The Effects of Contributing Factors in the Use of the Educational Materials in Teaching Based on the Elementary Teachers' Point of Views

(Case-Study: Sanandaj City)

Anvar Shahmohammadi
Department of Humanities Payame Noor University
POBOX19359-3697.Tehran, Iran

Sairan Alimohammadi
Part Time Teacher in Department of Humanities Payame Noor University
POBOX19359-3697.Tehran, Iran

Yaaghob Ahmadi
Department of Humanities Payame Noor University
POBOX19359-3697.Tehran, Iran

Abstract

There are many factors facing teachers in their quest to implement educational materials in instruction. This research is a survey method and its statistical society includes all the fifth- grade elementary teachers in Sanandaj in the educational year 2011-2012 who are 70 people. The study sample studied covers all the total statistical society. The statistical data have been gathered through performing the researcher –made questionnaire. In order to maintain the reliability through using the Kronbach's alpha, the coefficient 83 % has been calculated for the questionnaire. To analyze the data gathered through the descriptive statistical methods (Frequency, Percent, and Weight Average) and to increase the exactitude of the computations the software SPSS (Science Statistical Package for the Sociology) has been used. The results of the research have shown that: 57.1 percent of the teachers believe that the principles' attitudes regarding the education in the use of the educational materials have been effective much and 71.4 percent believe that the teachers' attitudes due to the use of the educational materials have been effective very much and 67.1 percent believe that the individual characteristics of the teachers in the use of the educational materials have been effective very much and 60 percent agree with the in- service education very much.

Key words: The Contributing Factors, The Educational Materials, Teaching, Elementary Level

Introduction

Educational materials offer exciting approaches to teaching that were not even dreamed of Twenty years ago, but the extent to which the educational potential of Educational materials Technology will be realized remains to be seen. Some teachers will use Educational materials to revolutionize their classrooms. Perhaps you will be one of them."(Geisert and Futrell, 1995, p. xvii Geisert and Furtrell express the view of educators and parents about the promise Educational materials have to affect major educational reform. Ben net (1997) echoes Geisert and Futrell and offers an even more aspiringly detailed vision of the computer's Potential in education: Today's Educational materials, if used differently, could bring advances that would improved Education dramatically. Ordinary students would make massive gains, and restraints on bright students would dissolve. Wherever illiteracy is a problem, it would be eliminated and handicapped students would have vast new vistas opened to them.

But what about Educational materials promise? Many studies about how Educational materials are utilized in schools reveals that although there have been many successes involving Effective implementation of computer technology, a more sobering reality exists. Surveys Indicate that Educational materials aren't fulfilling their potential to effect significant changes in Education, are under-utilized, and are not being implemented in very effective or creative Ways(Ginsberg & McCormack, 1998 ; Bennet, 1997 ; Miller & Olson, 1995).

Though Teachers agree on the potential that lies in Educational materials to effect significant changes in education, more often than the full potential of the Educational materials is not being exploited. The reality is that Educational materials are most often employed to supplement Traditional classroom pedagogy and have not been fully integrated into classroom Learning activities (Ginsberg & McCormick, 1998).

What are some of the factors that Prevent teachers from implementing Educational materials and realizing the full potential of the technology?

Review of the Literature

This literature review identifies some of the frequently recurring factors that affect implementation of Educational materials into instructional processes. The factors are not presented in a ranked order in the literature review. What effects factors have on implementation in school divisions, specific schools or with individual teachers are relative to the educational context in which it is encountered.

Attitudes of Administrators

Individual teacher initiative accounts for much of the implementation of Equipment and educational materials in schools. Lack of support by administrators is identified as a significant barrier toward implementation of educational materials in classrooms (Morton 1997; Brand 1998).

Arzt, (1991) and Lockard et al (1997) argue that successful implementation of educational materials can only occur if administrators offer teachers support and leadership.

Persky (1998) states that in addition to administrators developing a philosophy to guide the implementation of Equipment and educational materials, they can support the technological professional development of teachers by: Establishing flexible schedules so teachers can practice what they have learned (or to continue their learning); Encouraging and facilitating team teaching and peer coaching allowing teachers to visit each other's classrooms to observe Equipment and educational materials integration; and scheduling regular meetings among teachers using technology to plan and evaluate instruction.

Teacher Attitudes

Teacher attitudes toward Educational materials may be a significant factor in the implementation of Educational materials in education. Griswold (1984), Stevens (1984) and Stephenson and Delandsheere (1985) cited in Madden (1989) express a concern that educational materials literate individuals will "reap greater benefits than their Educational materials who lack that knowledge". Their concern is that the development of Educational materials literate individuals is dependent on Educational materials literate teachers who have "in general demonstrated a resistance to learning about Educational materials" (p. 16).

