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THE EFFECTIVE HANDLING OF ISSUES AND CHALLENGES FACED DURING THE TEACHING-LEARNING PROCESS

* Dr. Ravindra Nagesh Naik

* I/c. Principal, Ramanand Arya D.A.V. College, Mumbai.

Abstract

The present paper analyzes the challenges faced by the teaching fraternity in online v/s traditional classroom teaching, particularly in the post pandemic situation. Traditional classroom teaching is the unit where the teacher teaches and delivers the lecture face-to-face. Here the students are able to interact with the teacher immediately in the class in front of other students. At the same time, online teaching is bound to be associated with the device, wherein the students cannot express themselves with their doubts or queries to the teacher in a personal manner. Distance sometimes restricts the attachment one needs to be felt in the entire teaching process. This attachment is missed not only by the students, but also the teachers. The study is analyzed with the help of primary data collected from 100 teachers around the Mumbai suburban area. The study highlights the fact that in spite of major technological revolution, beginning in the 21st century, traditional classroom teaching methods retain their own standard in higher education systems in India. However, these problems can be overcomed with the mechanism called blended learning, wherein the combination of both online and classroom teaching can ease the teaching learning process.

Keywords: Flipped Classroom, Blended Learning, Challenges, Teaching Techniques.

Introduction:

The primary barriers to effective classroom technology integration are external factors that are beyond the control of the technology-using teachers. External restrictions must be addressed at the institutional level, and progress is frequently incremental (e.g., rolling out technical access one level at a time). It is promising to see that first-order hurdles are being addressed in the US (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, &Sendurur, 2012), but more work is necessary to completely remove these barriers. This section describes a few of the outside barriers to using technology in the classroom and provides solutions.

We start by talking about problems with inadequate technology or connectivity, sometimes known as the "access constraint." The use of instructional technology is not possible in schools if there are not enough computers or a quick internet connection. The issue of inadequate technical training is then brought up. Teachers won't be able to utilize new technology to their full potential if they do not have effective professional development in using them. We explore the support constraint-related factors in our final section. Inadequate technical assistance, peer support, and administrative support are all support-related hurdles to technology integration.

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Literature Review: Wenner, Burn, and Baer (2011) showed through research at an American Community College that remedial math students performed better when the material was presented in the context of application to geoscience. The researchers contrasted two different approaches to teaching remedial math: one was traditional, and the other employed the applied math found in modular courses. Wenner et al. discovered that while a remedial math course's modular approach was successful, better levels of student participation and completion depended on the type of institution, the courses it offered, the mathematical concepts it covered, the evaluation process, and the teaching strategies used by the instructors. An effective instructor's participation includes a suitable introduction to the modules and directions on how to use the learning management system and assessment websites. It was also found out that it was critical for teachers to stress the modules' suitability in order to assist students in passing the post-module exams. This encouragement encouraged students to finish the modules by making them feel better about themselves, their abilities, and their prospects for success. Finally, students tended to finish modules more quickly when instructors drew the connection between the math being learnt and its relevance to actual issues. According to Goldschmidt &Sejpal (2013), teaching in the modular model empowers the student to take on more responsibility for and control over his or her learning. Goldschmidt &Sejpal (2013) emphasize further that the modular approach requires more maturity from the learner and is better suited for more advanced pupils. All the performance-related capabilities are interconnected in the modular way. For them, groups of duties are combined. For instance, managing an organization effectively requires the ability to handle finances, which involves budgeting, allocating resources, accounting, and monitoring. Additionally, Gonzales (2015) notes that one of the

teaching strategies is modular learning, which requires students to work independently and at their own pace to master everything in the module. Furthermore, He claimed that the approach is different from the conventional one, in which pupils simply listen to lecturers explain things. Additionally, to overcome the challenges that the pupils encountered in the conventional classroom setting. In addition, he proposed that, because it is student-centered, self-paced, and note-free, the modular method would be a useful option. Additionally, employing a module to teach English rather than a textbook as in the conventional techniques is intended to promote active learning, advance critical thinking, and strengthen problem-solving abilities. The chance to conduct formative evaluations in the classroom is given to the lecturer. Additionally, Cheng and Bakar (2017) stressed that standardized textbooks have their own styles and that the way in which their contents are organized and the breadth of the subject they contain may have an impact on the teaching and learning environment. They contend that using a module offers a more adaptable learning environment for teachers and students alike. Despite the fact that modular learning has been around for a while, there is currently a great potential to improve the excellent learning experience thanks to the force of advancing technological innovation. As educators and researchers in a top online school, educators will experience the next "Gutenberg" or "printing press" moment in education, which captures the amazing process by which human thought gives rise to a revolutionary movement. It took hundreds of years for the first "Gutenberg moment," which led to the mass manufacturing of books, cheaper unit costs, democratized ownership of knowledge, and ensured consistency and quality in the spread of knowledge. Innovation and the effects of change have accelerated dramatically today. The DepEd provides laptops, iPads, and smartboards to schools that are

