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**Review Article**

# Relationship of Self-Directed learning, ICT, Academic 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 academic motivation with entrepreneur curriculum in distance education. This research in terms of aim is practical, in terms of data collection is quantitative, and in terms of nature and method is descriptive (non-experimental) and correlative. Statistical population of this research includes students of smart secondary schools of Esfahan city in Academic year of 1395-96 (2016-2017) up to 550 persons. Sampling method is clustered method and 225 persons were selected randomly among of regions of 2, 3, and 5 of Education Administration of Esfahan city using Morgan formula. Library and survey methods were used for data collection. The instruments include researcher made questioners about entrepreneur curriculum of distant education, academic 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 α=0.73. For analyzing data, SPSS software, version 21) was used to present descriptive statistic (including Frequency distribution table, mean, Percentage, and Standard deviation) and inferential statistic (including Pierson Correlation and Regression). The results show that self directed learning, ICT, and academic 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 academic motivation are important in preparing entrepreneur curriculum. Academic motivation have maximum importance with β= 0.43 and information technology has minimum importance with β= 0.23.

## Keywords

entrepreneur curriculum, academic motivation, self directed learning, Information technology and communication (ICT).

## Introduction

One of the problems of education systems has long been that the curriculums presented to student do not increase the ability of students, and this influences the learning motivation of students so that it caused to education failure of students. Hence, attention to entrepreneur curriculum of distant learning and its developing in learning fields were constantly considered by authorities, students, and stakeholders of education. On the other hand, along with complicating of education process in current age and its wide expansion, traditional and classical education (teacher oriented, book oriented) cannot help students in this dynamic space. Therefore, we should seek to effective, dynamic, and up-to-date education system (seyf; 2008).

Entrepreneur curriculum of distant learning includes collection of teaching-learning activities that after passing them, students, without other's support, become able to enter economic, social, and cultural activities and self-employment with a high self- confident. One of the effective factors in developing the entrepreneur curriculum in distant education of smart schools is self directed learning (Arefi et al., 2010).

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Knowels 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 needed sources and contents for learning, select and implement the suitable learning strategies, and choosing suitable assessment system for evaluating their learning with or without other's help (Nazari et al, 2010, p.776).

Self directed learning is an instructional method that increasingly is used in distance education institutes and systems and can defined it in terms of learner's responsibility for learning (Khazaei & Ashornejad; 2012).

The results of the third international study of mathematics and science that was designed and implemented by International Association of Education Progress Evaluation show that in the lesson contents of most countries, there was 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), 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 instruments 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 on 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 tools 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 review 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 for human users to produce, process, and present data (Kafai; 2005).

One of the other effective factors is educational motivation. Educational motivation refers to the individual's learned beliefs about his valuable personal abilities or capability, his goals and expectations for acquiring success or failure and positive feels and curiosity and stress come from self evaluating process (Kavosian et al., 2007).

Educational motivation in terms of goals is divided into two categories: external Educational motivation which includes parents' pleasure, achieving external awards such as good scores, and social recognition. Strong emphasis on external education motivation can lead to many consequences; and internal Education motivation which refers to satisfying one's internal demand and student's beliefs and information about him or herself that play an important role in his (her) Educational motivation and learning. One of the effective factors on student's Educational motivation is better understanding of learning contents. Meaningful contents, complexity and simplicity of contents or hard and easy materials and speeches, teacher behavior such as equal look and putting everyone in contact equally, and the quality of teacher's writings all influence the attention and accuracy of students directly, and it plays important role in providing the Entrepreneur curriculum (petrides; 2004). Therefore, the main problem of this research is relationship of self directed learning, ICT and educational motivation with entrepreneur

curriculum in distance education.

## 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 is met using comments of ten related professors and experts and the reliability is calculated by Cronbach alpha formula equal to $\alpha$=0.73.

### Population, Participants, and Sampling

Statistical population of this study includes students of smart secondary schools of Esfahan city in academic year of 2016-2017 up to 550 persons. Sampling method was multi-level cluster sampling by which 225 persons selected randomly among the regions of 2, 3, and 5 Education Administration Organization of Esfahan using Morgan formula. 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 technology and communication in teaching-learning process in some extent.

### Instruments, Validity and Reliability

In order to examine the research variables, researcher made questionnaires to obtain information about entrepreneur curriculum, educational motivation, self directed learning and ICT were used. Validity of questionnaires was met using the opinions of ten professors and experts in this field and the reliability was calculated by Cronbach alpha formula, $\alpha$=0.73.

## Findings

**Table1.** Descriptive Indexes 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 persons in this scale is near to average. Score distribution of entrepreneur curriculum has maximum skewness and score distribution of education motivation has minimum skewness.

**Table 2.** Results of Pierson 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 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 distant 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, 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 is significant at 0.001and 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 education motivation with entrepreneur curriculum in distance education. As it was shown in the results, self directed learning has relationship with

developing of distant education entrepreneur curriculum in smart schools to a great extent. Study of Lanickchild (2001), quoted from Van Petegam (2008), states that self directed learning is 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 from Chau and colleagues (2002) and Linars (1999), had found a convergent style as preferred style for both student 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 about investigation of relationship between readinesses of self direction with learning style showed that there is significant relationship between these two concepts. Quoted from 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) show that there is significant relationship between self directed learning and academic performance and entrepreneur curriculum. Research results also showed that there is direct correlation between ICT in curriculum planning (developing activities, innovative activities, and leadership activities) and developing of entrepreneur curriculum of smart schools. Kooli, Kradour, and Vangel mentioned that potential technology can provide opportunities for student to use treasures of internet information equally 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 material, latest research results, events, and news. Online education provides possibility for learners to do their homework and activities any time they require (Gold, L, et al, 2011).

Therefore, it is necessary to pay attention to developing self-directed learning of students 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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