## Third Project Newsletter is out!

Our third project newsletter has been sent. Read it here (in English)!

Our previous newsletters are all here on the blog.

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## The future of education: Learning for a multiplicity of realities

Augmented reality (AR) is expected to have a significant impact on education over the next few decades. AR is a technology that uses data gleaned from the Internet, sensors embedded in our portable devices, and novel display technologies to create digital overlays that are mapped onto the environment that we directly perceive. The result is a perceived environment that not only consists of its physical properties, but can be made to present itself in any way that we choose, whether it be an environment that tells us about itself, interactive dinosaurs that emerge from a page in a book, to Pokemons hiding in bushes in our favorite park.

AR will not only affect what we will need to learn and how we will learn it, it will also fundamentally change our

relationship with our environment, and has in fact already begun to do so. It is not unrealistic to expect that, within the next several years, the youth in our schools will have grown accustomed to traversing a multiplicity of realities, each having its own distinct properties, cultures, rules of engagement, and knowledge formats. One day they may battle aliens trying to break through the walls around them, and the next, participate in a simulated collaborative work environment involving individuals from all over the world. The possibilities are seemingly endless.

In professional development activities led by the University of Iceland's Education Plaza (www.menntamidja.is) over the past several years, Icelandic educators have been encouraged to consider some of the challenges and opportunities that AR can be expected to bring to learning environments. Among some of the themes for future learning in AR environments that have emerged are:

- More collaborative learning
- Integrated thematic or "phenomenon based" (PhenoBL) learning
- Use of authentic simulated environments for learning
- Learning "how and why" vs. "what"
- Creative construction and use of emergent realities

Many of the changes suggested by these themes can already be observed. Collaborative learning and integrated subjects are certainly popular themes and are being institutionalised through policy and national curricula throughout Europe and beyond. Other themes are more forward-looking and challenging, in particular those that hint at radical changes in the form, function and purpose of learning environments. These raise difficult questions that educators will need to address sooner than later:

• What do we teach in school when our environment can

teach us about itself?

- Where will our future learners go when they "go to school"?
- How do we assess learning for a multiplicity of realities?
- How do we educate people today for an increasingly uncertain future?

Tryggvi Thayer, Project Manager, University of Iceland School of Education

## EntreAssess discussed at United Nations in Geneva

News of the EntreAssess approaches to understanding what it takes to be entrepreneurial have been discussed at the United Nations Conference on Trade and Development (UNCTAD) in Geneva.

A few years ago UNCTAD conducted a series of Multi Year Expert Groups and developed an 'eco system' approach to developing policy frameworks that support entrepreneurship. Enhanced Entrepreneurship Education and Skills Development is one of 6 pillars that support the Entrepreneurship Policy Framework and Implementation Guidance, and it includes embedding entrepreneurial learning in both formal and informal learning. Of course supporting teachers and encouraging the sharing of learning is a big part of this, and it is exactly where

EntreAssess can help.



Key questions in the UNCTAD policy framework ask if national curricula are being developed and if it is integrated in all disciplines. It also asks if both attitudes and enabling skills are developed, and not simply knowledge recollection — as assessed in examinations and written tests. Additional forms of assessment are clearly needed, so that a fuller picture of learner performance can be considered, and learners can be better supported as a result.

"This is important, because in an ever-changing landscape, the ability to harness... breadth as well as depth of knowledge, at appropriate points in time, becomes a new goal."

One of the key points being considered by UNCTAD's team is not the relatively easy to assess understanding of hard skills (management, financial, operational), but also what are often called soft skills, such as creativity and innovation. These skills became a central theme of UNCTAD discussions and research during 2014-15, and are now uppermost in many people's minds when thinking about the topic.

Findings so far suggest that assessment needs to evolve, and that more supportive ways to evaluate learning that aligns effectively with teaching practices are required. The research also concluded that whilst models are being developed, they are often too complex and time consuming to be realistic options for a teacher to undertake.

Again this is where EntreAssess can help to inform and help teachers and educators across all disciplines.

Andy Penaluna, Research Director of the Centre for Creative Entrepreneurship, University of Wales Trinity Saint David