EDEN 2013 ANNUAL Conference

The Joy of Learning

Enhancing Learning Experience
Improving Learning Quality

EDEN 2013 Annual Conference

University of Oslo
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BOOK OF ABSTRACTS

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Conference organised in collaboration with

Norwegian Association for Distance and Flexible Education – NADE
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The Joy of Learning – Enhancing Learning Experience, Improving Learning Quality

E-learning, open and distance education have been increasingly important fields of intellectual excitement and innovative development. The challenges posed by the new technologies are permanent, students constantly keep teachers under pressure to develop. Human elements are moving to the forefront, employing creative methods and smart solutions. Standards and accountability have also been emphasized but personalization of learning, individual and collective motivation, enhancement of the learning experience, and an overall improvement of learning quality are gaining ever-increasing traction.

In Europe, despite economic and social pressures, there is a collective drive towards realising the creative potential. Learning is becoming more and more individualized and self-managed. Personalization helps foster motivation and engagement and supports awareness and motivation. Personal learning environments and personalized assessment (including learning analytics) offer resources to monitor and assess the process.

How can we do our best to make learning a thrilling experience for learners, including providing a sense of joy in the virtual classroom? – The question is an exciting one, discussion and debate provide a range of innovative theories and approaches, and help to invent new tools necessary to achieve the goals. Should they be about the smart use of ICT tools, new methodologies for enhanced learning experience, content management systems, or about fascinating inter-disciplinary solutions supported by e.g. game based learning, immersive environments, multimedia, etc., the answers will be dynamic or even provoking.

The EDEN 2013 Conference aims to discover and present the latest best practice in this field, share progressive concepts, inventive solutions, and promote joint-thinking and collaboration.

The conference key themes have been: engaging and challenging learners – enhanced learning experience by collaboration – learning-intensive physical and virtual spaces – the power and pleasure of sharing in learning – the sense of ownership, self-expression and development of personality – adding joy to teaching and learning by ICTs – virtual reality, media and gamification – leadership and the quality of learning – teachers as performers and the competences needed to enhance learning experience.

Norway is world leading in openness, digitisation and modernisation of education. The University of Oslo, a top national higher education institution as conference host offers great conditions and stimulating environment. The support and partnership of the Norwegian Association for Distance and Flexible Education (NADE) has been tremendously useful to involve great keynotes and to ensure smart involvement of the national and Nordic professional community and stakeholders.

Andras Szucs   Morten F. Paulsen
Secretary General   EDEN President

Acknowledgement and thanks are given to the Programme and Evaluation Committee

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EDEN Oslo Pre-Conference Interview Series

The 2013 Annual Conference "The Joy of Learning" was featured by an exceptional team of keynote speakers – world known and valued thinkers from different continents. In preparation of their contributions, interviews were done by outstanding EDEN scholars with them in the weeks before the conference.

We publish these interviews in the Proceedings because we trust that they may help to achieve better understanding of the conference concept and benefit for delegates.

EDEN thanks NADE, the Norwegian Association for Distance and Flexible Education for their great support which allowed to invite the best keynote speakers for the Oslo conference.

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LIVING IN THE AGE WHERE "KNOWING" MAY BE OBSOLETE

Interview with Sugata Mitra by Steve Wheeler

The media and education worlds have been buzzing over the last few days about the work of a quiet, unassuming Indian born professor. Born in Calcutta in 1952, Sugata Mitra started his academic career in computational and molecular science. His later research also encompassed biological science and energy storage systems. Mitra has also researched diversely into areas such as medicine (Alzheimer's disease and memory research) and psychology (perception in hypermedia environments) and he received a PhD in Physics for his studies into organic semi-conductors. It is not hard to see why some have hailed him as a polymath and even 'something of a genius'. Most recently, Professor Mitra won the prestigious TED prize of 1 million US dollars acknowledgement of his work setting up computer kiosks in developing rural areas, and for his studies into 'minimally invasive education'. He is now Professor of Educational Technology at Newcastle University, in the North East of England. I managed to catch up with him to interrupt his busy schedule for a brief interview ahead of his keynote at the EDEN 2013 Oslo conference.

Steve: *Sugata, thank you for taking some time out from your busy schedule to speak to me, and congratulations on your recent TED prize. You have been an inspiration to many through your research, but what is it that inspires you the most in your work?*

Sugata: When the numbers from measurements come together I look for strong correlations – black and white with zero probability of error. Like in a Physics experiment. Sometimes I get results like that and I think, 'I guessed that one right'.

Steve: *A lot of your recent work has been around the use of technology in education. What benefits do you believe technology is offering to learners, and what evidence is there that it is making a difference?*

Sugata: In www.sugatam.wikispaces.com you will find several examples, including children teaching themselves to use the Internet on street side computers, and doing it well enough to pass a government examination on computers. Children in Kuppam teaching themselves biotechnology 10 years ahead of their time and children in Uruguay whose reading comprehension in Spanish has jumped several levels because of their access to computers.

There are many other published results. Anecdotally, a student from a village in Maharashtra, India, is doing a Ph.D. in evolutionary biology with a scholarship to Yale. He says he got there because he used to read New Scientist from a hole in the wall computer in his village. A child from a slum in Hyderabad, India, is studying medicine with a scholarship in Kuala Lumpur, Malaysia. He got there with encouragement, advice and support from a 'Skype Granny' from England.

Steve: *These are certainly remarkable results, leading me to think that education is in need of change. What do you think are the main constraints preventing any significant reforms of education? And what might be done to overcome them?*

Sugata: There is a powerful belief that schooling should be done the way it is. All we need to do is improve classrooms, make teachers better and review the curriculum every five years. This is thinking from another century, so powerfully reinforced that we find it impossible to think any other way. Schooling does not need improvement, it needs to be reinvented. Every aspect of it – curriculum, pedagogy, assessment and certification. Some brave Government, somewhere, will have to take a plunge....

Let me give you an example. Here is one of today's examination questions: How long will it take a 5 Kg mass to fall to the ground if dropped from a height of 20 metres? (Do not use computers, calculators or any other aids. Do not talk)

This could easily be changed to: Use the Internet to find out how long it will take a 5 Kg mass to fall to the ground if dropped from a height of 20 metres. Discuss the answer with your colleagues and report the results of the discussion. Justify why you think the answer is right.

Keynote Interviews

Steve: *That would certainly bring more relevance to learning, especially for children who have grown up with technology all around them. Let's talk about your recent work. You are known worldwide for your groundbreaking work in minimally invasive education. Can you explain what this is and why you think it is so important?*

Sugata: There are places on the planet where good teachers cannot or do not go. We have tried to level the playing field for a thousand years, unsuccessfully. We need an alternative. Children, given technology and left alone, seem to be able to level the playing field by themselves, probably because Computers and the Internet work the same way in the swamps of the Sunderbans as in Washington DC. Teachers don't work the same way, neither do parents. So, if there was a way of learning that had minimum dependence on parents and teachers, children everywhere would have a better chance. This is Minimally Invasive Education.

Steve: *You seem to have attracted the nickname of the 'Slumdog Professor' in regards to the influence your research had on the making of the Slum Dog Millionaire movie. Is this something you are happy with?*

Sugata: I am happy that Vikas Swarup was inspired by my early work. I am not happy that self taught children should aspire to win game shows. They should do a Ph.D. instead, as, at least, one child from a hole in the wall computer has done. I love the name though!

Steve: *You tell stories about your contact with learners in remote or under privileged areas of society, many of which are inspirational. Which story (or stories) inspires you the most from your many travels?*

Sugata: There are far too many stories to tell, all of them incredibly inspiring. One incident came to my mind as I said the last sentence:

'You Sir, have crossed all limits of human decency!' said a child to another in a self organised learning session without teachers. The teacher and I giggled from the corridor for a long time. I don't know why I find this inspiring, but I like laughing.