Lidtke (cited in Madden, 1989) attribute the reluctance of teachers to embrace Educational materials to a number of factors that include: anxiety from dealing with equipment, a sense of loss of control over the teaching situation, hardware and software availability lack of technical support, time and effort for training, remaining current in the field, and appropriately implementing the technology in the classroom.

An earlier study by Lidtke (1979) is cited and summarized by Madden (1989): Results indicated that while teachers did not feel that their own jobs were threatened by educational materials, they still saw them as dehumanizing, isolating, prone to error and possibly as a violation of the right to privacy. Similar results were reported by Tetenbaum and Mulkeen (1984) (p. 13).

A more recent study by Newhouse (1995) found that some teachers do not believe that educational materials have "a useful educational objective" (p. 5) and that they are "nonessential and supplemental to their teaching and classrooms" (p. 4).

Drury (1995), in his reference to a study of the Canadian Ministry of Education and its attempt to implement IT in schools in Ontario, finds that: Canadian ministry officials estimate that only 20 percent of the teaching cohort at least "moderately committed Educational materials users" and even this 20 per cent may not be in favor of a dilution of the traditional curriculum model - "software integrates the curriculum. It can work against a subject approach." However research indicated that the main factor leading to a high level of IT-usage was a school- wide consensus on the importance of IT use for students and the amount of teacher-teacher collaboration (p. 2).

Kazlauskas and Koop (1995), in their examination of the barriers to the implementation of Educational materials, observe: A critical factor that all staff needed to recognize and understand that integrating Educational materials into classroom practice is a complex innovation which requires change to the whole school's practices and culture, to the curriculum, and in teacher's attitudes and classroom practice. Such change is achieved incrementally over a long period of time (p.2).

A study by Morton (1996) draws some important conclusions surrounding teachers' personal familiarity with Educational materials and how lack of personal familiarity and experience may act as a barrier: the acquisition of Educational materials expertise and skills is generally left to teacher initiative high levels of anxiety in using Educational materials is experienced by teachers wanting to use Educational materials and have few role models to follow teachers view the use of Educational materials as promoting learning in students teachers are aware that increasing the frequency of Educational materials use will lead to changes in pedagogy teachers are critical of lack of Educational materials resources to implement change administrators have created a major barrier to implementation because they are focused on learning about the Educational materials instead of using the Educational materials for learning (p.1).

Van Lengen (cited in Morton, 1996) finds that for the most part all teachers are willing to implement the Educational materials but "the problem was that many [teachers] were either infrequent users or they didn't know how to use them"(p. 8). Compounding this problem is the need for infrequent teacher users to have structured opportunities to develop and practice Educational materials skills. In addition is the startling revelation that "those that do not know how to use them [Educational materials] have successfully avoided the many basic staff development activities that have run over the years" (p. 8).

Appropriate role models are required for infrequent users to implement and manage educational materials. Morton (1996) presents a complicating factor to the role model situation: the situation is that those role models exist, are generally based on computing studies teachers using computers in laboratory situations...and the more subtle obstacle of computing being the domain of mathematics / computer studies [teachers] inhibits the spread of computers across the curriculum (p. 5).

Newhouse (1995) identifies teachers' lack of using Educational materials literacy as being an obstacle to their using Educational materials in classrooms. Newhouse draws a conclusion about the number of years of experience with Educational materials teachers have and the impact it makes on the implementation process: most teachers need two or three additional years of experience using Educational materials to become significant users of Educational materials in classrooms...teachers need up to five years solid experience in using Educational materials to become proficient at integrating them [Educational materials] in the curriculum (p. 5). Newhouse's findings are shared by Roszell (1995) the most commonly identified factor, in the literature affecting IT use by teachers, was their level of knowledge and skill in using Educational materials. This factor was identified by Zammit (1991), Ely (1990), Pelgrum and Plomp (1991) and Brummelhuis (1991) (p. 151).

Teacher Training Seidmen (1996) has conducted a study into issues surrounding teacher training and its relationship with the successful implementation of Educational materials. Along with the statistical analysis, Seidmen finds that the handwritten comments by teacher respondents "overwhelmingly expressed a need for teacher training on basic Educational materials skills". Seidmen also states that teacher training should not be limited to teachers who teach Computing. Seidmen refers to an international trend on the part of educators to train all teachers on the use of Educational materials: This need for teacher training is explained by the fact that most of the presently hired teachers received little or no training in their formal education. It could also be a reflection of the need to update teachers' knowledge in the world of fast moving technology of communication. Training all teachers on the educational use of Educational materials gains special importance when considering integrating the Educational materials into regular curriculum. Teachers need to know how to use Educational materials first before they can integrate [them] (p. 145).

