

An Analytical Study On Attitude Towards Information Technology Among Students And Physical Education Teachers Of Colleges In Western Districts Of West Bengal

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Abstract: The purpose of this article is to share with the readers the findings of a study conducted to investigate the level of ICT use among teachers. Also, this study seeks to investigate the attitudes of teachers towards the use of ICT for educational purposes. Technology is now at the threshold of its maturity within all the sectors. An overview of the research in the value of using ICTs in teaching and learning process proved that the utilization of ICT has had a major influence on the teaching and learning process. 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. The purpose of the study was, "An analytical study on attitude towards information technology among students and physical education teachers of colleges in western districts of West Bengal." The Researcher selected on the different colleges of western districts for research purpose. The researcher will take total 150 subjects for the study in which (N=75 students) and (N=75 teachers) with the range of age is above 21 years. The selected subjects will be colleges were selected for the data collection as per simple random technique method. After that researcher collects the data, from those teachers with the help of standard questionnaire.

After the data collection the researcher analyses the data with the help of descriptive statistics (Mean, SD, t-ratio).

Keywords: Attitude, information technology, students and teachers.

I. INTRODUCTION

This study determined the attitudes of students toward the course in Information Technology (IT) considering the following variables: the subject itself, the instructor, the instructional materials and the learning environment which are being utilized to provide learning experiences that would enhance the development of students' capabilities towards IT. Engineering students have high level of attitude towards the Introduction to Information Technology course, the instructors, the instructional materials and the learning environment. The computer units in the Computer Laboratory of Engineering must be arranged and maintained appropriately because some of the computer units were not functioning properly and infected of virus. Purchasing of updated computer and Information technology related books must be

prioritized by the library. Computer Journals and Magazines must be adequate enough for the research works of the students. Keywords: Attitude towards Computer, Engineering students, Information Technology, Instructional materials. The continuous development of computerization has far reaching effects on society and it is best that every learner be made conscious of the effects of computer on the different aspects of life. The computer is no longer lock up to the region of scientific, military, big business or academic circles. The computer came to be an everyday tool of the ordinary educated person. Information Technology (IT) in its broadest sense encompasses all aspects of computing technology; and as an academic discipline it is concerned with issues related to advocating for users and meeting their needs within an organizational and societal context through the selection,

creation, application, integration and administration of computing technologies.

The potentials of information and communication technology (ICT) to facilitate students' learning, improve teaching and enhance institutional administration had been established in literature. The use of information and communication technology as a tool for enhancing students' learning, teachers' instruction, and as catalyst for improving access to quality education in formal and non-formal settings has become a necessity. Recognizing the impact of new technologies on the workplace and everyday life, teacher education institutions try to restructure their education programmers and classroom facilities, in order to husband the potentials of ICT in improving the content of teacher education. Information and communication technology as tools within the school environment include use for school administration and management, teaching and learning of ICT related skills for enhancing the presentation of classroom work, teaching/learning repetitive tasks, teaching/learning intellectual, thinking and problem solving skills, stimulating creativity and imagination; for research by teachers and students, and as communication tool by teachers and student. Information and communications technologies are computer based tools used by people to work with information and communication processing needs of an organization. Its purview covers computer hardware and software, the network, and other digital devices like video, audio, camera, and so on, which convert information (text, sound, motion, etc.) into digital form. Successful integration of ICT in the school system depends largely on the competence and on the attitude of teachers towards the role of modern technologies in teaching and learning. Thus, experienced teachers, newly qualified, and student-teachers need to be confident in using ICT effectively in their teaching.