Steve: *Following on from your hole in the wall projects in their various contexts, you developed the idea of remote mentors, popularly called the 'Granny Cloud'. Can you explain how this works and why it is important?*

Sugata: As I previously said, there are places on the planet where good teachers cannot or do not go. But they can, using Skype. There are retired teachers who miss children. Grannies can accelerate self organised learning. Put it all together and you get the Granny Cloud. You can get further details about this idea from www.solesandsomes.wikispaces.com

Steve: *Can you talk a little about your latest research interests?*

Sugata: There are several research questions I'm currently pursuing. For example, can a facility for children be operated remotely over the Internet? What will it take to build one? How can we get Key Stage 4 (14-16 year old) reading comprehension in children of age six? Is there a math (formula) that will explain how learning works?

Steve: *Those are quite ambitious research questions, and we will be very interested to hear of your results. I had dinner with Nicholas Negroponte recently and your name came up. He told me you have been involved with MIT, working with him and his colleagues such as Vijay Kumar in the Media Lab. Could you talk a little about your involvement there? Did your work there for example relate to Negroponte's one laptop per child movement?*

Sugata: I was there as a visiting professor for a year. I am not now. My work with Nicholas was on whether children can learn to read by themselves. We don't quite know yet. Nicholas framed a question for me, 'is knowing obsolete?' It is my biggest take away from the Media Lab.

Steve: *What is your vision for education in the next 10 years? What do you think needs to be done next?*

Sugata: We need to rethink the curriculum, rethink assessment and rethink certification in an age where 'knowing' may be obsolete. Homo Sapiens will transition to Homo Deus in the next 50 years. Our preoccupation will be with meaning and creation. Knowing will not be our main interest – creating will. In order to create we will need to know things. When we need to know something we will have the means and the capacity to do so in minutes. A page of erudite text may take an educated person an hour to understand. A century ago it would have taken a month. A thousand years ago, a year or more. We could extrapolate to a time when it will take us a minute to understand. A generation or two later, one second.

The human brain is evolving faster than anything has, ever before.

Steve: *Sugata, thank you for sharing your thoughts.*

Steve Wheeler is Associate Professor of Learning Technologies at Plymouth University, in South West England and a passionate blogger. Originally trained as a psychologist, he has spent his entire career working in media, technology and learning. He is now in the Faculty of Health, Education and Society. He teaches on a number of undergraduate and post-graduate teacher education programmes. He specialises in research on e-learning and distance education, with particular emphasis on social media and Web 2.0 tools. Steve is elected Member of the EDEN Network of Academics and Professionals Steering Committee and was named as the world's 4th most influential Twitter personality on the topic learning technology in 2012.

WHY ANNA KIRAH THINKS WE SHOULD GET RID OF THE BLINDERS IN EDUCATION

Interview with Anna Kirah by Helen Keegan

When two like-minded people meet, an inspiring conversation is the result. This is exactly what happened when Helen Keegan agreed to interview EDEN 2013 keynote speaker Anna Kirah. Helen took the initiative and started a virtual conversation with Anna, sending her only one question at a time. This way Anna had the time and space to explore her ideas and create the story-teller texture feel of the interview. Thanks to the wonderfully open discussion, don't be surprised if new questions and answers appear with the time. It's worth to come back and check on new updates! Now, sit back, relax, take your time and let yourself be inspired.

Helen: *Thank you for agreeing to be interviewed in advance of your hotly anticipated keynote at the 2013 EDEN Conference. As one of the very few keynote speakers to be invited back for a second time, your speech in Lisbon (2008) is remembered with a great deal of enthusiasm as the participants found you so very inspiring!*

The main theme for this year's conference is The Joy of Learning. In your TEDxTalk, you offer some wonderful examples that demonstrate the importance of understanding the aspirations and motivations of everyday people in their everyday lives, and working together towards a common goal. Could you share your perspectives on the conference theme, based on your experiences as a design anthropologist specialising in people-centred innovation?

Anna: First of all, it is an honour to be asked again to hold a keynote at the EDEN Conference.

We have come to the point where I believe we need to stop talking about digital learning tools, face-to-face learning tools and talk about the tools of learning. In fact, I would argue we need to take the "e" out of e-learning. The joy of learning has to do with our ability to give our students, whomever they may be, the tools to learn and the tools to motivate themselves to learn what they need to create meaning in their lives. The joy of learning is about encouraging curiosity and creativity. One of my favourite quotes in life is:

> "There is no content of knowledge that is not pertinent to the work you will want to do." – Ben Shahn

We must help people learn HOW to learn, but not what to learn. We can set guidelines, we can set a framework, and when necessary we can even set the most important rules – but learning is ultimately about creating and or finding meaning.

Let us take schooling and education. Why do we go to school? It is to learn the ways of the culture we live in, the stories and truths of the culture – a connection from the past to the present and to the future. It is about integration, being unified in ones self vis a vis the cultures one lives in (for we do not live in just one culture anymore). We are living in a world today where authority and power is becoming flattened due to our access to knowledge. And yes, knowledge is power. Knowledge is no longer something which is holy to the few who have studied a topic. Knowledge is no longer something which is only for the "experts" it has become democratized. This of course also changes how we learn.

I am forever sighing when I hear the antiquated debate around WIKIPEDIA as a tool for learning. Of course it is a tool for learning! It is far more effective than the static textbooks of yesteryear. We need to teach HOW to read Wikipedia, how to arrive at an informed opinion on just about any topic you can imagine – (for example – note and read the references in any article). What is amazing about Wikipedia is that it is ever changing, just like our cultures our changing, just like history is changing, just like our language is changing – knowledge changes over time and space and Wikipedia has the elasticity and flexibility to handle change and at the same time hold on to the past connecting it to the present and adding thoughts to the future.

The people-centred approach to innovation on any front – be it a service, a product or even organisational change must come from a collaboration across silos, across stakeholder, across different target groups because it is through collaboration that we find meaning.

Keynote Interviews

If we take the democratization of learning in to account, then all must be allowed to influence how they learn in order to motivate them to learn more. I encourage us all to stop creating tools for learning for people and start creating tools for learning "with" the very people we serve.

Helen: *I'm interested in your ideas around curiosity and the motivation to learn. I often feel as though our traditional institutional/educational structures stifle curiosity. Through quality assurance processes (which are essentially about mitigation of risk) learning is chunked into discrete units, which can be measured, categorized and ranked. However, these processes seem to be more focused on our learners' extrinsic motivation (i.e. assessment focused), as opposed to the intrinsic motivation that comes from deep curiosity. Could you tell us more about your approach to motivating others and your strategies for developing a deep sense of curiosity with the people/organisations with whom you work?*

Anna: When my eldest daughter was two years old, she loved two things: a kind of cookie (biscuit) and my chicken soup. My chicken soup took 12 hours to make, a slow shimmer and then straining all of the bones and fat out. When the soup was finished, it rested on the kitchen-counter to turn into jelly and then it was certain that it was "just right". Well, one day I entered the kitchen and I found my daughter putting cookies in to the soup. I was horrified and yelled out: "WHAT ARE YOU DOING?!" My daughter looked at me indignantly and said: "I am making Cookie Soup". There are two points to the story:

1. This is actually one of the definitions of innovation, and perhaps my favourite: putting two seemingly unrelated things together to make something NEW that is MEANINGFUL, RELEVANT, DESIRABLE AND USEFUL!
2. EVERY single one of us is born curious and creative and most of us unfortunately have both this innate curiosity and creativity drained from us by our parents (by for example, not encouraging the acts of cookie soup), by our school systems (forcing us in to averages, forcing us to learn what we are told to learn), by our places of work (for example, the politics at the workplace, by power dynamics that determine what ideas actually surface and become utilized in efficiency and improvements).

We grow up with blinders that become stronger and stronger. We need to learn to take these blinders off and that is what I consider to be my most important task when working with organisations – how to remove our blinders. We need to bring back cookie soup into our lives, we need to find that curiosity in ourselves (start asking "why" more frequently) and bring back that beautiful innate creativity (dare to try new things, dare to mix things a bit, dare to learn from our youth who are much wiser than we are).

