Ervaringen met AR in het Onderwijs

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Mobieltjes?

• Sensoren
• Identificeren context

Situated Learning

• Context
  – Sociale context
  – Locatie
• Opdrachten
camera + network
Near Field Communication
Micro interactions

- Payment
- Change phone settings
- Reset/activate alarm
Definitie AR

• Azuma
  – combineert realiteit en virtualiteit
  – real-time interactief
  – speelt zich af in 3 dimensies
Augmented Reality

camera + gps + accelerometer
Augmented Reality: Locatory
HUD versus Tricorder

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Open Universiteit
celstec.org
Zintuigen

- zicht
- gehoor
- tastzin
- reuk
- evenwicht
- ....
Definitie AR

• Azuma
  – combineert realiteit en virtualiteit
  – real-time interactief
  – speelt zich af in 3 dimensies

• Robert Rice
  – When I talk about AR, I try to expand the definition a little bit. Usually, when you talk to someone about augmented reality, the first thing that comes to mind is overlaying 3D graphics on a video stream. I think though, that it should more properly be any media that is specific to your location and the context of what you are doing (or want to do)... augmenting or enhancing your specific reality.
ARLearn

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ARLearn toolkit

Fieldtrip system  Serious gaming

Augmented Reality  mobile app  Virtual reality

Notification framework  Rich media

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ARLearn and Google App Engine
Open source
Serious games

- Scoring
- Progress
- Team play
- Roles

Game
- Welcome message
- Assignment 1
- Feedback
- Assignment 2

Run
- Teams
- Players: Stefaan, Marcus
- Answers
- Actions

Run 2

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Lifecycle of a media item

Onzichtbaar

dependsOn

zichtbaar

disappearOn

Onzichtbaar
## ARLearn Case studies

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Cultural Science Fieldtrip in Florence

Op bijgaande tekening kun je zien hoe Brunelleschi's ontwerp voltooid had moeten worden. Bedenk dat de geleding ervan ‘klassiek’ wordt genoemd; hoe uit zich dit dan?

Maak van deze hoek zo goed mogelijk een foto en spreek in vijftig woorden in hoe hij de hele gevel heeft geleed.
Streetlearn: ARLearn streetview client

Architecture of the gallery

A visitor in the gallery is proud of her knowledge about the debate over the architecture of this building. She says, that a famous architect state: "Hier wil ik geen discussie over hebben, dit ontwerp keur ik zonder meer goed". But she forgot who it was. Can you help?

From which architect was the quote?

A. F.J. Dupont  
B. A. Bodon  
C. J.F. Staal
Hostage Simulation: Real World Training for critical situations
Roles / teams

Head of Office - Security Officer - Staff Welfare

a role is performed by a small group with smartphone.

advance organizer for real drill

take decisions / collaborate
Question

Important Message

After informing your country's Representative, what do you do next?

- Make contact with the hostage takers to find out the demands
- Liaise with other UNHCR staff to establish when, where and why the hostage was taken.

Submit answer
ELENA: language learning for kids (4-6y)

context!

game patterns

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WESpot: inquiry based learning
ARLearn games as open educational resources (OER)
OER federations
ARLearn: what is next: Google Glass Project?
More...

• http://www.ou.nl/arlearn

Get Started

This manual will help you to get started with ARLearn in four steps:

1. Download the ARLearn app from the google play
2. Create your first game
3. Create a run, to deploy the game on your mobile devices
4. Open ARLearn on the mobile device to play the game.

ARLearn smartphone app

At this moment ARLearn is only available for android. An iphone client is currently being developed.