The Effects Of Different Modes Of Technology Usage In Higher Educational Learning Environment

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Abstract- Competition, the students are charged with high donation, high fees structure and extra fees in between the semesters due to various reasons. Eventhough the charges are high, the parents or the guardian of the students are ready to pay the amount whatever demanded by the college side. The problem of the study is not about the money collecting from the students, the problem is whether the students' performance has been increased during these college times and whether the value for money properly used for technology or not. The main objectives to study on different modes of technology towards student performance in higher educational institutions, to bring awareness to the students towards the various level of information technology extent avail to students, and to give feasible solutions based on the findings analyzed. The study undertaken is descriptive in nature. For this, the study conducted a research covering the students studying from higher educational institutions with various factors related to the effects of different modes of technologies usage in higher educational learning environment. . Now all are in information age largely used different modes of technology enabled services in learning environment. This paper considered this and analysed accordingly.

Keywords – Higher educational institutions, learning environment, technology, value for money.

I. INTRODUCTION

India is the best country known for educational excellence. In every corner of India, colleges are established which offers education to every aspirant in various streams such as Arts & social science, law, engineering, medical, commerce or journalism, and mass communication. Governments, as well as private colleges, are located in India. Colleges in India playsa crucial role in developing and promoting higher education. People can find different colleges in India which offers various degrees such as Management, engineering, Medical, Law, Information technology, pharmacy and so on. Getting admission into colleges in India is not an easy task one need to get it done with the entrance examination. For deserving and talented aspirants free scholarships are offered by colleges in India which help them to pursue higher studies. The count of higher educational institutions has been increased everywhere and the competition between colleges are improved towards various factors such as educational system, ambience of the college, dress code of the students inside the college, placement supports, exploring students to world etc. Behind these competition, the students are charged with high donation, high fees

structure and extra fees in between the semesters due to various reasons. Eventhough the charges are high, the parents or the guardian of the students are ready to pay the amount whatever demanded by the college side. The problem of the study is not about the money collecting from the students, the problem is whether the students' performance has been increased during these college times and whether the value for money properly used for technology or not. For this, the study conducted a research covering the students studying from higher educational institutions with various factors related to the effects of different modes of technologies usage in higher educational learning environment.

The rest of the paper is organized as follows. Research objectives discussed in section II. Technology based facilities available in higher educational institutions are explained in section III. Research methodology are explained in section IV. Data Analysis and Interpretation are explained in section V. Concluding remarks are given in section VI.

II. RESEARCH OBJECTIVES

1. To study on different modes of technology towards student performance in higher educational institutions
2. To bring awareness to the students towards the various level of information technology extent avail to students.
3. To give feasible solutions based on the findings analyzed.

III. TECHNOLOGY BASED FACILITIES AVAILABLE IN HIGHER EDUCATIONAL INSTITUTIONS

The need for usage of technologies which removes the boundaries of time and location increases day by day today when information and accession to information gain importance. Effect of mobile learning to education is the fact that mobile devices are small and they have got with a lot of features despite their size increases interest for them. This increasing interest requires more study on these devices or causes the usage of these devices in more fields. The feature of mobile devices that enable educational atmosphere encourages individuals for their usage. Besides, it enables an educator who shares the information to contact more students independent of time and location with the usage of mobile devices in education. E-learning occurred as a new form of distance learning and its terminology is close to those oftraditional learning. But although the applications of m-learning are seen as an evolution of e-learning, m-learning is a characterized technology and has its own terminology. For instance, while the terms multimedia, interactive, hyperlinked, media-rich environment are among the terminology of e-learning; terms like spontaneous, intimate, situated, connected, informal, lightweight are among the terminology of m-learning.