Things are getting worse, not better. My stepdaughter is 16 years old and her first year of Norwegian high school. Her textbooks are printed books and are written terribly. She came to me with her sociology book and read a paragraph to me because she was confused. It was about the pros and cons of globalization. One of the cons was that "globalisation weakens culture". She had asked her teacher about this, but her teacher was busy teaching and said to focus on the text for the test. She asked me what I thought.

Now here is the sad thing, I want my daughter to get a good grade on her test so I tell her to follow the book. BUT I also tell her that the book is crap. Culture is not a static thing, it never has been. Culture changes, culture evolves but culture is not weakened. I do not have the space to go in detail here, but imagine, if this book was digital, imagine if this book was dynamic. Imagine, if people could place their comments in the text and discuss it, imagine, if experts in culture and anthropology could put their own thoughts into this text and help the children learn more about what they are curious about? Imagine, if we allowed them to learn MORE than is in the textbook! Imagine, if the measure in school was how well the teacher had encouraged creativity and curiosity in his/her students?!

The only way I know how to bring back the importance of creativity and curiosity is by showing its value and that is a journey that starts by listening to the challenges of any given organization and by helping them find in context their own blinders. When the blinders are removed, they themselves see the great potential in meeting people where they are, in living in the question instead of jumping to solutions, in diving into the possibilities instead of making quick fixes that ultimately cost us more on the long run. We need to create viable solutions to our future and that starts by taking a step back and being willing to remove our blinders and understand the aspirations and the motivations of the people we create for and start creating with them.

I will touch upon these topics in my talk at the conference and I have a surprise up my sleeve which I hope will be something that all of us can enjoy and learn from!

Keynote Interviews

Helen: *The metaphor of 'removing the blinders' is extremely powerful. I guess that magical moments, such as when you recognised the innovation in your daughter's Cookie Soup (yum!), are things we must remain open to – we all need to keep an open mind. It can be really difficult to remain open to the world around us by retaining an almost childlike sense of wonder – and yet it's so important both personally and professionally. In terms of formal education, where do you think are the biggest 'blinders'?*

Anna: This is a very good question and could be the topic of a book. I will try to narrow it down a bit to just a few of the blinders in formal education. The first being arrogance. Educators who believe they know more than their students is one of the most dangerous blinder I encounter regularly. Educators who are afraid to go in dialogue with their students and perhaps even coming up with something more powerful than what they know. Things have been turned upside down with the onset of the internet The information highway that has become so accessible (causing a demand for transparency) has made it possible for even a young child to have more knowledge than his or her teacher. This requires educators to be humble to be flexible and to be adaptable to change. Educators must be willing to lead their students to the beauty of learning, the motivation to learn as opposed to what needs to be learned. Our entire curriculum needs to address this. We have come to a point that the democratization of learning requires a flattened power structure where teachers become facilitators of learning instead of knowledge holders. We need to educate our students to be knowledge seekers and to make informed decisions on the abundance of information at their fingertips.

I would also like to take on the concept of PhDs as a blinder. The entire idea of a PhD creates the "expert blinder". The concept of a dissertation as a solo project, where one is required to prove individual knowledge and competency endangers the power of flexibility and adaptability to change. Innovation has almost always been a social phenomenon – we are social beings and new ideas come from observing others, dialogue with others and collaborating with others. Why can we not create collaborative PhDs? There is room for both subject matter experts (individual PhDs) and collaborative PhDs that teach us the value of collaboration and how working together brings us to another level of understanding.

Our current model is limiting. When we finish our PhDs, we are focused often on our own expertise and we are pushed in to a world where we strive to continuously prove ourselves at an individual level. The challenge is how can we be experts and at the same time be willing to be open to opportunities. The most common challenge within an organization is that people see themselves as experts in their own area and become defensive and threatened when, for example, a lay person or non-expert comes up with a brilliant idea that disrupts their way of thinking or doing.

Today, almost anyone, if they so wanted, could become an expert in an area (due to the availability of information online) and challenge the status quo. I am working on two public sector projects, one in transportation and one in health – in both of these projects there is a tension between the users of services and the "experts" creating the services. Most of my work is in facilitating this tension. This brings us back to the issue of creating WITH the people we serve and not for the people we serve. When we understand the aspirations and motivations of the people we serve, we find meaning. From meaning we can create together meaningful, relevant, useful and desirable services for the people and with the people.

My partner is building his own three story house. He is not trained as a carpenter, he is a theologian with a dream. He is building it step by step from reading online. The builders in the village come and speak with him and look at his work. What they say is that his craftsmanship is far better than the majority of builders today. This is possible for him because meaningful and relevant information is available online. The real challenge for e-learning is how to make information easily obtainable, easily usable in the context that an individual needs to learn.

Helen Keegan is senior lecturer in the School of Computing, Science and Engineering at the University of Salford and Programme Leader for BSc (Hons) Professional Sound and Video Technology. In 2012, Helen has been awarded a National Teaching Fellowship, one of the most prestigious awards for excellence in higher education teaching and support for learning in the UK. Helen is a pioneer of using social media technologies to transform students' learning. With an educational background which crosses arts and sciences, she has a degree in linguistics and developed an international reputation for originality and digital innovation, actively using a wide range of social and mobile technologies to develop and disseminate her ideas, and constantly improve her teaching. With her students, Helen focuses on learner-driven curricula, helping them develop an online presence and an improved understanding of the internet. She is an executive board member of the Digital Cluster – a centre of excellence which combines and leads on high quality research, enterprise and teaching in the areas of informatics, digital media, and new and convergent technologies. Helen runs her own blog and is active on Twitter (@heloukee).

EDUCATION AND ECSTASY INSTEAD OF EDUCATION AND AGONY

Interview with Bernard Luskin by Eva Suba

Learning psychologist Bernard Luskin has a series of prizes and an entire career in academic institutions. Dr Luskin is considered as one of the pioneers of open, distance and e-learning in the academic world of USA. He revealed earlier, that he will explore psychology of learning & social media in his EDEN Annual Conference keynote speech sharing new knowledge in media psychology that improves learner motivation, provides inspiration and enhances learner satisfaction leading to increased student success. With all the new hypes and buzzing field of technology-enhanced learning, I was interested what his thoughts are on how psychology and learning interact with each other.

Eva: *In your interview of 2006 you said you think we've just barely scratched the surface yet in the use of media and learning. Where are we standing now 7 years later?*

Bernard: A great deal of rapid identifiable change has occurred in the past seven years since my previous EDEN keynote presentation. MOOCs, Linkedin, Facebook, Google, Bing, Blogging, Webinars, Pod Casts, eBooks and other services have started. Twitter has become quite significant and learning technology has moved forward apace. The MOOC has entered the scene and is creating stimulating conversations and controversy in education. Distance learning has passed the tipping point and the future of distance learning is increasingly clear. Some states, such as California are going to offer distance learning courses in general education, state-wide to help alleviate the lack of campus availability. The whole field of learning, from K12 through higher education has advanced. Politics continues and the regulators abound, but once generational acceptance was established and the tipping point reached, the future revealed itself. However, at this stage we have only scratched the surface of the future of distance education …but we have scratched it together.

Eva: *Coming from the highly evolved US open learning culture, how do you see the European ICT enhanced learning, e-learning, distance education development?*

Bernard: Distance is dead. Distance has been overcome by technology and media psychology. There are still many country boarders and language barriers to worldwide applications in distance learning. However, the European e-learning world has advanced and there is much more international cooperation than in the past.

Eva: *Brain sciences are rapidly evolving giving us more and more information on how humans and animals actually learn. What are the overlapping areas in your opinion, where media psychology, brain sciences and learning technology create meaningful synergies for learning research?*

Bernard: Brain Science has moved to the forefront of research on learning. New findings from magnetic resonance imaging have enhanced the credibility and understanding of NLP, i.e., Neurolinguistic programming, our understanding of brain plasticity and learning and the knowledge that learning in a positive way can overcome genetic and cultural limitations. This is increasingly understood by scholar practitioners advancing the fields of media psychology, media studies and distance learning. Positive psychology and positive mastery have been widely recognized as ways to improve both individual and group results. New degree and certificate programs in media psychology and media studies are providing a new wave of leaders for the future. More new graduate programs and courses are needed. The opportunity is now.

