

## To what extent do the content –centered books cause the application of traditional methods in comparison to information technology?

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**Abstract:** Nowadays, students enter the class while they are more ready and expect teachers to use new and up to date methods in learning –teaching classes. But unfortunately, sometimes Their instrument used in educational system is not up dated and modern and teachers have to use traditional methods One of These tools and of course , the most important one is The educational book which its content is not so different from the previous years' book . It seems that this problem causes teacher not using information technology to improve the process of teaching – learning. The aim of the present study is to investigate this issue. This study is surveying type. The sample of the study is 380 subjects which were selected randomly from 950 teachers. The findings of the study that the content – centered book paves the way for application of traditional method in comparison to the information technology. The authorities of educational system should provide the situation and give more permission to the teachers to bring changes in the content of books and also pave the way to use educational technology to digitize the books into e-books. So that teachers do suitable and practical planning in the best way.

Hamid Khademmasjedi. **To what extent do the content –centered books cause the application of traditional methods in comparison to information technology?** *Forests. J Am Sci* 2012;8(10):680-683]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>. 92

**Key words:** ICT, high school education, technology, book's content, Information technologies

### Introduction

Undoubtedly, the development of IT in all aspects of human life has influenced the education and the information technology capabilities are in various ways. So that the relationship between IT and education and how IT is used in education is the top issue of the present time and its importance is so clean that no one can ignore it. The power and capabilities of information technology in various aspects of human life are that can consider IT as a symbol of new civilization or the rise of a new wave of civilization.

Increasing use of terms and phrases like” post – industrial civilization “, “information society “, and “economical knowledge “to describe the features of the present age to prove the above mentioned ideas.(Guoyuan Sang, 2010).

### Information and communication Technology

Information and communication technology(ICT)is often used as an extended synonym for information technology (IT) , but it is more specific term that stresses the role of unified communication and the integration of telecommunication , computers ,as well as necessary enterprise softer are ,middleware ,storage and audio-visual systems which table users to access ,store ,transmit and manipulate information(2) . CT has become a basic and essential tool for student teaching –learning and is effective in efficiency and improvement of teaching (Inising Jong, 2009). Nowadays, not only the tools have changed, but also the teachers work as a guide, facilitator, and a coach.

Changing the teacher – centered methods into students-centered methods causes the motivation increasing among students and students have become an active and effective element in the learning and teaching process (Ebadi,2004).

### History of technology in education

The first from of educational class was distance learning and education. Isaac Pittman taught “short writing” in England in 1840 using of new information technologist created a new potential ability which is based on technology and using of it in teaching and learning process is very effective(Dabelu, 2003). These new technologies also have caused the permanent and lifelong learning (Charyani, 2001); the facts show that using new technology has a strong effect on human social life and definitely the education system is affected as well. The studies in education suggest that it has mainly used in education system (Dalus, 2001).

The most important use of computer is in doing projects and researches. The computer is also used for data imparting, table drawing and diagrams and graphs. Incorporating new technology in the course books familiarize the students with these technologies and eliminate their fear and expand the knowledge border. And if so, the knowledge is not limited to the books ( Zmani, 2006). Nowadays, most of countries, revise their educational system to compensate the previous undevelopment and to remove barriers. One of these valuable experiences is using information and communication technology. The ICT application does not mean only using audio

visual tools in education because it is just a part of educational technology concept. In new concept of educational technology, mostly the emphasis is on systematic designing and planning of teaching and learning process. The educational technology method is based on solving the educational problem's designing executing and evaluation of all system (Ahadiyan, 1999). In fact, it means using techniques and knowledge in education its new meaning, the old problems and shortcomings in educational planning and course book content which is a problem in itself ,the teacher's problems and disabilities in the domain of education including teaching methods , and in contrast , the rapid , big and deep changes in this domain and unofficial learning power of students from IT and the student's capabilities in comparison to the teachers , experts , and even senior educational planners of the ministry of education , face the education system with this basic question :

Can the present education system strengthen and develop itself according to society and the world changes and developments or not?

According to mentioned discussions, this study intends to investigate the effect of content – centered books in application of information and communication technology in teaching and learning process in Karaj city, Iran. Therefore, this study aims at answering the following question:

To what extent, do content – centered books pave the way for traditional methods application in contrast to information and communication technology?

### Objectives

The main objective of this study is to investigate the impact of book's content on teacher's using of information and communication technology and other new methods.