Seidman states that subject matter teachers are reluctant to consider the implementation of Educational materials in teaching: The relatively cautious position of the SM [subject matter] teachers is perhaps due first to their limited experience with software and hardware, and second to the uneasiness about changing their habits and techniques as some of them expressed in their written comments (p. 147). Mintz (1997) echoes Seidmen's view that teachers are unprepared to use Educational materials in their classrooms and they "lack support and educational guidance" (p. 3).

Mintz points to professional development and training as a solution to successful implementation: the next crucial step [in successful Educational materials implementation] is the professional development for teacher that will provide them with materials, strategies and new understanding to meet the learning goals (p. 4). The Office of Technology Assessment Report (cited in Geisert and Futrell, 1995) was written for the U. S. Congress to provide federal policy-makers an information base for making long-term decisions about Educational materials in education. The OTA Report states that technologies have the potential to enrich the teaching and learning process but only under certain related conditions: adequate teacher training in the skills needed to operate the technology a clear vision and understanding among educators of state-of-the-art development and applications support for experimentation and innovation time for learning and practice (p. 256).

The OTA report lists adequate teacher training as one of the recommendations in the report: Provide adequate teacher training. Teachers will need continuing in-service programs as technology changes, as more effective uses of technology are developed, and as research provide a better understanding of how children learn. (p. 257).
The teacher is central to the implementation of Educational materials in the classroom. Adequate teacher training is necessary it that is occur. Essential to teacher training is drawing a link between pedagogy and technology (Solomon, 1995; Bennett, 1996; Holzberg, 1997; McKenzie, 1994).

Research Questions

1. Are the teachers' attitudes effective about the educational affairs in the use of educational materials from the principles' point of views?
2. Are the teachers' attitudes effective in the use of the educational materials and equipments?
3. Are the individual characteristics effective in the use of the educational materials and equipments?
4. Is the in- service education effective in the use of the educational materials and equipments?

Methods

This research has been done through the survey method and its statistical society includes all the elementary teachers who teach grade five in the educational year 2011-2012 in Sanandaj who are 70 people. The volume of the sample studied is all the statistical society. The statistical data have been gathered through performing the researcher –made questionnaire. In order to maintain the reliability through using the Kronbach's alpha, the coefficient 83 % has been calculated for the questionnaire. To analyze the data gathered through the descriptive statistical methods (Frequency, Percent, Average weight) and to increase the exactitude of the computations the software SPSS has been used.

The Findings

Table 1. The characteristics of the Respondents' Socio-Demographic Based on the Gender

Gender	Frequency	Percent
Male	45	64.3
Female	25	35.7
Total	70	100

Table 2. The Characteristics of the Respondents' Socio-Demographic Based on the Number of Service

Number of the students in each class	Frequency	Percent
1-10	6	8.6
10-20	35	50
20-30	29	41.4
Total	70	100

Table 3. The Characteristics of the Respondents' Socio-Demographic Based on the Educational Degree

The latest educational degree	Frequency	Percent
Post-diploma	36	51.4
Licentiate's Degree	32	45.7
Master of Art	2	2.9
Total	70	100

Table 4.The characteristics of the Respondents' Socio-Demographic Based on the Number of the Students

Number of the students in each class	Frequency	percent
10-20	7	10
20-30	42	60
30-40	21	30
Total	70	100

64.3 percent of the teachers are women and only 35.7 percent of them are men. 8.6 percent of the teachers have been teaching from 1 to 10 years and this percent for the years: 10 – 20 and 20 – 30 are 50 and 41.4 percent. 51.4 percent of the teachers have the Post-Diploma degree and 45.7 percent have Licentiate's degree and 2.9 percent have the Master of Art degree. 10 percent of the students attend the classes with 10 to 20 students and this percent for the classes where there are 20 to 30 and 30 to 40 are 60 and 30 percent.

Question1. Are the principals' attitudes regarding the educational affairs in using the educational materials from the teachers' point of views effective?