Eva: *What are the latest findings of media psychology you find highly relevant for today's K-12 and higher education?*

Bernard: There is increased recognition that media psychology is learned one theory at a time. Theories of attention, persuasion, control, mastery, positive psychology, Neurolinguistic programming are now foundational in course development and best practices in teaching and learning. Pscybermedia is a neologism that has become more widely understood. In dissecting a new word such as, Psybermedia, we find that Pscy, i.e., psychology, the study of human behaviour, cybernetics, i.e., artificial intelligence, and media, i.e., pictures, graphics and sound, i.e., pscybermedia, has moved into the scholar practitioner lexicon.

Eva: *Some years ago you foreseen that graduate professional education is going to become sophisticated due to the ubiquitous needs of learners while undergraduate programs will grow significantly. Where do you think the world of learning is right now? Was your prognosis correct?*

Bernard: My various prognoses of seven years ago were correct. The world of learning has advanced. The understanding of brain science, including NLP, Neurolinguistic Programming and understanding that brain plasticity can offset genetic and cultural limitations and have substantially advanced learning psychology. Media studies that assess the results of technology and learning are bringing new knowledge. Learning management systems and student information systems have improved. It is increasingly recognized that that the teacher is at the centre of best practices and that personal attention can make the difference between success or failure. New knowledge is helping the traditional learner, the adult learner and is bringing new insights into the ways we work with all types of learning disabilities.

Eva: *The internet and media has fundamentally transformed mainstream education. How do you think massive open online courses' (MOOCs) will evolve in the context of learner demand?*

Bernard: MOOCs have a place in education at all levels. There will be credit aggregators who partner with the MOOC providers in order to monetize and grant academic credit for courses offered. Many schools, colleges and universities will begin to accept this credit.

The MOOC is a new variation of learning opportunity now growing among the many ways that people gain information. Ways include personal discovery, traditional classroom offerings, formal distance degree and certificate programs and more. The answer to the question regarding how the best people learn can be summarized the recognition that successful individuals learn "any way they can."

Eva: *Psychology is a course most teacher training institutions build in to their curricula. Do you think there's a need for institutions to consider media psychology as part of the same curricula? If yes, how do you think it could be woven into the texture of teacher training seamlessly?*

Bernard: Media psychology courses should be offered in all programs in higher education and especially in leadership programs and in teacher education. Understanding psychology is fundamental to learning. Media psychology cuts across all programs and the understanding of theories in psychology applied to media is more important than ever. Understanding media psychology and applying media psychology in the learning world is a 21st century learning imperative. Media psychology can be seamlessly blended into teacher education programs and also included in specific courses.

Eva: *Motivation is one of the keywords when talking about learning. What is your biggest motivation in your current work today?*

Bernard: As president elect of The Society of Media Psychology and Technology, Division 46 of the American Psychological Association, I have given priority to

1. encouraging colleges and universities to offer new degree and certificate programs in media psychology and media studies,
2. to increasing greater understanding of the nature of media psychology,
3. to supporting the principle that psychology is best learned one theory at a time and then applied to media, and
4. to supporting new research initiatives in media studies so our knowledge about media and behaviour continues to grow.

Eva: *This year's theme for the EDEN Conference is the Joy of Learning. What is your message to the conference participants in preparation for the event?*

Bernard: These are exciting times in education and learning. My personal theme is always "education and ecstasy". I believe it should replace the old theme of "education and agony". You become what you think. Positive psychology, the idea of mastery, the growing research that shows that psychovisualization of perfect practice leads to positive results, and the dramatic growth in understanding how people learn now paves the way to the future of a world of learning that is full of joy.

Keynote Interviews

Knowledge is information put to productive use. The EDEN conference is particularly relevant for those who believe in what they are doing. This includes those of us who are advocates of distance education and media psychology. We believe that it is important to think positively and that the goals of better learning will be achieved through our perseverance. We must work together to see the world from each other's viewpoints. This will give us a basis for forming and sharing fresh perspectives. The "joy of learning" worldwide will continue to spread. Learning methods and practices will change as we do. We have all of the pieces and we are putting them all together.

STORIES OF JOY AND DESPAIR IN THE VIRTUAL CLASSROOM

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A new generation of digitally mediated distance education has fundamentally changed the tertiary education landscape. Throughout the world, in 2010 an estimated 17 million students were studying through open and distance teaching institutions and this figure is growing exponentially. However, many distance education programmes have historically struggled to achieve greater than 50% retention. Distance education is common among mature-aged lifelong learners who study part-time. Data relating to campus-based students cannot be transferred to distance students because they engage with their study very differently. Against this background, the current study examined what factors influence the student experience during the first few weeks of distance learning.

The overarching methodology was Design-Based Research, which was chosen to guide the development of enhanced educational outcomes. Within the overarching methodology, the research drew on phenomenological data gathering methods to study the experiences of first-time distance learners from their own point of view. With permission from the University's Human Ethics Committee, enrolment data was obtained for 750 students studying via distance for the first time in Semester 2, 2011. One hundred and forty students volunteered to participate from which 20 were purposefully selected: Andy, Beth, Chris, Deborah, Emma, Fiona, Geraldine, Hannah, Ian, Jack, Kane, Libby, Maggie, Nathan, Olivia, Penny, Rachel, Susan, Tom[1]. Using Sony bloggie™ cameras, twenty-two hours of video reflections were gathered using a diary technique adapted from previous studies. Consistent with a phenomenological approach to understanding experiences in participants' own words, a grounded theory approach was applied to the process of thematic data analysis. Four themes arose from the data that featured aspects of joy and despair: (1) Motivating factors; (2) Inhibiting factors; (3) Seeking support and (4) Learning approaches.

The purpose of the study was to examine factors that influence the student experience during the first few weeks of distance learning. Despite demographic trends among participants, they were not a homogenous audience. Stories revealed that students who appeared to be similar on paper actually led very different lives in reality. The study observed that only a minority of participants spoke in a consistently positive way about the joy of distance learning. Having enrolled in more-or-less the right number of units (papers) to suit their lifestyle, this group never doubted their capacity or desire to study by distance. In contrast, the majority of participants reported notable periods of despair. Eventually, this group either resolved to study fewer units (papers) per semester or concluded that distance learning did not suit either their approach to learning or their lifestyle at that point in time.

The paper concludes that first-time distance learners experience ebbs and flows of joy and despair; the reasons for which are incredibly complex. Of some concern, despite the sophisticated design of today's virtual classroom, and the new digital tools available to teachers, the most prevalent theme among participants of this study was despair. Given the exponential growth in open and distance education, it is critically important to invest in research that continues to unravel the complexity of distance learner success.

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[1] All names are pseudonyms.

THE LONELINESS OF THE LONG DISTANCE LEARNER

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The title of this paper is adapted from the 1962 film, *The Loneliness of the Long Distance Runner*, in which a young man from a deprived socio-economic background commits a crime, is placed in detention but rises in status due to his prowess as a long distance runner. The film ends with him stopping before winning a critical race as memories of his past and thoughts of his future present a picture of desolation. The message is that an individual's self-esteem can be built up but can just as quickly be destroyed, often by factors outside their control.

This paper recognises that the journey between enrolment and graduation faced by internationally located working distance learners can be long and laden with mixed emotions. There is no doubting the exhilaration experienced by new students starting a course or their pride and joy as they successfully complete it. It is the period in between that this paper considers and asks what it is about the student experience that keeps them motivated to continue during the good times and the bad.

It contrasts how the life choices of employees, their personal aspirations, lifestyle, career and qualifications, combine to provide the primary driver for their investment in their human capital. The paper identifies motivation as a key factor in its achievement and that the learning experience may be affected positively or negatively depending upon the individual's orientation to learning. Incentive to learn is required and this may be extrinsic or intrinsic. Extrinsic incentives derive from the individual's ability to demonstrate the outward rewards and benefits of their activity whereas intrinsic incentives result from the individual's sense of internal satisfaction derived from achieving their internal goals and targets.

