

**Research Article**

DOI: <http://dx.doi.org/10.22192/ijamr.2022.09.05.008>

## **Problems related to Smart Class room Utilization**

**Venkataraman S\* and Karthikeyan S\*\***

\*Assistant Professor, Department of Education, Annamalai University, Annamalainagar, India-608002, E-mail: [karaivenkat@gmail.com](mailto:karaivenkat@gmail.com)

\*\*Ph.D., Research Scholar, Department of Education, Annamalai University, Annamalainagar, India-608002, E-mail: [kkeyan497@gmail.com](mailto:kkeyan497@gmail.com)

### **Abstract**

#### **Keywords**

Problems,  
Smart Class room,  
Utilization

The aim of the present study is to find out the problems related to Smart Class room Utilization among Secondary and Higher Secondary school Teachers. 42 Teachers and of Secondary and Higher Secondary schools, from Cuddalore and Mayiladuthurai Districts of Tamilnadu, India is the sample selected for the present study. Interview method adopted with an open ended question. Each teachers was requested to list down their issues encountered in using Smart class rooms successfully. The teachers who have access to Smart Class rooms listed their practical issues with the Smart class rooms.

### **Introduction**

Education is a dynamic and continuous process. The real aim of education is the unfolding of hidden potentialities of an individual (Singh & Gupta, 2017). In 21st century, the use of science and technology has been increased and fluencies the field of education. (Sandhya Ga., et al, 2018). Interactive classroom are the demand of the society by which their kids can gain knowledge in short time and in interesting way also. In the context of global policy, global society and global economy, each and every country is seriously thinking of heightening the degree of quality in system of education. (Prakash Chandra Jena, 2013)

In this age computers play a big role in our education. The concept of digitized classroom has

not only made the education easy but it gave the students power to enhance their performance. (AparnaPancholi, et al, 2015)

The first images that come to mind when we hear the word "classroom" are teachers, blackboards, chalk, and dusters. However, modern technology has outperformed our expectations for the classroom. We have observed a discernible rise in educational levels, developments, and inventions during the epidemic. Through the use of projectors, virtual whiteboards, and other audio-visual tools, schools and other educational institutions have adopted contemporary teaching approaches. All of these components of a smart class enable professors to instruct students successfully while making studying enjoyable and fascinating for the students.

## Smart Classrooms: Enhancing Education through Technology

Smart classrooms are a cutting-edge new approach to education. With the development of interactive white boards, digital projectors, PCs, and other digital tools, classrooms are becoming more high-tech and modern. These and other technology can be found in smart classrooms, which give pupils a thorough educational experience. Teachers may provide their pupils with a better learning environment by using smart classrooms. Teachers can generate interesting images that help to make their lessons more memorable by using interactive white boards. Images, films, and other media can be displayed using digital projectors, and activities and research can be facilitated using computers. Students have access to the most recent instructional software and apps in smart classrooms, which enables them to advance their education in a number of ways.

Technology in the classroom has the potential to promote critical thinking and teamwork. Group projects, talks, and other activities can be facilitated in smart classrooms. Students can collaborate to solve issues, have important conversations, and create their own ideas. Technology use can encourage individual study as well. With the use of technology, students can research interests-related subjects in-depth and create original projects.

Student engagement can also be increased by using smart classrooms. Teachers can create an interesting and dynamic learning environment by utilising interactive whiteboards, digital projectors, and other technologies. Real-time exercises, inquiries, and interest exploration are all available to students. This could support maintaining student engagement and motivation in the classroom.

Teachers may have access to an extensive assessment tool in smart classrooms. Teachers can quickly monitor the progress and performance of their students by using digital tools and apps. As a result, they will be better able to adapt their

lessons and activities to the needs of their students. The way that pupils learn is changing thanks to smart classrooms. These innovations can contribute to ensuring that children are receiving an excellent education.

## Smart Classrooms are the Future of Education

The future of education is fast moving toward smart classrooms. A smart classroom's main goal is to improve the learning environment for its students. Teachers can provide content in more visually appealing ways in smart classrooms. Computers and other digital devices can also be used to give pupils access to resources and knowledge. Additionally, smart classrooms give teachers access to a wealth of information. For instance, teachers can readily obtain lesson plans, instructional resources, and other resources online. Teachers can also readily distribute resources to their pupils using digital devices and the internet. Because of the increased efficiency, teachers may concentrate more on teaching and less on gathering resources. The use of smart classrooms is rising in the educational sector.

## Components of a Smart Classroom

Multiple elements come together to form an interesting learning environment in a smart classroom. These elements consist of various digital media, interactive software, and computer hardware. A computer, a projector, and a monitor are examples of computer hardware found in a smart classroom. The projector and monitor are used to display the content for the pupils while the computer is utilised to access and present digital content. An alternative to a projector and monitor in some situations is a whiteboard.

A crucial element of a smart classroom is interactive software. The instructor can connect with the pupils and oversee the learning process thanks to this programme. Learning management systems (LMS), student response systems (SRS), and virtual whiteboards are a few examples of interactive software. Additionally crucial to

establishing a stimulating learning environment is digital media. This comprises multimedia content like images, text, and animations as well as audio and video. These can be used to clarify ideas and actively include students in the educational process.

### **Problems with Smart Classrooms in Practice and Technology**

In order to fully benefit from smart classrooms, a number of practical and technical issues must be resolved. The first issue with smart classrooms from a practical standpoint is how much setup is needed. A wide range of gear, including computers, projectors, displays, and other equipment, as well as software and other programmes, are needed for smart classrooms. Depending on the needs of the classroom and its size, this process may take a long time and be expensive. Additionally, the classroom might not operate effectively if the hardware and software are not configured correctly. The continual maintenance and care that smart classrooms require presents another issue in practise. To make sure they are operating effectively, hardware and software need to be updated and maintained on a regular basis. To achieve its full potential, the classroom must also be kept tidy and orderly. In order to maintain the classroom operating efficiently, this can be a time-consuming and expensive task that needs to be done frequently. Additionally, some kids may have anxiety when using technology since they may not feel comfortable doing it or may not know how to do it correctly.

