Architectural Technology / Virtual Reality (AT/VR) Project

Interdisciplinary Project for Architectural Technology and Interactive Media with Animation Programmes

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Project Summary

Ten Architectural Technology (AT) students were selected to work with ten Virtual Reality (VR) student groups in order to produce an interactive 3D virtual environment of the AT student's building design for the SEN School of Shirebrook Academy.

The VR students benefitted from having an external client and some excellent assets with which to work. The AT students drove the design of the virtual building and use the virtual environment to review, progress and present their work.

This authentic learning experience has been enjoyed by both groups of students.

Outcomes

- 10 virtual environments,
- some excellent feedback from the students,
- possible further work with a local school (to visualise their plans for the future),
- additional licences of VR4Max for use in the future,
- plans for next year which build on what we experienced this year,
  - to include the Interior Design subject area,
  - to improve the interaction of the virtual environments.

Evaluation

Although the marks for the VR students did not show any improvement from last year, there was some very positive feedback about the assignment experience (see quotations below).

All of the groups engaged with the assignment and from the feedback received we believe this is because of the authentic learning experience provided by interaction between the two groups of students.

The students were motivated by the sense of autonomy and ownership they had for this project (and by the prizes on offer?).

We feel this project worked because of the suitability of the two groups of students. The work was mutually beneficial to both groups. This sort of integration cannot be forced and must work from all sides.

Student feedback from participating in the project

> I found the project interesting. It is completely different to any other group work I've ever done. I **thoroughly enjoyed it** even though it was very stressful at parts. I think this project would work really well covering a whole module and having two semesters to work on it. To conclude I think the project as a whole was successful. Not just for my group but for the class as a whole.

> I really did like creating someone else's actual design rather than some generic assignment brief. It really made it feel **more professional**.

> Doing this project taught us both a lot of things and **I am very proud** of the work produced. It also introduced me to the idea of collaborating with people from different areas to produce a combined outcome.

> I specifically enjoyed the fact that the work was based on something that was real and actually happening. There were also lots of incentives to do well such as the presentation to the SEN students and the trip to London to present your final piece of work.
>
> I would **definitely like to take part in a similar project in the future** and would like to see something like it in our final year of study.

> When a project is as time-consuming as this one, if it isn't given a good context you don't feel motivated to give it the attention it needs to produce anything of a good quality. But the cross over with the AT student really achieved this. It wasn't a made up scenario that seemed too obscure to be taken seriously.
>
> Because of this I would say that this project was one of the **most focussing, frustrating and enjoyable projects of the year**.

Project Timeline

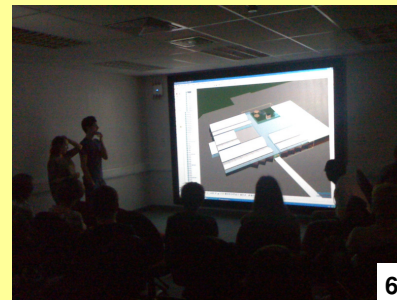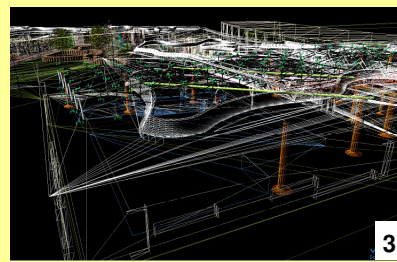**November 2009**

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May 2010

Image 1: AT/VR Project Launch - November 23rd 2009

The two groups of students are introduced to each other and to the project.

In **January**, 10 AT students are selected to present their designs to the VR students.

Image 2: Meet the Architectural Technologist Session - February 15th 2010

The students meet in their groups and discuss the designs. Following this, Bond Bryan, the Architects for Shirebrook SEN School, present their work.

Image 3: Interim Review - March 23rd 2010

3 groups are selected at the interim review to present their joint projects to the Shirebrook SEN students.

VR4max training - April 13th 2010

Sander Tolsma from Tree-C Technology, Holland, visits to deliver VR4Max training to the students and staff.

Image 4: Presentation to Shirebrook SEN student - April 21st 2010

The Shirebrook SEN students watch presentations from 3 groups and vote for their favourite design. AT students use VR students work to present.

Images 5 & 6: Final Presentations - April 27th 2010

The VR students present their work. One of the groups is selected as the winner by the tutors. This group collaborated well, made good use of VR4max and supported the ideas behind the AT/VR project

London Exhibition - May 5th 2010

A multi-disciplinary AT/VR group presents their work at a national exhibition of Architecture.

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