Simply having ICT in schools will not guarantee their effective use. Regardless of the quantity and quality of technology placed in classrooms, the key to how those tools are used is the teacher; therefore teachers must have the competence and the right attitude towards technology. Attitudes refer to one's positive or negative judgment about a concrete subject. Attitudes are determined by the analysis of the information regarding the result of an action and by the positive or negative evaluation of these results. There is a common saying that attitude determines altitude. Studies have established close links and affinities between teachers' attitude and their use of ICT. More positive attitudes towards the computer were associated with a higher level of computer experience. Students' confidence on ICT can be explained through the attitude and behaviors of their teachers. Teachers' behavior is a critical influence on students' confidence and attitude towards ICT as they provide important role model to their students. The literature suggests that lack of adequate training and experience is one of the main reasons why teachers do not use technology in their teaching. This also eventuates in teachers' negative attitude towards computer and technology. In addition, lack of confidence leads to reluctance to use computers by the teachers. Attitude of pre-service and in-service teachers towards computer and technology skills can be improved by integrating technology into teacher education. Findings have revealed that a significant

relationship exist between computer attitude and its use in institutions for pre-service teachers and also for serving teachers in the affective attitude, general usefulness, behavioral control, and pedagogical use. Attitude is a major predictor of future computer use. Study indicated the importance of appropriate responses to the trainee's feelings about using ICT as one of the factors critical to success. Thus, there is the need to take care of the emotional needs of student teachers as attitude is a major predictor of future ICT use. Student teachers have positive attitude and are highly enthusiastic about interactive whiteboards as an important feature of teaching and learning, and this motivated them to practice using the technology.

Technologies (ICTS) in the field of education. Theoretical and empirical studies have considered the importance of ICTs in the process of teaching and learning. This current paper investigates the level of ICT use for educational purposes by teachers in Jordanian rural secondary schools. The paper will contribute to the body of knowledge regarding the level of ICT use and also, concerning the importance of teachers' attitudes towards the use of ICT for educational purposes. The data for the study were collected through the use of quantitative data. In October 2008, a questionnaire was distributed to 650 teachers in Jordan, randomly selected. Four hundred sixty teachers responded to the questionnaire. The survey included questions concerning the level of ICT use as well as questions related to the attitudes of teachers towards the use of ICT. The findings of the study, which were obtained by analyzing the data collected from the teachers revealed that, teachers had a low level of ICT use for educational purpose, teachers hold positive attitudes towards the use of ICT, and a significant positive correlation between teachers' level of ICT use and their attitudes towards ICT was found. The findings suggest that ICTs use for educational purposes should be given greater consideration than it currently receives. In general, the results were consistent with those previously reported in studies related to the use of ICT in the educational settings. Students in terms of their attitude towards IT on one hand and the relationship with their low academic achievement on the other hand. All port pointed out that attitude involved particular responses like cognition, behavioral and affective responses having clear and specific associations with attitude object. Attitude in this study refers to three components, such as affection, behavior, and information technology.

The Teachers' Attitudes toward Information Technology (TAT) complements Teachers' Attitudes toward Computers Questionnaire to provide assessment in New Information Technologies. It is constructed primarily from semantic differential items using Teachers' Attitudes toward Information Technology statements such as Teachers' Attitudes toward Information Technology addresses the following areas: electronic mail, multimedia, the World-Wide Web, teacher productivity, and classroom productivity for students. Teachers' Attitudes toward Information Technology also includes subscales replicated from the Teachers' Attitudes toward Computers Questionnaire.

The purpose of this research study was to survey Internet users with psychiatric disabilities regarding issues related to their use of information technology (IT) and its connection to

self-determination in their lives. A Web-based survey was created and administered by the University of Illinois at Chicago (UIC) National Research and Training Center's (NRTC) Self-Determination and Technology Workgroup, comprised of mental health service consumers, advocates, and researchers interested in the application of IT to mental health issues. The study was designed to yield information that would be of use to those seeking to better understand how IT can enhance individual self-determination, to identify access gaps that exist and how to address them, and to appreciate the potential of IT applied to mental health advocacy efforts.

