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Assess the Attitude on Use of Technology in Classroom among the Faculty of Management in SRM University

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Abstract

As a new medium enters the educational scene, there is a great deal of initial interest and much enthusiasm about the effects it is likely to have on instructional practices. However, enthusiasm and interest eventually fade, and an examination reveals that the medium has had a minimal impact on such practices. During the last decade, the use of the Internet and personal computer in the classrooms at all levels has become very common as the speed of the Internet increased and the processing power of the PC climbed. The question is whether the recent development and classroom adoption of computer technology will affect the education in an effective way from which the past technological innovations have. The aim of the study was to assess the attitude on use of technology in classroom among the faculty of management in SRM university and to associate the attitude on use of technology in classroom among the faculty of management in SRM university with their demographic variables. Quantitative approach and Non Experimental descriptive research design was used. The Study variable include Attitude on use of technology in classroom, Demographic variables includes age, sex, education, teaching assignment, income, exposure to use of technology, years of exposure, number of students enrolled, number of classes taught. The data collection instrument consisted of 2 parts. Section A: Demographic variables and Section B which consists of the attitude scale derived by the investigator. It consists of 26 items related to teacher's attitude on use of technology in classroom.Based on the Inclusion and Exclusion criteria 100 faculty of management in SRM university by using non-probability convenient sampling technique were selected to participate in the study. The study was conducted at S.R.M School of Management, SRM University, Kattankulathur The data was analyzed and interpreted based on the objectives using descriptive and inferential Statistics. The major findings of the study were with the reflect of overall status is the 0% of faculty had unfavorable attitude on use of technology in classroom. 32 (32%) of faculty had moderately favorable attitude on use of technology in classroom. 68 (68%) faculty had favorable attitude on use of technology in classroom. There is significant association between the attitude on use of technology in classroom among faculty of management with their demographic variables like exposure and year of exposure to use of technology in classroom. Technology has played a central role in improving teaching and learning in light of educational reforms around the globe. More positive teachers attitudes were toward technology the more likely they were to integrate it in classroom

Keywords: Attitude; Use of Technology; Faculty of Management; Internet; Computer Technology.

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Introduction

Advances in technology have caused vital changes in many domains of societal and individual life. As such, technology has also influenced the way education at all levels was done. As an innovative tool, technology has played a central role in improving teaching and learning in light of

educational reforms around the globe. Numerous scholars argue that integrating technology and education can enhance teaching and learning activities in ways that can support student-centered teaching with more active student involvement in the learning process. (Alexander etal 1999) [1].

If the goal is to promote technology enhanced education, it is of primary importance to investigate what teachers perceive of technology and its use in education, what their knowledge and skills are or what skills they need to further develop (Kahveci 2011) in his study in Egypt reported that the more positive teachers attitudes were toward technology the more likely they were to integrate it in classroom [2].

Various studies conducted in different countries on teacher attitudes, including Turkey, revealed positive attitudes toward technology and computers. A number of scholars concluded that attitudes were more strongly influenced by prior computer experiences than by gender. Hong (2006) also established a gender relationship with positive attitudes toward computers in favor of males. Others reported that computers have not been used by teachers for professional purposes as much as for other personal interests [3].

Background of the Study

In order to discuss how best we can integrate technology into the classroom, we need to review the historical relationship between technological innovation and education. A "meaningful integration of technology in classroom" can be traced back to the early part of the 20th century when visual aids such as films, pictures, and lantern slides were commonly used in public schools. Then came motion picture projectors, sound motion pictures, the radio, the television, Video Cassette Recorders (VCRs), computers and the Internet in chronological order. How did they change our learning and teaching. Here are some historical anecdotes which can give us some ideas. In 1913, Thomas Edison announced, "Books will soon be obsolete in the college. It is possible to teach every branch of human knowledge with the motion picture." "A medium that gained a great deal of attention during this period (1920s and 1930s) was radio. By the early 1930s, many audiovisual enthusiasts were hailing radio as the medium that would revolutionize education. However, contrary to these sorts of predictions, over the next 20 years radio had very little impact on instructional practices. Perhaps the most important factor to affect the audiovisual movement in the 1950s was the increased interest in television as a medium for delivering instruction. By the mid 1960s, much of the interest in using television for instructional purposes abated." (Reiser & Dempsey, 2007) [4].