### Methodology

This study is a descriptive –survey type. The subjects are all high school teachers teaching in district 4 in Karaj city in 2011 in which 950 (600females and 300 males) were selected. District4 in Karaj city was selected for this research because a lot of teachers teaching in this area and 380 teachers were selected (134males and 240females) randomly according to different areas situation and geographical scattering.

### Research collecting tools

The questionnaire used in this study is a kind of researcher designed questionnaire in which the content validly a was emphasized this questionnaire was revised by several professionals

including lecturers of Allamen University (Dr.Nourozi), Tarbiat-e-Moalem university (Dr.Jafari and Dr.Rastegarpour) and a few of educational counselors and teachers. Questionnaire used to collect data includes 23 questions.

### Data analysis

To collect, organize and describe the data to draw conclusions, the descriptive statistical techniques were used to determine frequency and percentage and also deductive statistics techniques (T-test one way) were used to answer the questions of in research.

In this section the findings are presented and the research questions are answered. There are tables in this section and data are analyzed in this section in clouding two parts in which gathered data are classified and summarized through descriptive statistics. In deductive statistics section, the T-test used to answer the main question of the study.

### The single –sample T-test

The single-sample T-taste is based on this assumption that the number of randomly independent observations of subjects with resulted normal distribution in one variable and with interval is available, although, practically it's impossible. We should know that “whether the sample which the subjects were selected from has normal distribution or not.”At least we should accept the correctness of the assumption.

To collect and summarize the required data and data analysis, the descriptive statistics was used to determine the frequency and percentage. Also a T-test was used to answer the questions in this study. So both descriptive and deductive statistics were used to do data analysis the preset study.

The question: to what extent do content-centered books pave the way for the application of traditional and old methods in comparison to information and communication technology?

Table 1 Content-centered book frequency distribution

Standar d error of mean	SD	Mean	Frequenc y	
0/04227	0/8239 9	2/427 4	380	Content - centered book

On the basis of table1, the content-centered books pave the way for application of traditional methods in comparison to ICT.

Table 2. Content –centered books T-test

3=test value				
Mean differences	Confidence level	Df	T	
0/57260	0/01	379	13/545	Content – centered

According to table2, content-centered books provides the condition for application of traditional methods in comparison to ICT.

According to table2, the random sample mean is 13.545. The degree of freedom is 379 with confidence level of .01 and  $T_c=2.57$ . only percent is the probability of error and the results are significant at the level of 0.99. The observed T (13.545) is larger than T critical ( $T_c=2.58$ ), therefore, the null hypothesis is rejected. In other words content – centered books provide condition for application of traditional and old methods in comparison to information and communication technology.

### Results and discussion

The findings resulted from statistical analysis answered the following question:

To what extent, does content –centered book part the way for application of old and traditional methods in comparison to information and communication technology?

The findings of this study show that the content –centered book weakens the application of ICT in the schools. Teachers participating in this study believe that content –centered book is a factor that prevents the ICT development in schools so, the authorities should take this point into account and bring the required changes to direct the content of books toward the information and communication technology application in educational settings and adjust the education conditions with society conditions and the world. The findings of the study are in accordance with the study by Rezaeiyan (2001) , Saad Atmand (200) , Soleimani (2002)Ghasemi (2008) ,Zangeneh (2006) , Almahbob (2000) , Janeks and Springer(2003).The finding of this study were not accordance with the study by Karimi (2003) , Kanzok Omd Christen (1997).

### Conclusion

At the present time and along with rapid development in the world, the students like to be taught with the use of new and up to dated techniques and tools. And like to learn the subjects and material rapidly, but the content of books is old and traditional, new technologies were not used in these books. Consequently, teachers have to pose some

questions on the basis of old methods. On the other hand, in developed societies, IT, CDS are used in the teaching –learning process. We didn't provide the required conditions for using electrical content in teaching –learning process, as a result, limited the creativity of teachers to apply and use the new technologies the findings of this study suggest that most teachers use old and traditional methods: the main reason of using old methods is the content of the books .the content –centered book has a negative effect on using new technology and ICT in teaching – learning process. Ministry of education can change the situation through changing the traditional and old content of books and provide the conditions for the ICT use in content of books and lead the educational system to use web, CD, internet, e-books...etc.

If this change happens, teachers can use ICT in teaching –learning process and improve the educational system quality. Generally speaking, it causes significance and effective change and attracts students to study and learn more.

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9/28/2012