



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

A Study Of Digitization And Its Impact On Students Performance Of Selected Higher Educational Institute After Covid Pandemic

*Vijay Singh Thakur

Professor Maharana Pratap College of Management Bhopal

Abstract

In the present scenario of education digitization and various digital tool have a significant impact to enable effective teaching and learning among the students. In the present study impact of digitization on student performance has been discussed. The study was based on primary data which has been collected among the student of higher educational institutions by using simple random sampling method. The data for present study has been analyse by using t test at 5% level of significant. The findings of the study explore that among the various digitization aspect video conferencing, smart class and social media has been found significant. However, power point presentation is not significantly and positively related with student performance of higher performance.

Keywords: Digitization, Power point Presentation, Video-conferencing, Social media and smart class

Introduction

In the present scenario of globalization digitisation has become a most important need for peoples as well as organization to convert the information into digitalization format. Without the usage of digital tools conversation of information into digital format is not possible. However digitization has become a part of daily routines of the peoples. Now a days educational institutions frequently using the various digitals tools in the effectiveness teaching and learning process. It has been observed that during the Covid pandemic when students and peoples are not moving to the educational institutions then digitalization played a most significant role in order to connect peoples with each other for a smooth running of the institutions. The present research study related with impact of digitization on student performance of selected higher education institution after Covid pandemic. In this process of research we have identified for different digitization tools which have been using by the higher education institutions for teaching and learning process among the students such as smart classes, video conferencing, social media and power point presentation.

Concept of Digitization

Digitization is systematic process in order to converting of information into digital format. In this format the information is organize into discreet units of data. However this is the binary data that computers and various other devices can process. Digitization is audio and video both which is based on nature of the information which is converting into digital format. However it involves the exploring of business models and platforms using digital technologies.

Digitization gradually involving the transformation of unorganized sector in the many parts of globe.

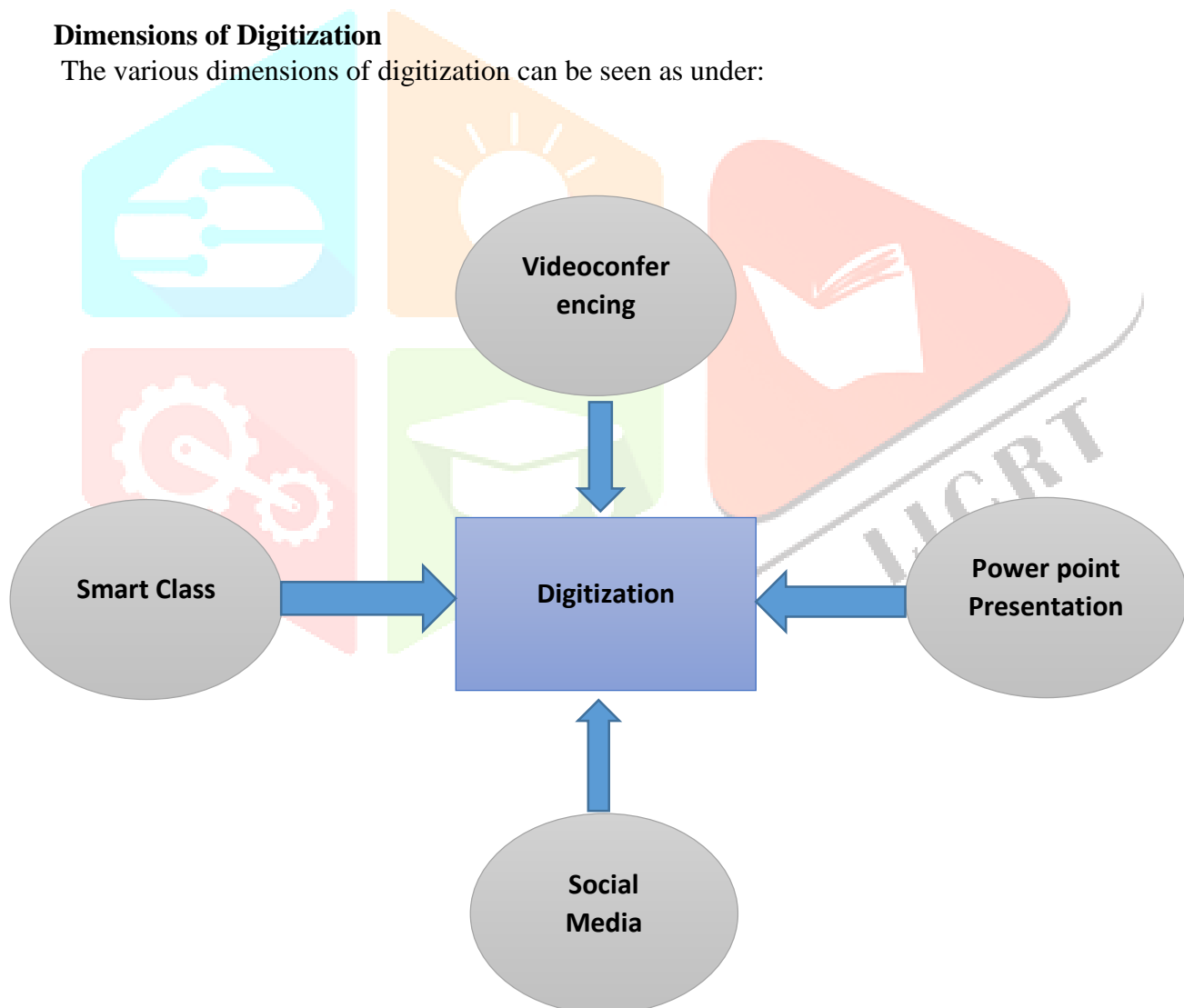
Impact of digitization on higher education

