



Futuris 23 Serious Games

English Script

2.00 Futuris Generique

2.08 College Paul Klee, Thiais, near Paris - Virgule

2.13

It's playtime with a difference.

These pupils at a school near Paris are helping to develop a new kind of educational computer game as part of a European-wide project.

Its aim: a seamless blend of learning and gaming - and a blueprint for future electronic teaching systems.

2.32 Virgule

2.40

And it's 14-year-olds, like these, who provide the acid test.

The developers are letting them loose on the Elektra project over 18 sessions, and their feedback is being used to fine-tune the game.

2.57 SOT Tiphaine Lalonde, Elektra Validation Leader, ORT France (speaks French)

"Above all, the aim of the Elektra project is to develop a methodology of learning games. It's a methodology which could, in the end, be used for all subjects - applicable to French, maths, history - and then afterwards it can be personalised. "

3.17 Upsound Tiphaine helping boy

3.31 SOT Daniel Schwarz, Elektra Project Coordinator, Laboratory for Mixed Realities, Cologne (speaks German, starts off)

"If you look at the 21st century, computer games will certainly emerge as one of the most successful forms of leisure activity. "

3.38 Virgule

3.42 SOT continues



"Instead of getting wound up about the increasing amount of time computer games take up in the lives of our children, schoolkids, students - and adults as well - we want to look at the games' successes, find out the principles and forces of motivation, the basic elements of winning, and why they're so very popular.

Then we want to take the "secret ingredients" of these computer-games, and use them in learning. "

4.08 Teenagers play the game

At the moment, the Elektra game helps teach physics - in particular the propagation of light and how to create shadows..

They chose physics because it's taught in a similar way at a similar age in Austria, Belgium, France and Germany.

4.29 VOX girl

"Here, I'm trying to put the metal ball in the hole."

4.34 Cologne, Germany, setup Daniel and Laurent (Please leave music!)

4.43 Daniel and Laurent setup

The project has been coordinated by the Laboratory for Mixed Realities in the German city of Cologne.

It takes a unique multi-disciplinary approaching - bringing together computer game designers with experts in education, cognitive science and psychology.

They decided the adventure game format would be ideal for learning.

5.12 SOT Laurent Petit, Elektra Pedagogical Director, University of Liège, (Belgian who speaks French)

"We don't want to distinguish the learning process as such from the education element, the play element, and the gaming environment. So everything's mixed up in a well integrated environment so the pupil could be scarcely aware that he or she is learning. It's something we've noticed with certain pupils who play these games."

5.37 Pictures from the game

The Elektra game is set in the year 2026, the date of the next solar eclipse in Europe.

5.46 SOT Daniel Schwarz, Elektra Project Coordinator, Laboratory for Mixed Realities, Cologne (speaks German)

"The player is the hero in the story. It's an adventure thriller... a bit like the Da Vinci Code. The plot generates suspense - which is the motivation to go on, to understand the secrets, and in doing that pupils should also learn a lot.



We've also created really convincing characters - like the spirit of Galileo - who appears to help the player - and these characters should create a credible and convincing feel."

6.23 Laboratory for Mixed Realities, Cologne

And in the teenage market, credibility is King.

As the game was developed, a team at the University of Graz in Austria tested which types of characters would be the most effective in encouraging youngsters to keep playing and keep learning.

6.41 Galileo pictures

They had to decide what the key character, Galileo, should look like. A cartoon, or a realistic figure? Whether his face should be friendly or sinister?

Researchers found that the target group prefers realistic colour figures. But other aspects depend on the player's own personality.

6.57 Pictures from Magdeburg scanning

Elektra researchers from the Center of Advanced Imaging at Magdeburg in Germany wanted to know what role emotion has in learning.

So they played clips of cartoon-type and realistic characters saying positive or negative words with and without facial expressions, and measured the brain activity.

7.19 PLEASE LEAVE THIS UPSOUND

Clips from neurostudies animations - just for information the faces say:

Anfangen - start

Applaus - applause

Absage - cancel

Verbrechen - a crime

7.34 More scanning pictures

The emotional faces stimulated an additional part of the brain, showing that learning from emotional faces helps students retrieve information from the memory more efficiently.

And a strong narrative also helps:

7.49 SOT Daniel Schwarz, Elektra Project Coordinator, Laboratory for Mixed Realities, Cologne (speaks German)



"What's interesting about the neuro-scientific studies in our project is to find out if this new type of learning game - where you're plunged into a 3D environment and confronted with challenges - if this new way of learning produces more long-lasting results compared with traditional teaching tools like books or talk and chalk."

"The neuro-science part of our project suggests that educational content wrapped up in a meaningful "storytelling" context, can be remembered better than pure, hard information."

8.29 College Paul Klee, Thiais, near Paris

As the test session drew to a close, the younger members of the research team gave their verdicts.....

8.42 VOX 1 girl

"It's interesting, and there's still a bit of "suspense"

8.45 Virgule

8.49 VOX 2 girl

Galileo is a bit irritating because he never stops talking... "

8.52 Virgule

8.56 VOX 3 boy

"If you've fallen behind with physics... this game could help a lot."

8.59 More classroom scenes

Their vital feedback then goes back to the developers who tweak the game before the next series of test sessions.

9.09 SOT Tiphaine Lalonde, Elektra Validation Leader, ORT France (speaks French)

"What they like is getting hands-on, and playing with the experiments, the physics experiments.

And you can really feel them reacting, because it's interactive. If they give a good answer, we say well done, and if they get it wrong they say "Ohh no, I've messed up."They're real reactions because they're absorbed in the game.

"They like it least when there too many explanations.. in other words they love to be able to get right into the thick of things."

9.37 Scenes from game

It's not yet clear if the final version of Elektra will be released commercially.



But the project's multi-disciplinary approach is proving a point - that it's possible to learn a lot, from a fun and engaging game.

9.55 Generique

10.00 Ends