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Attitude Towards Web Based Learning and the Usage of Technology Among the Higher Secondary School

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Abstract

This study helps to find the attitude towards web learning and the usage of technology among the higher secondary school students in the district of Cuddalure. One of the significant developments is the growth of the "Internet". In fact, the Computer Technology has developed because of the development of Internet and its variety of applications in almost all the fields. Internet services include direct communication (e-mail, chat), online conferencing resources (World Wide Web, Gopher), remote login and file transfer (telnet, ftp) and many other valuable tools and resources. Internet is nothing but the network of networks. The Internet is a worldwide collection of Computer networks connecting academic, Governmental, commercial, and organizational sites. It provides access to communication services and information resources to millions of users around the globe. Quantitative method was used in this study. The objectives are four. The first objective is to study the level of attitude of higher secondary school students to web learning. The second objective is to study the level of usage of computer technology among the higher secondary school students. Third objective is to find out the significant difference in attitude towards web learning among higher secondary school students with respect to gender. Fourth objective is to find out the significant difference in attitude towards web learning among higher secondary school students with respect to type of school. The benefactors are students, teachers, administrators and the school principals.

Keywords: Attitude, Web learning, Technology and Higher Secondary.

Introduction

The present day learning among the school students has changed totally from the traditional learning environment .It is not only the environment that changed but also their attitude towards learning that has changed considerably. In the traditional learning methods the tutors acted as the only source of active learning, later on books and paper materials reduced the dominance of

teachers as the main source of learning. In the recent decade, books and other paper materials are replaced by technology based learning with the use of computers and Internet.

For re-engineering the emerging trends in education, it is indispensable to provide digital education through the computer. Education through computer is easy, comfortable, trendy and uniquely interactive, over and above everything else. It is so because the learning process is based on the four key roles of the computer: that of a tool, a tutor, a topic and a thought provider. Appropriate computer technology places users in control of their own learning. It encourages both independent and collaborative learning while extending and supporting the learning process.

Technological and scientific advancement has resulted in wide-spread use of electronic communication and information media both in day-to-day life at home and academic life at schools; making access easy and quick to the body of knowledge available anywhere anytime, and thus struggle among people to know more by exploring different sources of knowledge can be seen to score the lead in this era of competition. People are having different ways and means at their media like discretion for this purpose, such as internet which connects the whole world through a mouse click, electronic media like television and radio etc. and also mobile phones.

Educational technology has dominated the education in schools as well as institutions of higher learning. The younger generation are more at ease in developing the necessary skills for acquiring knowledge through internet. Most of the higher secondary students studying in urban areas are exposed to all the web resources available for learning but it is not so with the higher secondary students studying in very remote and rural areas in India. The attitude they possess also equips them with the required mindset to use the technology for learning purpose.

Online education has revolutionized the education industry. Computer technology has made the dream of distance learning a reality. Education is no longer limited to classrooms. It has reached for and wide, thanks to computes physically, distant locations have come closer due to Internet accessibility. So even if students and teacher are not in the same premises, they can very well communicate with one another. There are many online educational courses where by students are not required to attend classes or be physically present for lectures. They can learn from the comfort of their homes and adjust finings as per their convenience.

Review Literature:

Review of related literature includes facts, concepts, theories and previous research findings and it is a part of research process. The researcher should undertake the survey of literature related to the problem because it is an eye opener for research work. Academic journals, conference proceedings, Government reports, Books published or unpublished thesis should be studied, depending on the nature of the study.

Arbaugh(2002) and Shicheng Tian(2001) have stated that despite their teaching preferences most of the faculty agreed that using the web changed their pedagogical approaches. However less than 20% of the students file their learning approaches differed in web versus comparison courses. Vicki (2003) reveals that professors must deliver quality instruction to retain the related learning behaviors and their relationships with academic performance in web based courses.

Grant MacEwan (2006) Instructional design of web based distance education courses is written about frequently, partly due to the focus on instructional design in distance education course development. In a print-based distance education context, the course is designed prior to the beginning of the course and its form is fixed during the time the course is offered. Revisions of course material are difficult to make because changes often result in the reprinting of large portions of the course so occur infrequently. In web-based distance education, there is a similar emphasis on course design prior to the course offering, although revisions are easier to make than in print-based course modules. Caitriona and Abdulhussain(2007) have found that (1) making visual presentations helped students understand science knowledge;(2) making links between web pages helped students construct science knowledge structures; and (3) students themselves said that visual thinking helped them learn science. In addition, this study found that when using visual learning logs, the main overall ideas of the science concepts were usually represented accurately.

