# Article information:

Integrating augmented reality into mathematics teaching and learning and examining its effectiveness - ScienceDirect  
<https://www.sciencedirect.com/science/article/abs/pii/S1871187123000159>

# Article summary:

1. Rapid technological advances have had a significant impact on the learning process, and mobile phones now come with features such as cameras, SMS, music, video players, games, audio and video recorders, radios, web portals and MMS.

2. AR technology can help students improve their ability to learn STEAM subjects by providing an immersive learning environment that combines real and virtual elements.

3. This study aimed to develop an AR material for use in mathematics teaching and to examine its effectiveness in developing mathematical skills related to spatial geometry.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article “Integrating augmented reality into mathematics teaching and learning and examining its effectiveness” is a well-researched piece of work that provides a comprehensive overview of the potential benefits of using augmented reality (AR) technology in mathematics education. The authors provide evidence from various studies that demonstrate how AR can be used to improve student engagement and understanding of mathematical concepts. The article also outlines the challenges associated with developing AR materials for use in the classroom, as well as the opinions of experts and teachers about the developed material.

The article is generally reliable and trustworthy; however there are some areas where it could be improved upon. For example, while the authors provide evidence from various studies on how AR can be used to improve student engagement and understanding of mathematical concepts, they do not explore any potential risks or drawbacks associated with using this technology in education. Additionally, while they discuss the opinions of experts and teachers about the developed material, they do not present any counterarguments or opposing views on this topic. Furthermore, while they discuss how AR can help students visualize three-dimensional objects from different perspectives, they do not provide any evidence or examples of how this has been done successfully in practice.

In conclusion, while “Integrating augmented reality into mathematics teaching and learning and examining its effectiveness” is a well-researched piece of work that provides a comprehensive overview of the potential benefits of using augmented reality (AR) technology in mathematics education, it could be improved upon by exploring potential risks or drawbacks associated with using this technology in education; presenting counterarguments or opposing views on this topic; providing evidence or examples of how AR has been used successfully in practice; and discussing possible risks associated with using this technology in education.

# Topics for further research:

* Potential risks of using augmented reality in education
* Counterarguments to using augmented reality in mathematics teaching
* Examples of successful augmented reality applications in mathematics
* Risks associated with augmented reality in mathematics teaching
* Pros and cons of augmented reality in mathematics teaching
* Impact of augmented reality on student engagement and understanding

# Report location:

<https://www.fullpicture.app/item/0f842803eb7e8635b8ac3785d0a7e767>