Central Schools or Centres of Excellence. Because Technical Elements, according to Mean-Chin (2020), are the biggest problem with distance learning that involves both students' and teachers' access to gadgets such mobile phones, computers, laptops, printers, and internet connection. According to Chen, Huang, and Hussain (2018), as well as the 4.0 trend in education, which encourages the use of the E-instruction system, enabling learners' achievement, and implementing task- and performance-based learning on a specific learning objective, these devices are required for distance learning education. But since half of these are thin clients—computers designed for establishing connections with a server-based computing environment—they cannot be lent.

Significance of the Study:

As it looks at the issues and concerns surrounding instructors' usage of the modular distance learning mode, the current study is significant. This study can be helpful to educators and planners since it will take into account the difficulties and concerns teachers have with using the modular distance learning mode. Since they will be aware of the issues and concerns that the teachers have with the modular learning delivery system, the administrators will gain the most from this study. This might make them think about possible solutions to their issues and concerns in order to achieve their objectives in the future. The educators who utilize this distribution and are affected by these issues. The problems and worries that individuals are experiencing will be resolved as a result of this study. Students, who are at the center of the educational process, are the primary recipients of the study's results. Any enhancement to the modular learning system can pave the way for better learning to be produced in order for society to live and prosper. Parents and guardians also gain from this. They were able to address the issues raised during the implementation of the new learning system thanks to this study. It entails providing appropriate coaching and properly tracking students' development.

Methodology:

Research Design

The data gathered from each respondent in this study was collected and analyzed using a quantitative technique. Before distributing it to the intended group of respondents, the researchers designed and finalized a questionnaire on their own. The questionnaire was especially created to address the study's goals in relation to how professors see the use of ICT technologies in colleges of Mumbai city.

Instrumentation & Sampling:

Respondents were assessed using a self-developed cross-sectional survey questionnaire that had 7 sections. The survey used a Likert scale with five possible outcomes: 5 for strongly agree, 4 agree , 3 neutral, 2 disagree, and 1 strongly disagree. The sample for the study was randomly chosen from among 100 degree college teachers of Mumbai. The sample answered the statements, basing their decisions on their perceptions. The survey was handed out to the participants by hand. The questionnaire was divided into several sections, including: (A) Personal Information; (B) Experience with ICT for Teaching; (C) ICT Access for Teaching; (D) Support for Teachers for ICT Use; (E) Challenges of Using ICT Tools in Teaching and Learning; (F) Teachers' ICT Skills; and (G) Teachers' perception about the usage of ICT techniques in relation to the outcome of the learning of the students.

Data Collection Procedures:

Data collection describes how the researcher will gather data. 120 teachers were randomly assigned the questionnaire. They had a week to complete the survey and send it back to the researcher. Each and every one of the volunteers gave their time freely to the study. Some questionnaires were missing details, making it impossible for the research to benefit from them.

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Ultimately, 100 questionnaires were given back to the researchers so they could analyze the data.

Data Analysis Process:

The Statistical Packages for the Social Sciences (SPSS) version 22 was used to analyze the data collected from the respondents. Both descriptive and inferential analyses are used in this study. To examine the frequency and proportion of the general population in the demographic backdrop, the researchers utilized descriptive analysis. Additionally, it is used to calculate the frequency, mean, standard deviation, and percentage.

