

ETHICS IN TECH PRACTICE:

Case Study: Virtual Reality Education

MARKKULA CENTER FOR APPLIED ETHICS

at Santa Clara University



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Virtual Reality Education

By Brian Patrick Green

Education is an industry which remains highly labor intensive and uneven in its results. Millions of students and teachers interact with each other on a daily basis, and sometimes those interpersonal interactions lead to inadequate learning outcomes.

Virtual reality might offer the opportunity to improve learning outcomes by adjusting the student-teacher relationship. Using VR gear, students would interact with virtual teachers who could be more entertaining and personalized in their teaching. Student evaluation would be integral to the VR experience, and after each evaluation a machine learning algorithm would determine the appropriate next lesson to optimize student learning outcomes.

One idea is to use VR to enhance ethics and character education, allowing students to experience historical or fictional scenarios and make choices which allow them to experience the results of their decisions, thus hopefully forming their character in beneficial ways. In this way a student could experience many years' or even lives' worth of ethical decision-making in complex situations and thus become an accomplished ethical decision-maker in a compressed period of time.

Discussion questions:

1. Should such technology be developed? If not, why not? If so, how could it be done ethically? What unique ethical concerns does it raise?
2. Who are the stakeholders involved? Who should be consulted about the project's goals and development?
3. What additional facts might be required? What practical steps might you need to take in order to access the information/perspectives needed to manage the ethical landscape of this project?
4. What are some of the ethical issues that any designers/developers of such a device would need to address?
5. How might this project be evaluated through the various ethical 'lenses' described in the "Conceptual Frameworks" document?
6. In this project, what moral values are potentially conflicting with each other? Is there any way for the disagreeing sides to reconcile or does success for one necessarily mean failure for the other?

7. As a project team, how might you go about sorting through these ethical issues and addressing them? Which of the ethical issues you have identified would you prioritize, and why?
8. Who would be the appropriate persons on a team to take those steps? At what level, and by what methods, should decisions be made about how to manage the ethical issues raised by this project?