Smart classrooms are becoming more and more common in educational institutions around the world, despite the real-world issues they have. In addition to giving students the chance to learn skills that will help them thrive in the future, smart classrooms may be utilised to improve learning by making it more interesting, efficient, and effective. However, the issues stated above must be addressed and fixed in order to fully utilise smart classrooms.

Cost is one of the main practical issues with smart classrooms. Installing and maintaining the equipment used in smart classrooms can be expensive and may call for the usage of extra resources, such as IT specialists and specialised software. Due to this, it may be difficult for schools to set up and manage Smart Classrooms, especially those on a limited budget. Schools can look at low-cost options to solve this problem, like employing open-source software or choosing an all-in-one device that can be utilised to run the classroom. The intricacy of the technology is another issue with smart classrooms from a practical standpoint. Despite the fact that the technology used in Smart Classrooms can be very effective, it can also be challenging to use and comprehend. Teachers who are not tech-savvy may find it difficult to manage the classroom and deliver good lessons as a result. Schools can help with this problem by offering instructors training or support services to help with any technical difficulties. In addition to the technology's complexity, managing Smart Classrooms can be challenging.

It can be challenging to guarantee that every student is receiving the same degree of education and technological involvement when the number of pupils in a classroom rises. Schools can resolve this problem by utilising extra resources, such as online learning resources, to ensure that every student has an equal opportunity to learn. Finally, technological problems with Smart Classrooms are possible.

Despite the sophisticated technology utilised in Smart Classrooms, problems like hardware failure or software bugs could still arise. If there isn't a dedicated IT specialist in the classroom to handle any problems, this could be very problematic. Schools can offer support services to assist with any potential technical challenges to solve this issue. In conclusion, Smart Classrooms have a variety of advantages, but they also have a variety of real-world issues. It can be difficult to manage the classroom due to the high cost of the technology, the complexity of the systems, and the vulnerability to technological problems.

However, schools may make sure that the Smart Classroom is an effective and useful addition to their learning environment by taking the essential steps.

It can take time and money to adequately train teachers on how to operate the equipment, which is another requirement. Additionally, technological issues can occur and teachers could lack the knowledge to resolve them. For instance, there is a chance that technology will cause students to get unfocused on the instruction. Additionally, some students could be put off by the technology and find it difficult to keep up with the group. Furthermore, it may take time away from teaching time to teach pupils how to utilise the technology effectively. Security is a concern as well. Due to their internet connectivity, smart classrooms could pose a security concern. Schools must make sure their networks are safe, and they must put safeguards in place to safeguard student information and deter unwanted access.

Teachers and children can benefit from smart classrooms in many ways, but there are also a number of drawbacks. Before investing in smart classrooms, schools must carefully weigh the costs and technological challenges, and they must make sure the technology is utilised efficiently and securely. Smart classrooms may be a terrific addition to any school with the proper forethought and preparation.

### **Title of the study**

The problem taken for the present study may be entitles as **“Problems related to Smart Class room Utilization”**.

### **Sample**

42 Teachers and of Secondary and Higher Secondary schools, from Cuddalore and Mayiladuthurai Districts of Tamilnadu, India is the sample selected for the present study .

### **Method**

Interview method adopted with an open ended question. Each teachers was requested to list

down their issues encountered in using Smart class rooms successfully.

### **Results of the study**

The teachers who have access to Smart Class rooms listed their practical issues with the Smart class rooms.

### **List of issues of Smart Class rooms**

1. Cost of Smart Classroom Setup
2. Maintenance and Upkeep
3. Limited Accessibility
4. Lack of Security
5. Technical Difficulties
6. Risk of Distraction
7. Limited Learning Outcomes
8. Poor Teacher-Student Engagement
9. Difficulties in Data Management
10. Lack of Flexibility
11. Issues With Technology Integration
12. Potential for Abuse of Technology
13. Limited Professional Development
14. Privacy and Data Protection
15. Unsuitable for Every Subject
16. Potential for Data Loss
17. Limited Student Control
18. Inadequate Network Infrastructure
19. Inadequate Technical Support
20. Unsuitable for Every Learner

### **Conclusion**

In order to address these issues, there are several steps that can be taken. They are:

Schools should ensure that they have the budget to purchase and maintain the necessary technology. It is also important to provide teachers with the proper training to ensure that they are able to use the technology effectively.

Schools should provide students with the necessary support to use the technology. This could include providing additional training or tutorials. Schools should also create a policy to ensure that students are using the technology for educational purposes.

Schools should ensure that the technology is being used in an effective manner. This could include creating lesson plans that incorporate the technology and monitoring student engagement.

By taking these steps, schools can ensure that smart classrooms are beneficial and that the issues associated with them are addressed. Smart classrooms can provide students with a more engaging and interactive learning experience, and can be an invaluable resource for teachers.

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	Website: <a href="http://www.ijarm.com">www.ijarm.com</a>
	Subject: Education
Quick Response Code	
DOI: <a href="https://doi.org/10.22192/ijamr.2022.09.05.008">10.22192/ijamr.2022.09.05.008</a>	

### How to cite this article:

Venkataraman S and Karthikeyan S. (2022). Problems related to Smart Class room Utilization. Int. J. Adv. Multidiscip. Res. 9(5): 126-130.

DOI: <http://dx.doi.org/10.22192/ijamr.2022.09.05.008>