Table 5.The Comparison of the principals' attitudes regarding the educational affairs in the field of using the educational materials

Quantity	Frequency	Percent
To Title Extant	12	17.1
A large Extant	40	57.1
Complete	18	25.7
Total	70	100

Mean: 42.0000 Std Deviations: 14.15238 Minimum: 15.00 Maximum: 70.0

17.1 percent of teachers believe that the principals' attitudes in the field of using the educational materials are a little effective. 57.1 percent of the teachers find this attitude much effective and 25.7 percent find that very much effective.

Question2. Are the teachers' attitudes in the use of the educational materials effective?

Table 6. The Conditions of the Teachers' Attitudes in Using of the Educational Materials

Quantity	Frequency	Percent
To Title Extant	5	7.1
A large Extant	15	21.4
Complete	50	71.4
Total	70	100

Mean: 79.81 Std Deviations: 16.44 Minimum: 32 Maximum: 100

7.1 percent of the teachers' attitudes in the use of the educational materials and tools are evaluated a little and this percent for the high level is about 21.4 percent and for the very high level is about 71.4 percent.

Question3. Are the teachers' individual characteristics in the use of the educational materials and tools effective?

Table 7. The comparison of the teachers' individual characteristics in the use of the educational materials and tools

Quantity	Frequency	Percent
To Title Extant	6	8.6
A large Extant	17	24.3
Complete	47	67.1
Total	70	100

Mean: 83.77 Std Deviations: 16.34 Minimum: 33 Maximum: 100

The teachers' individual characteristics in the use of the educational materials and tools show that 8.6 percent of the teachers believe in the use of these materials and tools in their teaching as follow; 8.6 percent a little , 24.3 percent very , and ultimately 67.1 percent very much.

Question4. Is in-service education of the teachers effective in the use of the educational materials and tools?

Table 8. The comparison the in-service education of the teachers in the use of the educational materials and tools

Quantity	Frequency	Percent
Not at all	3	4.3
To Title Extant	6	8.6
A large Extant	19	27.1
Complete	42	60
total	70	100

Mean: 77.62 Std Deviations: 20.10 Minimum: 17 Maximum: 100

The in-service education of the teachers in the use of the educational materials and tools show that 4.3 of the teachers very little, 8.6 percent little, and also 27.1 percent much and finally 60 percent very much agree with the in-service education of the teachers

Discussion and Conclusion

At the beginning or forward coming of the twenty first century in the field of education considering the public opinion expectations compared to the recent pedagogy system accomplishments, considerable shortages or losses have been felt. On the other hands, prompt changes made in different types and changing the society needs , creating new professions and jobs ,all have made a necessary and essential revise in the process of the education system .nowadays the success of the societies in the cultural , social , economic ,and political fields are pledged a unique , dynamic and constructive educational system. The main axis in moving toward this direction is the fundamental changing and improving qualities of the teachers' activities. What make a school different from the others is the abilities of the human resources; particularly the principals and the teachers of that school.

Each education system can't succeed or be flourished unless it will have knowledgeable and qualified teachers having a lot of scientific qualifications and being familiar with educational approaches and equipped with professional, vocational, occupational, and educational skills. The teachers who are able to follow the changes in this changing world. I believe that teachers should know in what world wide changing circumstances they live and try to keep up with it and not to confine their thoughts and abilities to their geographical boundaries and they have to enjoy the power of initiative and innovation and skills and attempt not to confine their activities to some handouts or pamphlets which they have been taught or familiar with in teaching training centres or during their jobs , because the complicated and changed world today needs continuous learning , being up- to- date , activities , sensitiveness and creativity. We don't think the importance of elementary course should be forgotten meanwhile. This course is the most sensitive course in the education system and provides students with an appropriate opportunity to begin and continue learning, so if the presentation of education activities are not done perfectly to the students in this level, the teachers can't compensate the failure in the following educational years or levels, and it is difficult to make amend for.

So, due to its essential, sensitive and important role, the elections of the employed teachers in this level should be paid attention more. Although, the importance of this course is known to everybody, we see the employment of some teachers with low university degrees in this level. Considering the statements mentioned above, we suggest that employment and attracting teachers and active people who are responsible in this course, having university degree, specialty and the guarantee, scientific criteria, and their abilities should be investigated very clearly more than before.

Studying the teachers' opinions in the principals' attitudes in using the educational materials show that 57.1 percent of teachers believe much in the use of the educational materials.

Studying the teachers' attitudes in using the educational materials show that 71.4 percent of teachers believe very much in the use of the educational materials.

Studying the teachers' individual characteristics in using the educational materials show that 67.1 percent believe very much in the use of the educational materials.

Studying the teachers' in- service education in using the educational materials show that 60 percent agree very much with in- service education.

