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Augmented Reality in Character Modeling Education as a Course Material

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In this study, an approach to the development process of an Augmented Reality based innovative course material is proposed. This approach is explained through a sample application developed for digital character modeling course.

In the traditional method, the character modeling education is carried out in 3D virtual environments as its nature, while the artist or tutor controls these works on 2D screens. Students follows what tutor does as a passive audience. The screen and point of view are controlled by the teacher and there is no control of the student on the virtual environment. For this reason, the student can not participate actively in the majority of the course and this leads to the learning by doing.

The methodology used for the course material has been inspired from the ADDIE (Analysis Design Development Implementation Evaluation) method. The educational needs and the new possibilities of the AR were analyzed to develop a course material. This step aims to define outcomes of the course according to needs.

Features of the software are smart phone and google cardboard compatible, offering a shareable experience between teacher-student-student, 3D virtual environment that can represented within the physical world, students can monitor the progress of the modeling work on individual controls with phone-compatible bluetooth device (rotate, zoom, navigating through the modeling stages), managing virtual objects through physical objects (orbit), it is possible to explore the relationship between the physical reference (blueprint) and the virtual model during the modeling phase through virtual images superimposed on the physical medium.