Desire for success is a strong incentive for working students that influences their perceptions and attitudes toward learning. The paper reflects on the different orientations to learning and considers these in relation to vocational, personal, academic and social incentives. It considers how these translate into the motivation challenge for provider institutions and, drawing upon research conducted with working distance learners, it highlights specific issues faced by students in maintaining motivation.

These reflect the different dimensions of their life choices and the problems that result from their conflicting demands, their career imperative, their autonomy and their work experience. In the latter respect it recognises the Sword of Damocles that redundancy represents for their working future and the lengths to which students go to overcome adversity. This requires positive motivation which can be attributed to their single-mindedness but most likely results from sound financial and career advancement reasons.

MOTIVATION, COLLABORATION AND QUALITY MANAGEMENT OF MODULES OF A GERMAN CAREER SERVICE

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How does one motivate busy university students to attend optional courses for which no credits are obtained? How is participation and collaboration achieved amongst the course participants and how are these courses evaluated to ensure consistently high quality and continued adaptation to changing needs? Finding answers to these questions was crucial for the success of the semester-long courses offered by the Job Factory – Career Service at West Saxon University of Applied Sciences, Zwickau, Saxony, Germany. These courses, so-called modules, present students with the opportunity to gain knowledge and experience in areas that are not or hardly covered during their core courses but are crucial for a successful and swift transition to employment.

The areas covered in these modules were decided upon based on three comprehensive surveys conducted with a large part of the entire student body, companies present in the region and university professors. The results pointed to a clear-cut preference for technical skills on the one hand including Microsoft Office and project management and soft skills on the other. Further analysis of the latter preference revealed the need for separation of soft skills into two modules: leadership skills and a separate module on the remaining soft skills. In other words, this procedure, the conduct of surveys with the immediate benefactors of the course visit, the students on the one hand and companies as future employers of these very students on the other, took care of the relevance issue.

The courses have been largely set up as online courses except for some on-site workshops in areas that require interaction and where interaction boosts the learning outcome. The e-learning character allows for greatest flexibility for students to include these modules into the overall term structure without sacrificing any other core requirement. To allow for best possible interaction with other module participants and with the mentor, latest communication and data collection tools have been included. Motivation to pursue any of the modules is solely based on the perceived relevance and need to know with regards to the contents provided, as credits cannot be obtained. In conclusion, the consideration of multiple intelligences, relevance of the content and adjustment to the prospective participants' time resources are three key factors to bear in mind for motivation purposes; the availability of modern communication tools and, where suitable, the opportunity to apply and test acquired knowledge in real-life situations face to face caters to the need to collaborate in order to develop new competencies in a meaningful manner.

Crucial for the medium- and long term success of the courses is continuously high quality and up-to-date contents. To ensure both, quality checks are conducted through the module participants themselves and through external evaluators to ensure firstly that the contents and delivery methods are meaningful and conducive to meet the learners' expectations and the intended outcome and secondly that the course administration is streamlined with the university processes and omits any unnecessarily complicated procedures. Based on this procedure, all modules have been subject to at least one considerable adjustment and will remain to undergo facelifts and content adjustments as necessary.

To conclude, the modules have been gradually introduced at the university since fall 2010 and have since then become recognized service components of the Job Factory – Career Service.

UNIVERSITY STUDENTS' USES OF ICT: THEIR PERSPECTIVE

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Introduction

This paper that we are presenting forms part of a research and development project conducted by EMA, a research group of University of Barcelona. The aim of the project is to identify and comprise the uses of the ICT related with processes of learning of the university students, with the intention to extract conclusions that allow to improve the design of the situations of learning in formal context, doing them more adapted and interesting, related with different profiles of students. In this proposal, the study of the use of the ICT in the processes of learning of the students is presented in a transversal and integral sense that incorporates the didactical dimension, the personal dimension and the social dimension.

We have been taking in account the theoretical framework related with the process of identity construction of students by means of ICT in relation to the learning process. Since youth were called Digital natives, as well as, Google generation, Digital generation, and Instant generation, it was assumed that the technological experiences and uses of students were homogenous for their process of learning. Some teachers and experts have worked with the idea that university students had a sophisticated knowledge and understanding of ICTs. However, some recent studies call into question the widespread topic of the domain of technology by young people, and they finds a use of recreational and social network and lack more skills for academic purposes. Moreover, this project is related with the role of ICT in the achievement of academic and professional skills. Communities and virtual environments have great potential as a ways for learning and professional development. However, the setting up of virtual communities is not something spontaneous that occurs by simply having Internet access. Training is required. Studies on the uses of the Internet in the university system of Catalonia note the distinction between the uses of the network inside and outside the classroom.

Methodology

This project adopted a combination of quantitative and qualitative methods. In the first stage we used a quantitative research, specifically a questionnaire that was used as a data collection method with close-ended questions. The sample of this study was 1048 students (error 5%, 95.5% confidence interval) enrolled during the 2010-2011 academic year in the first and fourth courses of their universities. It has been applied to a five different universities of Catalonia.

On the second stage, we were working with different focus groups discussion. One the one hand we randomly took some students who had been taken part of the previous questionnaire, and we distribute them in three heterogeneous groups. On the other hand, in order to contrast this information we develop another focus discussion group, but this time preformed by a group of experts. They were eight teachers, selected form several criteria.

Expected outcomes/results

The first part of the project allowed us to observe that there is heterogeneity in relation of how students use the technology to learn. In this stage we concluded that there are a variety of uses of technologies and most of them are not transferred for learning, although they perceive themselves as a high skilled to use ICT. Furthermore, we have had many results in this stage. On the one hand, we can see which tools are using our students in the formal context, that means which tools teachers proposed in their subjects and students use. The student's opinion about the usefulness of these tools is quite similar to its use. On the other hand we have to focus in the differences between the students. Firstly students have a different frequency and use of ICT if they are women or men. Also there are different between students that take a science or technical degree and students that study a social or humanistic degree.

At the time of writing this paper, the second stage of our project is in process, we are developing the analysis and conclusions of the focus groups discussions. However preliminary results of second stage show us that ICTs are used for teachers as a logistic tool rather than a tool that influences in the cognitive dimension of learning.

TALENTCAMPUS: NOVEL APPROACHES AND ENVIRONMENTS TO HELP LEARNERS REVEAL, DEVELOP AND CAPITALISE THEIR TALENT

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Introduction

European education and training policy clearly states that "In the future, creativity, the ability to think laterally, adaptability and other 'transversal' skills will be valued more than the specific bodies of knowledge that schools have traditionally taught." (European Commission, 2013). While this has been a priority at school level education for some time, it is no less important for higher education in a world where academic knowledge is no longer the only reference when it comes to apprehending excellence. In order to deal with an unpredictable and ever-changing changing world, higher education needs to create new ways of improving informal knowledge, enabling people to face new situations and even to create them.

One initiative supporting this is TalentCampus, a programme supported by the PRES Bourgogne Franche Comté and its Foundation for Scientific Cooperation. Through a series of Summer, Winter and Spring schools aims to develop a truly innovative approach to training for talents from all walks of life. If we take talent to mean 'a capacity for achievement or success' rather than the long-accepted definition of 'a natural ability', then it is in the detection, revelation, development and capitalisation of talent in the form of social competences and soft skills that we can aspire to improve capacity for employability, entrepreneurship, creativity and innovation.

TalentCampus and the joy of learning

Looking deeper into our understanding of what is talent, we can say that it is a combination of shared excellence in a particular field and of difference (the original and unique personality of an individual). Possessing talent does not necessarily imply being top of the class or an overachiever. Talent involves a particular ability, combined with specific resources and a distinctive style, applied to a given activity and often performed with pleasure in a remarkable way. The notion of pleasure is not to be neglected: as we speak of the joy of learning, so may we speak of the joy of discovering ones talent, developing it, expressing it and putting it into practice.

