

TECHNOLOGY-INTEGRATED-CURRICULUM IN RELATION TO PROFESSIONAL DEVELOPMENT OF EDUCATORS

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ABSTRACT

The present study was conducted to explore technology-integrated-curriculum in relation to professional development of educators. The study was conducted on 100 educators of government and private schools of Chandigarh. Self constructed questionnaires on technology-integrated-curriculum and professional development was used to collect data. The results of the study showed that there is significant relationship of technology-integrated-curriculum and professional development on male educators as well as female educators. There is also significant relationship of technology-integrated-curriculum and professional development on government school educators as well as private school educators. Also, there is slight difference of technology-integrated-curriculum and professional development between male and female educators and also government and private school educators.

Keywords: Technology-integrated-curriculum, Professional development and Educators

In today's fast growing world, technology is ubiquitous and has touched every part of our lives. Rapid development in the fields of science and technology has resulted in techno-deluge of gadgets that the modern man can use to address daily requirements, communication, education, governance, administration or entertainment. There has been a paradigm shift in the ways of teaching with the help of technology integrated in curriculum. Technology integrated curriculum had put a great impact on both students and teachers. It has changes the way teachers teach and also enhanced the relationship between teachers and students. Technology integrated curriculum is one of the most different concept in education. It is defined as "Technology integrated curriculum is use of technology to enhance and support the education environment. It also supports classroom instructions by creating opportunities for students as well as teachers to do old things in new ways. It has changed the ways of teaching, offering educators effective ways to reach different types of learning and assess student understanding through multiple means. It also enhances the relationship

between teacher and student. When technology is effectively integrated into subject areas, teachers grow into roles of adviser, content expert and coach. It helps in making teaching-learning more meaningful and fun. As the role of technology in classroom is steadily increased so do the need of professional development of teachers to make them more aware of new techniques. Technology integration has transformed teacher's role for betterment of students. Also for professional development opportunities are essential to better train educators for the effective use of technology as an instructional tool. Professional development provides educators better opportunity to understand new advancements and adapt their teaching styles and pedagogy to make effective use of available educational advancements. Technology-integrated-curriculum has changed the way of thinking and teaching of teachers and it in turned also put a tremendous effect on professional development of teachers. It has made teachers more aware of myriad resources that can enhance their teaching. Furthermore it had developed the potential of many teachers and make them aware of

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new digital technologies and enhanced their teaching which few years ago was restricted to books but now “Sky is the limit for Educators”. This type of curriculum has transformed educators into more confident and independent personalities. Teachers are now more aware of technologies and these have groomed them professionally too. As rightly said by David Lassner, “The real power of interactive technologies is that they let us learn in ways that are not otherwise possible or practical” Guskey (1994) emphasizes and connects the growth and problem solving notions of professional development suggesting it is “increasingly seen as a process, not a event,... that the process is intentional...and is a systematic effort to being about positive change or improvement”. Gall and Renchler (1985) concluded that professional development more specifically as “efforts to improve teacher's capacity to function as effective professionals by having them learn new knowledge, attitudes, skills”. NCES (2000) the results of the NCES (2000) study indicated that teachers used technology primarily for administrative and preparatory tasks rather than for classroom instructions. Berker, Ravitz and Wong, 1999, Davidson, Schofield and Stocks, 2001, Zhao et al, 2002) report that classroom access to technology has rapidly increased over the past decade, the most frequent and creative uses of computer technology are not yet linked to curriculum. NCES (2000, 2007) reports that approximately one-third of the nation's teachers indicated that they were prepared to use the internet and computers for classroom. Interestingly, less experienced teachers felt better prepared than veteran teachers to teach with technology.

OBJECTIVES

1. To study the relation of Technology-integrated-curriculum and professional development on the basis of gender.
2. To study the relation of Technology-integrated-curriculum and professional development on the basis of type of school.
3. To study the difference of Technology-integrated-curriculum between male and female educators.
4. To study the difference of Professional

development between male and female educators.

5. To study the difference of Technology-integrated-curriculum between government and private school educators.
6. To study the difference of Professional development between government and private school educators.

METHOD

Investigator followed descriptive method to study technology-integrated-curriculum in relation to professional development of educators.

SAMPLE

Sample consisting of 100 educators was randomly drawn from different government and private schools of Chandigarh from which 50 from government schools (25 males and 25 females) and 50 from private schools (25 males and 25 females) were drawn.

MEASURES

- Self constructed questionnaire on technology-integrated-curriculum was used by the investigator. Investigator got questionnaire standardized from experienced University Professors. It contained 27 items with multiple type responses.
- Self constructed questionnaire on professional development was used by the investigator. Investigator got questionnaire standardized from experienced University Professors. It contained 20 items of multiple choice type responses.

PROCEDURE

Self constructed questionnaires on technology-integrated-curriculum and professional development was used. Questions on technology integrated curriculum contains 27 multiple choice questions of 'yes' and 'no' types. One mark was assigned to positive response and zero for negative response.

Similarly, questionnaire on professional development contains 20 items. The first 19 items are of 'yes' 'no' types and scored as one mark for positive response and zero for negative response but for question 20, percentage was found out by the investigator and then overall results were seen.

RESULTS AND DISCUSSION

Analysis of obtained data was done in accordance with the objectives framed, which are discussed below:

DESCRIPTIVE DATA ANALYSIS RESULTS:

The data was analyzed in order to describe the status of sample. Percentage difference was seen for question 20 of professional development for government and private school educators which is as under:

Maximum percentage(%) of government school male educators is 48% who monthly attend staff meetings to discuss the vision and mission of

the school.

