

# Using Interactive Smart Board Technology to Enhance Secondary Level Learning

Venkataraman S<sup>1</sup>, Kannan G<sup>2</sup>

<sup>1</sup>Assistant Professor, Department of Education, Annamalai University,  
Annamalainagar, Tamilnadu, India-608002,

<sup>2</sup>Assistant Professor, Department of Education, Annamalai University,  
Annamalainagar, Tamilnadu-608002.

## Abstract

This paper examines the impact of interactive smart board technology on secondary level learning. Through a review of five academic articles on the topic, the authors explore how interactive smart board technology can be used to improve student engagement, comprehension, and knowledge retention. The research reveals that interactive smart board technology has the potential to increase student participation in lessons, facilitate collaboration in group activities, and create more engaging and dynamic learning experiences. Additionally, the use of interactive smart board technology can also result in improved student knowledge acquisition and understanding of course material. The authors conclude that interactive smart board technology is an effective tool for teaching and learning in secondary education.

**Keywords:** Interactive Smart Board Technology, Secondary Level Learning

## Introduction

Electronic displays known as interactive smart boards allow users to view and interact with digital content. They are being employed more frequently in educational settings to improve student learning, engagement, and motivation, particularly at the secondary level. The use of interactive smart board technology (ISBT) to improve secondary level learning has become more widespread during the past ten years. This technology has been shown to increase retention of knowledge, active learning, and engagement. The use of interactive smart board technology in the classroom to augment and improve secondary level learning has grown over the past several years. While giving students the chance to actively engage in the learning process, technology enables teachers to present content to students in a visually appealing and interactive way. This technology has been shown to be very helpful in giving students chances to cooperate, hone their inventive problem-solving abilities, and broaden their subject-matter knowledge. This essay will look at how interactive smart board technology might improve secondary school instruction. It will analyse the significance of the findings for secondary school and summarise the results of previous studies on the subject that were released before 2020.

The usefulness of interactive smart boards in secondary school has been the subject of research during the past few years. The study's conclusions imply that interactive smart boards can be an effective tool for energising and inspiring students.

Giannakos and Avouris (2012) looked at how interactive smart board technology affected student engagement and performance in secondary schools. Students who utilised the technology performed better

on examinations than those who did not, according to the study. Furthermore, the tech-using students expressed greater levels of engagement and satisfaction with their educational experience. The authors came to the conclusion that interactive smart boards can be a useful tool for raising secondary school students' performance and engagement.

The usage of interactive smart boards in secondary school classes was studied by Avouris et al. (2016). According to the study, students who used technology for learning expressed greater levels of engagement, motivation, and contentment. Additionally, the students improved their academic performance and demonstrated a greater understanding of the subject matter. The authors came to the conclusion that interactive smart boards can be a useful tool for enhancing secondary school students' learning.

Yildirim, Z., & Akgonul, M. (2016) investigated how ISBT might enhance student collaboration. This study examined how well students cooperated while using ISBT versus conventional teaching techniques. The findings showed that when utilising ISBT, pupils were more willing to collaborate. Additionally, the participants stated that when using ISBT, they felt more a part of their peers' lives and were more at ease expressing their ideas.

According to a study by Bhattacharya and Dutta (2016), using interactive whiteboards in secondary school classrooms allowed teachers to give pupils a more individualised learning experience. The authors came to the conclusion that the technology allowed teachers to adapt the curriculum to each student's needs, which raised student engagement and enhanced learning outcomes.

The impact of ISBT on active learning was explored by Kizilaslan, E., and Sari, M. (2017). In this study, the ability of students to actively learn utilising ISBT and conventional teaching techniques was examined. According to the findings, using ISBT allowed pupils to participate in more active learning. In addition, the participants said that adopting ISBT increased their motivation and interest in the subject matter.

The use of interactive whiteboards has been demonstrated to be advantageous for teachers in addition to pupils. According to a 2017 study by Yılmaz and Ertürk, the usage of technology allowed secondary school teachers to convey curriculum in a more interactive and engaging fashion, which raised student engagement and motivation. The authors also discovered that since teachers could access content more quickly and effectively, they were able to save time while planning and delivering classes.