Digitization played an important role in the higher education because various practices of digitization are using as a digital tools in order to promote teaching and learning purpose. Now a day's digital learning and teaching has become the essential part for the educational system in order to make teaching and learning digital. However digitization have a most significant impact on higher education which may be explore as

- 1. On style of learning:** Digitization helps student to learn in their own style in the different condition. Digitization helps those students whose are not able to understanding in the traditional method because digitization create confidence and better understanding between learners and teachers.
- 2. Skill to learn at any point of time:** the digitization helps the students to become more capable in the learning activity without having physical study material. However with the help of digital tools student may be use a study material anywhere through video conferencing.
- 3. Increase improvement:** Digitization and digital tools helps the student to improve their performance in the classroom and other task related to teaching and learning process. However student may be more capable with the use of digitization.
- 4. Improve engagement:** Usage of digital tools and digitization helps the student to make their engagement with teaching and learning process in the institutions. However digitization also helps students to be more engaged with various teaching and learning of the institutions.

Dimensions of Digitization

The various dimensions of digitization can be seen as under:



Review of literature

Hashem A. Alsamadani (2018), Conducted a research study on online blogging and students writing skills. The purpose of this study was to examine impact of online Blogging for students writing skills along with group of students. Authors classified two group such as, pre-writing and post writing group through blogging. Findings of the study indicated that use of blogging was effective and had a great impact on students and group writing skills and also suggested that traditional method performances was not better than writing through blogging. Authors also recommended that there was a need to modify blogging such as make students aware and conduct training program on how to use blogging for writing purpose individually and with group after which it will be more effective.

Talatu Ibrahim Umar (2018), conducted a research study on social media on behavior and performance of the secondary level school students. The purpose of the study was to examine impact of social media on student behaviour and performance. This research study was based on descriptive research design and authors formed two hypothesis. Few secondary level students had been selected to collect data and 306 students were randomly selected for the same. Findings of the study indicated that there was a negative impact of social media on student's behaviour and performance. In this regard, they suggested that parents and schools should pay more attention towards use of social media by the students.

Agwi Uche Celestine (2018), conducted a research study on social media impact on students' academic performance. Purpose of this research was to examine impact of social media on the academic performance of the students with respect to the particular situation of the education. In order to complete this research work, authors first developed sets of questionnaire with four research question and also designed three hypotheses. This research study dealt with descriptive research design, sample used for study were the students of state university of Edo State. After analysis of the data, research found that there is a significant relationship between use of social media and student's academic performance and also indicated that social media has no negative impact on student's academic performance

Shruti Tiwari (2017), conducted a research study on how to improve teaching and learning through smart class. This research study was based on the concept of smart class and ICT technology in school education and how it is improved performance and motivation of students. Result of the study clearly indicated that smart class and ICT is beneficial for those students who are interested in smart learning and research related activity in school. This technology and concept has now become prime requirement for current education systems in India as well as the whole world because now all the schools implement this concept from primary to high secondary level towards improving student's performance in classrooms. Authors also suggested that Smart Class enables teacher and students on how to learn and teach in smart way and smart manner. Apart from this, authors also suggested that now teacher and students become more technical in this era of education and upgrade their self as required by new curriculum.

Fr. Joshi Varghese (2017), conducted a research study on the impact of smart class in academic field. This research study dealt with effect of smart class technique on student academic achievement. For this purpose, sample 60 students was collected which was classified in 2 groups, each group contained 15 girls and 15 boys. Study was based on eight class students who got 60 to 65% percent score in exam. This study was divided in two group 30 students of first group learned through concept of smart class while other students learned through traditional method of teaching. Findings of the study suggested that there was a significant difference between both the methods of teaching. On the other hand, authors indicated that students learned through smart class were more effective and achievement level is higher than the traditional method of teaching.

