Identifying the antecedents and the consequences of Motor skills training in University of Applied Sciences

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Abstract

Purpose: In this qualitative study, identifying the antecedents and the consequences of Motor skills training in University of Applied Sciences was studied.. **Methodology**: Using the qualitative content analysis method, a structured interview was conducted by professors, experts, and students at the Applied Scientific University through a targeted way. Fifteen papers and three books were reviewed in this regard and analyzes continued to saturation. The registration unit was considered as content in this research. At the end of the inductive content analysis, and with continuous comparison of the obtained codes, 6 categories and 10 sub-categories were emerged. The data analysis method was the inductive content analysis with coding at three of open, axial, and selective levels. **Findings**: The results indicated that the most important achievements in the training of motor skills in students were: interventional conditions, pivotal phenomena, underlying conditions, causative conditions, strategies and outcomes, and the most important consequences included Student characteristics, methods and principles for training motor skills, infrastructures, The characteristics of trainers, actions and interactions and outcomes. **Conclusion**: The obtained result from this study can be the guide for the practice of masters and motor skills training designers in college students through formal education courses and, finally, the improvement of motor skills training in these environments.

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[DOR: 20.1001.1.26453460.2018.1.8.16.0]

1. Introduction

Considering the current 1,100 applied sciences centers with 5000 professors (Saeedi, 2014), the contribution of the applied sciences universities to higher education level is very impactful. The purpose of this university is to educate students who, in addition to theoretical education, have also been well-versed in their field-related skills. Training the skills is one of the needs of the community and the world in order to strengthen third-generation universities. Therefore, the applied Sciences University, as a university operating in study fields in Iran, needs to organize its qualifications as soon as possible. Considering this fact, achieving the most desirable level of skill training can be one of the most important aspects of this university. Determining the direction of movement in order to achieve the desired level requires strategic planning. The Strategies should be developed by analyzing the internal environment of the comprehensive university (strengths and weaknesses) and analyzing the external environment of the whole country (opportunities and threats) under the long-term missions and objectives (Eshghi Araghi & Ghanipour, 2017).

2. literature Review

Applied sciences education is designed and implemented with the aim of increasing the level of knowledge and technical skills of rural workers, increasing their production and income, creating suitable job opportunities and reducing unemployment throughout the villages of the country. There are more than 1,000 applied sciences centers in the country that have a great potential for enhancing qualitative skills (Jamshidi & Zinabadi, 2012).

Skill training is one of the key factors in achieving the goals of a sustainable development. Through the main functions of this type of training are the specialist human resources and the link between education and the world of work by responding to the needs of various economic and social sectors (industry, business, and services). Skills training programs for the training of individuals can play their part in the process as well, whose design, implementation, evaluation, and correction are realistic, based on the science and technology of the era, with the active participation of the main audience, consistent with the requirements. The obvious and hidden issues of production units and utilities are carried out by efficient experts, vocational education and technical instructors according to scientific findings. Undoubtedly, any hesitation in realizing the abovementioned factors will cause many problems in the effectiveness of such programs. To avoid such events, it is essential for the programs to be continuously evaluated and carefully scrutinized (Khaledi, 2008).

Bagheri Far & Salehi (2014) conducted a research entitled "Challenges in the training and education of entrepreneurial students in technical and vocational schools: a phenomenological study". The results showed that there are 10 major challenges in the process of training and educating entrepreneurship students in vocational schools. Among the challenges, some are "lack of up-to-date equipment for workshops and textbooks, inadequate budget, lack of up-to-date teaching methods for students, lack of absorption of talented and interested students, lack of sufficient training time, The necessary communication between the learned skills with the needs of the job market, negative attitudes of parents toward vocational schools, the problem of continuing education, and the inadequate media support for training. Each of the above-mentioned has created very serious problems in the dynamics of the process of vocational training and the education of entrepreneurship students.