In 1984, Papert indicated that the computer was going to be "catalyst of very deep and radical change in the educational system" and that by 1990 one computer per child would be very common state of affairs in schools in the United States" [5].

"As a new medium enters the educational scene, there is a great deal of initial interest and much enthusiasm about the effects it is likely to have on instructional practices. However, enthusiasm and interest eventually fade, and an examination reveals that the medium has had a minimal impact on such practices." During the last decade, the use of the Internet and personal computer in the classrooms at all levels has become very common as the speed of the Internet increased and the processing power of the PC climbed. The question is whether the recent development and classroom adoption of computer technology will affect the education in an effective way from which the past technological innovations have.

Using technology in instruction has been a part of education for decades; however, it is still considered a relatively new pedagogy to integrate technology into curricula. Teachers, who become the main focus during the process of integrating these technologies into the curriculum, face several obstacles when trying to integrate technology into their curricula. Many school districts are pushing technologies across all levels of education. In fact, billions of dollars are spent every year in purchasing and equipping schools in the United States and in the world (Norris 2003). However, The National Center for Education Statistics (2010) reported that 69% of teachers used computers for Teachers used computers for instructional purposes in the United States. The research identifies several factors that challenge schools and teachers to integrate the technology into the curricule [6].

Significant and Need for the Study

Technology initiatives in educational settings have been the topic of research interest for the past 30 years. In the1990s, teachers began to see computers as a part of the technology resource to use beside the traditional way of teaching, and they became known as educational technology in the classroom. In 2007, Hew and Brush provided a detailed analysis of the integration barriers that had been documented in the literature over the previous years. Although research

on teacher beliefs is not new moderately few studies have examined the relationship between teacher's belief and their classroom use of technology [7].

Education is not only limited teaching the students according to prescribed syllabus as a specific school level. It has much border objectives, goals and other concepts. Thus, education is becoming an increasingly important tool to combat poverty and to establish a modern nation. Feature of modern society is the penetration of information technologies in all spheres of life, including schooling. In general, the new technologies have been recognized to play a valuable role in developing and improving the teaching and learning situations. Jordan is a developing country with small population. It's the country where is a scarcity of natural resources. Since the establishment of Jordan in 1921, education for all has become the mission of different governments in Jordanian. Starting from the early 1980s, the Hashemite Kingdom of Jordan has made tremendous progress in the field of education by introducing technologies in schools.

The philosophy of the Ministry of Education in Jordan regarding the use of technologies in schools comes from the common believe that technologies would make education and learning scientific, understandable, efficient, effective, and interesting. In Jordan, during the past 30 years the governments have spent large amounts of money in order to integrate the new technologies in Jordanian schools. Governments have also worked hard and effectively to introduce appropriate technologies to improve and enhance the quality of education in Jordan. With the development of Technology in the field of education, many countries include Jordan invested a large amount of money to integrate technology in the field of education by providing teachers' with the good opportunities to develop their skills and knowledge related to the use of Technology (Al-Zaidiyeen, etal 2008). In one hand, the majority of schools in Jordan are provided with the necessary Technology infrastructure. On the other hand, various universities in the country offering courses related to the use of Technology in the process of teaching and learning to the pre-service teachers. Such courses focus on developing pre-service teachers Technology skills, knowledge and competence. As a result, Jordan educational system becomes one of the best in the Middle East. Despite the expansion of Technology in Jordanian schools, the body of empirical research investigating the level of Technology use for educational purposes is still relatively small [8].

The use of technology in education and in English language education in particular remains an emerging field of study, largely because technological advances introduce new instructional possibilities (Murray, 2007). The major research questions the study seeks to explore were as follows:

1. What is the level of Technology use for educational purposes for educational purposes by teachers.
2. What are the attitudes among teachers towards the use of Technology for educational purposes.
3. Is there a significant relationship between teacher's level of Technology use and their attitudes towards Technology.

