

A STUDY OF AVERSION TO COMPUTER USAGE AMONG SECONDARY SCHOOL TEACHERS

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Abstract

A computer has become the part of our life. There is no work, in our whole day, for which we are not dependent on computers or the technology products. The use of computers has overpowered our life and we have got addicted to computers to a great extent. Computers have changed work of education and the role of computers in education has been given a lot of prominence in the recent years. Therefore the role of teacher at this point is vital. Teachers are required to decide how to make appropriate educational use of Computer in the classroom, where there are no longer lecture-based or didactic teaching methods in classrooms any more. Keeping in view the importance of Computer Education in present time, a descriptive study was done by using the Computer Phobia Scale (2010) by Dr. S.Rajasekar and Dr. P.Vaiyapuri which measured the Personal Failure, Human Vs Machine Ambiguity and convenience of teacher. Data was collected from Chandigarh, Panchkula and Mohali school teachers. The result was statistically analyzed using mean, S.D and t-ratio. High, Average and Low level of computer phobia. The result indicated that most of the teacher possessed moderately low levels of computer Phobia.

Introduction

A computer has become the part of our life. There is no work, in our whole day, for which we are not dependent on computers or the technology products. The use of computers has overpowered our life and we have got addicted to computers to a great extent. Perfection is equivalent to the work obtained from computers. Also, this all is not overrated; computers have actually brought a revolutionary change in the whole way, with which the education and the work culture are practiced. Today it's very important for everybody. Learning the basics of computers is highly important for the teachers as well as students to excel in their respective fields. Computers help teachers as well as students to learn better and learn the practical aspect of the subject.

Computers have changed work of education and the role of computers in education has been given a lot of prominence in the recent years. Computers play a vital role in every field. They aid industrial processes; they find applications in medicine; they are the heart of the software industry; they play a vital role in education. The uses of computers in education are manifold. There is need to discuss the importance of computer in Education

Computer technology has a deep impact on education. Computer education forms a part of the school and college curricula, as it is important for every individual today, to have the basic knowledge of computers. The advantages of

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computers in education include an efficient storage and rendition of information, quick information processing and very importantly the saving of paper.

Computer teaching plays a key role in the modern systems of education. Students find it easier to refer to the Internet than searching for information in fat reference books. The process of learning has gone beyond learning from prescribed textbooks. Today, aspirers can satiate their thirst for knowledge by means of the Internet. It is easier to store information on computers than maintaining hand-written notes.

Online education has revolutionized the education industry. The computer technology has made the dream of distance learning, a reality. Education is no more limited to classrooms. It has reached far and wide, thanks to the computer technology. Physically distant locations have come close to each other only due to computer networking.

Changes in society's expectations mean that school teachers need to be able to use computers in education. With the increased emphasis on the use of computers in education, it is reasonable for society to expect that teachers should have the knowledge and confidence to use computer technology effectively in the classroom. Increasingly, in primary and secondary schools, teachers are expected to know not only how to use computers, but how to use them effectively with students. There is a general belief that computers will continue to be important for students both in their school years, and for the remainder of their lives. However, there is now considerable evidence to suggest that school teachers in many countries are not confident in the use of computers. Therefore the role of teacher at this point is vital. Teachers are required to decide how to make appropriate educational use of Computer in the classroom, where there are no longer lecture-based or didactic teaching methods in classrooms any more. Teachers need support and training to positively integrate technology into their classroom and teacher attitudes toward ICT may be a significant factor in the implementation of ICT in education.

In our country, along with "Educational Technology Ability Standards for Elementary and middle schools Teachers" issuing by Ministry of Education, the new turn of the whole staff educational technology ability training is started. But the trainable teachers are numerous and there are many problems in teaching training, which hinder the development of teacher's ICT ability. For the reason above, great attention should be taken on teachers to investigate the status of using ICT and find out the factors which determine the use of ICT in education.