3.1. WEB-BASED LEARNING

Web-based learning refers to the type of learning that uses the Internet as an instructional delivery tool to carry out various learning activities. It can take the form of (1) a pure online learning in which the curriculum and learning are implemented online without face-to-face meeting between the instructor and the students, or (2) a hybrid in which the instructor meets the students half of the time online and half of the time in the classroom,

depending on the needs and requirement of the curriculum. Web-based learning can be integrated into a curriculum that turns into a full-blown course or as a supplement to traditional courses.

3.2. VIRTUAL CLASSROOM

A virtual classroom is a teaching and learning environment where participants can interact, communicate, view and discuss presentations, and engage with learning resources while working in groups, all in an online setting.

3.3. DIGITAL COLLABORATION

Digital collaboration is using digital technologies for collaboration. Dramatically different from traditional collaboration, it connects a broader network of participants who can accomplish much more than they would on their own.

3.4. ONLINE ASSIGNMENTS AND TESTS

Online test help service offers assistance with different online quizzes, online tests, exams, online homework, and online assignment so that students can complete their online tasks within the stipulated time and with guaranteed success. Our expert help is available in providing external support for completion of blackboard tasks like quizzes, tests, exams, homework and different academic assignments based on different subjects of different grades.

3.5. SYSTEMATIC STUDENT LEAVE REQUEST AND APPROVAL

The system is an Intranet based application that can be accessed throughout the organization or a specified group/Dept. This system can be used to automate the workflow of leave applications and their approvals. The periodic crediting of leave is also automated. There are features like email notifications, automatic approval of leave, report generators,etc in this system. Leave Management application will reduce paperwork and maintain records in a more efficient way

3.6. SELF-BASED INSTRUCTOR-LED LEARNING

The method of creating a self-paced course and an instructor-led course is straightforward. New methods of learning such as Blended and Flipped learning, can be implemented easily through the self-paced and scheduled (instructor-led) course.

3.7. INDUSTRY-INSTITUTION INTERACTION

Bridging the gap between industry and the academic institutions. Better interaction between technical institutions and industry is the need of the hour. This will have great bearing on the engineering curriculum, exposure of engineering students to the industrial atmosphere and subsequent placement of young graduating engineers in industries across the country.

3.8. EFFICIENT SMART BOARD SYSTEM

The SMART Board is a revolutionary interactive whiteboard, which has the potential to permanently change the way meetings are conducted. With a SMART board, presentations become easier to manage. No longer is the focus split between the presenter and the screen because the SMART Board surface is a touchscreen.With digital ink, one can make on-the-fly adjustments to presentations and clarify or highlight key points. One also has the capability to mark up anything onscreen, even a video, then capture the annotations, or erase the digital ink, without affecting the original image. In addition, audience feedback can be more easily applied as any part of the screen can be written on with the use of digital ink. The SMART Board also has the ability to integrate with printers and document cameras to bring one's productivity into the real world. At the conclusion of a session, meeting notes can be easily distributed through e-mail with the touch a button.

3.9. MODERN LABORATORY FACILITIES

The college Computer laboratory is well equipped with modern computing facilities for students and teachers. Its information technology-based learning solutions, multimedia experience, e-resources and high-speed internet connectivity over 10mbps are useful instruments for enlarging students overall knowledge and perspectives.

3.10. SYNCHRONOUS WEB CONFERENCING

Synchronous conferencing is the formal term used in computing, in particular in computer-mediated communication, collaboratio, and learning, to describe technologies informally known as online chat. It is sometimes extended to include audio/video conferencing or instant messaging systems that provide a text-based multi-user chat function. The word synchronous is used to qualify the conferencing as real-time, as distinct from a system such as e-mail, where messages are left and answered later.

3.11. TUTOR PORTAL

Tutor student portal is a one kind of classified portal where an institute, student and tutor connect each other as per his/her requirement and get benefited from this portal. It will help student for finding best tutor, tutor by searching student from listed account and Institute by recruiting tutor and invite student for join the institute.

