

Relationship of Self-Directed Learning, ICT, and Educational Motivation with Entrepreneur Curriculum in Distant Education

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Abstract

This research is conducted aiming to study the relationship of self-directed learning, information technology and communication, and educational motivation with entrepreneur curriculum in distance education. This research is practical, quantitative, and descriptive - correlational (non-experimental) study. Target population of this research included all 550 female students of smart secondary schools in Esfahan city in Academic year of 2016-2017. Using Morgan formula, 225 research samples were selected through clustered sampling method from regions 2, 3, and 5 of Education Administration of Esfahan city. Library and survey methods were used for data collection. The instruments included researcher made questionnaires about entrepreneur curriculum of distant education, educational motivation, self-directed learning, and ICT. The validity of questionnaires was confirmed by ten professors and experts in this field and its reliability was calculated through alpha Cronbach that was 0.73. For analyzing data, SPSS software, version 21, was used to present descriptive and inferential statistic. The results showed that self-directed learning, ICT, and educational motivation have positive significant relationship with entrepreneur curriculum of distance education. It also shows that all of three variables of self- directed learning, ICT, and educational motivation are important in preparing entrepreneur curriculum. Educational motivation have maximum importance with $\beta= 0.43$ and information technology has minimum importance with $\beta= 0.23$.

Keywords

Entrepreneur Curriculum, Educational Motivation, Self-Directed Learning, Information Technology and Communication (ICT).

Introduction

One of the problems of educational systems has long been the way of presenting curriculum to students in that it does not increase the ability of students which consequently influences their learning motivation and in turn cause their failure. Hence, attention to entrepreneur curriculum of distance learning and its developing in learning were constantly considered by authorities, students, and educational practitioners. On the other hand, along with complicating educational process in current era and its wide expansion, traditional and classical education (teacher oriented and book oriented courses) cannot help students in this dynamic space. Therefore, it is necessary to seek effective, dynamic, and up-to-date educational system [2].

Entrepreneur curriculum of distance learning includes collection of teaching-learning activities that after passing them, students, without other's assistance, are able to enter to economic, social, and cultural activities and self-employment with a high self-confidence. One of the effective factors in developing the entrepreneur curriculum in distance education of smart schools is self-directed teaching [3].

Knowels (2011), quoting from Fisher, King, and Tague, has defined self-directed learning as a process in which people proceeds to identify their own learning needs, determine their

learning objectives, identify required sources and contents for learning, select and implement the correct learning strategies, and choose proper assessment system for evaluating their learning with or without other's help [5].

Self-directed learning is an instructional method that increasingly is used in distance education systems and can be defined according to the level of responsibility of the learners to their learning [1].

The results of the third international study of mathematics and science that was planned and conducted by International Association of the Evaluation of Academic Achievement show that in the lesson contents of most countries, there is not enough attention to these skills (tims & perls, 2011). Knowels (2011) quoting from Williams, said that students who enter the education programs without self-directed learning skills encounter stress, frustration, and failure. Quoted from Chao and chen (2008), studies of Saroi (1980), Hermeneu (1990), Anderson (1993), Darmianti (1994), Maurice (1995), Hoorang (1995), Ogazon (1995), Hegrati (2000), Hsu and Shiou (2005), and Stewart (2007) show that there is a significant relationship between self-directed learning and academic performance and entrepreneur curriculum planning in distance education. On the other hand, using information technology devices such as personal computers, education software, and the Internet enhance distance education entrepreneur curriculum in smart schools. For this purpose, smart school teachers should design teaching-learning process based on educational goals. But it is impossible if teachers do not know effective factors influencing entrepreneur curriculum in distance education.

Undoubtedly, the role of ICT in this issue is undeniable and is considered as one of the effective factors in developing entrepreneur curriculum of distance education. Information technology is an interface that provides possibility for stating broad spectrum of information, thoughts, concepts, and messages. This phenomenon has various definitions due to its different characteristics. Information technology refers to a set of devices and methods that collect, store, recover, process, and distribute data in some way (maynard; 2006).