Navidadham & Shafizadeh (2016) conducted a research titled as "Review of the most important challenges and strategies of skills training in Iran." The results of this study indicated that according to the results, three of the most important challenges of skills training in the country are: lack of higher education development model, uncertainty in the share of skills training in the higher education system of the

country and lack of necessary skills in graduate students of training centers. Applied sciences education system through the interaction between the field of practice and theory in the development of related scientific studies is the creation and development of new concepts and the reconstruction and reform of the educational system (Khalaghi, 2009). In other words, educational reforms are carried out through the research mechanism. Indeed, the research-driven nature of the system enables the continuous improvement by adapting time and technology changes. One of the common problems faced by Iran's applied sciences education system is the inability to find new solutions due to the changes in time to meet customer requirements and systematic reform. Lack of a theoretical basis for applied academic teaching and reliance on it for scientific study of problems and discovering solutions for qualitative improvement of the system shortages or lacks in related research centers in the fields of technical education and the lack of connection of this system with universities and research centers are among the due challenges. Currently, despite the wide variety and diversity of these trainings, there has not yet been an independent or accredited research center or institute for researches on applied technical science education in Iran. In addition, there is no curriculum in the field of applied science education in Iran's universities, for students and university professors to study and interpret such definitions (Barzegaran, 2006). In a research titled as the effect of observation of animation model, fixed image and combined model on motor learning of two-base balance skills, Ghavami et al (2012).

Resulted as significant effectiveness; The results indicated that animation is an ideal pattern for learning the double-sided balance skills. They also suggested that static images could be used as an accompaniment with animation. Ashtari (2016) examined the effect of instantaneous summary and scope feedbacks on learning performance of students' mobility. The results showed that providing feedback because of the active engagement of the learner through the learning process and increasing the motivation of learners to conduct the process is more beneficial than other types of feedbacks. Simbar et al. (2017) conducted a research titled as "Adolescent motor skills upgrading based on skill-oriented learning". The results showed that skill-based education that teaches students at the actual job level is very effective in improving their motor skills.

Schlöffel, et al (2017) conducted a research titled as "Teachers' Skills Training in the Form of Combined Learning Scenarios." The results indicated that the use of combined training style has a significant effect on skill-based educators' trainings. Cahyaningrum, et al. (2016) conducted a research titled as "Educational Assistance Materials Based on Structuralism Principles for Students' learning development." The results showed that the use of educational materials can be effective in developing skill-oriented students' learning. Martini et al. (2015) conducted a research titled as "Understanding of psychology students from skill-based learning through academic assignments". As the university assignments are based on practicality and skills, the results indicated that in real life, the more the practice is considered, the higher understanding of students will result.

The present study was conducted to pattern the motor training to apply it on the practical courses in order to improve the high level learning outcomes. There are three types of skills or competencies; the first level is the broad set of competencies needed for success in the workplace known as the employment skills, the second level includes the technical skills common to all businesses in a cluster or industrial sector, and the third level includes the technical and unique skills throughout the industry. In this research, the third level of skills was dealt with to provide the best model in relation to how to train motor skills to the students of applied sciences university. In this research after examining the strengths and weaknesses of Applied Sciences University and the study of effective factors on motor skills training, a pattern is presented. In a nutshell, the purpose of this study is to find the most effective pattern for promoting motor skills training and to identify effective factors in teaching these skills and to provide strategies in order to improve the provision of such motor skills training along with provision of this template to the instructors and stakeholders. Therefore, they teach the students based on the strategies offered by the motor skills

courses. Following the preparation of the pattern, the presented strategies were implemented on the students of the Applied Sciences University along with validation.

3. Methodology

In this research, a qualitative content analysis with inductive approach was utilized. Content analysis consists of using a repeatable and valid method for obtaining inference from the content in relation to its source or its features. The qualitative content analysis is an empirical, methodological and controlled approach to content, using the rules of content analysis and the steps of its patterns without hasty quantification (Fardmanesh, 2004). In order to analyze the content in this research, both written sources (book and article) and the obtained content from interviewing the specialists in the field of motor skills training at the Applied Scientific University were investigated and studied.

A. Content analysis of written documents: 1. Papers: To do this, according to the Table 1, the keywords were first specified for the content analysis. Then, these keywords were searched through the mentioned databases. The criterion for selecting the articles was the similarity of the keywords in the title of the articles. Due to the large number of the articles, the priority was to analyze the articles indexed from the 1980s onwards. Since some articles have not been indexed in the famous databases or have not been freely available, Google Scholar was also used for searching. There were also few articles available on Persian databases such as SID, MagIran, Noormags and Daneshyar.

