

EXPLORING THE IMPACT OF TECHNOLOGICAL INTEGRATION ON SECONDARY SCHOOL STUDENTS: A COMPREHENSIVE STUDY

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ABSTRACT

The present study has been designed to study the Influence of Technology on Secondary School Students in Prakasam district. Various Indian and foreign studies were reviewed. Descriptive Survey method has been used in this study. The sample consists of 150 students studying in secondary schools of Prakasam district. The investigator used stratified random sampling technique for selecting the sample. Questionnaire was constructed for the Students to find out the opinions on the Exploring the Impact of Technological Integration on Secondary School Students: A Comprehensive Study. The data were analyzed using various statistical methods like mean, SD, 't' test and F-test were the statistical techniques used. The score obtained by different groups are compared across the variables like gender, medium, class, management and locality. The results are discussed in light of previous research studied; suggestions and Recommendations for further research were also suggested.

Key words: Influence of Technology, Secondary School Students.

1. INTRODUCTION

Technology on educational system is not restricted to high technology. Nonetheless, electronic technology on educational system has become an important part of society today. Modern technology on the educational system includes (and is broadly synonymous with) e-learning, instructional technology, Information And Communication Technology (ICT) in education, Ed. Tech, learning technology, multimedia learning, technology enhanced learning (TEL), Computer-Based Training (CBT), computer assisted instruction or Computer Aided Instruction (CAI), Internet Based Training (IBT), flexible learning environments, networked learning, virtual education, personal learning environments, networked learning virtual learning environments (VLE) (which are also called learning platforms), m-learning, and digital education. These labels have been variously used and understood, and conflate to the broad domain of technology on the educational system and e-learning. These alternative descriptive terms are all more restrictive than "Technology on Educational System" in that they individually emphasize a particular digitization approach, component or delivery method. For example, m-learning emphasizes mobility, but is otherwise indistinguishable in principle from technology on the educational system.

Need and significance of the study:

The study helped to determine the needs of learners and outcomes of integrating technology into classroom instruction, thereby keeping both Students and students competitive, irrespective of their locale. Students and students remain enthusiastic about technology integration in the classroom and about opportunities to enhance their teaching and learning processes amidst challenges faced in their various schools. This study serves as resource material for developing countries that have yet to deploy technology solutions to schools and can lead to a paradigm shift for schools in developing countries that have been neglected or deprived of access to technology-rich education. Essentially, the information provided on what worked best, the status of technology interventions in selected schools, Students' level of technology implementation, and students' level of achievement as a result of technology interventions, thereby leading to positive social change in the society.

Objectives of the study:

1. To study the Influence of Technology on Secondary School Students in Prakasam District.
2. To study the significant difference among the perceptions of students based on their demographic variables i.e., gender, medium, class, management and locality towards Influence of Technology on Secondary School Students in Prakasam District.

Hypotheses of the present study

1. There is no significant difference between the perceptions of male and female category students towards Influence of Technology on Secondary School Students in Prakasam District.
2. There is no significant difference among the perceptions of students based on their class towards Influence of Technology on Secondary School Students in Prakasam District.

3. There is no significant difference among the perceptions of students based on their medium of instruction towards Influence of Technology on Secondary School Students in Prakasam District.
4. There is no significant difference among the perceptions of students based on their school management towards Influence of Technology on Secondary School Students in Prakasam District.
5. There is no significant difference among the perceptions of students based on their locality towards Influence of Technology on Secondary School Students in Prakasam District.

2. REVIEW OF RELATED LITERATURE

Dan Hirsch (2018) studied on “The Impact of Technology on Student Achievement”. The purpose of this study is to examine the impact of technology on achievement in American Government. The hypothesis is that technology will have no impact on student achievement. A quasi-experimental design was used. The data from the research suggests that technology had no impact on student achievement. Both the control and treatment group achieved similar results.

Ikwuka, O. I. (2017) studied on “Effect of ICT on Secondary School Students’ Academic Performance in Christian Religious Studies in Oshimili North Local Government Area”. The results showed that students who were taught with ICT had better academic performance on CRS and that the gender has no significant effect in the academic performance of students who were taught CRS with ICT instructional package. Based on the findings, it was recommended among other things that Christian Religious Studies’ Students should use ICT for teaching CRS in secondary schools.

Design of the Study

The researcher followed the survey method of the descriptive research. For this investigation the questionnaire had been considered as a suitable tool for the collection of data. The questionnaire consisted of 45 statements as perceived by the Students.