Information technology has been evolved to develop the capabilities of human though. The term of Information Technology can be reviewed in two viewpoints. In the first viewpoint, the term of information technology is used to describe techniques which help us in recording, storing, processing, retrieving, marketing, transferring, and receiving data. In second perspective, information technology is defined as a set of instruments and methods which provide the possibility to produce, process, and present data for users (Kafai, 2005).

One of the other effective factors influencing curriculum development is educational motivation. Educational motivation refers to the individuals' beliefs about their valuable personal abilities or capabilities, their goals and expectations to acquire success, and positive feelings, curiosity, and stress that come from self-evaluating process [4].

Educational motivation is divided into two categories in terms of goals. The first one is external educational motivation, which includes parents' pleasure, achieving external awards such as good marks and social recognition. Strong emphasis on external educational motivation may lead to many valuable consequences. The second one is internal educational motivation which refers to satisfying individuals' internal demand, beliefs, and information about themselves that play an important role in their educational motivation and learning. Better understanding of learning contents is one of the effective factors influencing students' educational motivation. Meaningful contents, complexity and simplicity of contents, hard and easy materials and speeches, teacher's behavior such as equal look and putting everyone in contact equally, and the quality of teacher's writings influence the attention and accuracy of students directly and play an important role in providing the entrepreneur curriculum (petrides, 2004). Therefore, the main problem of this research is examining the relationship of self-directed learning, ICT, and educational motivation with entrepreneur curriculum in distance education.

Research Method

This research is practical in terms of goal and is descriptive and correlational in terms of method because relationship of self-directed learning, ICT, and education motivation with entrepreneur curriculum is investigated. Validity of questionnaires was met using comments of ten related professors and experts and the reliability was calculated through Cronbach alpha formula equal to 0.73.

Population, Participants, and Samples

Statistical population of this study included 550 students of smart secondary schools of Esfahan city in academic year of 2016-2017. Using multi-level cluster sampling and Morgan formula, 225 students were selected randomly from the regions of 2, 3, and 5 of Education Administration Organization of Esfahan City. For selecting participants through two-stage cluster sampling, in the first stage, three regions were selected randomly among all regions of Education Administration Organization of the City and in the second stage, research questionnaires were distributed among students of those schools that use information and communication technology in teaching-learning process.

Instruments, Validity, and Reliability

In order to examine the research variables, a researcher made questionnaire was used to collect required data about entrepreneur curriculum, educational motivation, self-directed learning, and ICT. This instrument was sent to experts who were working in this field to determine its face and content validity. In order to determine reliability of instrument, Cronbach alpha coefficient was calculated that was equal to 0.73.

Findings

Table1. Descriptive Statistics of Research Variables

variables	min	max	average	Standard deviation	bias	skewness
Self-directed learning	1.00	6.67	3.6614	1.27832	-.593	.939
ICT	1.00	7.00	3.8868	1.44571	-.504	.258
Educational motivation	1.00	6.67	3.9789	1.43831	-.652	.065
Entrepreneur curriculum	1.58	6.42	4.2936	1.10231	-1.441	3.723

Table 1 shows that score distribution of all research variables have negative bias. In other words, the sum of cubic scores from average is a negative number and the scores of most of participants are less than average in this scale. Score distribution of entrepreneur curriculum has maximum bias and score distribution of information technology have minimum bias. Score distribution of all research variables has positive skewness. This means that scores of most of samples in this scale is near to mean. Score distribution of entrepreneur curriculum has maximum skewness and score distribution of education motivation has minimum skewness.

Table 2. Results of Pearson Correlation Analysis between Variables

Independent variable	Dependent variable	Coefficient Correlation	Significance level	Interpretation
Self-directed learning	Entrepreneur curriculum	.506**	0.001	Direct and significant relationship
Information technology		.355**	0.001	Direct and significant relationship
Educational motivation		.605**	0.001	Direct and significant relationship

Results in Table 2 show that self-directed learning, information technology, and educational motivation have positive and significant relationship with entrepreneur curriculum in the significance level of 0.001.