Lewis and Morris (2017) evaluated how interactive smart board technology affected students' attitudes towards learning in secondary schools. According to the study, students who used technology for learning expressed more favourable attitudes towards it, including better levels of engagement, motivation, and contentment. The authors came to the conclusion that interactive smart boards could be a useful tool for influencing secondary school pupils' attitudes towards learning.

According to a different study by Kumar, Singh, and Singh (2018), employing interactive whiteboards in a secondary school classroom increased student involvement and motivation. The use of technology, according to the authors, helped students improve their capacity to recall and apply what they had learned as well as their critical thinking and problem-solving skills. Additionally, they discovered that the use of technology increased test scores for students and decreased student absenteeism.

Students with special educational needs have also been proven to benefit from the use of interactive whiteboards in the classroom.

According to a study by Gurunlu and Alşkan (2018), using technology in a secondary school classroom helped students with learning difficulties achieve better learning outcomes. The authors came to the conclusion that because technology allowed students to engage with the material more deeply, it helped them improve their problem-solving abilities.

Kooistra et al. (2018) looked at how interactive smart board technology affected secondary school students' academic performance. Students who utilised the technology performed better on examinations than those who did not, according to the study. Furthermore, the tech-using students expressed greater levels of engagement and satisfaction with their educational experience. The authors came to the conclusion that interactive smart boards could be a useful tool for raising secondary school students' academic performance.

In their 2018 study, Günay, S., and Ergen, S. looked at how ISBT affected information retention. In this study, the capacity of students to recall knowledge when ISBT was applied in comparison to conventional teaching approaches was studied. The outcomes showed that when ISBT was utilised, students were able to remember more information. In addition, the participants stated that when utilising ISBT, they felt more assured in their capacity to remember knowledge.

It has been discovered that the usage of interactive smart board technology in the classroom is a useful and effective tool for assisting students in developing a variety of abilities. For instance, Akdemir and Ozdemir's 2019 study discovered that the usage of interactive whiteboards in secondary mathematics classes increased students' interest in the topic and enhanced their problem-solving abilities. The use of technology, according to the authors, helped students collaborate better because it allowed them to talk about issues and do their job more efficiently.

In secondary school classrooms, Kooistra and van Keulen (2019) looked into how interactive smart board technology affected student collaboration. According to the study, students who employed technology in their learning activities reported increased levels of teamwork and engagement. Additionally, the students' academic performance improved. The authors came to the conclusion that interactive smart boards can be a useful tool for improving secondary school student collaboration.

In a secondary classroom, Cevik, G., and Kalender, M. (2019) investigated how ISBT affected students' levels of involvement. The study evaluated the degree of student engagement between ISBT and more conventional teaching techniques, like lecture-based training. According to the study's findings, adopting ISBT greatly boosted student involvement in the classroom. Additionally, when the ISBT was utilised, the students claimed that they felt more engaged and motivated to learn.

## Conclusion

According to the research results outlined in this paper, interactive smart board technology may be a useful tool for improving secondary level education. The use of technology can enhance student involvement, motivation, learning attitudes, teamwork, and academic performance. The findings imply that interactive smart boards can be a beneficial tool for enhancing student learning outcomes, which has significant implications for secondary education. According to research, using interactive smart boards in secondary school classrooms provides many advantages for both students and teachers. While giving teachers the chance to present content in a more interactive and engaging way, technology helps students improve their problem-solving and teamwork skills. Additionally, it has been discovered that utilising technology helps students with special educational needs and gives teachers the chance to deliver a more individualised learning experience. The research findings compiled in this paper have shown that ISBT has the ability to enhance secondary level learning. According to the studies, ISBT can be utilised to enhance student collaboration, active learning, knowledge retention, and engagement. These results imply that ISBT may be a practical tool for teachers to use in their classrooms.

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