The major driving force to adopt technology in the classroom comes from the three sectors; nonprofit organization, commerce, and education. Nonprofit and governmental organizations have been actively proposing guidelines for using technology in the classroom. For example, the International Standards for Technology in Education (ISTE) National Educational Technology Standards for Teachers (NETS-T), ISTE National Educational Technology Standards for Students (NETS-S), No Child Left behind (NCLB), The National Education Technology Plan and the Learning for the 21st Century Report provide guidelines to promote technological proficiency in the classroom. Although they are mainly developed for K-12 classrooms, they are equally applicable to small general education college classrooms. On the other hand, the private industry has been enjoying fairly successful application of technology to train their employees and help them expand their knowledge. Murry Christensen provides a reasonable cause for the business' better adaptation of technology to educate their people that 're-engineering' [9].

During the late 1970s through the 1980s and into the early 1990s, very large changes occurred throughout American business. Under the rubric of 'maximizing shareholder value,' large swath of middle management were cashiered and companies were combined, restructured, realigned, and recast in a new, "leaner" mode. The business environment was changing in response to information technology advances and investments, removing the need for an information "gate keeping" class. Foreign competition intensified, much of which had learned how to operate with faster cycle times and improved quality, at lower costs to consumers."(Masie, 2005). The efficient adoption of technology in a business Learning Management System (LMS) is closely related to the business' survival in aolatile economic environment and compet [10].

Objectives

1. To assess the attitude on use of technology in classroom among the faculty of management in SRM university.
2. To associate the attitude on use of technology in classroom among the faculty of management in SRM university with their demographic variables.

Null Hypothesis

There is no significant association on attitude on use of technology in classroom among the faculty of management with their demographic variables.

Materials and Methods

A quantitative approach, descriptive research design was used. The setting of the study was School of management in SRM University. The Study variable include Attitude on use of technology in classroom, Demographic variables includes age, sex, education, teaching assignment, income, exposure to use of technology, years of exposure, number of students enrolled, number of classes taught.The data collection instrument consisted of 2 parts. Section A: Demographic variables and Section B which consists of the attitude scale derived by the investigator. It consists of 26 items related to teacher's attitude on use of technology in classroom. Based on the Inclusion and Exclusion criteria 100 faculty of management in SRM university by using non-probability convenient sampling technique were selected to participate in the study. Pilot study was conducted to assess the feasibility of the study as well as the reliability of the study tool in the same setting. The sample of pilot study excluded from the main study. For the main study, the structured interview among the subject was conducted on a one to one basis in the premises of selected setting.

Description of Tool

A Well structured rating scale was used for the Study. After on intensive review of literature, internet research guidance form experts in the field of nursing.

The Questionnaire Schedule Comprised of Two Sections

Section A: Demographic variables, consists of the items such as age, sex, education, reaching assignment, income, exposure to use of technology, years of exposure, student enrolled, number of classes taught.

Section B: Attitude scale derived by the investigator. It consists of 26 items related to teacher's attitude on use of technology in classroom.

Scoring and Interpretation

Each question is to be answered as strongly agree, agree, neutral, disagree, strongly disagree. For every strongly agree response score 05, agree04, neutral 03, disagree 02,strongly disagree 01 was given, to interpret result of selected questionnaires to faculty.

Total Scoring Interpretation

Scoring

Level of Attitude	Interpretation
Favorable attitude	1-43
Moderately attitude	44-87
Unfavorable attitude	88-130

Ethical Consideration

The proposed study was approved by the dissertation committee of S.R.M College of Nursing, S.R.M University Kattankulathur, Kancheepuram district and permitted. Permission was obtained from the HOD, School of Management to conduct the study. The written consent was obtained from the participants before collecting the data. Assurance was given to the individuals that the confidentiality of each individual will be maintained.

Procedure for Data Collection

The formal permission was obtained from the head of the department of the management. The investigator explained the objective and method of data collection to the faculty and it was carried out within the given period of 1 week at SRM College of management. Verbal consent was obtained from the samples SRM School of management to carry out the main study from 20/02/2016 to 26/02/2016. The investigator explained the purpose of conducting the study and reassured the faculty that collection data will be kept confidential.

Statistical Analysis

Descriptive Statistics

- Frequency distribution was used to analyze the demographic variables.
- Frequency, percentage, mean and standard

deviation was used to assess the attitude on use of technology in classroom among the faculty of management in SRM university.

Inferential Statistics

- Chi-square test was used to associate the attitude on use of technology in classroom among the faculty of management in SRM University with their demographic variables.