Table 1: Teachers' Perceptions on implementing ICT tools in teaching and learning

Items	Always	Often	Sometimes	Rarely	Never	Mean	SD
1. Concentration of the students has been increased	40 (40%)	32 (32%)	26 (26%)	2 (2%)	0 (0%)	2.02	.943
2. Students try harder in what they are learning	42 (42%)	30 (30%)	24 (24%)	4 (4%)	0 (0%)	1.96	.931
3. Students feel more autonomous in their learning	36 (36%)	24 (24%)	31 (31%)	9 (9%)	0 (0%)	2.05	.989
4. Students understand and remember more easily	24 (24%)	27 (27%)	33 (33%)	16 (16%)	0 (0%)	2.02	.943
5. ICT facilitates collaborative work between students.	34 (34%)	41 (41%)	22 (22%)	3 (3%)	0 (0%)	1.97	.810
6. ICT improves the class climate	34 (33%)	37 (37%)	22 (22%)	7 (7%)	0 (0%)	1.97	.810

According to Table 1, the entire disclosures mean showed a moderate level. For the statement "Concentration of the students has been increased" (M = 2.02, SD = .943), 40% respondents always, 32% often, 26% sometimes, 2% rarely and 0% never. For the statement of "Students try harder in what they are learning" (M = 1.96, SD = 0.931), 42% respondent always, 30% often, 24% sometimes, 4% rarely and 0% never. "Students feel more autonomous in their learning" (M = 2.05, SD = 0.989), 36% respondent always, 24% often, 31% sometimes, 9% rarely and 0% never. "Students understand and learn more easily" (M = 2.02, SD = 0.943), 24% respondent always, 27% often, 33% sometimes, 16% rarely and 0% never. "ICT facilitates collaborative work between students" (M = 1.97, SD = 0.810), 34% respondent always, 41% often, 22% sometimes, 3% rarely and 0% never. Finally, "ICT improves the class climate" (M = 1.97, SD = 0.810), 34% respondent always, 37% often, 22% sometimes, 7% rarely and 0% never. The mean level of expression statement was in between 1.96 to 2.32. While overall mean constraints is M = 2.04, SD = .914 which is at a moderate level.

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Table 2: Challenges in using ICT tools in Teaching & Learning

Items	Always	Often	Sometimes	Rarely	Never	Mean	SD
1. Insufficient number of computers	37 (37%)	28 (28%)	22 (22%)	13 (13%)	0 (0%)	2.03	.926
2. Insufficient number of internet connected computers	36 (36%)	30 (30%)	23 (23%)	11 (11%)	0 (0%)	2.03	.926
3. Lack of adequate skills of teachers	2 (2%)	9 (9%)	16 (16%)	42 (42%)	31 (31%)	3.95	.978
4. Pressure to prepare students for exam and tests	10 (10%)	15 (15%)	15 (15%)	31 (31%)	29 (29%)	3.54	1.321
5. Most parents not in favor of using ICT in school	6 (6%)	9 (9%)	12 (12%)	43 (43%)	30 (30%)	3.86	1.128
6. Using ICT in teaching and learning not being a goal in our school	27 (27%)	47 (47%)	23 (23%)	1 (1%)	2 (2%)	2.06	.802

According to Table 2, the entire disclosures mean showed a moderate level. For the statement "Insufficient number of computers" (M=2.03, SD=.926), 37% respondent always, 28% often, 22% sometimes, 13% rarely and 0% never. For the statement of "Insufficient number of internet-connected computers" (M=2.03, SD=0.926), 36% respondent always, 30% often, 23% sometimes, 11% rarely and 0% never. "Lack of adequate skills of teachers" (M=3.95, SD=0.978), 2% respondent always, 9% often, 16% sometimes, 42% rarely and 31% never.

"Pressure to prepare students for exam and tests" (M=3.54, SD=1.321), 10% respondent always, 15% often, 15% sometimes, 31% rarely and 29% never. "Most parents not in favor of using ICT in school" (M=3.86, SD=1.128), 6% respondent always, 9% often, 12% sometimes, 43% rarely and 30% never. Finally, "Using ICT in teaching and learning not being a goal in our school" (M=2.06, SD=0.802), 27% respondent always, 47% often, 23% sometimes, 1% rarely and 2% never.

