



INFLUENCING FACTORS AND POLICIES AMONG PHYSICAL EDUCATION TEACHERS IN TECHNOLOGICAL INTEGRATION IN CLASSROOM SETUP

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Abstract

This paper explored the influencing factors and policies among physical education teachers in technological integration in a classroom setup. Teachers working in the schools of India were selected for the study. 300 physical education teachers included 150 male and 150 female teachers were selected for the study. For this study, the "H. Baert" questioner was applied. Technology integration was used as the variable for assessing the effectiveness of teacher's ability to use among students in physical education courses. The results highlighted the effectiveness of different technology integration in physical education courses. It was found that the technology integration was more in the case of the smart board, projectors, digital video camera, tablet/pc, office tools (word, excel, Powerpoint, Publisher), presentation software, and youtube respectively when compared to other technology.

Keywords: Integration, Physical Education, Technology and Course.

Introduction

Physical Education and Sports are some of the significant measuring sticks and an essential piece of training in any nation at any time of time. Educational programs should be structured so that physical exercises become a piece of everyday exercise plans. Sports are among the features of media nowadays and it is going to be a major industry on the planet. The creation of the modern computer has changed the face of the planet. Today there are more devices fitted with a microchip than there are human beings. The word 'computer' comes from the word compute which means 'to calculate'. Computers were developed from calculators as the need arose for more complex and scientific calculations. A computer in physical education is an interdisciplinary discipline that has its goal in combining the theoretical as well as practical aspects. Computer-assisted instruction provides students with an alternative to classroom

settings and frees the instructor from wrote process that is better handled by the computer. Students can observe and listen to the mechanics of movements in slow motion and learn effectively with the help of a computer. Using the internet one can update the recent technological improvement in sports training, changes in rules, downloading the rules from the internet authorities, doing research, and so on. Computers have potential applications in the elementary and secondary physical education curriculum current usage is minimal when compared to other disciplines. Computers are highly useful in making wide tasks and projects including budgeting, financial statements, calculations, and scheduling in physical education programs. Using computers not only enhances the quality of documentation but also saves time and operational expenses for sports organizations. In education, researchers have claimed that the inclusion of technology can enrich teacher's productivity and students' engagement and learning. For example, Otero et al. (2005) stated that technology could be used as (a) a cognitive tool to help students understand concepts and solve problems, (b) an evaluation tool to assess student learning, (c) a motivational tool to encourage and engage the student in learning, (d) a communication tool to foster collaboration with educators, students, and parents, and as e) a management tool to increase teachers' efficiency. In the field of sport and physical education (PE), technologies such as pedometers, heart rate monitors, physical activity (PA) watches, iPad's, video games, and various mobile apps, to name a few (Beighle et al., 2004; Block, 2008; Phillips et al., 2014) has been adopted by PE practitioners as a tool to monitor students' physical activity, to motivate students to practice, to correct skill execution and performance, and to add new strategies for learning (Legrain et al., 2015).



Methodology

300 physical education teachers from the different states of India were randomly selected for the study. The selected subjects included 150 males and 150 female physical education teachers (PET). For the study, a standardized questioner used by "H. Baert" was applied in the study. During the time of data collection, the research scholar took permission from the concerned institution, before communicating with the physical education teacher. With the permission of the consent authority, the research scholar explains the objective and purpose of the questioner to the subjects. Once the data was collected, the percentages method was applied.

Result and Discussion

A questioner-based survey system was utilized for this current study. Questioners by H. Baert, 2011 was used for data collection. The design of the survey items was influenced by a previously developed instrument. The survey items were modified and added to meet the purpose of this current study. The survey was comprised of five main parts. But for the present study, only influencing utilization of technology and current policies in the program were analyzed. The data pretraining to the present study are presented in tables below:

TABLE 1
FACTORS INFLUENCING UTILIZATION OF TECHNOLOGY IN THE CLASSROOM

Factors	0	1	2	3	4	Total Resp.
Fear of failure when using technology in the classroom	47%	11%	21%	11%	10%	285
Knowledge of how to use the technology	00%	10%	23%	52%	15%	288
Knowledge of how to implement the technology within my teaching	00%	10%	12%	67%	11%	276
National standards/Guidelines for technology integration	00%	10%	22%	40%	28%	271
Research support in using the technology integration	03%	13%	37%	29%	18%	263
Financial support	00%	00%	00%	04%	96%	295
Administrative support	00%	00%	00%	03%	97%	296
The encouragement of others	00%	00%	02%	06%	92%	295
Colleagues that believe in incorporating technology	00%	00%	03%	04%	93%	282
Colleagues that are not in support of integrating technology	29%	12%	16%	11%	32%	268
The current level of technology inclusion in Senior Secondary level	00%	02%	05%	21%	72%	271
The students desire to use technology	00%	00%	04%	15%	81%	283
The motivational aspect the technology brings to my students	00%	00%	00%	03%	97%	295
The knowledge level of my students related to using technology	00%	00%	00%	05%	65%	290