Results

Regarding the age of 100 faculty, (5) 5% are in the age group 21-25 years,(40) 40% are in the age group of 26-30, (55)55% are in age group of above 30 years. Considering the sex,(52)52% are male faculty and (48) 48% are females. Considering the education (12) 12% are undergraduate, (60)60% are post graduate and others are Ph.D degree holders. Considering the teaching assignment (69) 69% are MBA teaching assignment. Considering the income (3) 3% are earning 4727-7877 rupees, (11)11% are earning in between 15754-31506 and (84) 84% are earning more than Rs 31506. Considering the exposure to technology (55) 55% are exposed to the technology and (45) 45% are not exposed. Considering the number of years exposed. (45)45% faculty are not exposed, (37)37% are exposed for 1-2 years, (7)7% are exposed for 3-5 years and (11)11% are exposed for more than 5 years. Considering the number of student enrolled 55 are not enrolled, 1-15 student enrolled constitute 35% (16-30) student constitute 6%and more than 30 student constitute 4%. Considering the number of classed taught 9 faculties taught 1-2 classes, (27) 27% of faculty taught 3-4 classes and 54 faculties taught 5 and more classes.

Table 1: frequency and percentage distribution of demographic variables with respect to the faculty of management. (N=100)

Demographic variables		Faculty	
		Frequency	%
Age	20 -25yrs	5	5
	25-30yrs	40	40
	Above 30 years	55	55
Sex	Male	52	52
	Female	48	48
Education	UG	12	12
	PG	60	60
	Ph d	28	28
Teaching Assignment	MBA	69	69
	BBA	27	27
	MPH	4	4
Income	Rs 4727-7877	3	3
	Rs 7878-11876	2	2
	Rs 15754-31506	11	11
	>Rs 31506	84	84
Exposure	Yes	55	55
	No	45	45
Year of Exposure	None	45	45
	1-3years	27	27
	3-5years	17	17
	>5years	11	11
Students enrolled	None	55	55
	1-15 students	35	35
	16 – 30 students	6	6
	Above 30 students	4	4
No of classes taught	None	10	10
	1-2 classes	9	9
	3-4 classes	27	27
	Above 5 classes	54	54

Table 2: Shows assessment of the level of attitude on use of technology in class room among teaching faculty

Level of attitude	Frequency	Percentage
Un favorable attitude	0	0
Moderately favorable attitude	32	32
Favorable attitude	68	68

The above Table 2 reveals that among 100 faculty, 32 (32%) faculty have moderately favorable attitude; 68 (68%) faculty have favorable attitude and none of them have unfavorable attitude.

Table 3 reveals that there is significant association on the attitude on use of technology in classroom among faculty with their demographic variables of exposure to use of technology and year of exposure. There is no association with respect to other variables.

Table 3: Association between the level of attitude among faculty and with their demographic variables N=100

Demographic variables		Attitude						Chi square test
		Unfavorable		Moderately favorable		Favorable		
		N	%	N	%	N	%	
Age	20 -25yrs	0	0	0	0	5	7.4	$X^2 = 2.521$
	25-30yrs	0	0	13	40.6	27	39.7	P = 0.283 NS
	Above 30 years	0	0	19	59.4	36	52.9	
Sex	Male	0	0	16	50	36	52.9	$X^2 = 0.075$ P =
	Female	0	0	16	50	32	47.1	0.784 NS
Education	UG	0	0	3	9.4	9	13.2	$X^2 = 0.669$
	PG	0	0	21	65.6	39	57.4	P = 0.715 NS
	Ph d	0	0	8	25	20	29.4	
Teaching Assignment	MBA	0	0	24	75	45	66.2	$X^2 = 0.793$
	BBA	0	0	7	21.9	20	29.4	P = 0.673 NS
	MPH	0	0	1	3.1	3	4.4	
Income	Rs 4727-7877	0	0	1	3.1	2	2.9	$X^2 = 4.129$
	Rs 7878-11876	0	0	0	0	2	2.9	P = 0.248 NS
	Rs 15754-31506	0	0	1	3.1	10	14.7	
	>Rs 31506	0	0	30	93.8	54	79.4	
Exposure	Yes	0	0	11	34.4	44	64.7	$X^2 = 8.08$
	No	0	0	21	65.6	24	35.3	P = 0.004
								Significant
Year of Exposure	None	0	0	21	65.6	24	35.3	$X^2 = 10.81$
	1-3years	0	0	8	25	19	27.9	P = 0.013
	3-5years	0	0	1	3.1	16	23.5	**Significant**
	>5years	0	0	2	6.2	9	13.2	
Students enrolled	None	0	0	21	65.6	34	50	$X^2 = 2.40$
	1-15 students	0	0	8	25	27	18.5	P = 0.473 NS
	16 – 30 students	0	0	2	6.2	4	5.8	
	Above 30 students	0	0	1	3.1	3	4.4	
No of classes taught	None	0	0	2	6.2	8	11.8	$X^2 = 1.72$
	1-2 classes	0	0	2	6.2	7	10.3	P = 0.624 NS
	3-4 classes	0	0	8	25	19	27.9	
	Above 5 classes	0	0	20	62.5	34	50	