Generally speaking it can be implied that the results of the research confirm the Mehrabi's hypothesis (1999) with the title: studying the principals' attitudes in using the educational materials in the process of education. Movahedi (2006) with the title: The approaches of increasing teachers' motivations in order to use the educational materials in teaching. Zolfaghari (2008) with the title of applied strategies of using the educational materials in the process of teaching and learning of the students in the senior level of Markazi province. Erfanian (2000) in research by the name of : studying the teachers' information in using the educational tools and their relations with the mixture of these educational materials in teaching .it is also concluded with the studying Lo, Hang,Yeng,Yo, and Fang (2003) with the title of : Studying the teachers' attitudes in media literacy .Kesler (2007), In a research by the name of : the introduction of learning the language by using computers formally and informally and the teachers' attitudes in using the educational materials . Vition VO, Chang and Chao (2008) are harmonious which is based on the adopting and understanding of usefulness of a technology and having the positive attitudes about the efficiency in using that technology.

References

Ben net, F. (1997). Computers as tutors. Solving the crisis in education. [On-line]. Available: http://www.concentric.net/~Faben1/

Brand, G. A. (1998). What research says: Training teachers for using technology? Journal of Staff Development, 19(1). 10-13.

Drury, C. J. (1995). Implementing change in education: the integration of information technology into irish post-primary schools. (M. Sc. Thesis, University of Leiscester, 1990). [On-line]. Available: http://indigo.ie/~cjdrury/thesis/chapter4.html

Galligan, J., n.d. Computers and pedagogy: it's not what you've got; its how you use it. [On-line]. Available: http://www.woodvale.wa.edu.au/acec95_papers/volume1/paper7.html

Geisert, P. G. & Futrell, M. K. (1995). Teachers, computers and curriculum. Microcomputers in the classroom. Needham Heights, Mass: Simon & Shuster Company.

Ginsberg, R. & Mc. Cormick V. (1998). Computer use in effective schools. Journal of Staff Development, 19(1). 22-25.

Kessler, Greg (2007).Formal and informal CALL preparation and teacher attitude toward teachnology.from Vol.14, No.3-4, 199-136.

K, Huang Lo,C., Yang , H, Yu, I.& Fang ,R.(2003).A Study of Junior –high Technology Teachers Attitude toward Media Literacy. In C. Crawford et al.(Eds.).from27 (1 4) , pp. 398 –422. Chesapeake, VA: AACE.

Karracker, T. (1998). Computers and education, theorists, teachers, and parents on what works, what doesn't, and why. Microtimes. [On- line]. Available: http://www.microtimes.com/158/schools.htm l

Kazlauskas, A. & Koop, A., n.d. integrating computer use into the primary curriculum: the reality and the challenge.[Online].Available:http://www.woodvale.wa.edu.au/acec95_papers/volume1/paper24.htl

Mehrabi Rahmatolla (2000) Studying the principals' attitudes in using the educational materials in the process of education. Thesis in M.A. level, Shahid Beheshti University.

Movahedi Mohsen (2006) the approaches of increasing teachers' motivations in order to use the educational materials in teaching .Thesis in M.A. level, Shahid Beheshti university.

Mintz, D. (1997). Technology's promise: Responding to the la times. From Now On The Educational Technology Journal, 7(1) [Online]. Available: http://fromnowon.org/sept 97/ latimes. html

Miller, L. & Olson, J. (1995). In Canada how computers live in schools. [On-line]. Available: http://www.ascd.org/pubs/e1/miller.html

Morton, A. (1996). Integrating computers across the secondary school curriculum. The Western Sydney experience. [On-line]. Available: http:// www. spirit. net. au/ ACE 96/ papers/mouton.htm

Newhouse, P., n.d..Precipitation from computer-saturated learning environments. [On-line]. Available: http://www.woodvale.wa.edu/acec95_papers/volume1/paper33.html

Roszell, D. D. (1995) . The use of information technology in schools. Master's thesis, University of Saskatchewan, Saskatoon, Saskatchewan, Canada. Solomon, G. (1995). Planning for technology. Learning and Leading With Technology, 23(1). 66-67.

Wu, W., Chang, H. & Guo, C. (2008). An Empirical Assessment of Science Teachers Intentions toward Technology Integration. Journal of Computers in Mathematics and Science Teaching. 27 (4), pp. 499 – 520. Chesapeake, VA: AACE.

Zolfaghari Hassan (2006) Applied strategies of using the educational materials in the process of teaching and learning of the students in the senior level of Markazi province. Thesis in M.A. level, Shahid Beheshti University.