
Use case Scenario: Future Internet Learning World

Presentation for the Usage Area Content from Fraunhofer IAIS
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Vision

Future Internet Learning World

Reform the learning and teaching process in European schools by

- developing novel, creative methods for both learners and teachers in an innovative **Future Internet Learning World.**
- providing **novel interaction paradigms for user centric content.**
- showing that learning can be a motivating experience for all actors in real as well as virtual learning teams
- **making education in Europe the envy of the world.**

Education is our primary European resource of the Future and needs the support of the FI.



Large Scale User Scenario

FI Learning World



- The first user scenario will be a pan-European large scale pilot called **“Explore and save the planet” with 65.000 European schools collaborating together from more than 27 European countries.** The idea is to
 - collaborate globally in virtual teams and act locally in real teams in the neighbourhood by activating communities such as parents, local institutions and businesses.
 - explore the world via virtual geo-maps, combined with real-time explorations on the ground discovering, filming and creating 3D models of the local hot spot.
 - compare for example environmental pollution hot spots in European smart cities and regions. Credits will be given for innovative solutions to change the pollution in local hot spots.
 - engage in scientific analysis and research to think of constructive and scientifically sound solutions to the problems they identify as well as in creative and innovative presentations.
 - interact naturally by gestures and natural language with each other and share the dynamic 3D audiovisual content and help each other to solve the environmental problems.
- **Novel interaction paradigms and interfaces, based on non-verbal affective social signals (including measures of empathy, co-creation, contagion) will enable novel engaging, inclusive and greatly improved networked activities.**

Innovative Internet functionality

FI Learning World

- The core FI functionality for the Future Internet Learning World are high speed, intelligent content and context aware user centric networks capable of
 - Matching of data extracted from a user with the data characterising audiovisual content.
 - Linking of intelligent content items managed by the FI to create and provide knowledge in the learning scenario.
 - Interaction with adaptive content by means of human-machine communication similar to the usual human-to-human communication mechanisms (e.g., natural language, gesture), including the subtlest expressive, emotional, sympathetic aspects of human interaction.
 - Real-time interaction between users, total immersion, sense of presence and embodiment (embodied social networks), including emotional and non-verbal social signals (empathy, entrainment, co-creation, contagion).

Expectations of the FI core technology platform and the Experimentation Environment

- The **FI core technology platform** shall enable
 - novel paradigms of intuitive and natural embodied interactions between users and content, which can be integrated with everyday physical activity.
 - support new forms of personalised, context-aware, participatory user experiences of creative content.
- As **experimentation environment** we will collaborate with the existing **school network “eTwinning:**

<http://www.etwinning.net/en/pub/index.htm>



of over 65,000 European schools and Smart Cities and Regions since they represent a natural concentration of students and teachers and services. The pilots will be evaluated using sound pedagogical assessment methodology performing quantity as well as quality measurements to produce solid evaluated results.

The Role of Fraunhofer IAIS in the FI-PPP Contact

- We as Fraunhofer IAIS can take over the role of the Project Coordinator as well as Scientific and Technical Coordinator, because we cooperate already with a huge pan-European cluster of innovative media organisations.

- **Please contact us for possible collaboration:**

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