Madhu Gupta (2017), has been conducted a research study on smart class and students achievement based on gender of the students. The main purpose of this study was to examine effects of smart class on students achievement based on gender of the students in social science subject. The study was based on descriptive method of research. Data has been collected from 430 students in which 216 students belonged to smart class and 214 belongs to traditional class, the sample of these students was collected through multi-stage stratified random sampling technique. Findings of the study indicated that smart class plays an important role for gender education and it had a direct impact on student's performance and achievements. On the other hand, all the variables such as teaching, gender and intelligence have significant impact on student achievement.

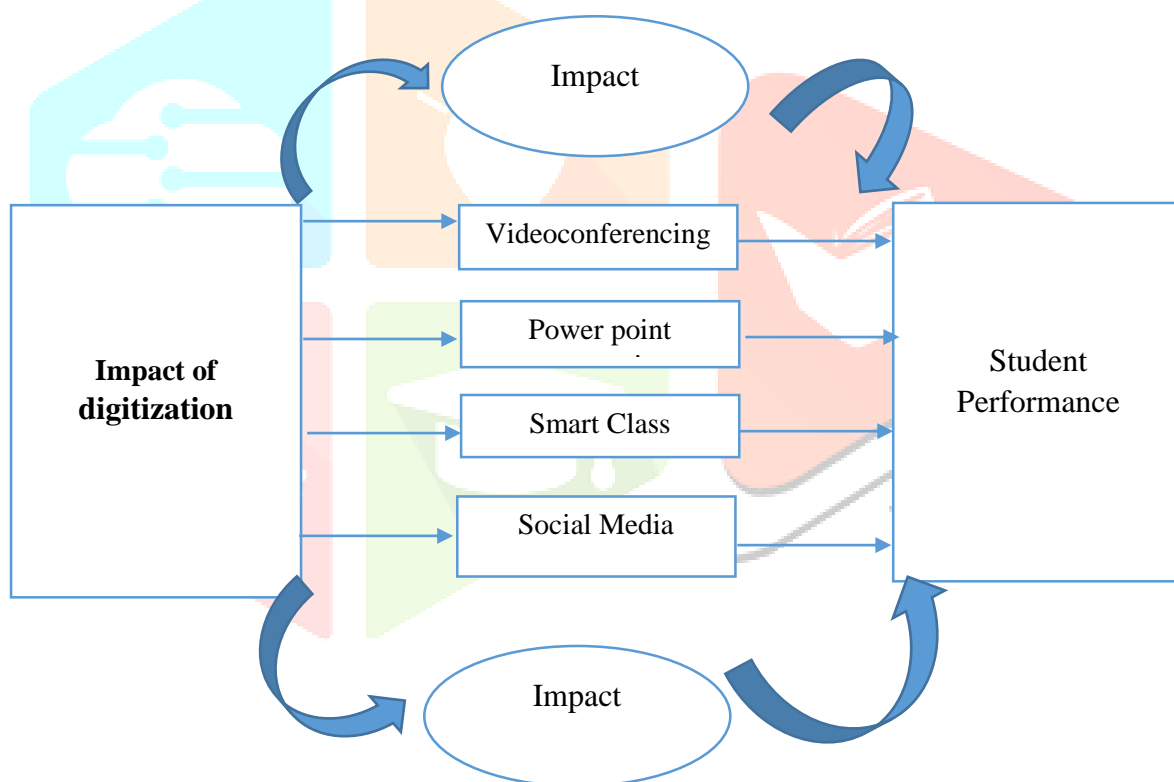
Ahmed Al-Hunaiyyan (2017), conducted a research study on smart class with respect to mobile learning model. The purpose of this research was to examine mobile learning program in the view of smart class environment. In this regard, authors developed and identified certain aspects of mobile learning program in the context of smart class. With the importance of this model authors also suggested importance of this model with respect to smart class in schools and colleges. In the findings and conclusion of the study authors suggested that mobile learning model with respect to smart class is a very crucial factor and has a direct impact on student's performance in the classroom.