Computer Phobia

There is no consensus in the literature on the use of the terms such as technophobia, computer phobia, and computer anxiety. In the studies performed so far this subject has been handled under some titles, computer phobia, computer anxiety, computer aversion, technophobia, and techno stress. Although technophobia is becoming a commonly used term, appearing in newspapers and popular magazines with increasing frequency, in a pioneering work, defined computer phobia as: (a) fear or anxiety toward computers (b) a resistance to talking about computers or even

thinking about computers, and (c) hostile or aggressive thoughts about computers (Ursava& Karal 2009) Afterwards, technophobia has come to be known as computer phobia, and has been defined by as: “(a) anxiety about present or future interactions with computers or computer related technology, (b) negative global attitudes about computers, and their operation or their societal impact; or when contemplating future computer interaction.

Educational technology and computers play an important role in education. Since the use of technology is no longer confined to computer science majors, it is essential for all teachers to use and understand computers and implement technology in order to be successful.

Review of Related Studies

Rosen, Larry D.& Weil, Michelle M.(1995) did nationwide study on teachers. The study examined “technophobia” as an explanation for low levels of computer utilization. Elementary teachers (N = 171), secondary science teachers (N - 117), and secondary humanities teachers (N = 200) in 54 schools across five urban school districts completed three measures of technophobia and a measure of demographic characteristics, computer/technology experience, computer availability, and current computer use. Results indicated that: (1) computers are available at all schools, but are not being used by many teachers; (2) many teachers are technophobic, particularly elementary teachers and secondary humanities teachers; (3) teachers are most worried about dealing with the actual computer machinery in their classroom, about computer errors, and about learning to use computers; and (4) predictive models showed that although computer experience is the most prominent predictor of technophobia, it is not the only predictor — age, gender, teaching experience, computer availability, ethnicity, and school socioeconomic status also play an important role in predicting technophobia.

Roblyer and Edwards (2000) suggested that there are five important reasons for teachers to use technology in education: (1) motivation, (2) distinctive instructional abilities, (3) higher productivity of teachers, (4) essential skills for the Information Age, and (5) support for new teaching techniques . In order to use of technology in the classroom effectively, teachers’ attitude toward technology should be positive and they should be trained in using the modern technologies in the field of education.

Ursava and Karal (2009) did a study on pre-service teachers’ computer phobia. The study was performed on 430 pre-service teachers at the Education Faculty in Rize/Turkey. Data in the study were collected through the Computer Phobia Scale consisting of the “Personal Knowledge Questionnaire”, “Computer Anxiety Rating Scale”, and “Computer Thought Survey” the results shows that, computer phobia of male pre-service teachers does not statistically vary depending on their gender. Although male pre-service teachers have higher computer anxiety scores, they have lower computer thought scores. They also observed that there is a negative and intensive relation between computer experience and computer anxiety and found out that pre-service teachers using computer regularly indicated lower computer anxiety.

Chen (2012) investigated whether elementary EFL teachers in Taiwan suffer from computer phobia and low self-efficacy. Some background characteristics of the teachers were also examined. The study was conducted with elementary EFL teachers from all parts of Taiwan, and the findings confirmed that teachers suffer from the expected levels of computer phobia. Additionally, low self-efficacy levels are very common among the teachers. Based on the results, a negative relationship was observed between computer phobia and computer self-efficacy. The teachers' level of computer self-efficacy decreases as their computer phobia level increases.

As for the relationship of teachers' computer phobia, a statistically significant positive correlation was identified among computer anxiety and teachers' age, PC usage, and computer accessibility at school. It should be noted that the accessibility of computers apparently is highly associated with teachers' computer phobia and computer self-efficacy. This reveals the importance of providing teachers with sufficient computer equipment. It is also highly suggested that teachers be encouraged to use computers in order to decrease computer phobia and raise computer self-efficacy levels.