Table 1. Keywords and searched databases for content analysis

Searched terms	Databases	Number of the obtained articles		Number of the selected articles
		Research-based	Review-based	
Strategy The model Teaching University of Applied Sciences motor learning motor skill	Proquest Springer Science direct Emerald Ebsco Sage Eric Google scholar Libijen.net MagIran Iran Doc	54	19	15

The criteria for selecting the articles for analysis were in terms of the publish time from 1980 to 2017, and in content (15 review-based and 4 research-based) through electronic channels. However, the 15 papers for analysis were not identified from the very beginning casually. Rather, according to their relationship with the topic of research, initially, an article was selected; the content analysis was conducted on it, and then another article was selected and analyzed. It should be noted that since the selection and analysis of the articles was conducted after the analysis of books, a theoretical saturation was considered in the article No. 12. Although from the No. 13 on the categories and codes were being repeated constantly, the next three articles were also examined for ensurement.

2. Books: By searching for the keywords presented in Table 1, 8 downloadable books were obtained from the databases. The criterion for selecting the books was the special focus on "motor skills training." For this purpose, the list of books was carefully examined. Then with this limitation, three books were selected.

B. Content analysis of the interview: To conduct the interview, initially, with a review of theoretical literature, general questions were drafted. Then, the interview was performed on the three groups of individuals (professors, students, and experts) throughout the Applied Sciences Universities of Tehran in a

purposeful approach. In this regard, 10 workshop professors, 8 experts of training and 4 graduate students in the fields related to the assembly industry were interviewed. To select the individuals in a targeted manner, the procedure continued up to theoretical saturation. 22 individuals were interviewed in this regard. The interview time ranged from 15 minutes to one hour. After each interview, their file was heard and turned into text and the interview questions were balanced. In addition, interviews were semi-structured and individuals' speeches could have been the basis for the next question in the interview process.

To analyze the qualitative data, an inductive content analysis was used in accordance with the Table 2. After selecting the items for analysis, first, the semantic parts were read on the basis of the subject analysis unit, then, a label or code was determined for each of them. In the next step, the similar codes were placed in a sub-category. Finally, the main categories of research became apparent with the combination of similar categories.

In this study, the maxqda software (version 10) was used to analyze the inductive content. It should be noted that this software only performs sorting of the codes and the researcher identifies the sub-categories and categories and, finally, develops a model based on the data obtained from the qualitative content analysis.

To do this, at first, each of the texts of books, articles, or interviews was read for a general overview of anchor times. Then, in the context of content analysis, reading of the text began and continued. In the sense that the registration unit was considered the content instead of words, sentences, paragraphs or the whole texts. From the beginning of the text, readings began, and wherever it referred to content, the text was chosen as the key sentences, and a code or label was assigned for it. Defining the codes and labels, Miles & Huberman (2004) stated that: "Codes and labels are semantic units used to describe or infer information during a content analysis study". The codes usually depend on pieces that can be words, phrases, sentences or the whole text. An example of semantic units and related codes is given in the Table

Table 2. Effective factors on improvement of motor skills

Initial extracted concepts of motor skills training improvement in assembly works	Open coding(categories)	Categories
Having the physical aptitude of the student body strength, muscle strength, physical flexibility, the ability to do the works by hands, nerve and muscle coordination	Characteristics of Students	Intervener conditions
Having confidence in students' works, a passion for works and skills, the ability to adapt mentally with the desired skills		
Drawing Attention - providing Prerequisites - Providing Help (Manual)	Methods and Principles of Learning organization	phenomenon-oriented
Direct view of the work done by skilled craftsman easily (as overview) or indirect viewing (Screening movie) of the work precisely		
Initially doing mental exercises, then doing the practice periodically for the individuals with less experience is an effective strategy for improvement of motor skills . the weaknesses should be noticed during practices to investigate the due trainings		
Controlling scientific activities of students and presenting feedbacks to the students from the trainers with repetition of performance tests		
Having workshop equipment, technology ,knowledge, guidebooks, allocating budgets, using ICT and curriculum and workshop programs	Infrastructures	Underlying conditions
Hiring students interested in assembly works, group work		
Having scientific and moral competence, patience, tolerance and open-mindedness, creativity, emotional intelligence	Features of the trainers	Causal conditions
Trainers' specialty in educating the skills, their knowledge, of the skills - certified trainers - Experiences		