Table 3: Use of ICT tools in classroom

Items	Always	Often	Sometimes	Rarely	Never	Mean	SD
1. Use emails to Communicate with other	36 (36%)	28 (28%)	23 (23%)	13 (13%)	0 (0%)	2.05	.989
2. Edit text online containing internet links and images	38 (38%)	27 (27%)	30 (30%)	10 (10%)	0 (0%)	2.02	.943
3. Create a resentation with simple animation functions	40 (40%)	30 (30%)	28 (28%)	2 (2%)	0 (00%)	1.96	.864
4. Create and maintain blogs or websites	32 (32%)	41 (41%)	25 (25%)	2 (2%)	0 (0%)	1.97	.810

5. Participate in social networks	16 (16%)	19 (19%)	32 (32%)	33 (33%)	0 (30%)	2.32	.777
6. Download and install software in computer	31 (31%)	40 (40%)	27 (27%)	2 (2%)	0 (0%)	2.02	.816
7. Download or upload curriculum resources from/to websites or learning platforms for students to use.	27 (27%)	47 (47%)	23 (23%)	1 (1%)	2 (2%)	2.06	.802

According to Table 3, the entire disclosures mean showed a moderate level. For the statement "Use emails to communicate with other" (M= 2.32, SD = .973), 36% respondent always, 28% often, 23% sometimes, 13% rarely and 0% never. "Edit text online containing internet links and images" (M = 2.32, SD = .943), 38% respondent always, 27% often, 30% sometimes, 10% rarely and 0% never. "Create a presentation with simple animation functions" (M=1.96, SD= .864), 40% respondent always, 30% often, 28% sometimes, 2% rarely and 0% never. "Create and maintain blogs or web sites" (M=1.97, SD= .810), 32% respondent always, 41% often, 25% sometimes, 2% rarely and 0% never. "Participate in social networks" (M=2.32, SD=0.777), 16% respondent always, 19% often, 32% sometimes, 33% rarely and 0% never. "Download and install software in computer" (M=2.02, SD= .816), 31% respondent always, 40% often, 27% sometimes, 2% rarely and 0% never. "Download or upload curriculum resources from/to website or learning platforms for students to use" (M=2.06, SD= .802), 27% respondent always, 47% often, 23% sometimes, 1% rarely and 0% never.

Recommendations:

The following suggestions are strongly suggested based on the study's findings:

1. The Department of Education must set aside extra funds for the buildings and technology required for modular remote learning modes.

2. To satisfy the demand for new normal education, teachers should create an appropriate plan and keep putting it into practice.

3. Teachers and parents must work together to monitor students' daily activities and provide targeted interventions to measure their progress.

4. Stakeholders may collaborate with the teachers to solve the problems and worries they encounter when they adopt the new standard teaching techniques.

5. In order to successfully give high-quality instruction, it is vital to maintain the provision of appropriate resources, pertinent training, and skill-development sessions among teachers.

6. It is important to support parents' and guardians' efforts to teach kids at home first so that they are appropriately led. The outcome of the examination and the students' academic progress should be monitored at home.

Conclusion:

Although school districts, administrators, and teachers all face substantial hurdles in integrating technology, there are exciting new educational technologies that are becoming more and more accessible and give teachers creative new methods to convey curriculum to students. The reading and writing tools discussed in this book have been shown through research to significantly improve student performance. And while there may be some possible obstacles, attempts to integrate new instructional technologies into the classroom will be

rewarded. According to recent studies on technology use in the classroom, great progress has been made in removing the first-order (external) obstacles to technology integration, particularly those related to access to computing resources. The following are suggestions for future development: 1) seek money for resources from non-traditional sources (such as grants and crowdfunding); 2) ask the ISTE for advice on how to find effective professional development programmes; 3) make use of the experience of master teachers in professional learning communities; 4) ask software companies for training on newly adopted educational software; and 5) make sure that teachers have enough technical, administrative, and peer support during the implementation. In contrast, it will probably be more challenging to get over second-order (internal) hurdles to technological integration. The following are some of our recommendations for dealing with the teacher's internal issues (i.e., attitudes, beliefs, abilities, and knowledge): 1) emphasize constructivism and student-centered education in teacher training; 2) concentrate professional development efforts on those that highlight the use of technology in instruction rather than for administrative activities; 3. Provide teachers with training on the intersection of technological knowledge, pedagogical knowledge, and content knowledge (TPACK). 4. Involve teachers in the decision-making process when adopting new technologies. 5. Provide teachers with visualization tools in student tracking technologies that allow teachers to easily interpret student progress. Teachers, educational technology specialists, school administrators, researchers, and educational software workers will need to work together continuously to integrate technology in the classroom. Fortunately, the advantages for schools, educators, and kids will have a significant impact.

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