Gersham and Mohanasundaram(2008) state that web course delivery can offer a vibrant learning environment created through different teaching strategies, activities and technologies. Sagin.S and Cimsek.S.(2008) investigated student's attitudes towards the use of Information and Communication Technologies(ICTs) in a reading skills course offered at Middle East Technical University, Ankara, Turkey. To this end, 30 first year students of the foreign language education (FLE) department followed a four-week component of a ICTs- integrated reading skills course. To

examine the student's attitudes towards the course and the new learning environment at the end of the teaching period, an attitude questionnaire was administered and interviews were conducted.

Paavola(2011),examined the technological affordances of a Web-based collaborative learning technology, Knowledge Practices Environment(KPE) , for supporting different dimensions of knowledge creation processes. KPE was used by engineering students in a practically oriented undergraduate engineering course. The study concentrated on student's usage and self-reported experiences of the tool and student-adopted strategies for spatially arranging items in KPE's main knowledge space. According to the results, students used KPE mainly to share and organize project documentation. KPE appears to offer an advantage over traditional folder-based learning environments by providing a structured visual overview of the process and materials in the content view, thus facilitating pragmatic and epistemic dimensions of knowledge created at the same time.

Sivakumar .R and Dinakaran.V(2012) E-Learning driven world is expecting new set of skills to be included in the prospective education to contribute at global scenario. It assists learning process through the use of electronic files. E-Learning as the use of any of the new technologies or applications in the services of learning or learner support.in this article, the authors discuss about the basic information about e-learning; definitions, platforms and principles with its advantages and disadvantages; finally a glimpse of future is provided. Hyo-jeong (2012), investigated the complexity of past experiences with ICT, pedagogical beliefs and attitude toward ICT in education that the Net Generation student teachers have about their intention to teach and learn with technology. It has a particular focus on their lived experiences as school students where ICT related policies were actively enacted in Korea and Singapore for the past decade.

John Kirriemuir and Angela McFarlane (1997): This review is intended as a timely introduction to current thinking about the role of computer games in supporting children's learning inside and out of school. It highlights the key areas of research in the field, in particular the increasing interest in pleasurable learning, learning through doing and learning through collaboration that games seem to offer. At the same time, the review takes a measured tone in acknowledging some of the obstacles and challenges to using games within our current education system and models of learning.

Dooley & Murphrey (2000) the issue of competition from peers at private and public institutions is a concern to some faculty. No longer are the classroom walls borders for students; they can pick and choose online courses from one or more institutions and they will register for courses at institutions that will ensure their needs are met. Thus, some faculties from traditional institutions worry about the increased competition from those that offer online courses and programs**.** Furthermore, faculties are interested in online collaboration opportunities with faculty from other institutions and would welcome the institution's support of this type of collaboration**.** Collaboration also includes inter-institutional student to student collaborations. It is important to note that these extrinsic factors could also be categorized as institutional motivators as opportunities for peer modeling and technology sharing showcases could be instigated by administrators and thus be seen as administrative support.

Donnell (2009) examines student and faculty attitudes toward computer technology in advanced arts classes at a southeastern university in the United States. This one semester study was focused on the traditional arts disciplines of art, dance, music and theatre. Attitudes of both students and faculty members were examined through perceptions of liking, usefulness, confidence and anxiety levels toward computers when more competent with computers. Mohamed (2012) investigated the extent to which individual characteristics, which are gender, religious work value and organization level (students and staff), are related to attitudes toward computer use ethics. This investigation is conducted in an academic setting in Malaysia, among those subscribing to the same religious value. Design/ methodology/ approach: the research used a cross-sectional survey approach in an attempt to achieve the objective.

Methodology:

The investigator adopts the survey method of research. In the words of Adi Seshaiah and Sekhar (1977), the survey method is necessary for the collection of facts and information relevant to the problem investigated. The survey approach to educational problems is one of the most commonly used approaches. It goes beyond mere gathering and tabulation of data, it involves interpretation, comparison, measurement, classification, evaluation and generalization, all directed towards a proper understanding and solution of significant educational suggests ways of meeting them. The various statistical techniques were implemented to analyze and systematize the data that were obtained through the tests in finding out the level of attitude towards web learning and the usage of computer technology among higher secondary school.

Findings

The level of Attitude towards Web-Learning among higher secondary school students.