Hiring talented students - Holding entrance examination - Having a special workshop curriculum - Hiring experienced faculty in the field of motor skills – having a specific method for teaching motor skills - allocating appropriate budget for equipping futuristic workshops	Actions and interactions	Strategies
Having capable graduates - Meeting the needs of the labor market for skilled workers - meeting the needs of students in higher level education in the field of motor skills – updating the workshop books -attracting more students	Results	Consequences

4. Finding

After coding the semantic units and reaching the saturation limit, the codes were categorized based on similarity, and finally 6 categories and 10 sub categories of qualitative data emerged be due to the analysis of the content of the interview and the texts. Table 3 lists the categories and the due sub-categories.

Table 3. Extracted categories and sub-categories from qualitative content analysis

Item	Categories	Sub-Categories
1	Characteristics of Students	Physical ability
		Mental ability
2	Methods and principles of the organizing of motor skills	Preparations
		Practice
		Evaluation and feedback
		observation
3	Infrastructures	Physical infrastructure
		Educational infrastructure
4	Trainers' features	individual ability of the trainers
		Professional ability of trainers
5	Actions and interactions	-
6	Results	-

In the following, each of these categories and the due sub-categories are explained along with a summary on the qualitative content analysis of them. The semantic sentences written in parentheses are either from interviews with professors, experts and students, or also from the books and articles that are analyzed in this regard. It is worth mentioning that in order to maintain the authenticity of the statements quoted from the interviews; they are mentioned in the same colloquial way.

Category 1. Intervener Conditions (Students' Features): In the analysis of the qualitative content received from the analysis of articles, books as well as the texts, the most emphasis was made on the characteristics of students in learning motor skills As 12 codes directly pointed out this factor. Motor skills are essential components of expertise that is used by the individuals who work in industry or other specialized professions. How these skills have been taught and practiced has changed considerably over the years. For instance, with the advancement of technical capabilities, manufacturing and assembly skills training in the industry nowadays, the use of simulations and computer-based training has progressed. On the one hand, the role of motivation in learning has been intensively ignored in learning literature. A sample of the statements made in the interviews (from professors, experts, students) in this regard is:

Physical Ability:"It is important to improve the physical and mental characteristics of students in enhancing their motor skills. Students with greater accuracy can be effective in developing their motor skills in using their hands and fingers. They gain more control over their hand and eye movements, which

allow them to deliver their work in a higher quality and precision. " "Some students do not have the physical capabilities to do the work, for example, the student is so weak that they cannot move one of the walls of the elevator cabin alone, and let alone to carry out the assembly of that piece."

Mental ability: "the university should attract students who are prone to work". "Students usually do not have the passion for practical works. The students who enter the industry should be interested in practical works."

Category 2. Phenomenology (the methodology and principles for organizing motor skills): Contemporary research findings in the field of psychology and motor skill science indicate that it focuses specifically on four factors that are shown to enhance motor skills learning: Focus on preparation, how to present trainings and practices, observations and feedback. In this regard, the role of preparation and feedback from these exercises and the due observations can be a catalyst for learning motor skills. The motivational features of feedback can have important learning effects. The components such as rehearsing exercises, feedback, and direct or indirect skills are highly influential in skills training. Some of the interviews on this factor are mentioned below:

Preparation: Pervasive attention: This action is necessary for concentration and introduction of learning, and has a significant impact on the direction of attention and the amount of energy consumed (Ganie, 1985). Informing the learner of the goal means they should be aware of the expected learning outcomes."The professor drew the shape of the device on the board, but we wouldn't practice."

Observation:The findings have shown that only the observational activity is not usually effective as a physical exercise, although it has been consistently shown that observing and practicing learning skills is the most effective solution. Sense of sight along with practical practice is effective. Exercise and observation (especially when accompanied by physical exercises) can play an important role in learning the skills. Patterning, that is, displaying skills by a teacher or trainer, or any other mode that can show it well, has more emphasis on comprehensive capability for gaining information in the process of observing individuals. Visual teaching aids, such as films, video tapes, and skill demonstrations by skillful individuals are good complements to pre-exercise training.

