# Article information:

Use curiosity for virtual reality “as a hook” in the engineering education | IEEE Conference Publication | IEEE Xplore
<https://ieeexplore-ieee-org.libproxy.ucl.ac.uk/document/6402067>

# Article summary:

1. Virtual Reality (VR) can be used as a tool in engineering education to enhance student learning experiences by providing immersive and interactive simulations.

2. The use of VR modules downloaded from free or demo versions can overcome budget constraints in educational institutions and still provide students with engaging learning opportunities.

3. Further research is needed to explore the impact of VR technology on student motivation, self-efficacy, and learning outcomes in engineering education, as well as to address challenges related to teacher roles and student characteristics.

# 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 discusses the use of virtual reality (VR) as a teaching tool in engineering education, specifically focusing on the concept of using curiosity as a hook to engage students. The study presented in the article explores the impact of VR case studies on student motivation, self-efficacy, and learning outcomes.

One potential bias in the article is the limited sample size used in the study. The results are based on only one class in one academic year, which may not be representative of broader trends or generalizable to other contexts. Additionally, the study only compares two groups of students - one using VR models and one not - without considering other potential variables that could influence student performance.

The article also lacks a thorough discussion of potential risks or limitations associated with using VR technology in education. While it mentions budget constraints as a reason for using free or demo versions of VR modules, it does not address potential ethical concerns, such as data privacy or accessibility issues related to VR technology.

Furthermore, the article focuses primarily on the benefits and positive outcomes of using VR in education, without exploring potential drawbacks or challenges. It does not consider alternative perspectives or counterarguments that may question the effectiveness of VR as a teaching tool.

There is also a lack of evidence provided to support some claims made in the article. For example, while it states that students using VR reported better appreciation of real environments, there is no data presented to substantiate this claim. Additionally, more detailed information on how student knowledge was assessed before and after the intervention would strengthen the study's findings.

Overall, while the article presents an interesting approach to integrating VR into engineering education and highlights some positive outcomes from using VR case studies, it would benefit from a more balanced discussion that considers potential biases, limitations, and alternative viewpoints. Further research with larger sample sizes and more comprehensive assessments would help to provide a more robust understanding of the impact of VR technology on student learning outcomes.

# Topics for further research:

* Ethical concerns of using virtual reality in education
* Limitations of virtual reality technology in teaching
* Risks of using VR in engineering education
* Counterarguments against using VR as a teaching tool
* Data privacy issues with virtual reality technology
* Accessibility challenges of virtual reality in education

# Report location:

<https://www.fullpicture.app/item/c3e567df2d1a89c36728c1de20898dae>