3.12. VIDEO CONFERENCING ROOM

A video teleconferencing unit (VTU) is a piece of electrical equipment that performs videoconferencing functions, such as the coding and decoding of audio and video signals and multiplexing of video, audio, data, and control signals, and that usually does not include Input/Output (I/O) devices, cryptographic devices, network interface equipment, network connections, or the communications network to which the unit is connected.

3.13. ANTI-RAGGING COMMITTEE

Ragging is a practice in educational institutions that involves existing students baiting or bullying new students. In the name of introduction or initiation, millions of students are brutally abused in many educational

institutions. Historically originated, probably, to generate fellow-feeling or camaraderie and the ability to work in a team, it has metamorphosed into something else. It often takes a malignant form wherein the newcomers may be subjected to psychological or physical torture.

3.14. INTERNAL COMPLAINTS COMMITTEE

In pursuance of UGC (Prevention, prohibition and redressal of sexual harassment of women employees and students in higher educational institutions) Regulations, 2015 read with Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and in partial modification of Office Order No. 449 dated 05.08.2016, Internal Complaints Committee (ICC) is re-constituted as under to deal with the complaints relating to Sexual harassment at work place.

3.15. ANTI-DISCRIMINATION COMMITTEE

In compliance of the UGC's directives for prevention of caste based discrimination in Higher Educational Institutions, a committee with the following members is hereby constituted to look into the complaints of any act of discrimination against SC/ST students/teachers/non-teaching staff.

3.16. NATIONAL ACADEMIC DEPOSITORY

The vision of National Academic Depository (NAD) is born out of an initiative to provide an online store house of all academic awards. National Academic Depository (NAD) is a 24X7 online store house of all academic awards viz.certificates, diplomas, degrees, mark-sheets etc. duly digitised and lodged by academic institutions / boards / eligibility assessment bodies. NAD not only ensures easy access to and retrieval of an academic award but also validates and guarantees its authenticity and safe storage.

3.17. ENTREPRENEURSHIP CELL (E-CELL)

Entrepreneurship Cell(E-cells) is set up to foster entrepreneurship among the students. It is like a club, run by students and driven by the management of the institutes.Students learn important & useful trait about entrepreneurship. Even though students do not take up entrepreneurship as a full-time profession, the skill sets learned as E-Cell members would be extremely helpful to them in any job.

E-Cells conduct several activities such as workshops, interaction with successful entrepreneurs, building prototypes, setting up small campus companies where other students can be your customers, internship opportunities with outside companies etc. in order to cultivate the below skill set among the students:

Organizing skill: Since the E-cell is typically run by the students, they learn how to organize various activities from end-to-end. This requires them to coordinate with different stakeholders, bring consensus among them and align them to chase the single goal.

Team building skill: Any activity requires multiple people support to execute it successfully. Students learn to find the right person for the right job. They also learn to trust their team member and encourage them to finish the tasks.

They also understand that to achieve any goal, they need to take their team along. In a real entrepreneurial journey, as they say, a Class B idea with Class A team is better than Class A idea with Class B team.

Sales & Marketing skill: This is one quality that every entrepreneur must learn. The college campus company activity allows the students to sell their products or services to the customers in real time.

Convincing Skill: To achieve success in your entrepreneurial journey, you need to learn to take your team along and this essentially requires lots of convincing skill. The e-cell activities provide an excellent platform to hone this skill.

Relationship building: In order to execute the events, a student has to liaison with various college departments/authorities and get things done from them. Hence relationship building becomes very critical for the success.

Knowledge about compliance: Students have to run pillar to post to get the necessary permission & approval from the management to organize the events. They can not break the rules and work within the constraint. This I equate to the various compliance related work that an entrepreneur requires to do during the startup journey.

Sponsorship: Sometimes students have to find the sponsors to fund their events/activities. This is equal to finding investors in the entrepreneurial journey.