"Some of the tools of assembly works were not available, some were available, but they did not allow us to work with them, because they said they were too expensive, if we damage them, it will be costly."

"I only show works once in classes, but each student can eventually complete each part once because there is no enough time."

Practice:The intentional exercise is the most important variable to facilitate learning, there is an important and basic literature that defines methods in which trainings can be programmed or adjusted to enhance the learning process. In this regard, the due professors and experts mentioned the following in interviews:"Exercise can make an important contribution to learning, including a lot of practice which is not only cost-effective, but also can increase learning"."We've never worked on the actual elevators." "Studies have shown that instructions create external focus on work are a result of much training, which facilitates the autonomy of motor skills and improves the efficiency of movement."

Evaluation and feedback: As Rahmaninia pointed out in his book, feedback is one of the most effective factors in learning motor skills. Feedback is an important component and is one of the ways in which educators can influence their students' learning process. The most important feedback action when teaching motor skills is to provide information about the pattern of action for students. Recent researches have also shown that feedback can be used to focus learners' attention on the desired outcomes. (Rahmaninia, 2005). Interviews with the due experts on this subject are as follows:

"Feedback is not only a source of information; it is also a motive that has important implications for learning. For instance, feedback after doing homework (theoretical and practical) shows that feedback

from performance has a positive impact on learning.""Good feedback after exercises, can make the motor skills learning more effective compared with "undesirable" feedback before exercises."

Category 3: underlying conditions (infrastructures)

The existence of infrastructures for individuals and educational facilities is one of the main factors in the formation of motor skills and learning them.   Through interviews with professors and graduates in this field, they stated that:

Physical infrastructures:"I think answering to a few questions can be useful: safety issues should be respected when planning and implementing activities.""Our workstations were not equipped well, even in some cases we were taught theoretically in a typical classroom."

"We did not have enough equipment at our university so that we did not have time for everyone to work with the equipment. If we were lucky, we could once have worked only once with the equipment."

Educational infrastructures:

"At high levels, the curriculum defines commands in order to learn different skills. At low levels, the curriculum defines the learning process in one skill; therefore, paying attention to the curriculum and the student's skill needs is very important. "Workshops timings have to be expanded so that students can get the skills they need"."Using a video projector and devices such as simulators or handbooks can be helpful."

Category 4. Casual conditions (trainers' characteristics) :Today, with the emphasis on action-oriented learning, the role of teachers changes from the information transmitter to the learner's helper and guide. This new role does not diminish the importance of the teachers' position, but creates the requirement for new knowledge and skills. The trainers providing adaptable opportunities to strengthen motor skills would enhance the development of motor skills in educational environments. In an interview with a faculty member, he stated that the inability to properly transmit the course materials and the inability of trainers are through the problems nowadays. In this line, he stated that:

Trainers' individual ability :"A teacher starts a class with the task of teaching students, and then changes the work based on students' performance or practical works. The mastery on the tasks allows the trainers to move towards new and more complex tasks, but it seems one of the challenges is that the instructors do not set tasks considering their skill levels. " Trainers' professional capabilities：

One of the most important factors due to effective education is the trainer who plays an essential role as an effective factor in empowerment and learning of learners (Wilcook , 2002). A trainer has the ability teach the skills that he has fully mastered to others in an appropriate way. Some graduates also stated about their professors that:Sometimes the students themselves should teach the trainers how to work".

"Some of the trainers were good and knew a lot, but they were not in mood of answering the students."

Category 5: Strategies (Actions and Interactions) :Strategies represent the interactions and actions that activists face in their own terms. In fact, the process of the flow of actions occurs in response to events and special situations interacting with the phenomenon. In fact, the purpose of the implementation of the strategy is managing, carrying out, and realizing the phenomenon in the context of the dominance. These strategies are chosen in a targeted way and are made for a reason; therefore, using tactics and strategies can create phenomenology (Corbin & Strauss, 1990).

