

# Supporting Collaborative Work with 3D Collaborative Virtual Environments

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## **Abstract:**

3D Collaborative Virtual Environments (CVEs) have been in the focus of different areas of research for some time. In this thesis, work is presented evaluating 3D environments for their CSCW potential. For this pilot studies were conducted testing the system for its general use for collaboration and for collaborative writing. Collaborative story writing was chosen as an example for cooperative work for later evaluations. Participants had to write short stories which are supposed to have connecting points, therefore making coordination mandatory. Afterwards the knowledge gained was used to create a CVE system for collaborative writing called SLWrite. SLWrite is not only a collaborative writing environment using a Second Life, but was also expanded with recommendation algorithms which support groups in their tasks. To test the usefulness and of this system a study was conducted and evaluated. The study was comparing teamwork done in SLwrite with teamwork done in a 2D remote condition. The tasks done were designed for groups without prior knowledge; they did not favor any of the environments. The study showed a wide range of results. One important aspect seems to be the user's tendency for immersion. Generally did the Second Life system not produce worse results than the 2D set-up.