The classes rarely take place in the classroom, and may well be out in the open air! The courses are based on innovative learning approaches (active learning, collaborative learning, project-based learning) and learners take away with them a tool kit to help them implement their talent, a network of talented and original contacts and an accreditation recognising their competencies.

The role of digital and social media in the detection and development of talent

The TalentCampus team is currently exploring ways of enriching the learner experience through the judicious integration of digital and social media, which "can support more engaging and playful approaches, provide new formats for creative expression and encourage teacher and learners to experiment with different, innovative, ways of articulating their thoughts and ideas". However, given the complex dynamics which make up the TalentCampus concept, where spontaneity, surprise and challenge play a key role during the face to face training, we need to establish whether these might be lost or enhanced once social media come into the picture.

Form of the presentation

After presenting the TalentCampus approach and the philosophy behind it, the presenters will analyse the results of the initial evaluations before switching to conversation mode, involving the audience actively in exploring the third aspect, namely the role digital and social media can play in the detection and development of talent.

ELICITING STUDENTS' VOICES THROUGH SCREENCAST-ASSISTED 'FEEDBACK ON FEEDBACK'

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Effective feedback dialogue elicits knowledge construction, promotes positive self-perception, sustains motivation, and promotes autonomous learning. However, feedback can only be effective if learners engage with it, and there is often a mismatch between the students' needs and expectations and their tutors' assumptions and practices. The e-Feedback Evaluation Project (eFeP) is a JISC-funded collaborative project involving the Open University (OU) and the University of Manchester, UK. One of its aims is to examine the effectiveness of feedback in terms of student engagement and response. Ten students were asked to make screencast recordings as they talked through the feedback written by their tutors on one of their assignments; in other words, students recorded their 'feedback on feedback'. Each recording was analysed in terms of the student's cognitive, affective, and metacognitive responses to the tutor's feedback. The analysis focused on responses to comments relating to strengths and weaknesses, as well as responses to the depth of such comments. Five depths were considered in this analysis according to whether the strength or the weakness had been: (1) Indicated; (2) Categorised/Described; (3) Corrected/Exemplified; (4) Explained, and (5) whether advice for future improvement had been given.

In the case of **feedback on weaknesses** different types of student response were identified. Cognitive responses to feedback on weaknesses, especially those related to what students regarded as "silly mistakes" (e.g. agreement or spelling), tended to result in effective knowledge construction, as they actively integrated the feedback or made an informed choice to accept it. Conversely, uninformed acceptance or rejection of the feedback often reflected a mixture of cognitive and affective elements. Metacognitive responses to feedback on weaknesses in the form of planning strategies to improve future performance were also very common. **Feedback on strengths** most commonly elicited affective responses, especially when students perceived that their tutors established a personal rapport with them and recognised their efforts. Cognitive and metacognitive responses to feedback on strengths generally mirrored those elicited by feedback on weaknesses (although some response types were less apparent for feedback on strengths).

In the case of feedback on weaknesses, the determining factor for students' responses to the **depth of feedback** was whether tutors had provided enough information to enable them to actively integrate the feedback or make an informed choice to accept it. When corrections of more complex errors (e.g. syntax) were left unexplained, students adopted unhelpful cognitive responses such as attempting to integrate inaccurate information or simply accepting the correction at face value (uninformed acceptance). Advanced students who attempted to use vocabulary in a creative way sometimes failed to understand their tutor's unexplained corrections, and rejected these as 'patronising' or repressive. It is also worth noting that the tutors' comments on strengths rarely included explanations (depth 4) or specific examples drawn from the student's work (depth 3), and yet students did welcome these whenever they were present. Depth 1 comments in the form of ticks normally elicited positive affective responses related to effort recognition and personal rapport with the tutor. However, simply acknowledging the good quality of the work (for example by giving a high mark) was not necessarily sufficient, especially for high achievers. Well-intended tutor support was also rejected when students suspected a one-size-fits-all approach that failed to take their individuality into account.

This study shows that successful and highly motivated students do engage cognitively, affectively, and metacognitively with tutor feedback, and make active efforts to integrate it into their learning. However in some cases their responses to the feedback are ineffective. This is consistent with tutors' common claims that their feedback does not always achieve its intended purpose. A tutor's incorrect assumptions about the student's abilities, expectations or attitudes in relation to feedback can contribute to these occasional breakdowns in communication. The causes of such breakdowns may be cognitive, for example when the feedback does not provide enough information, or affective, when students feel that their efforts or individuality are not being duly acknowledged.

By giving students a voice, the 'feedback on feedback' method used in this study encourages them to articulate their responses to the feedback and makes it possible to identify what types of comment promote successful or unsuccessful feedback dialogue. This study demonstrates that the method is viable and could be implemented with a wider range of students as a means of promoting feedback dialogue between students and tutors, both in face-to-face and distance learning environments.

"I ENJOYED USING SRS IN THE CLASSROOM" – A RESEARCH STUDY OF STUDENT RESPONSE SYSTEM IN NORWEGIAN CLASSES AND IN FURTHER EDUCATION OF LANGUAGE TEACHERS IN NORWAY[1]

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Introduction and background

This paper describes a small scale pilot study leading to the inclusion of a student response system (SRS) as part of the curriculum in a further education course for language teachers. It also presents how the language teachers attending the further education course evaluated the SRS, both as a pedagogical tool in the classroom and as part of the curriculum of a further education course for language teachers.

In the literature, SRS is referred to by different names: *personal response system* (PRS), *audience response system*, *clickers* and *classroom response system*. The SRS technology makes it possible for a teacher to present a question or problem to the class, and the students will give their answer anonymously though a response device. The answers from all the students can immediately be presented (as for instance a histogram) to the class. The teacher obtains an instant overview of the class' knowledge on a particular topic, and the students will get instant feedback on whether they answered correctly.

The pilot study

We conducted a pilot study where we observed teachers who tried the SRS in their classrooms for the first time. Afterwards, all the pupils (mean age: 17.7) had to fill out a questionnaire concerning the use of SRS, and in addition, we interviewed two pupils from each class, and the teacher.

The results showed that 43 (out of 45) pupils agreed or strongly agreed with the statement "*I enjoyed using SRS in class*". 43 pupils agreed or strongly agreed that the use of SRS made them more engaged in class, and 40 pupils agreed or strongly agreed with the statement that SRS should be used more. All these results suggest that SRS contribute to more fun and more engagement in the classroom. The interviews with the teachers suggested that they too found the SRS to be a useful tool, and they noted that the SRS made it easier for them to maintain the pupils' attention.

The online course for language teachers and their experiences with SRS

Based on the results from the pilot study, we incorporated SRS as part of the curriculum in online course for language teachers. The response from these language teachers suggests that they see many benefits in having SRS as part of their curriculum, and using SRS in their classrooms. First of all, the teachers emphasise the motivational aspect in using SRS, and the fact that pupils like to use a technological device in the classroom. Secondly, the SRS makes it easier to get the pupils attention. Thirdly, the pupils enjoy the instant feedback presented to them as a histogram by the SRS.

Conclusion

As the present study shows, SRS is a useful pedagogical tool in language classes. The pupils find the teaching enjoyable when SRS is used. This contributes to other desirable effects, such as more motivation for learning and increased attention.

We draw the conclusion that it is beneficial to include training in SRS in further education for language teachers. In this way, they will be equipped with the skills to use SRS in a classroom as a means to vary their teaching. Teachers who succeed in engaging the whole class in their subjects are also likely to find their teaching more enjoyable.

STUDENT MOTIVATION AND ENGAGEMENT IN 1:1 DIGITAL LEARNING WITH TIME TO KNOW (T2K) – HIGHLIGHTS OF RESULTS FROM CROSS-COUNTRY STUDIES

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Introduction

Innovative, technology-rich learning environments, specifically 1:1 laptop technology initiatives, can become a method for paradigmatic change in teaching and learning by providing engaging environments and tools that empower learning experiences. Time To Know (T2K) (http://www.timetoknow.com) has introduced the first core curriculum digital teaching platform (DTP) designed to function as the primary instructional platform in today's technology-intensive 1:1 classrooms. T2K is designed as a teacher-led, social-constructivist learning environment. The solution provides engaging and adaptive content focused on exploration, inquiry-based learning, collaborative class discussions, multimedia activities, and games. Teachers can address student needs at varying levels of proficiency by prescribing individually customized activities and appropriate homework. Moreover, on-going feedback during class enables the teacher to track each student's progress.