IV. RESEARCH METHODOLOGY

RESEARCH DESIGN

The effects of different modes of technology usage in higher educational learning environment is an extensive term a descriptive type of research was undertaken. The research aim was to portray accurately the characteristics of the organization following different modes of technology towards student performance in higher educational institution practices. Initial literature review was carried out, wherein various research papers related to the topic published were gone through. The objectives were set. The targeted population was the students from Higher Educational Institutions. A questionnaire was compiled taking into account the various aspects of technology enabled services towards student performance in higher educational institution practices. A structured form of questionnaire having all close ended questions were prepared.

4.1. METHODS OF DATA COLLECTION

Both the Primary and Secondary data were used in the project

4.1.1. PRIMARY DATA

The present study is based on the primary data and secondary data, the primary data are collected from 112 sample respondents by using well-structured and pre-tested questionnaire.

4.1.2. SECONDARY DATA

The secondary data namely literature relating to the study was gathered from the national and international journal, newspaper, magazines, articles and various other records.

4.2. RESEARCH INSTRUMENT

Questionnaire containing close ended questions.

4.3. SAMPLING DESIGN

The primary data was collected through the field survey in the study area. First-hand information pertaining to value for money towards student performance in higher educational institution practices was collected from 112 respondents.

4.4. TYPE OF SAMPLING : Non-Probability Sampling

4.5. SAMPLE SIZE

The sample size decided was 112 employees. The sampling method used was convenience sampling. Convenience sampling (also known as availability sampling) is a specific type of non-probability sampling method

4.6. STATISTICAL TOOLS USED

To arrive at certain conclusions regarding the hypothesis advanced in the present investigation, the following statistical tools for analysis of data were employed to consolidate, classify and analyze the data with reference to the selected objectives of the study.
i.e., Simple Percentage Analysis, Descriptive Statistics.

V. DATA ANALYSIS AND INTERPRETATION

Percentage analysis

Table 5.1 Gender

Gender	No. of Respondents	Percent
Male	50	44.6
Female	62	55.4
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.1 depicts that 44.6% of the respondents are 'Male' whereas 55.4% of the respondents are 'Female'.The result inferred that majority (55.4%) of the respondents are 'Female'.

Table 5.2 Age group

Group	No. of Respondents	Percent
Arts Group	31	27.7
Engineering Group	20	17.9
Research Programmes	37	33.0
Others	24	21.4
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.2 depicts that 27.7% of the respondents are from 'Arts Group' whereas 17.9% of the respondents are from 'Engineering' group, 33% of the respondents are from 'Research Programmes' and the remaining 21.4% of the respondents are from 'others'. The result inferred that most (33%) of the respondents are from 'Research Programmes'.

Table 5.3 Locality of living

Locality of Living	No. of Respondents	Percent
Urban	55	49.1
Rural	57	50.9
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.3 depicts that 49.1% of the respondents are from 'Urban' locality of living whereas 50.9% of the respondents are from 'Rural' locality of living. The result inferred that majority (50.9%) of the respondents are from 'Rural' locality of living.

Table 5.4 Medium of instruction passed in higher secondary

Medium of instruction passed in Higher Secondary	No. of Respondents	Percent
Tamil Medium	29	25.9
English Medium	43	38.4
Others	40	35.7
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.4 depicts that 25.9% of the respondents are from 'Tamil medium' of instruction whereas 38.4% of the respondents are from 'English medium' of instruction and the remaining 35.7% of the respondents are from 'others' medium. The result inferred that most (38.4%) of the respondents have completed their higher secondary from English Medium.

Table 5.5 Residence of living

Residence of Living	No. of Respondents	Percent
Day Scholar	52	46.4
Hosteller	60	53.6
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.5 depicts that 46.4% of the respondents are from 'Day Scholar' whereas 53.6% of the respondents are 'Hosteller'. The result inferred that majority (53.6%) of the respondents are 'Hosteller'.

