in the education system in the country show that higher education should pay attention to the needs of stakeholders while maintaining and improving the quality of services. Given the importance of service-oriented university and its capabilities in service innovation, a combination of new technologies and exchange of experiences with society can play an important role in achieving sustainable development of universities as a key strategy. This important issue emphasizes the need for current research. Therefore, in the current changing situation, our universities must pay attention to the needs of society in order to maintain survival and gain a competitive advantage. According to the results of the present study, improving components such as committed human resources, responsiveness and customer satisfaction, quality improvement, development of a flexible structure, maintaining academic autonomy and reducing reliance on the government, needs assessment and continuous evaluation, technology development, cooperative management, and other dimensions, can strengthen the SO culture in universities. Therefore, we can make customers better adapt to the scientific environment by laying the foundation for improving services. Today, the country's university services are in dire need of

change and innovation due to the lack of accountability for social demands, in which case universities can improve the country's university services by using a centralized service strategy and improving its components.

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References

- 1-Dadras M, Khouran Z, Yousfy M, Farokhi H. Evaluating the quality of university services from the perspective of students *J Eng Educ* 2018; 17(10):142-159
- 2- Qalavandi H, Ashrafi F, Aghazadeh K. Evaluating the quality of educational services at Urmia University based on the HeadPerf model. *J Edu Meas and Eval Stud*. 2017; 17(2): 68-88
- 3-Osterlinck A, Leuven A. Knowledge M-anagement in Post-Secondary Education: universities. OECD working paper. *J Serv Res*. 2005. available at: www.oecd.org/dataoecd/46/21/2074921.pdf.
- 4-Blinco K, Grisby T, Laird A, O'Neill O, Srikanth V, & Smythe C. Adoption of Service Oriented Architecture for Enterprise Systems in Education: Recommended Practices. IMS Global Learning Consortium, Inc. 2009; 5(10):23-32
- 5- Mircea M, Andreescu A. Service-Oriented University: changes and opportunities towards innovation. *Procedia Soc Behav Sci*. 2012; 31(5): 251-256
- 6-Kettun M, and Kantola J. Service-Oriented Architecture in Higher Education. Published in the United States of America: by Information Science Reference (an imprint of IGI Global). 2008: 751-755. Web site: <https://www.researchgate.net/publication/264553331>

- 7- Plonka, FE. Developing a Lean and Agile work force. *Hum Fac Ergon Man.* 2008; 7(1): 11 -20.
- 8 -McMahon W. The Impact of Human Capital on non-market Outcomes and Feedbacks on Economic development. *J Educ Econ.* 2012; (62):87-105
9. Chiang F.T. & Birtch T.A. Reward climate and its impact on service quality orientation and employee attitudes. *Int J Hosp Manag.* 2012; 30 (1): 3-9.
10. Karpen I.O, Bove L.L., Lukas B.A. & Zyphur M.J. Service-Dominant Orientation: Measurement and Impact on Performance Outcomes. *J Retailing.* 2017 91(1): 89-108. <https://doi.org/10.1016/j.jretai.2017.01.001>
- 11 -Hamza A, Hassan A, Alhady M. Developing a Service Oriented Process Management System for University Quality Assurance. *Int J Eng Sci Eng Technol.* 2012; 2(1): 7-17
- 12- Fajar A, Norcahyo M, Sriratnasari S. SOA System Architecture for Interconnected Modern higher Education in Indonesia. 3rd International Conference on Computer Science and Computational Intelligence. *Procedia Comput Sci.* 2018; 135:354–360
- 13- Faller C, Höftmann M. Service-oriented Communication Model for Cyber-physical-production-systems. Conference on Intelligent Computation in Manufacturing Engineering, *Procedia CIRP.* 2018; 67: 156 – 161.
- 14- Mircea M, & Andreescu A. Using Cloud Computing in Higher Education: A Strategy to Improve Agility in the Current Financial Crisis. *Commun of the IBIMA.* 2011;6 (20):10-20
15. Davis S ,Bunderson B. Using a Service Learning Teaching Modality to Recruit tandardized Patients for Mental Health Nursing Simulations, Clinical Simulation in Nursing. *J Mil Med.* 2015;7(6):19-14.
- 16- Bageri A, Abaspoor A, Agazadeh A. Designing a competency model for Islamic University graduates for service-oriented and meeting the needs of society .*J Manag Islam Stud.* 2012; 3(2): 503-520.
17. Parandeh A, Parade N, Sharifnia H. Learning approach based on providing nursing education service . *J Med Educ.* 2015; 7: 658-653
- 18.Yeganeh A, Jafari P, Gurcheyan N, Sharifi H. Model for Improving the Service- Oriented Universities. *J Educ Adm.* 2018; 9(1): 128-152
- 19- Cuper D. G. University spin off firms and high growth firms in Canada. *APEC SME Innovation briefing.* 2007; 3 (1): 23-32
- 20-Kysilka D, Medinschi S. Managing the quality Components of higher education services. *Qual mana high Educ.* 2012; 23(3): 232-239
- 21-Zetthaml V.A, parauraman A, Berry L .L. Delivering Quality Service. *J Mark.* 2015; 49(4): 41-50
22. Mersalehi Y, Zamani H, Mahani M. Teaching and Comparing the quality of Educational Services and Teaching quality at the Training centres. *High Educ lett.* 2017; 11(43): 131-159
- 23 -Strauss A, & Corbin J. Basics of qualitative Research: Techniques and Procedures for Developing Grounded Theory.(Buik Mohammadi, translator). Tehran: Institute for Humanities and Cultural Studies, 3rd edition. 2008.
- 24-Creswell JW. Qualitative Inquiry and Research Design. 2009 ;Tehran: Allameh Tabatabai University Press. 2017: 205-210
- 25- Shapiro H .Higher education and community. Transletor shima mogomo and shoma shasti(2017). Tehran :Social and Cultural Studies of Research. 2005.
- 26-Jafarzadeh Z. Knowledge sharing infrastructure in higher education. *J Libr Inf.* 2015; 16(2):204-224
- 27-Estermann T. (2017). University Autonomy in Europe III: Country Profiles, European University Association, Avenue de l'Yser 74 · 2040 Brussels, Belgium. 2017; 4(8): 54-67
28. Rostami F, Zarafshan K, Garavandi Sh. Service-Learning a New Approach to Higher Education .*High Educ Mail.* 2015; 7(26) .99-108
- 29- Prakash M, Nadkarni D Randolph A, Miller, M. Service-oriented Architecture in Medical Software: Promises and Perils . *J Am Med Inform Assoc.* 2007; 14(2): 244–246
- 30-Sandeep P. conceptualizing and Measuring Service Cultural institute of Technology Unitech, Thesis for the degree of Master of Business, Lecturer Department of Management and Marketing Unitech Institute of Technology. 2015.

31. Ostrom A. Moving forward and Making a difference: Research for the science of service . *J Serv Res.* 2012; 13(1): 2 4-36
- 32-Mazhar A, and Masood A. Determinants of Students' loyalty to service-based university approach. 2019: Online at <https://mpa.ub.uni-muenchen.de/84352/>
- 33.Gaster MA. Service learning: Where is the emphasis? *Teach Learn Nurs.* 2011;6(1):19-21.
- 34.Hwang H-L, Wang H-H, Tu C-T, Chen S, Chang S-H. Reciprocity of service learning among students and paired residents in long-term care facilities. *Nurse Educ Today.* 2014;34(5):854-9.

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