With technology advancing at an increasing rate, it is necessary to understand how it shapes or influences the learning process. As an ever present component in higher education pedagogy, more empirical evidence is needed to demonstrate the connections between students' references for learning and the use of this technology. This study contributes to a better understanding of technology usage, attitudes, and the academic achievement level among students at the universities in Iraq. Therefore, this study will be providing insights into the nature of the attitudes toward IT of the students and the relationship with their academic achievements which can explain their eventual success or failure. The confirmation of this relationship highlights the need for early intervention plans geared towards ensuring positive attitudes among the students and improving their level of academic achievement. 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.

II. REVIEWS OF RELATED LITERATURE

Tican (1996), Which sought to determine the attitude of students towards the IT Course itself, the instructor, the instructors' methods of teaching, instructional materials and the learning environment. Weighted mean, rank and Pearson – Product Moment Correlation Coefficient were the statistical tools used to analyze and interpret the data gathered. Results and Discussion the obtained weighted mean on the level of students' attitude towards the subject. The respondents were strongly agree that they find computer stimulating and challenging (WM = 4.77); they find lecture/hands-on as the most effective way to learn computer (WM = 4.69); they find computer relevant to their future career (WM = 4.65); Computer makes significant contribution to mankind (WM = 4.65); and they like computer because it requires critical and logical thinking and deep analysis which most of their classmates can follow (WM = 4.55). Students are being challenged by the activities of the course because they find its true essence and application to real life situation and they really appreciate its usefulness. Teaching and learning strategies in education have been radically revised with the

aim of providing better service to the learners through the intensive use of the ICT.

Plomp et.al (2001), Identify three objectives which distinguished for the use of ICT in education such as, the use of ICT as object of study, the use of ICT as aspect of a discipline or profession; and the use of ICT as medium for teaching and learning. Peck and Domcott (1994) outlined ten reasons that technologies should be used in schools: (1) Technology enables teachers to individualize instruction, which allows students to learn and develop at their own pace in a non-threatening environment; (2) Students need to be proficient at accessing, evaluating and communicating, and information; (3) Technology can increase the quantity and quality of students' thinking and writing through the use of word processors; (4) Technology can develop students' critical thinking and allowing them to organize, analyze, interpret, develop, and evaluate their own work; (5) Technology can encourage students' artistic expression; (6) Technology enables students to access resources outside the school; (7) Technology can bring new and exciting learning experiences to students; (8) Students need to feel comfortable using computer, since they will become an increasingly important part of students' world; (9) Technology creates opportunities for students to do meaningful work, and; (10) Schools need to increase their productivity and efficiency. Thus, teachers are expected to make good use of modern teaching technology and develop effective teaching resources. Morgan (1997) claimed that when computers are used, there are many learning processes are engaged such as: (1) gather information; (2) teacher as facilitator; (3) involvement in experiential learning; (4) face-to-face communication; (5) expanded creativity, and (6) testing of new knowledge. For the purpose of answering question number one respondents were asked to respond to 13 Likert-scale items measuring their level of ICT use for educational purposes in rural secondary schools. The results of descriptive analysis (Means, Std. Deviations, and Percentages) were presented in Table 1. Examination of the Means, Std. Deviations and Percentages in Table 4.5, confirms that the highest Percentages of scores in the use of ICT tool for educational purposes by rural secondary school teachers were, "using Internet" (51.8% of the participants answered that they either use the internet "often" or "very often"), with Mean score (M=3.34), and Std. Deviation (SD=1.34), "using CD-Rom" (49.9% of the participants answered that they either use the CD-Rom "often" or "very often"), with Mean score (M=3.14), and Std. Deviation (SD=1.46), "using presentation" (47.3% of the participants answered that they either use the presentation "often" or "very often"), with Mean score (M=3.12), and Std. Deviation (SD=1.43), and "using word process" (26.4% of the participants answered that they either use the word process "often" or "very often"), with Mean score (M=2.55), and Std. Deviation (SD=1.25). The lowest Percentages of ICT use by rural secondary school teachers were scored: for the items "using simulations and games" (46.7% of the participants answered that they "never" simulations and games), with Mean score (M=2.03), and Std. Deviation (SD=0.87), "using Electronic mail" (40.0% of the participants answered that they "never" use Electronic mail), with Mean score (M=2.45), and Std. Deviation (SD=1.14), "using authoring" (39.1% of the participants answered that

