A report on the Project
Learning in 3D Virtual Worlds, enabling vAcademia in CAVE

Project overview

Title: Learning in 3D Virtual Worlds, enabling vAcademia in CAVE

Duration and implementation period: two periods: 18–24.08.2013 and 2–8.09.2013

Specific motivation: Enabling the Educational 3D Virtual World vAcademia to work with the CAVE facility may allow to extend the application domain of both systems and open additional possibilities. A study or a research project may be conducted aiming at exploring these possibilities and defining requirements for deploying the system into practice.

The main objective of the project is to explore the possibilities of an educational virtual world accessed through a CAVE interface.

Research questions:

RQ1. How does CAVE works and what are the affordances of this technology for learning?

RQ2. How to use an educational Virtual World platform in CAVE? What are the benefits and challenges?

RQ3. Which learning methods and scenarios are best suitable for an educational Virtual World platform in CAVE?

Addressing the Research questions:

RQ1. I have observed several demos and applications on CAVE and discussed learning-related application of CAVE with the people at UCL.

RQ2. I have discussed affordances and challenges of using CAVE as an interface for 3D Virtual Worlds with people at UCL. We have made progress in developing a CAVE interface for such a world – vAcademia. We have planned developing a simple prototype.

RQ3. I had several discussions on the future project application using the technology that combines a CAVE and a 3D Virtual World

Work plan – all points were completed or addressed

Operational work description: I am planning to learn how both systems (the CAVE facility and vAcademia) work and understand what is required to make them work together in order to facilitate collaboration between the vAcademia main development team and UCL-VRLAB CAVE support team.

Timing workflow:

- getting to know the people in the lab,

- discussing the possibility of a study or a project based on running vAcademia VW in CAVE,

- mediating the communication between the vAcademia main development team and UCL - VRLAB CAVE support team,

- discussing with all the stakeholders the work to be done within the visit, taking the role of a mediator and facilitator,

- trying out the CAVE facility,

- learn how both systems (the CAVE facility and vAcademia) work and understand what is required to make them work together

- facilitate the dialog and collaboration between the vAcademia main development team and UCL-VRLAB CAVE support team

Writing

1. The work and discussions during the visit contributed to the joint article.

Judith Molka-Danielsen, Maggi Savin-Baden, Anthony Steed, Mikhail Fominykh, Oyewole Oyekoya, Leif Martin Hokstad, and Ekaterina Prasolova-Førland: "Teaching Threshold Concepts in Virtual Worlds: Exploring the Conceptual Requirements for Systems Design," in Den 20. Norsk konferanse for organisasjoners bruk av informasjonsteknologi (NOKOBIT), Stavanger, Norway, November 18–20, 2013, in press.

2. The work and discussions during the visit partly contributed to the joint project proposal (not yet submitted anywhere).

vAcademia in Virtual Reality (vAVR). The main objective of the project is to explore the possibilities of an educational virtual world accessed through CAVE, Head-mounted interfaces, and motion-tracking devices.

Photo and video report

Fig. 1 Testing vAcademia in CAVE

Video https://dl.dropboxusercontent.com/u/42930774/2013-09-06%2011.20.16.mp4

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