What can we Gain from Transdisciplinary Visualization Courses?

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Can your university overcome interdepartmental obstacles to teach interdisciplinary or transdisciplinary Courses?

Visualisation and Archaeology

➔ Enhancing displays - images, walk-throughs
➔ Authentically illuminated environments
➔ Reconstructions of the site throughout its history
What is Heritage Visualisation?

It’s all about:

→ Accuracy

→ Detail

→ Authenticity

→ Very realistically multi-modal environments
No absolute truths

For sites which no longer exist - archaeologists must have confidence in the results
Realistic Lighting

Modern lighting

Animal tallow candlelight
Heritage sites offer significant challenges to CG

Media participation
- accurate flame and smoke

The need for realism
- laser scanning, psychophysics

Complexity of environments
- parallel processing, visual perception

Multi-disciplinary nature
- archaeology, psychology, engineering, art history

Multi-sensory
- Sound, smell, temperature …
Visualisation and Archaeology

Computer Science

- Not happy that I taught Archaeologists
- Interesting projects for CS students
  - But - harshly marked (where’s the code?)

Archaeology

- No room in the curriculum for more than an overview
- Students asked interesting questions
- No background to use what was learnt directly
How will your teaching change in the new environment?

Warwick Digital Laboratory

- £50 million inter-disciplinary initiative
- No “silo mentality”

“The first question I ask when someone applies to Pixar is: Can you draw?”

[Ed Catmull, President of Pixar, personal communication]

MSc in Computer Graphics and the Media Industry

- Tempus EU project
- WDL, UK; Buckingham University, UK; Zaragoza, Spain; Comenius University, Slovakia; SSST, Bosnia; Sarajevo Academy of Performing Arts, Bosnia; and, Sarajevo Film Festival
Computer Graphics and the Media Industry

Mixture of Technical and Creative

→ Core Modules
- Modelling and Animation I & II
- Directing and Storytelling
- Post Production (editing and compositing)
- Project Thesis and Showreel

→ Optional Modules
- Real Time Graphics and Game Development OR Advanced Graphics
- Graphic Design OR Drama and Acting
The Future

- Pilot course at SSST in Bosnia – 2008
- Introduce at WDL – 2009

The New Renaissance

- Technical AND creative students
- Not hampered by departmental “politics”

- MSc level courses
  - Support for different backgrounds
- Undergrad level?

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