Table 1 represents the factors influencing the utilization of technology in the classroom among the professionals in percentages. Based on the responses it was found

that the motivational aspect that technology brings to the students was 97%, the colleague's belief in incorporating technology was 93%, encouragement of others was 92%, students desire to use technology was 81%, in case of the current level of technology included in the senior secondary was 72%, knowledge level of the student's related technology level financial supports are the major reason that influence there a utilization of the technique was 65% and 32% colleagues that are not in support of integrating technology respectively. In all the cases the responses recorded were strongly agree as it is clear that all these factors effectively influence the utilization of techniques in the classroom.

TABLE 2
CURRENT POLICIES WITHIN THE PROGRAM IN REGARDS TO THE INTEGRATION OF TECHNOLOGY

Factors	Yes	No	I don't know	Total Resp.
Does your program assess the students' ability to use technology?	26%	64%	10%	295
Do faculty in your program address technology use in the course syllabi?	67%	33%	00	282
Do you meet and decide as a faculty on how you will integrate technology?	41%	39%	20	268
Do students within the program need to show evidence of technology integration within their learning?	10%	90%	00	271
Does your faculty have a —technology plan that structures the integration of technology within the physical education program curriculum?	17%	80%	03%	283
Does the physical education subject need to complete a technology course within the program?	29%	65%	05%	295
Does the level of technology integration within your program depend on each faculty member's experience and knowledge of technology?	64%	22%	14%	290
Is there a member within your faculty who leads in the introduction of technology within the program curriculum?	13%	65%	22%	295

Table 2 represents current policies regarding the integration of technology in physical education courses and its effectiveness. It was found that the program was able to assess the student's ability to use the technology was only 26%, in case of address technology use in the course syllabi by the faculty was 67%. When it comes to meet and decide as a faculty on how you will integrate technology the percentage was found to be only 41%. It was also found that only 10% of students within the program need to show evidence of technology integration within their learning. It is alarming to find that only 17% of faculty have a technology plan that structures the integration of technology within the physical education program curriculum. It was clear from the table that only 29% of physical education subject



teachers need to complete a technology course within the program, whereas in term of the level of technology integration within the program depend on each faculty member's experience and knowledge of technology it was found to be 64% and there were only 13% members within faculty who lead in the introduction of technology within the program curriculum respectively.

TABLE 3
PERCEPTION OF CURRENT POLICIES RELATED TO TECHNOLOGY
INTEGRATION PROGRAM

Factors	Yes	No
According to you, should technology use be addressed in the syllabus?	100%	00
Do you believe students should show evidence of teaching with technology?	96%	04%
Do you believe that faculty should meet and decide together on how you will integrate technology?	90%	10%
Do you believe that your faculty should have a —technology plan that structures the integration of technology within the PETE program curriculum?	96%	04%
Do you believe technology integration should be taught as a separate course within the program?	98%	02%
Do you believe technology should be integrated throughout the program?	80%	20%
Do you believe all PETE faculty members should be trained in the integration of PE technology?	98%	02%

Table 3 represents the perception of current policies related to technology integration in physical education courses. It was found that all the responses which were recorded 'yes' were above 80% in all the statements. 100% responses were recorded in 'according to you, should technology use be addressed in the syllabus', 98% was recorded for 'do you believe technology integration should be taught as a separate course within the program', and 'do you believe all physical education faculty members should be trained in the integration of pe technology'. In the case of two statements i.e., 'do you believe students should show evidence of teaching with technology, and do you believe that your faculty should have a technology plan that structures the integration of technology within the physical education program curriculum was recorded 96%. 90% of responses were recorded for 'do you believe that faculty should meet and decide together on how you will integrate technology and 80% for 'do you believe technology should be integrated throughout the program'.

Conclusion

The level of technological proficiency in physical education was high and the majority of them perceive to be an expert in using this tool with 50%. More specifically, physical educators expressed that their basic use/knowledge on most tools which reflected their integration level was often limited in-classrooms. It was also concluded that technological proficiency was more in using tablet/pc, online discussion forums, email, fitness assessment programs, office tools (word, excel, PowerPoint, Publisher), presentation software, data analysis, and display (spss, etc.), educational PowerPoint games, graphics packages (Photoshop, canvas, page maker, Corel draw), google applications (google sites, google docs for example), and youtube. In case of perception of current policies related to technology integration in physical education courses it was found that 94% response was yes and only 06% was no which is a clear indication that integration of technology should be integrated into the subject for better result output.

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