Table 5.6 Father's educational qualification

Father's Educational Qualification	No. of Respondents	Percent
Unschooled	13	11.6
School Level	15	13.4
Diploma	15	13.4
Graduate	18	16.1
Post Graduate	26	23.2
Others	25	22.3
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.6 depicts that 11.6% of the respondents father's educational qualification is 'Unschooled' whereas 13.4% of the respondents father's educational qualification is 'school level', 13.4% of the respondents father's educational qualification is 'Diploma', 16.1% of the respondents father's educational qualification is 'Graduate', 23.2% of the respondents father's educational qualification is 'Post Graduate' and the remaining 22.3% of the respondents father's educational qualification is 'Others'. The result inferred that most (23.2%) of the respondent's father's educational qualification is 'Post Graduate'.

Table 5.7 Mother's educational qualification

Mother's Educational Qualification	No. of Respondents	Percent
Unschooled	24	21.4
School Level	14	12.5
Diploma	8	7.1
Graduate	17	15.2
Post Graduate	49	43.8
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.7 depicts that 21.4% of the respondents mother's educational qualification is 'Unschooled' whereas 12.5% of the respondents mother's educational qualification is 'school level', 7.1% of the respondents mother's educational qualification is 'Diploma', 15.2% of the respondents mother's educational qualification is 'Graduate' and 43.8% of the respondents mother's educational qualification is 'Post Graduate'. The result inferred that most (43.8%) of the respondent's mother's educational qualification is 'Post Graduate'.

Table 5.8 Level of satisfaction towards e-learning and m-learning facilities for students in the college

Level of satisfaction towards e-learning and m-learning facilities for students in the college	No. of Respondents	Percent
Highly Satisfied	9	8.0
Satisfied	27	24.1
Neutral	25	22.3
Dissatisfied	33	29.5
Highly Dissatisfied	18	16.1
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.8 depicts that 8% of the respondents are 'Highly Satisfied' whereas 24.1% of the respondents are 'Satisfied', 22.3% of the respondents are 'Neutral', 29.5% of the respondents are 'Dissatisfied' and the remaining 16.1% of the respondents are 'Highly Dissatisfied'.

The result inferred that most (29.5%) of the respondents are 'Dissatisfied' towards e-learning and m-learning facilities for students in the college.

Table 5.9 Level of satisfaction towards web-based learning, virtual classroom and digital collaboration for students in the college

Level of satisfaction towards web-based learning, virtual classroom and digital collaboration for students in the college	No. of Respondents	Percent
Highly Satisfied	23	20.5
Satisfied	14	12.5
Neutral	7	6.2
Dissatisfied	17	15.2
Highly Dissatisfied	51	45.5
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.9 depicts that 20.5% of the respondents are 'Highly Satisfied' whereas 12.5% of the respondents are 'Satisfied', 6.2% of the respondents are 'Neutral', 15.2% of the respondents are 'Dissatisfied' and the remaining 45.5% of the respondents are 'Highly Dissatisfied'. The result inferred that most (45.5%) of the respondents are 'Highly Dissatisfied'towards web-based learning, virtual classroom and digital collaboration for students in the college.

Table 5.10 Level of extent towards learning subjects from college online notes

Level of extent towards learning subjects from college online notes	No. of Respondents	Percent
Very High	12	10.7
High	6	5.4
Neutral	26	23.2
Poor	28	25.0
Very Poor	40	35.7
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.10 depicts that 10.7% of the respondents learning subjects from college online notes to a 'Very High' extent whereas 5.4% of the respondents stated 'High' extent, 23.2% of the respondents stated 'Neutral' extent, 25% of the respondents stated to 'Poor' extent and the remaining 35.7% of the respondents stated to 'Very Poor' extent. The result inferred that most (35.7%) of the respondents learning subjects from college online notes to 'Very Poor' extent.