Reliability and Validity:

For the purpose of the present study the split- half method was adopted. The split-half reliability co-efficient for the Influence of Technology on Secondary School Students as perceived by students was 0.86 and for the validity of the scale it is based on the content and construct validity.

Administration of Tool:

The tool was administered among students, necessary instructions were given in filling the tool. All the respondents followed the instructions and filled the tool by reading the all the items carefully.

Data Collection:

The investigator personally visited the sampled schools and administered the tool among the sampled respondents. The data collected through questionnaire and Interview schedule were used for analytical purposes.

Statistical Techniques Used:

The statistical techniques used mainly for analytical purposes were means, standard deviations were used To study the significant differences in between the socio-economic variables, ‘t’-test and ‘F’-test (ANOVA) have been used by the investigator with the help of Statistical Package for Social Sciences (SPSS).

Table 1. Overall perceptions of students towards Influence of Technology on Secondary School Students in Prakasam district

N	Min. Score	Max. Score	Mean	Mean Percent	Std. Dev.
300	50	100	83.40	83.40	4.18

As seen from the above table 1 the students expressed high perceptions towards Influence of Technology on Secondary School Students in Prakasam district. The mean and mean percentages are 83.40 which is 83.40% respectively.

Table 2. Significant difference among the perceptions of students based on their demographic variables towards Influence of Technology on Secondary School Students in Prakasam district

Variable	Category	Mean	Std. Dev.	t/F-value	p-value
Gender	Male	83.41	4.50	0.04 ^{NS}	0.97
	Female	83.39	3.86		
Class	VII	83.76	3.32	9.82**	0.00

	VIII	82.76	4.56		
	IX	81.84	4.72		
Medium	English	82.90	4.57	1.98*	0.05
	Telugu	83.83	3.77		
Management	Government	85.06	3.82	11.33**	0.00
	Aided	82.29	3.55		
	Private	82.89	4.40		
Locality	Rural	84.42	3.16	2.81**	0.00
	Urban	82.96	4.49		

N=150

There is no significant difference between the perceptions of Students based on their gender towards Influence of Technology on Secondary School Students in Prakasam district.

There is a significant difference among the perceptions of Students based on their class towards Influence of Technology on Secondary School Students in Prakasam district and VII class Students perceived high than that of the rest.

There is a significant difference among the perceptions of Students based on their medium of instruction towards Influence of Technology on Secondary School Students in Prakasam district and Telugu medium Students perceived high than that of the rest.

There is a significant difference among the perceptions of Students based on their School Management towards Influence of Technology on Secondary School Students in Prakasam district and Government school Students perceived high than that of the rest.

There is a significant difference among the perceptions of Students based on their locality towards Influence of Technology on Secondary School Students in Prakasam district and rural area Students perceived high than that of the rest.

3. FINDINGS OF THE STUDY

1. There is no significant difference between the perceptions of Students based on their gender towards Influence of Technology on Secondary School Students in Prakasam district.
2. There is a significant difference among the perceptions of Students based on their class towards Influence of Technology on Secondary School Students in Prakasam district and VII class Students perceived high than that of the rest.
3. There is a significant difference among the perceptions of Students based on their medium of instruction towards Influence of Technology on Secondary School Students in Prakasam district and Telugu medium Students perceived high than that of the rest.
4. There is a significant difference among the perceptions of Students based on their School Management towards Influence of Technology on Secondary School Students in Prakasam district and Government school Students perceived high than that of the rest.
5. There is a significant difference among the perceptions of Students based on their locality towards Influence of Technology on Secondary School Students in Prakasam district and rural area Students perceived high than that of the rest.

4. RECOMMENDATIONS

1. Sufficient training should be given to the teachers for effective teaching on Technology.
2. The students were in a technologically equipped classroom and received technological instruction that included using Web 2.0 tools.
3. Future studies need to identify specific aspects of technological instruction and their effect on academic achievement.
4. Proper infrastructural facilities and personal computers should be provided more in number in all the secondary schools.
5. On-line and Networking facilities should be established for effective implementation of Technology.

6. Innovative models should be developed in all school for effective implementing the Technology in the present context.
7. Required software facilities should be enhanced for integrating Computer Assisted Instruction in secondary schools for effective teaching.
8. The teachers should prepare their students for Computer Assisted Instruction in their classrooms.
9. Orientation should be given to all the teachers about Innovative Technologies and its effects on the achievement among the students.
10. Government may be distribute Computer Assisted Instruction packages for all subjects to all the educational institutions that they can use it in their daily teaching learning process.

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