One of the most important weaknesses of the University of Applied Science is the lack of faculty members, so they cannot use the well-qualified and experienced professors in any of the lessons. the professors usually enter the university temporarily and leave the university after a while. therefore, the professors of this university, that are through the most important pillars of education, have always been an issue. Another point is that none of the technical qualifications of the professors is examined before their entry, and only their degrees and teaching histories is reviewed. therefore, It is not specified whether these professors have the ability to train motor skills.

Category 6: Consequences (Results): Providing such a pattern and implementing it will have implications that, in a successful state of implementation, will enhance the skills training, which supports the same phenomenology. "In fact, strategies are in place to deal with, to manage or control the phenomenon and have consequences" (Suddaby, 2006).

5. Discussion

The purpose of this study was to identify the antecedents and consequences of motor skills training in the students of Applied Scientific University. The results indicated that many internal and external factors affect the learning process, some of which are the physical, emotional and mental preparations of learning , and ignoring these factors leads to superficial learning and, as a result, weak manpower. Therefore, if we can accurately create the preparation of students to learn, we have taken a long step towards providing appropriate teaching methods. Training consists of a series of information or advice, counseling and help in identifying thoughts, expressing feelings, identifying options, or developing new skills. In other words, learning is the process of relatively stable changes in the potential behavior of an individual, which is obtained through experience, among which various factors influence the internal or external, encompassing, and learning status. One of such important factors is physical, emotional, and experimental preparation of the learners. Among the laws and principles due to learning, the law of preparation is at the top of the list. This issue is so important that all social, individual, informational, and behavioral patterns have referred to the role of universal preparedness for exploratory participation, self-empowerment, and autonomy in learning (Smeltzer, 1996).

Emotional preparation is also facilitated by providing a positive, warm, and accepting atmosphere; and also by determining the learning goals. Among other emotional excitement factors, one can mention the relationship between the material with the student's final destiny, the curiosity of the master, the enthusiasm of the professor for the subject, the feedback, and the examinations. Mental readiness includes experiential learning and past experiences, which means, learning is the current in which the experiences form the basis of the present situation. Therefore, the content should be presented in such a way that the learner has the ability to understand them, and the trainer should pay attention to the readiness of the individual students in order to properly teach the materials (Bagherifar & Salehi, 2014).

As a result, this question raises that which conditions make learning more effective. This is certainly not possible without regarding the student's interpretation of the conditions in which the learning is taking place. In other words, in order to improve learning, the circumstances should change instead of the very learners. "If the student's current learning conditions can be correctly mapped out, one can move to a point where the student is physically fit to the extent possible. On the other hand, with the view that a coherent and comprehensible piece of information will be presented to the students, they can properly attend the classes "(Abernethy et al., 2010).

Individuals do not have the same characteristics and abilities. Even in simple and normal behaviors, the differences in their ability to do simple things are very small and sometimes indistinguishable, while their ability becomes obvious in learning complex and difficult skills. Therefore, in order to select the right individual for jobs, one should measure their ability to find the ones who can handle things or at least have another potential ability to do it, which means to make sure that after completing an educational course, they will be able to perform the desired tasks in a desirable manner.

In addition to cognitive processes, other skills also contribute to the behavior in working. As these factors are more objective, many studies have been conducted on their relationship with the work efficiency. These skills are either due to the physical manipulation of objects in the environment, or due to understanding their technical relationships with the power of our senses. In general, these talents include the sensory and motor abilities of individuals that help them with the pursuit of motor activities and the

perception of stimuli. "Motor skills are related to manual jobs and technical activities, that are manifested in two forms: one mechanical intelligence and two psycho-motor or mental-motor. From the sensory abilities, one can refer to the multiple senses that are often discussed through feelings and perceptions "(Nadimi, 2015).

In line with the results of this research, some suggestions for the training of motor skills in the field of assembly and engagement enrichment and the presence of learners in motor skills are presented: Providing opportunities for trainings on motor skills and participation of individuals together.Providing educational experiences to university students. providing Student support on a permanent basis. Providing opportunities for increasing knowledge on motor skills over time

References

Ashtari M R. (2016). Impact of immediate feedback, summary and scope on performance and learning motor skills . PhD thesis, AZAD University of Tehran Markaz.