Table 5.11 Level of extent towards college web interaction system helpful to interact with faculty and fellow class students

Level of extent towards college web interaction system helpful to interact with faculty and fellow class students	No. of Respondents	Percent
Very High	13	11.6
High	55	49.1
Neutral	16	14.3
Poor	25	22.3
Very Poor	3	2.7
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.11 depicts that 11.6% of the respondents stated that college web interaction system is 'Very High' helpful to interact with faculty and fellow class students whereas 49.1% of the respondents stated 'High', 14.3% of the respondents stated 'Neutral', 22.3% of the respondents stated 'Poor' and the remaining 2.7% of the respondents stated 'Very Poor'. The result inferred that most (49.1%) of the respondents stated that the college web interaction system is highly helpful to interact with faculty and fellow class students.

Table 5.12 Level of agreement towards the assignments and tests are maintained in online with proper systematic supervision

Level of agreement towards the assignments and tests are maintained in online with proper systematic supervision	No. of Respondents	Percent
Strongly Agree	16	14.3
Agree	7	6.2
Neutral	49	43.8
Disagree	22	19.6
Strongly Disagree	18	16.1
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.12 depicts that 14.3% of the respondents are 'Strongly Agree' towards the assignments and tests are maintained in online with proper systematic supervision whereas 6.2% of the respondents stated 'Agree', 43.8% of the respondents stated 'Neutral', 19.6% of the respondents stated 'Disagree' and the remaining 16.1% of the respondents stated 'Strongly Disagree'. The result inferred that most (43.8%) of the respondents are 'Neutral' towards the assignments and tests are maintained in online with proper systematic supervision.

Table 5.13 Level of agreement towards the systematic student leave request and approval are maintained in online

Level of agreement towards the systematic student leave request and approval are maintained in online	No. of Respondents	Percent
Strongly Agree	13	11.6
Agree	6	5.4
Neutral	10	8.9
Disagree	34	30.4
Strongly Disagree	49	43.8
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.13 depicts that 11.6% of the respondents are 'Strongly Agree' towards the systematic student leave request and approval are maintained in online whereas 5.4% of the respondents stated 'Agree', 8.9% of the respondents stated 'Neutral', 30.4% of the respondents stated 'Disagree' and the remaining 43.8% of the respondents stated 'Strongly Disagree'. The result inferred that most (43.8%) of the respondents are 'Strongly Disagree' towards the systematic student leave request and approval are maintained online.

Table 5.14 Level of agreement towards the student information system available

Level of agreement towards the student information system available	No. of Respondents	Percent
Strongly Agree	10	8.9
Agree	11	9.8
Neutral	25	22.3
Disagree	49	43.8
Strongly Disagree	17	15.2
Total	112	100.0

Source: Primary Data

Interpretation

The above table 5.14 depicts that 8.9% of the respondents are 'Strongly Agree' towards the student information system available whereas 9.8% of the respondents stated 'Agree', 22.3% of the respondents stated 'Neutral', 43.8% of the respondents stated 'Disagree' and the remaining 15.2% of the respondents stated 'Strongly Disagree'. The result inferred that most (43.8%) of the respondents are 'Disagree' towards the student information system available.

VI. CONCLUSION

The study concluded with various indications after a detailed analysis and findings through a proper survey collected from the students widely. Many colleges provide a formidable array of courses, majors and extracurricular opportunities, but firsthand accounts indicate that many undergraduates do not feel that the material conveyed in their readings and lectures has much relevance to their lives. In addition, the average time students devote to studying varies widely among different colleges, and many campuses could require more of their students. Those lacking evidence about the study habits of their undergraduates could inform themselves through confidential surveys that faculties could review and consider steps to encourage greater student effort and improve learning. The vast difference between how well seniors think they can perform and their actual proficiencies (according to tests of basic skills and employer evaluations) suggests that many colleges are failing to give students an adequate account of their progress. Grade inflation may also contribute to excessive confidence, suggesting a need to work to restore appropriate standards, although that alone is unlikely to solve the problem. Better feedback on student papers and exams will be even more important in order to give undergraduates a more accurate sense of how much progress they've made and what more they need to accomplish before they graduate. Now all are in information age largely used different modes of technology enabled services in learning environment. This paper considered this and analysed accordingly.

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