**Research Papers that justify the fact that Videos are better for a Learning Environment**

1. The paper "Student Views on Learning Environments Enriched by Video Clips" by Ilker Kosterelioglu, examines the impact of using video clips in a university-level course on students' perceptions of the learning environment. The study found that the integration of video clips in the course led to an increase in students' engagement and motivation, as well as a deeper understanding of the course material. The students reported that the video clips helped to make the content more concrete and relevant and that they appreciated the opportunity to visualize the concepts being taught. Additionally, the study found that the use of video clips in the course led to an increase in students' self-directed learning and critical thinking skills. The results of this study suggest that videos can be an effective tool for enhancing the learning environment and promoting student engagement and understanding.

Link: <https://files.eric.ed.gov/fulltext/EJ1089708.pdf>

1. The paper "Using Supplementary Video in Multimedia Instruction as a Teaching Tool to Increase Efficiency of Learning and Quality of Experience" by various authors, examines the impact of using supplementary video in multimedia instruction on student learning outcomes and their experience. The study found that the use of supplementary video in multimedia instruction led to an increase in student understanding of the course material, retention of information, and overall performance on assessments. The study also found that students reported a higher quality of experience when the video was used as a supplement to text and images. The study suggests that the use of video in multimedia instruction can serve as an effective tool for increasing the efficiency of learning and quality of experience for students. The results of this study suggest that videos can be an effective tool for enhancing the learning environment and promoting student engagement and understanding. Additionally, the use of video in the instruction can increase students' retention of the material, and improve overall performance on assessments.

Link: <https://www.erudit.org/en/journals/irrodl/1900-v1-n1-irrodl04933/1065372ar/abstract/>

1. The paper "Instructional video in e-learning: Assessing the impact of interactive video on learning effectiveness" by various authors, examines the impact of using interactive video in e-learning on student learning outcomes. The study found that the use of interactive video in e-learning led to an increase in student understanding of the course material, retention of information, and overall performance on assessments. The study also found that students reported a higher quality of experience when the interactive video was used as a supplement to text and images. The study suggests that the use of interactive video in e-learning can serve as an effective tool for increasing the efficiency of learning and quality of experience for students.

This study proves that we should include videos in our Augmented Reality (AR) self-educate maker space project for the following reasons:

1. Promotes engagement and understanding: The study found that interactive video can be a powerful tool for promoting student engagement and understanding. The use of interactive videos in an AR self-educate makerspace project can help to make the learning material more concrete and relevant, which can increase student engagement and understanding of the material.
2. Increases efficiency of learning: The study found that the use of interactive video in e-learning led to an increase in student understanding of the course material, retention of information, and overall performance on assessments. In an AR self-educate maker space project, interactive videos can be used to provide students with an efficient and effective way to learn the material, which can help to improve their performance on assessments.
3. Enhances the overall quality of experience: The study suggests that the use of interactive video in e-learning can increase the overall quality of experience for the students. In an AR self-educate maker space project, interactive videos can be used to supplement text and images to provide a more comprehensive and engaging learning experience.
4. Provides opportunities for interaction: The interactive nature of the videos allows for the students to have more active and interactive learning experiences, leading to a deeper understanding and retention of the material.

In summary, the study shows that the use of interactive videos in an AR self-educate makerspace project can enhance student engagement, understanding, retention of information, and overall quality of experience and provide opportunities for interaction, making it an effective tool for teaching and learning.

**References**

Kosterelioglu, Ilker. (2016). *Student Views on Learning Environments Enriched by Video Clips.* <https://files.eric.ed.gov/fulltext/EJ1089708.pdf>

Ljubojevic, M., Vasković, V., Stankovic, S., & Vaskovic, J. (2014). Using supplementary video in multimedia instruction as a teaching tool to increase efficiency of learning and quality of experience. *The International Review of Research in Open and Distributed Learning*, *15*(3). https://doi.org/10.19173/irrodl.v15i3.1825