Table 1:Showing the Level of Attitude towards Web-Learning among Higher Secondary School Students

Variable	Level	Range	Frequency	Percentage
Attitude towards Web-learning	Low	Below 126	87	29.0
	Moderate	127 to 141	136	45.3
	High	Above 142	77	25.7

From the above table, it is clear that the level of Attitude towards Web-Learning among higher secondary school students is moderate in nature. The results indicate that the students have moderate level of Attitude towards Web Learning which indicates that they have positive awareness of the importance of Web Learning in the process of learning. Hence the hypothesis is accepted. The level of Usage of Technology among the higher secondary school students.

Table 2: Showing the Level of Computer Technology among Higher Secondary School Students

Variable	Level	Range	Frequency	Percentage
Computer technology	Low	Below 114	87	29.0
	Moderate	115 to 138	131	43.7
	High	Above 139	82	27.3

From the above table, it is clear that the level of Usage of Computer Technology among higher secondary school students is moderate in nature denoting that they have good perception towards using the computer technology. Hence the hypothesis is accepted. There is no significant difference in Attitude towards Web-learning among higher secondary school students based on gender.

Table 3: Showing the Mean, SD and C.R value for Attitude towards Web-Learning among Higher secondary school Students based on gender

Variable	Gender	Number of sample	Mean	S. D	'CR' Value	L.O.S
Attitude towards Web-learning	Male	150	132.91	13.801	-.081	N.S
	Female	150	133.03	13.279		

From the table, it is clear that the obtained C.R value -.081 is lower than the table value (1.96) at 0.05 level, therefore there is no significant difference between the mean scores of attitudes towards Web-Learning among higher secondary school students based on their gender. From the inferred result it is evident that female students also have positive attitude towards web-learning displaying no gender differences in Attitude towards Web-Learning. Hence, the hypothesis is accepted. There is no significant difference in Attitude towards Web-Learning among higher secondary school students based on type of school.

Table 4: Showing ANOVA for Attitude towards Web-Learning among Higher Secondary School Students Based on Type of School

Variables	Source of Variance	Sum of Squares	DF	Mean Square	'F' Value	L.O.S
Attitude towards Web Learning	Between Groups	491.660	2	245.830	1.348	N.S
	Within Groups	54163.070	297	182.367		
	Total	51396.917	299			

From the table, it is clear that the obtained 'F' value 1.348 is lower than the table value (3.04) at 0.05 level. Therefore, there is no significant difference between the mean scores of Attitudes towards Web-Learning among higher secondary school students based on their type of school. The findings reveal that students of all the three types of schools have same level of attitude towards Web-learning irrespective of their usage and availability. Hence, the hypothesis is accepted.

Recommendation & Conclusion

The degree to which technology will be successfully integrated into the nation's classrooms is tied to the much larger job of restructuring the educational institutions in the more general sense. Female need to be given more training and access to computer in order to reduce the difference in Attitude and usage of computer based on gender.

The development of the new learning environments is dependent to some extent on having students with technology literacy skills (such as word processing and online applications) sufficient to function in the environments. On-working women need to be given training in Computer which can be done by the educational institutions where the students are studying thereby giving them an opportunity to earn knowledge from home and also to make them more comfortable in handling computer.

In the course of this research a number of issues surrounding the application of Computer Technology in the classroom were identified. The factors discussed below are essential conditions or prerequisites which must be addressed in order for computers to have a significant impact on classroom education "a simulation is a powerful technique that teaches about some aspect of the world by initiating or replicating it. Students are not only motivated by simulations, but learn by interacting with them in a manner similar to the way they would react in real situations. In almost every instance, a simulation also simplifies reality by omitting or changing details. In this simplified world, the student solves problems, learns procedures, comes to understand the characteristics of phenomena and how to control them, or learns what actions can be made in different situations. Computer simulations reflect instructive and constructive pedagogies. Those simulations that include learners as an external player on the provided conditions are instructive in nature. Instructive simulations may include information simulations, reinforcing simulations, experimenting simulations, symbolic simulations, and operational simulations. On the other hand, constructive simulations provide learners with a contextual environment in which they take place and play roles that may include integrated simulations, experimental simulations and conceptual simulations may reflect constructive simulations. The research shows the connection between types simulations described in the literature and two main pedagogies, instructive and constructive.

The hard technologies change often. Indeed they change quite rapidly. These soft technologies are the working practices that underpin the rest of today's modern industrial and

service economy: division of labor, specializations, and team work and project management. If you get the soft technologies right, the hard technologies will take care of themselves. This also helps to eliminate the isolation by connecting individuals with information from around the world. Computer technology can also be used in conjunction with programs that collect and centralize information. Computers may play important roles in the classroom and laboratory instruction and also in other modes of learning. They can be used with instructive or constructive pedagogies. Computer simulations give students the opportunity to observe a real world experience and interact with it.

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