The aim of this paper is to highlight findings from a multiple, cross-country (Israel, Texas, and New York City) evaluation research project on learning math with Time To Know. The present paper focuses on student engagement and motivation after the first year of implementation.

Methodology

The research project was based on the mixed methods design and pre-post testing with a comparison group. The data collected during the 2010-2011 and 2011-2012 school years included standardized assessment scores, school records on attendance and discipline, student and teacher questionnaires, students' drawings, interviews with teachers and principals, and student focus groups. This paper focuses on data on engagement and motivation obtained from questionnaires, student drawings, and interviews with teachers and principals.

Findings, Discussion and Conclusions

Within the first year of implementing the T2K program, most of the 4th and 5th grade students across the three locations liked math class (62%-79%). Relatively few felt bored (11%-23%), or felt that math was hard for them (10%-11% only in Israel). Positive attitudes were apparent in the summary of student drawings, showing a greater proportion of positive symbols when learning with T2K (in comparison to negative, neutral, or other symbols).

The student questionnaires revealed relatively high levels of engagement by means of their interest in school, willingness to learn, and better understanding of math. All of the Israeli teachers felt that with T2K they teach more interestingly. Both New York teachers (50%) and Israeli teachers (69%) felt that issues of negative behaviour decreased since students began learning with T2K.

In each school, teachers and school administrators reported that students enjoyed learning with T2K; they were "hooked," focused, quiet, and took ownership for class learning, and negative behaviour issues decreased. With T2K, students were motivated to learn and teachers were motivated to teach. This was apparent in their questionnaires and drawings. Moreover, preliminary cross-country data show increases in student achievement in state-wide tests. These findings are in agreement with the National Education Technology Plan statement that learning experiences should provide multiple and flexible means of engagement to tap into diverse learners' interests, challenge them appropriately, and motivate them to learn. Time To Know was developed to meet these goals. These first year findings indicate that teachers and students are on track toward achieving them.

ON THE FLIP SIDE OF THE COIN – THINKING DISPOSITIONS IN LEARNING BLOGS

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This paper describes a study of a learning blog, a web 2.0 application, as a tool for promoting the utilization of thinking dispositions, the use of variety of thinking dispositions and the possibility of an increase in the incidence of use of thinking dispositions. The study was conducted at the College for Academic Studies in Israel, in a Master Program's on ICT and Learning. Data was collected from a sample of student's blogs. The content analysis category was based on a rubric developed by the researchers for the purposes of this study. The rubric was used as a basis for coding thinking dispositions and their components in the learning blogs records.

The research findings revealed that the learning blogs contains representations of thinking dispositions, in a large quantity and in a wide variety.

The results show that students' postings indeed displayed evidence of thinking dispositions processes. The study discusses implications for instructors wishing to add blogs to their teaching toolbox.

E-TANDEM LANGUAGE LEARNING INTEGRATED IN THE CURRICULUM: REFLECTION FROM STUDENTS' PERSPECTIVES

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Claudia Berger, University of Geneva, Switzerland, Ling Zhang, Hubei University, China

This article presents a reflection of the findings from students' perspectives of a three-year eTandem exchange course between two distant languages – Chinese and French, at institutional level – between the Unit of Chinese Studies of the University of Geneva, Switzerland and the French Department of Hubei University, Wuhan, China. The participants are second year language students from both sides (Level B1-B2 according to the Common European Framework of Reference for Languages, 2005). The course includes theme-based asynchronous learning activities in the Moodle Learning Management System as well as task-based synchronous oral communication via the Skype software.

Despite socio-institutional differences between the two universities, as one focuses on literary and cultural knowledge while the other emphasises pragmatic linguistic competences, the opportunity to communicate with native French/Chinese speakers of their own age is a big attraction to students from both universities. After a careful and iterative instructional design procedure as well as a long-term collaboration with teachers from both sides, the course has been gradually integrated into the curriculum of both universities, as a credited course in the University of Geneva and as a supplementary oral practice in Hubei University. The communication tasks are closely related to the ongoing course content of both universities.

This article presents the findings from the students' perspectives about the eTandem course. The analysis is based on (1) the data obtained each academic year from a pre-exchange survey of students' language profile and expectations for the exchange, (2) formal course evaluations administrated by the University of Geneva, (3) the students' activity statistics on Moodle platform, and (4) a face-to-face interview with the students from either universities.

A pre-course survey at the beginning of each year shows that the students' expectations from the eTandem exchange include improving oral communication skills, establishing a good friendship or a stable collaborative relationship with their language partners, exchanging cultural knowledge, and improving oral comprehension.

From 2010, a formal evaluation (issued by the University of Geneva) was conducted with students from both sides (the questionnaire was translated in Chinese for the students of Hubei University). It consisted of 4 parts with 12 5-scale questions about the course content, course organisation, teaching evaluation, global appreciation, and 4 specific questions on the eTandem exchange, together with 3 open-ended questions allowing comments or suggestions on the exchange.

The data showed that though technical problems remained a major obstacle for the online exchange, the students highly appreciated the eTandem course (80% rate the course as satisfying) and almost all the students agreed that their objectives and expectations were attained (98% on average for the three academic years). The students' perceived benefits included improving their speaking skills and understanding better the cultures. A lot of students noted the increased confidence in their use of the target language, as they were not afraid anymore of speaking Chinese/French. The practice of communicating with "real" native Chinese/French speakers put them "in the bath". They also emphasized the precious experience of learning about the target culture through exchanging with people of their own age during the interviews.

The benefits the Chinese-French eTandem course brought to the students are not only linguistical, but also cultural. The course will go on with a renewed design based on the students' feedback. A solid partnership between the University of Geneva and Hubei University is vital for the continuation of this Chinese-French eTandem exchange project. As a long-term collaboration is expected, the future work will also focus on the "normalization" of the eTandem course in Hubei University.

A PERFECT ICT COURSE FOR OLDER LEARNERS – FINDINGS ABOUT FAVOURED ICT COURSE CONCEPTS OF OLDER ADULTS

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When it comes to using information and communication technologies (ICT) on a regular basis, older adults in Germany and also in other European countries are still underrepresented compared to younger age groups. As benefits for older adults who decide to start using ICT are big, it seems important to encourage learning and using ICT in older age. But before positive consequences are visible, the older user needs to invest time and effort to learn how to use computers and the internet. About 22% of the older adults, who are starting to use ICT, participate in an ICT course to learn at least the basics. ICT courses are mainly face-to-face courses with typical classroom teaching formats. But also electronic learning (e-learning) concepts and a mixture of electronic and classroom teaching (blended learning) increase for older learners. The last two concepts have the advantage that learning is very self-regulated and the learning contents and schedules can be chosen to some extend by the learners themselves.

However, not much is know so far about the needs and desires of older course participants. Therefore this exploratory, mainly qualitative study with experienced ICT course participants was conducted to find out more about the needs of older learners in ICT learning. In detail, 26 older adults (14 male and 12 female, mean age 69.5 years) filled in an online questionnaire with open questions and multiple-choice questions. Questions were about favoured course concepts, favoured course support, teacher qualities, differences between older and younger learners, difficulties when using ICT, motivation to attend ICT courses and important aspects of ICT courses. Answers of the open questions were analyzed in a deductive way with MAXQDA, a program for computer based content analysis. Answers were assigned to five main categories with in total 27 subcategories. Additionally, quantitative data was analysed with PAWS statistics.

