Architectural Technology / Virtual Reality (AT/VR) Project

Interdisciplinary Project for Architectural Technology and Interactive Media with Animation Programmes

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Overview of the Architectural Technology / Virtual Reality Project

Background:
Building on work that took place in Semester 2 of 2008/2009, this is a collaborative Architectural Technology / Interactive Media with Animation project to support the design of new buildings for Shirebrook Academy (http://www.shirebrookacademy.org).

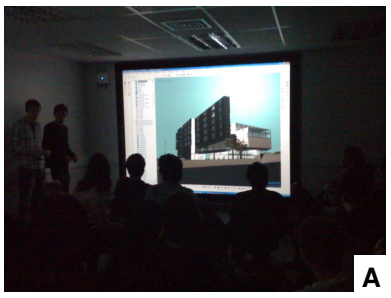
Project Aims:

- to further develop existing links between the Architectural Technology and Interactive Media with Animation degree programmes
- to develop the practicalities and methodologies of asking these students to work together, both in terms of assessment and outputs
- to establish a model of linking mutually beneficial degree programmes together
- to continue to raise the profile of the Adsetts Centre Visualisation Suite as a student-focused learning environment (see figure A below)

Project Objective:
A successful real-time stereoscopic 3D design visualisation of the new Shirebrook Academy buildings, resulting from combining the skills of the Architectural Technology students and Interactive Media with Animation students.

Intended Project Outcomes:

- a range of 3D visualisation building designs for Shirebrook Academy to be displayed internally and externally in Summer 2010
- a piece of work suitable for students' show-reels and portfolios above and beyond what they could have done without this collaboration
- partnerships with local businesses and communities
- pushing the boundaries of visualisation technologies to produce state of the art interactive virtual environments (see figures B to E below for examples of work from 2008/2009)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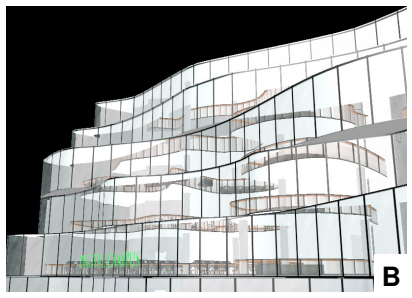
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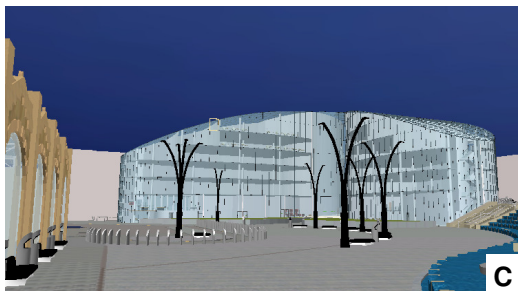
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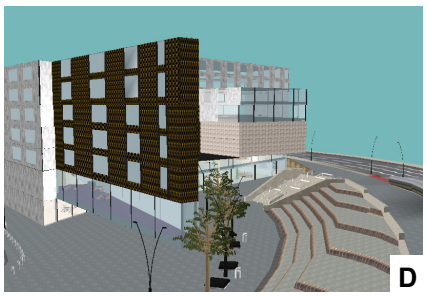
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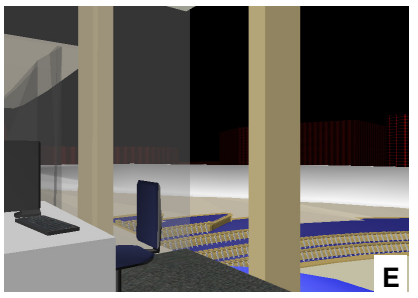
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Progress so far

- The project has been introduced to each cohort of students (from Architectural Technology and Interactive media with Animation programmes).
- A project launch event (November 2009, see photos 2 and 4 below).
- Purchase of 17 additional licences of the VR4Max virtual reality software - to be used to update the computers in the Adsetts Centre Visualisation Suite, and 10 licences will be available in labs the Furnival building (December 2009).
- Interim submission of building designs by Architectural Technology students (December 2009).
- Students taking the Virtual Reality (VR) module of the Interactive Media with Animation degree programme have completed an individual 3D modelling assignment, and created a specification document which has been passed to the Architectural Technology students.

Future Plans

- Selection of 10 Architectural Technology (AT) designs (January 2010).
- 10 groups of students taking the VR module will be formed based on results of individual modelling assignment, and allocated an AT student to work with (February 2010).
- A 'Meet the Architectural Technologist' session (see photos 1, 3 and 5 below).
- VR groups work with AT students to develop virtual environments during Semester 2.
- Interim presentations with both students and tutors (March 2010).
- Final presentations - to meet the requirements of each module (April/May 2010).
- An Exhibition/Event that will showcase the architectural designs, involving the students, staff, school and local community. (June/July 2010).
- Prizes awarded for best interactive virtual environment, as voted by SHU staff and Shirebrook students (June/July 2010).


1


2


3


4


5

Student responses to questions about the project at the launch event:

Where do you think the AT/VR project will lead?

To a better overall view of what has been designed. A visual in which nobody has yet been.

A piece of group work like this will help us develop an understanding of the actual presentation stuff which is produced in industry and what is expected from Architectural Technology / Architectural Design.

Hopefully something new and interesting.

Hopefully to a well developed 3D model and design. To help understand the building dynamics and function.

To future relations between groups and better uses for Virtual Reality.

What is your reaction to the AT/VR project?

Seems very exciting to combine the two. Hopefully it will benefit both sides and help develop AT's 3D visions and designs.

I think it is a good idea that should benefit both groups. Should be an enjoyable experience.

Bring it on - I like a challenge.

Very interesting. Sounds like it will work well. Will allow us to view our ideas from a 3D perspective.

Very good idea. Gives us an insight into how things would work in industry.

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