The question of "whether self-directed learning, information technology, and education motivation can predict distance education entrepreneur curriculum or not" was investigated through statistical technique of regression. In this section, all of the predictor variables (self-directed learning, information technology, and education motivation) have been put in the regression analysis model.

Table 3. Summary of Regression Analysis Results

Dependent variable	R	R ²	Adjusted R ²
Entrepreneur curriculum	.628	.395	.387

According to Table 3, predictor variables explain 40% of entrepreneur curriculum changes in a significant level.

In the next step, a One Way Variance Analysis (ANOVA) was used to investigate the regression significance of variables to indicate whether predictor variables can predict the criterion variable or not. The result of One Way Variance Analysis (ANOVA) is shown in Table 4.

Table 4. One Way Variance Analysis results related to predictor variables

Dependent variable		Squares sum	Df	Squares mean	F.	Sig.
Entrepreneur curriculum	Regression	448.481	3	149.494	48.083	.000
	error	687.101	221	3.109		
	total	1135.582	224			

As shown in Table 4, the obtained F for three dependent variables are significant at $\alpha=0.001$ and predictor variables have significant role in prediction.

Table 5. Standardized Coefficients

	Standard factors		Non-standard factors (beta)	T	Sig.
	Standard error	B			
Constant Value	0.92	1.22		2.30	0.041
Self-directed Learning	0.03	.17	0.28	4.51	0.005
Information Technology	0.04	0.15	0.23	3.75	0.003
Educational Motivation	0.04	0.27	0.43	6.29	0.001

The results shown in Table 5 indicate that each three variables of self-directed learning, information technology, and educational motivation is significant in preparing entrepreneur curriculum. Educational motivation with $\beta=0.43$ has maximum importance and information technology with $\beta=0.23$ has minimum significance.

Discussion and Conclusion

Main purpose of this study is investigating the relationship of self-directed learning, information technology and communication, and educational motivation with entrepreneur curriculum in distance education. As it was shown in the results, self-directed learning has significant relationship with developing of distant education entrepreneur curriculum in smart schools to a great extent. Study of Lanickchild (2001), quoted in Van Petegam (2008), states that self-directed learning in a personal learning strategy for learners is unique that make them enable to achieve goals defined in curriculums. Findings of Vandrol and Terner's (2005) study shows that learners' active engagement in controlling their learning processes can help them improve their ability to employ the resources and strategies effectively. Shapli (2000) in his study, quoted in Chau and colleagues (2002) and Linars (1999), had found a convergent style as preferred style for both students and professors of nursing department and estimated a high level of readiness of self-directed learning in learning among most of students and professors. Linars' study on investigating the relationship between self-direction with learning style showed that there is significant correlation between these two concepts. Quoted in Chao and Chen (2008), studies of Saroi (1980), Hermeneu (1990), Anderson (1993), Darmayanti (1994), Mourice (1995), Hoorang (1995), Ogazon (1995), Hegra ta (2000), Hsu and Shio (2005), and Stewart (2007) showed that there is significant relationship between self-directed learning and academic performance and entrepreneur curriculum development. Research results also showed that there is direct correlation between ICT in curriculum planning (developing activities, innovative activities, and leadership activities) and developing entrepreneur curriculum in smart schools. Kooli, Kradour, and Vangel mentioned that potential technology can provide equal opportunities for students to use treasures of Internet information by removing non-equal conditions for students with different educational backgrounds (Willson, 2008). On the other hand, studies of Gold (1999) showed that distance education and the Internet provide opportunities to access learning contents and materials, latest research results, events, and news. Online education provides possibility for learners to do their homework and activities any time they require (Gold et al., 2011).

Therefore, it is necessary to pay attention to develop students' self-directed learning by improving their self-organizing, metacognition, and motivation. In addition, as ICT is effective in developing entrepreneur curriculum of distance education, it is suggested that ICT is used in curriculum planning processes.

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