Virtual Field Trips as a Service

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Virtual Skiddaw

- Unity application developed in 2013 by Daden for the OU
- Support physical field trips: planning, on-site, revision, unable to attend
- 10km x 10km = 1600 sims!
- Walk, fly or teleport navigation (with compass & minimap)
Site Activities

- 6 sites, typically 50m x 50m, c.2-10 cm detail
- Allow students to understand context, sketch, roam, pick up specimen rocks
- "Extras" include flying and rising cut-throughs
Multi-User

- No in-built functionality in Unity3D, wrote it all ourselves
- Played with Jibe but settled on PhotonServer as it gave us finer control and was more generic
- Cloud or locally hosted reflection server to manage multi-user communications
- “on-line/where is” list, chat, and “visibility fader”
- Hybrid mode – you can see other users, they can see you, but you don't see their changes to the environment – ideal for fieldwork type activities (e.g. picking up rocks, changing map layers etc.)
iPad version

- Demonstration only at moment – only one site
- No keyboard/mouse so slightly different UI
- Virtual joystick for avatar movement
- Very limited memory given size of meshes and textures
- Feels far more tactile/engaging, and iPad screen size adequate
Virtual Field Trips as a Service

- Feasibility project funded by InnovateUK
- What would it take to move Virtual Skiddaw from:
  - single site/single institution to a
  - multi-site/(inter-)national service
- Partners:
  - Daden Limited
  - The Open University
  - Design Thinkers
  - Field Studies Council
- Six month project:
  - Technical Feasibility
  - Pedagogic Structure
  - Commercial Feasibility
Service is completely location, subject and educational level independent
Any skilled organisation can add locations (to a specification and through a QA process)
Any IT literate staff can add or customise “lesson plans” for any location
Any teacher can use the locations and lessons plans with their students
The service is available across multiple platforms – web, PC/Mac download, iOS/Android, other?
The service is paid for and self-sustaining – model to be agreed
Organisations contributing locations (and lesson plans) are rewarded (financial or in-kind?)
A completely safe and managed environment for schools – your class, your world.
VFTaaS Key Questions

- Does the Virtual Field Trip as a Service concept sounds like something that would be useful to you and your school/college/university/students?

- What do you see as its biggest attractions?

- What do you see as the biggest challenges to deployment (i.e. getting it into the school)?

- What do you see as the biggest challenges to getting student value from it?

- What payment model would be most acceptable to institutions?

- In comparison to Second Life/OpenSim what would you like to bring/leave/add to VFTaaS?
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