Tool

The present study used Computer Phobia Scale (2010) by Dr.S.Rajasekar and Dr.P.Vaiyapuri which measure the Personal Failure, Human Vs Machine Ambiguity and convenience of teacher. The scale was a 1-to-5 Likert-type scale (from 5= strongly agree to 1=strongly disagree) The scale was a 1-to-5 Likert-type scale (from 5= strongly agree to 1=strongly disagree). It was also a 5-point Likert-type scale, where 5(Strongly Agree) represents the maximum score of the scale and 1 (Strongly Disagree) represents the minimum score.

The CPS is also a 29-item scale in 5-point Likert format with 21 items phrased in the negative direction and 8 items in the positive direction. Respondents are asked to express how often their thoughts are in accord with each statement. Responses are scored as follows: 4= strongly agree "", 3="" agree ", 2="" Undecided", 1="" disagree" and 0="" strongly disagree". These are reversed for the negative items and higher scores represent more positive computing cognitions. Factor analysis led to three emergent subscales labeled as, Negative CPS (21 items), Positive CPS (8 items).

Sample

A true sample is a small group, which represent all the traits and characteristics of population; as it was impossible to include all the teacher of Tricity (Chandigarh, Mohali and Panchkula), therefore Schools were randomly selected. The technique of sampling was random in nature. A total of 50 questionnaires were distributed. A total of 10 school and 30 teachers took part in the survey, including 15 male and 15 female teachers. The total number of delivered Questionnaire is 50, and 30 valid questionnaires were collected. The response rate was 90%. Age group for the study was be 25 to 50 years. The sample was comprised of in-service teachers of Govt. schools of tricity (n= 30; Female=15, males= 15).

Result and Discussion

The result indicated that most of the teacher possessed moderately low levels of computer Phobia. Only 22% of the sample agreed with the statement that they have no difficulty understanding the technical aspects of computers and only 39% agreed that they were successfully using a computer nearly every day to help them with work. By comparison, 42% agreed that 'computer terminology seems like a foreign language, and 43% agreed that apart from word processing, they have no computer skills. Males reported more confidence than did females, and those who owned or had ready access to computers were more likely to describe themselves as competent .Teachers who had received computer instruction at university or through external agencies, and those who were teaching senior secondary and senior primary school grades were more likely to describe themselves as being competent with computers.

The results of our study demonstrate the following:

- a. The majority of teachers have positive attitudes towards computers for personal use. More than 60% of the teacher revealed not only that they like working with computers but also that they have confidence working with them.
- b. Almost all teachers believe that the computer is useful both to their future work and for personal tasks. Similarly, the majority of teachers have positive attitudes towards the role of computer in both teaching and learning.

Findings of the study also revealed some parameters where teacher had negative scored, which conclude that many teachers cautious of or skeptical about the use computer in educational practice. Further it has been found that personal factors (teaching experience and gender) are strongly associated with the beliefs and perceptions teachers hold about the use computer.

Educational Implications

It is cleared from the above discussion that the teacher has a positive attitude towards Role of Computer in Education as well as an acceptance of the potential role of ICT within teaching and learning. They also appear to have sufficient basic skill competence for operating the machine. This appears to be a necessary first step for their further ICT professional development to facilitate the implementation of learning with ICT into Education.

The above findings support the position that despite recent improvements the existing teacher training institutions does not prepare teachers to be able to use ICT in their teaching. The great majority of the Indian graduates are not competent enough to adopt new technologies in their learning tasks. This means that they definitely need to participate in IT training during the first year of their teaching career in order to be capable of integrating ICT in teaching and learning. This IT training, however, does not necessarily have to start from a low base since these teachers already have a basic IT skills competence as well as a positive attitude towards the role of computer in education. The proposed computer Education plan attempts to solve this problem by proposing the provision of training for all the

school and college teachers in order to improve their personal IT skills and become competent in using Computer into subject teaching.

The problem of inadequate ICT training during initial teacher education, however, remains for the generations of student-teachers to come. The realization that there is a need to form a new policy which may cure the problems of ICT in pre-service and in-service teacher has led us to search for educational models from other countries.

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