Objective of the study

The objective of the study are as under

1. To study the relationship between digitization and students performance in higher educational institutions towards **Videoconferencing**
2. To study the relationship between digitization and students performance in higher educational institutions towards **Power Point Presentation (PPT)**
3. To study the relationship between digitization and students performance in higher educational institutions towards **Smart Class**
4. To study the relationship between digitization and students performance in higher educational institutions towards **Social Media**

Research Framework



Hypothesis

H₀₁: There is **no significant** relationship between impact of digitization and students performance with respect to **Videoconferencing**

H_{a1}: There is **a significant** relationship between impact of **digitization** and students performance with respect to **Videoconferencing**

H₀₂: There is **no significant** relationship between impact of **digitization** and students performance with respect to **Power Point Presentation (PPT)**

H_{a2}: There is **a significant** relationship between impact of **digitization** and students performance with respect to **Power Point Presentation (PPT)**

H₀₃: There is **no significant** relationship between impact of **digitization** and students performance with respect to **Smart Class**

H_{a3}: There is a **significant** relationship between impact of **digitization** and students performance with respect to **Smart Class**

H_{o4}: There is **no significant** relationship between impact of **digitization** and students performance with respect to **Social Media**

H_{a4}: There is a **significant** relationship between impact of **digitization** and students performance with respect to **Social Media**

Research Design

Research design is a blue print for any proposed research work, it includes methodology and processor used to conduct the scientific research. The research design for present study is expletory in nature, however primary and secondary data has been used to explore the relationship between impact of digitization and students performance.

Data Collection

The present research study is based on primary and secondary data which has been collected by using different methods.

Primary data: Primary data for present study has been collected with the help of questionnaire method. In this process of data collection a well papered questionnaire containing 12 questions includes on the basis of videoconferencing, social media, power point presentation and smart class.

Secondary Data: Secondary study for the present study were taken from various sources such as published research paper, thesis and related books.

Sampling: Sampling is a systematic process to collect pre determine number among the whole population. The sampling for the present research study is based on following steps

- 1. Sample design:** The population of the study was selected from various higher educational institutions of Bhopal city. Simple random sampling techniques was adopted to collect the sample from the whole population. In order to maintain the accuracy sample were collected from the different geographical and demographic location of the respondent.
- 2. Sample Size:** The final questionnaire were distributed among the 200 students of selected public and private higher educational institutions of Bhopal city. After verification of the questionnaire 168 sets of questionnaire were found correct and completely filled. However, sample size of the study is 168.
- 3. Sampling Method:** Simple random sampling method were adopted to collect the sample among the group of students.
- 4. Sample Area:** Sample area for the study is limited upto selected private and public higher educational institutions of Bhopal city.

Measurement tools

In order to scaling of the data five point Likert scale has been used. The range of five point Likert scale is **01** strongly disagree to **05** strongly agree.

Tools for data analysis

Data analysis for the present study done by using t test at the 5% significant level and 95% confidence level.

Hypothesis testing

First Hypothesis

H₀₁: There is **no significant** relationship between impact of digitization and students performance with respect to **Videoconferencing**

H_{a1}: There is **a significant** relationship between impact of **digitization** and students performance with respect to **Videoconferencing**

Table 1: Impact of Digitization on student performance towards video conferencing

Hypothesis	Statement	df	t	Significant	Result
H₀₁	Impact of Digitization on student performance towards video conferencing	4	8.729	0.001	Significant
H_{a1}	Impact of Digitization on student performance towards video conferencing				

Interpretation: Above table 1 explore the impact of digitization on students' performance with respect to Videoconferencing. Since the value of t is 8.729 and P value is 0.001. In this case study accepted alternative hypothesis and rejected null hypothesis.

Second Hypothesis

H₀₂: There is **no significant** relationship between impact of **digitization** and students performance with respect to **Power Point Presentation (PPT)**

H_{a2}: There is **a significant** relationship between impact of **digitization** and students performance with respect to **Power Point Presentation (PPT)**

Table 2: Impact of Digitization on student performance towards Power Point Presentation (PPT)

Hypothesis	Statement	df	t	Significant	Result
H₀₂	Impact of Digitization on student performance towards Power point presentation	4	5.421	0.512	Not Significant
H_{a2}	Impact of Digitization on student performance towards Power point presentation				

Interpretation: Above table 2 explore the impact of digitization on students' performance with respect to Power point presentation. Since the value of t is 5.421 and P value is 0.512. In this case study rejected alternative hypothesis and accepted null hypothesis.

Third Hypothesis

H₀₃: There is **no significant** relationship between impact of **digitization** and students performance with respect to **Smart Class**

H_{a3}: There is a **significant** relationship between impact of **digitization** and students performance with respect to **Smart Class**

Table 3: Impact of Digitization on student performance towards Smart Class

Hypothesis	Statement	df	t	Significant	Result
H ₀₃	Impact of Digitization on student performance towards Smart class	4	6.407	0.000	Significant
H _{a3}	Impact of Digitization on student performance towards Smart class				

Interpretation: Above table 3 explore the impact of digitization on students' performance with respect to Smart class. Since the value of t is 6.407 and P value is 0.000. In this case study accepted alternative hypothesis and rejected null hypothesis.