Bagherifar A A, Salehi K. (2016). Study of the degree of students' satisfaction with studying in technical and vocational schools. Abstract articles of international conference on skills and employment . Tehran : National Technical and Vocational Education Organization . Torbat Heydarieh in the academic year 2014-2014.

Bagherifar A A, Salehi K. (2014). Skills challenges Studying and educating entrepreneurs in technical and vocational schools : a phenomenological study . Tehran. Fifth National Conference and the Fourth International Conference on training and employment

Brazegaran H A. (2006). Study the processes of teaching - learning vocational training courses in South Khorasan province. Research Report . Organization of Education and Technical and Professional Country.

Jamshidi L, Zinabadi H R. (2012). Privatization of Public Higher Education and Skills : A Case Study of Applied Academic Universities . Qualification Quarterly , 1 (1) , 33-4.

Khaledi M. (2008). Evaluation of effectiveness of technical and vocational education, vocational and academic courses and applied to the separation of public and private employment. Research Report, Institute for Labor and Social Security.

Khalafi A A. (2009). Features of the Australian Technical and Vocational Education System : lessons for reforming and technical education of Iran, Quarterly Journal of Educational Innovations No. 5 , Second Year . .65-81

Saeedi N. (2014). Educational Institutional Policies on Technical and Skills Training . Master's Thesis . Zahedan. Faculty of Nursing and Midwifery.

Eshgi Araghi M, Ghanipour F. (2017). Self-efficacy of entrepreneurship and lifestyle Strategies to realize entrepreneurial intention (case study : Applied Academic University of Markazi Province, Semiverar Branch). Journal of Innovation and Value Creation , 6 (11) , 92-75.

Ghavami A, Hosseini F, Mohammadzah H, Maleki B, Borhani H. (2012). Effect of observation of static images animation model and combination model on motor learning of two-base balance skill . Magazine Growth and Sport Learning, 4 (2) , 156-143.

Nadimi M. (2015). The impact of cognitive skills training, students move on cognitive function. Quarterly Journal of the Faculty of Medical Sciences of Islamic Azad University of Orumieh.

Navidadham M, Shafizadeh H. (2016). Study of the most important challenges and strategies of skills training in Iran . Socio-cultural Strategies Journal , 5 (20) , 15-2.

Abernethy B, Schorer J, Jackson R C, Hagemann N. (2010). Perceptual training methods compared: The relative efficacy of different approaches to enhancing sport specific anticipation. Journal of Experimental Psychology: Applied, 18, 143-153. doi: 10.1037/a0028452

Corbin J M, Strauss A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. Qualitative sociology, 13(1), 3-21.

Cronemberger S, franca j R, araújo A C F, da cunha F R, Faraco A A G, Ferreira A, Blackwell K. (2016). Ramses rosales diaz; jose navarro-partida; beatriz alvarado-castillo; abril bernardette martinez-rizo; jesus bernardino velazquez-fernandez; arturo santos. Investigative ophthalmology & visual science, 58, 2109 .

Fardanesh H. (2004). Classification of instructional design models based on learning and teaching approaches. Journal of Psychological and Educational Studies, 34(2), 5-21

Martini R, Puhlik - Doris P, Larsen G, Gray J, Weir K. (2015). Individual differences in use of humor and their relation to psychological well-being: development of humor style questionnaire. Journal of research in personality, 37,

Miles R, Huberman T. (2004). Strategies for ensuring trustworthiness in qualitative research projects. Education for information, 22(2), 63-75.

Schlöffel R, Borchert T. (2017). How does competence-oriented training with qualified Physical Education teachers work?– Development and implementation of a web-based video analysis service (IQUEL). Journal of European Teacher Education Network (JETEN), 12, 64-72.

Simbar M, Tohidi M, Majd H A, Azizi F. (2017). Effects of levothyroxine treatment on pregnancy outcomes in pregnant women with autoimmune thyroid disease. European Journal of Endocrinology, 176(2), 253-265.

Smeltzer S C, (1996). Expiratory training in multiple sclerosis. Archives of physical medicine and rehabilitation, 77(9), 909-912.

Suddaby L. (2006). U.S. Patent Application No. 11/337,074.