Maximum percentage(%) of government school female educators is 68% who weekly discusses and coordinate homework practice across subjects.

Maximum percentage(%) of private school male educators monthly develops school curriculum plans or a part of it for the betterment of students.

Maximum percentage(%) of private school female school educators i.e.64% once a year discuss or decide on the selection of instructional media like textbooks, exercise books.

INFERENTIAL ANALYSIS

Table 1: Showing gender wise mean, standard deviation and correlation (r) of technology-integrated-curriculum and professional development of educators

Gender	Group	N	Mean	SD	r
Male	Technology-integrated-curriculum	50	22.88	4.22	0.39
	Professional development	50	14.68	2.47	
Female	Technology-integrated-curriculum	50	24.58	2.53	0.44
	Professional development	50	15.12	2.35	

Table 1, reveals that the mean score of technology-integrated-curriculum and professional development of male educators are 22.88 and 14.68 respectively. Table 1 showing correlation which is calculated as 0.39 which is significant at both levels. Therefore, Hypothesis "There will be no significant relation of Technology-integrated-curriculum and professional development on male educators" was rejected.

Table 1 also reveals that the mean score of technology-integrated-curriculum and professional development of female educators are 24.58 and 15.12 respectively. Table 1 showing correlation which is calculated as 0.44 which is significant at both levels. Therefore, Hypothesis "There will be no significant relation of Technology-integrated-curriculum and professional development on female educators" was rejected.

Table 2: Showing mean, standard deviation and correlation (r) of technology-integrated-curriculum and professional development of government and private school educators.

Type of School	Group	N	Mean	SD	r
Government	Technology-integrated-curriculum	50	23.98	3.07	0.53
	Professional development	50	14.96	2.63	
Private school	Technology-integrated-curriculum	50	23.48	4.02	0.32
	Professional development	50	14.84	4.79	

Table 2, reveals that the mean score of technology-integrated-curriculum and professional development of government school educators are 23.98 and 14.96 respectively. Table 2 is showing correlation which is calculated as 0.53 which is significant at both levels. Therefore, Hypothesis 3 “There will be no significant relation of Technology-integrated-curriculum and professional development on government school educators” was rejected.

Table 2 also reveals that the mean score of technology-integrated-curriculum and professional development of private school educators are 23.48 and 14.84 respectively. Table 2 is showing correlation which is calculated as 0.32 which is significant at 0.05 level. Therefore, Hypothesis 4 “There will be no significant relation of Technology-integrated-curriculum and professional development on private school educators” was rejected.

Table 3: Showing mean, standard deviation and t-value of technology-integrated-curriculum between male and female educators.

Technology-integrated-curriculum	N	Mean	SD	t-value
Males	50	22.88	4.22	2.44
Females	50	24.58	2.53	

Table 3, reveals that the mean score of technology-integrated-curriculum of males and females are 22.88 and 24.58 respectively. The t-value was calculated as 2.44 which is significant at both 0.01 and 0.05 levels. This reveals that there exists a significant difference between male and female educators. Therefore, Hypothesis “There will be no difference in technology-integrated-curriculum between male and female educators” stands rejected.

Table 4: Showing mean, standard deviation and t-value of professional development between male and female educators.

Professional Development	N	Mean	SD	t-value
Males	50	14.68	2.47	0.913
Females	50	15.12	2.35	

Table 4, reveals that the mean score of professional development of males and females are 14.68 and 15.12 respectively. The t-value was calculated as 0.913 which is insignificant at both 0.01 and 0.05 levels. This reveals that there exists no significant difference between male and female educators. Therefore, Hypothesis 6 “There will be no difference in professional development between male and female educators” was accepted.

Table 5: Showing mean, standard deviation and t-value of technology-integrated-curriculum between government and private school educators.

Technology-integrated-curriculum	N	Mean	SD	t-value
Males	50	23.98	3.07	0.699
Females	50	23.48	4.02	

Table 5, reveals that the mean score of technology-integrated-curriculum between government and private school educators are 23.98 and 23.48 respectively. The t-value was calculated as 0.699 which is insignificant at both 0.01 and 0.05 levels. This reveals that there exists no significant difference between government and private school educators. Therefore, Hypothesis 7 “There will be no difference in technology-integrated-curriculum between government and private school educators” was accepted.

Table 6: Showing mean, standard deviation and t-value of professional development between government and private school educators.

Professional Development	N	Mean	SD	t-value
Government school educators	50	14.96	2.63	0.25
Private school educators	50	14.84	2.12	

Table 6, reveals that the mean score of professional development of government and private school educators is 14.96 and 14.84 respectively. The t-value was calculated as 0.25 which is insignificant at both 0.01 and 0.05 levels.

This reveals that there exists no significant difference between government and private school educators. Therefore, Hypothesis 8 “There will be no difference in professional development between government and private school educators” was accepted.

CONCLUSION

This study has found positive effects of technology-integrated-curriculum and professional development on both males and females educators. Also, this has shown a significant relationship between government and private school educators. To add on technology-integrated-curriculum also has a significant difference between male and female educators which shows that both genders have welcomed this new method of teaching with open arms. But, this has put no effect on professional development of educators as the difference of professional development between male and female educators is insignificant. Furthermore, difference of technology-integrated-curriculum and professional development between government and private school educators is also insignificant.

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