they “never” use authoring), with Mean score (M=2.16), and Std. Deviation (SD=1.00), and “using spreadsheet program” (37.6% of the participants answered that they “never” use spreadsheet program) with Mean score (M=2.09), and Std. Deviation (SD=1.14). As shown in Table 1, the percentages of the level of ICT use show that rural secondary schools teachers highly use some ICT tools for educational purposes such as the Internet, CD-Rom, presentation and word processing. On the other hand, the findings show that rural secondary schools teachers have lowest levels of ICT tools such as, simulations and games, electronic mail, authoring, as well as spreadsheet applications. Results also indicated that the overall percentages of the use of ICT tools for educational purposes were reported as low levels. As for using ICTs for educational purposes, the participants’ distribution was as follows 28.6% from the total sample reported that they never used the ICT tools for educational purposes, and 26.3% of the respondents reported that they rarely used ICT tools for educational purposes, while 25.1% from the total respondents reported that they often and very often used ICT for educational purposes. The overall average of the Mean scores of the use of ICT tools for educational purposes by rural secondary school teachers was (M=2.52) and the Std. Deviation (SD=1.19) confirming the results of the Percentages and indicated that the level of ICT use for educational purposes by rural secondary schools teachers found to be a low level.

III. METHODOLOGY

The purpose of this study is to construct “An analytical study on attitude towards information technology among students and physical education teachers of colleges in western districts of West Bengal” the health related physical fitness norms for school level boys and girls student of western districts. Standard procedure was followed to conduct this study.

SELECTION OF THE SUBJECT

The researcher will take total 150 subjects for the study in which (N=75 students) and (N=75 teachers) with the range of age is above 21 years. The selected subjects will be colleges.

SAMPLING TECHNIQUE

The researcher will take simple random sampling technique as an appropriate tool for selecting the desire subjects.

VARIABLES:

Attitude towards information Technology

- Standard Questionnaire

TOOLS TO BE USED

For assessment of comparative study on attitude towards information Technology among students and of Physical Education Teachers of Colleges in western districts. Researcher is going to adopt following questioners:-

SI No.	Variables	Test Item
1.	Attitude information Technology	Questioners-Attitude Towards Information Technology For Students and Teachers ASTITT-NI Dr.(Mrs.) Nasrin Dr.(Mrs.) Fatima Islahi

Table 1

STATISTICAL DESIGN

The study is about to find out of the Selected an analytical study an attitude towards Variable within the information technology colleges in western district areas therefore, Pearson product movement will be applied as statistical tool for the study. The level of significant for this study is set at 0.05.

- ✓ Descriptive statistical technique was applied to find out the distribution of data on ‘t’ ratio.
- ✓ Percentile scale was used to provide the grade to the obtain score on selected health related physical fitness variable.
- ✓ Cumulative frequency was done to find out the Frequency distribution on the score.
- ✓ Normative curve and normative scale was used with five different levels to provide the score on selected health related physical fitness.

IV. DATA ANALYSIS

The data collected from different colleges in western district of West Bengal, attitude information technology was put in to statistical formula for analysis which has been present in this chapter. Analysis of (Mean, SD and t-test) was employed to analyze the present data and level of significance was set at 0.05

FINDINGS

To comparison the attitude information technology variable under present study the analysis of (t-test) was applied and the level of significance was set at 0.05 levels. The statistical analysis is being presented through following tables.