Discussion

Using technology in instruction has been a part of education for decades; however, it is still considered a relatively new pedagogy to integrate technology into curricula. Teachers, who become the main focus during the process of integrating these technologies into the curriculum, face several obstacles when trying to integrate technology into their curricula. Many school districts are pushing technologies across all levels of education. In fact, billions of dollars are spent every year in purchasing and equipping schools in the United States and in the world (Norris 2003). However, The National Center for Education Statistics (2010) reported that 69% of teachers used computers for Teachers used computers for instructional purposes in the United States. The research identifies

several factors that challenge schools and teachers to integrate the technology into the curricula [6].

The Result of the Study Has Been Discussed Based on the Objective Stated the Study

The first objective was to assess the attitude on use of technology in classroom among the faculty of management in SRM University

The study findings were among 100 faculty of management 0% had unfavorable attitude on use technology in classroom, 32% have moderately favorable attitude on use of technology in classroom, and 68% have favorable attitude on use of technology in classroom.

This study was supported by queen (2010) studied on ICT (information communication and technology) in participation development of teaching and learning English as a global language in Nigeria. Result indicate that there is improvement in the quality of language teaching through the diversification of content, methods, and as well promoting experimentation, innovation, and obtaining and sharing of information. There is a wide–range of language learning reforms, hence the need to: 1) Increase access to teacher's knowledge and development through interactive technology 2) Increases the people awareness on the importance of technology 3) Increases access to instructional resources, increases flexibility in what to learn, how to learn and when to learn. 4) Adherence to these needs will help to realize more positive result in the application of technology in language teaching and learning Nigeria [11].

The second objective was to associate the attitude on use of technology in classroom among the faculty of management in SRM University with their demographic variables.

The association of knowledge scores with their demographic variables was done by chi-square test.

There is a statistical significant association found on the level of attitude on use of technology in classroom among the faculty of management in SRM University with their demographic variables like "exposure to use of technology" and "years of exposure" to use of technology in classroom. Hence the Null hypothesis stated that there is no significant association on demographic variables and the level of attitude on use of technology in classroom was not accepted for exposure o use of technology and years of experience. Whereas remaining variables such as age, sex, education, teaching assignment, income, number of students enrolled, number of class taught was not associated. Hence the Null hypothesis stated that was accepted.

Sheela (2006) examined on "knowledge of information and communication technology (ICT) and attitude towards teaching ICT among teaching educators". The major findings of the study were 1) teacher educators possessing good and poor knowledge of ICT differ in their attitude teaching ICT: teachers educators with good knowledge of ICT have more favorable attitude towards teaching ICT. 2) a significantly difference was found in the attitude of high experienced and less experienced teacher educators towards teaching ICT: teacher educators with less experienced had more favorable attitude towards roof than teacher educators with the more experience [12].

Conclusion

The study concluded that among the 100 the 0% of faculty had unfavorable attitude on use of technology in classroom. 32(32%) of faculty had moderately favorable attitude on use of technology in classroom. And 68 (68%) faculty had favorable attitude on use of technology in classroom. And the study reveals that there is a significant association on demographic variables and level of attitude on use of technology in classroom such as exposure to use of technology and years of exposure o use of technology.

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