Fourth Hypothesis

H₀₄: There is **no significant** relationship between impact of **digitization** and students performance with respect to **Social Media**

H_{a4}: There is a **significant** relationship between impact of **digitization** and students performance with respect to **Social Media**

Table 4: Impact of Digitization on student performance towards Social Media

Hypothesis	Statement	df	t	Significant	Result
H ₀₄	Impact of Digitization on student performance towards Social Media	4	9.652	0.001	Significant
H _{a4}	Impact of Digitization on student performance towards Social Media				

Interpretation: Above table 4 explore the impact of digitization on students' performance with respect to Social Media. Since the value of t is 9.652 and P value is 0.001. In this case study accepted alternative hypothesis and rejected null hypothesis.

Findings

- Findings of the study explore that videoconferencing has been found most significant aspect of digitization which is highly related among the student performance in selected higher educational institution of Madhya Pradesh. In this significant relationship it may be state that during the covid pandemic video conferencing being used by the higher educational institution. Which have impact teaching and learning process, resulting to improve student performance.
- Findings of the study indicate that power point presentation has not been found significant aspect of digitization because result of hypothesis testing is not significant and in this case the null hypothesis is accepted. However it may be explore that teaching and learning through power point presentation is not a impactful process from the student point of view.

3. Findings of the study clearly mentioned that smart class has been found one of the important dimension of digitization which has significant impact on the performance of students studying in higher education. However, the significant relationship shows that use of smart class is highly appreciated by the students and accepted that it is important to increase their performance.
4. It has been found that social media playing a significant role with respect to teaching and learning process. Findings of the study indicates that the use of social media is highly impact the student performance. However, it may be explore that social media related activities in the teaching and learning process is appreciated and accepted by the students of higher education.

Conclusion

As it has been discussed in the study that digitization played a significant role in the higher education. The study deals with the impact of digitization among the students of higher educational institutions. For this purpose of research four different dimensions of digitization has been taken as independent variables such as video conferencing, power point presentation, smart class and social media. The findings of the study explore that among the all four dimensions of digitization video conferencing, smart class and social media has been found most significant elements which have positive impact on the performance of students in the higher educational institutions. However, power point presentation has been refused and not appreciated by the student as an effective tools of digitization. In the final conclusive remark it can be conclude that entire digital process in the educational institutions is highly impactful in order to improve student performance and make teaching and learning more effective.

References

1. Agwi Uche Celestine (2018), Impact Of Social Media on Students' Academic Performance, International Journal of Scientific & Engineering Research Volume 9, Issue 3, March-2018
2. Ahmed Al-Hunaiyyan (2017), A New Mobile Learning Model in the Context of Smart Classroom Environment: iJIM – Vol. 11, No. 3, 2017 pp 39-56
3. Fr. Joshi Varghese (2017), The Effect of Smart Class on Academic Achievement, International Journal on Recent and Innovation Trends in Computing and Communication, Volume: 5 Issue: 7, 416-419
4. Hashem A. Alsamadani (2018), The Effectiveness of Using Online Blogging for Students' Individual and Group Writing, International Education Studies; Vol. 11, No. 1; , pp 44-51
5. Madhu Gupta (2017), Effect of Smart Classroom Teaching On Achievement of Students: A Closer Focus on Gender and Intelligence, Imperial Journal of Interdisciplinary Research (IJIR) Vol-3, Issue-1, 2017 pp 1077-1086
6. Shruti Tiwari (2017), Improving Teaching-Learning through Smart Classes, Suresh Gyan Vihar University Journal of Engineering & Technology, Vol . 3, Issue 2, 2017, pp 40-44
7. Talatu Ibrahim Umar (2018), Influence of Social Media on Psychosocial Behaviour and Academic Performance of Secondary School Students, journal of education & entrepreneurship Formerly Journal of Educational Policy and Entrepreneurial Research, Vol. 5, No.2, 36-46, 2018
8. Tan, J. (2010). Grounded theory in practice: Issues and discussion for new qualitative researchers. Journal of Documentation, 66(1), 93–101
9. Tudini V. (2003). Conversational elements of online chatting: speaking practice for distance language learners? In Alsic, 6, 2, 83-99.
10. Tuncay Sevindik (2010), Future's learning environments in health education: The effects of smart classrooms on the academic achievements of the students at health college, T. Sevindik / Telematics and Informatics 27 (2010) 314–322