Sl. No	Variables	Mean	SD	t-test
1.	Teachers attitudes	109.3867	15.82155	0.40844
2.	Students attitudes	108.76	13.01334	

Table 2: Compression Attitude Information Technology toward Students and Teachers

Table shows the Teachers Attitudes Mean (109.3867) SD (15.82) and Students Attitudes Mean (108.76) SD (13.01334). It is also revealed by the table that calculated t-test (0.40844) is lesser then the tabulated. There for there is no significant difference 0.05.

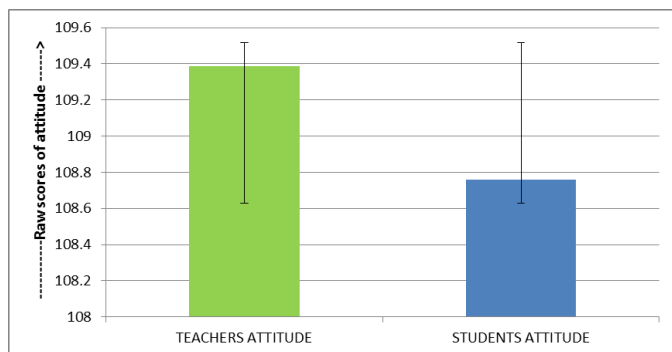


Figure 1: Graphical representation that Compression toward Teachers Attitude and Students Attitudes

V. DISCUSSION OF FINDINGS

By keeping in mind the important of attitude information technology towards students and teachers, the researcher has selected and investigation entitled, “An analytical study on attitude towards information Technology among students and Physical Education Teachers of Colleges in western districts of West Bengal.” Undertaking research in the area of attitude information technology of physical education is needed and is important for our daily life.

So, to measure the attitude of information technology different colleges in western districts. They could be given right guidance and training to promote physical education in their college betterment of a students and teachers well understanding to thinking towards teachers and students colleges. The statistical analysis of data collected on minimum 150 teachers and students in colleges.

The result of the study attained form the statistical analysis after application of mean and standard deviation that the students and teachers revealed negative attitude information technology towards teachers and students of physical education respectively, as compared with norms given in the questionnaire. The attitude information technology questionnaire given by Dr. (Mrs.) Nasrin and Dr. (Mrs.) Fatima Islahi as given in the states if the mean falls on the range of (109.3867) and(108.76) then it would have a negative attitude information technology teachers and students.

Similarly, for physical education it was given Dr. Nasrin and Dr. Fatima Islahi questioner that if the collected data.

VI. DISCUSSION OF HYPOTHESIS

In the beginning of the study researcher had formulated the following hypothesis.

H1: The students and teachers will show towards negative attitude information technology and physical education.

In this study the above mention hypothesis was rejected as the result of the study illustrated negative attitude information technology colleges students and physical education teachers to a great extend through not in the highest level recording to the norms given in the questionnaire .

VII. SUMMARY

The purpose of a study was to analysis the attitude information technology towards the students and teachers in colleges of western districts of West Bengal. For this study total 150 subjects were selected. The necessary data was collected with the help of questionnaire. In order to determine the attitude and information technology was applied statistical design of ‘t’ test methods.

The purpose of the study was to analysis the attitude of information technology difference college teachers and students of physical education. The subjects were randomly selected by the researcher conduct the survey the researcher administrated a standard questionnaire applied.

The questionnaire was given to each students and teachers and information was collected from the teachers and students when they where free. Then the raw data was converted in t-test applied.

Western districts of West Bengal were selected for this study. Total numbers of subjects were 150. This study was done only 150 teachers and students in colleges in western districts.

VIII. CONCLUSION

On the basis of analysis of the comparative study of attitude and information technology towards students and physical education teachers of colleges in western districts. In the beginning of the study researcher had formulated the following hypothesis.

H1: The students and teachers will show towards negative attitude information technology and physical education.

In this study the above mention hypothesis was rejected as the result of the study illustrated negative attitude information technology colleges students and teachers and physical educations to a great extend through not in the highest level recording to the norms given in the questionnaire.

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