Regarding course concepts, answers were split into course format, content, organisation and social aspects. Especially social aspects were very important to the respondents, many emphasised the need for social interactions with teachers and other learners also for pure online formats. In general online and blended formats were favoured because of rehearsal possibilities and practice options at home in the learner's own speed and time. Participants had also a precise idea how the course should be organised. Individual feedback and possibilities to test and monitor their progress is very important to most learners. Also sustainability and easy language without too many English and technical terms were mentioned frequently. Regarding teacher characteristics, empathy and patience is very important, but the age and formal education of the teacher only plays a very small role. Seven main ICT problems were mentioned, namely problems with the understanding of technical terms, sensory overload and sensory problems, fears of doing something wrong, inexplicable technical problems, navigation problems e.g. forgetting how to go to a specific website and problems with frequently changing interfaces. Furthermore, five different motives for learning ICT were found: gain new knowledge or refresh existing knowledge, staying up to date, reduction of insecurities, finding new communication possibilities and learning to use a specific program. In statistical analysis differences regarding course aspects were found. Most important to the respondents were 'quick feedback from tutor', 'rehearsal possibilities', 'sustainability', 'exercises' and 'practical examples'. Some influence of education level and computer skills on importance of the different course aspects was found.

As this study is only a first attempt to shed some light in the needs of older ICT course users, there were some limitations like a small sample size. However, these results give some interesting insights and to provide older learners with well suited courses in the future, it is very important to continue asking the experts in this field directly, namely the older adults ICT course users, about their needs and desires.

ONLINE LEARNING FOR STUDENTS FROM DIVERSE BACKGROUNDS

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The advantages of an online science education course to pre-service students from diverse backgrounds are presented in this study. In light of the importance of online learning as a teaching tool, an ongoing five-year study was designed to face the challenge of adapting a course for three groups of students from diverse backgrounds; students with learning disabilities (LD), excellent students and regular students. The "Science Education" on-line course was part of the teacher-training program for k-2 pre-service teachers, which focused on constructing a science teaching unit and was based mainly on learning scientific concepts, including fostering lab skills, and practicum. Adapting a science education online course by using information and communication technology following formative assessment was a challenge for students from diverse backgrounds, with different needs and capabilities as well as for their lecturers.

The findings pinpointed the advantages of the science education online course to all three groups of students, yet it carefully reports a slight but explicitly marginal advantage of the LD students' achievements in comparison to excellent students and regular students. The LD students' success was expressed by their final course score given by lecturer, as well as the improvement in the students' evaluation of their own self-learning ability followed the online course, their satisfaction level regarding learned contents, participation in discussion groups and tasks performance. A significant difference was found between the LD students and their peers, the excellent students and regular students regarding their tasks.

The possibility to deal with everyday authentic subject as well as the opportunity to conduct an online study forum was particularly significant for the LD students. Moreover, the LD students reported on higher participation in the online course in comparison to traditional one, and on high interaction with lecturer and colleagues. Students describe unique features of the online course: Flexibility and choices in utilization of the information and in time management. In addition, Interaction including possible cooperative learning and peer review, duration and time extent were determined by the learners; Knowledge construction based on the transfer of responsibility to the learner, on thinking and learning groups and on individual and customized learners support. In conclusion, Adjusting instruction to students from different backgrounds is a challenge facing colleges and schools education. The combination of excellent students with LD students and regular students intensifies the challenge. These encouraging current findings suggest an on line course contribution to students from different backgrounds.

CONCEPT LEARNING VIA SMS DELIVERY AT THE UNIVERSITY LEVEL

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Rationale

Latest technology based distance learning and mobile learning delivery platforms include cell phone based SMS technologies that provide access to learning materials without being limited by space or time. Sophisticated technological advances in the domain of pedagogical delivery have led to motivated, flexible, user-friendly, controlled and adaptive learning using cell phone delivery platforms.

Methodology

In the present study three groups of first year university students who studied Jewish concepts in an elective 15 week long (semester) course were exposed to three different modes of concept delivery. The first group of students received weekly lists of Jewish concepts sent via SMS messages to their cell-phones, the second group received weekly lists of Jewish concepts sent via email messages to their email inboxes, and the third group of students received weekly snail mail lists of Jewish concepts. The definitions of Jewish concepts studied by SMS, email and snail mail delivery platforms were identical and the students received 20 Jewish concept definitions on a weekly basis (except for weekends) for a period of 15 weeks. At the end of this period the students in the three groups were tested on a standardized Jewish concepts achievement test and responded to a questionnaire that examined their levels of learner curiosity, learner self-efficacy and learner technological self-confidence.

Results

Results of the study indicate that there were no significant differences between the achievement scores on the standardized Jewish concepts achievement test attained by students in the SMS to cell-phone delivery group, the email delivery group and the snail mail delivery group. However, there were significant differences between the students in the three different delivery groups regarding their levels of learner curiosity, learner self-efficacy and learner technological self-confidence. The students who received Jewish concepts via SMS messages indicated a significantly higher level of learner curiosity than their counterparts who received lists of concepts via email messages who in turn exhibited a significantly higher level of learner curiosity than students who received concepts via snail mail. Students in the SMS group also had a significantly higher level of learner self-efficacy than their counterparts in both the email and snail mail groups. No significant differences were found between students in the email group and those in the snail mail group on the learner self-efficacy factor. Lastly there were no significant differences between the levels of students in the SMS and email groups on the learner technological self-confidence factor. However, students in both SMS and email groups were significantly higher than students in the snail mail group on this factor.

Conclusion

The results of the study indicate the potential evident in SMS based cell-phone technology regarding enhancement of students' attitudes toward learner curiosity, learner self-efficacy and learner technological self-confidence. Thus cell-phone based SMS messaging can become a viable technological mobile delivery system in the university learning process and serve as a routine platform for the delivery of relevant learning materials.

ACHIEVEMENTS OF LEARNING DESIGN IN MULTI-AGENT MULTI-LANGUAGE INTELLIGENT SYSTEMS – THE I-TUTOR APPROACH

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This paper is discussing the scientific background of a multi-agent educational robot design from the designer's point of view. From the early years of the systematic use of Instructional design, educational scientists wanted to use the results of artificial intelligence to support authors, developers, researchers, in their pedagogical work to create "automatic" course designing machines or make the built in process more and more responsive and adaptive to the tuition circumstances, therefore design a more intelligent training material. The tracks of this huge work show that the approach of the robotisation of instructional design approach is slower that was initially expected. The last thirty years' developments in this discipline therefore are still in an emerging phase. The problem of not knowing how we learn, and the limitation to theoretically describe any learning content, leads us to particular solutions for particular problems. General solutions need radical changes in the approach.

The aim of the I-Tutor project is to develop this multi-agent based intelligent system to be applied in online education and that does not rely on a deterministic approach. Students and teachers could, thus, take advantage of the ITS as a boundary object to regulate teaching and learning process during their actions in a way that could be personalized and foster reflective processes. In this paper we show examples of some mayor research steps towards the solution of intelligent instructional design, and conclude to a new approach of learning design that was used in the I-Tutor project aiming at testing a new educational robot containing learning design elements as well.

TEACHER VERSION 3.0

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With 'Teacher version 3.0' concept, teachers become better at using new media in class as it both inspires and forces them do develop a concept of their own.

The workshop concept facilitates a feeling of comfort for teachers as they plunge into doing digital teaching with colleagues.

The all-knowing teacher of the past will become a facilitator and a digital organizer.

We are at a crossroads where we must reconsider what the computer or ICT can do for us and not just what we can do with it! Computers and mobile devices are mediating how we learn and teach. Therefore, the challenge is to establish a new concept for teaching where teachers and students can explore and share their experience of digital devices and applications in a comfortable way.

To address this need, Niels Brock has developed a digital skills course the aim of which is to inspire teachers to develop and share digital learning products. At the same time they will become confident with technology and be able to establish a best practice within their field of expertise.

Niels Brock's digital skills course is to inspire teachers to develop and share digital learning products. In workshops, they get hands-on knowledge of digital learning products and learn to create concrete products themselves – ready for use in their own teaching.

The concept and e-competence framework will be presented and demonstrated by samples. The concept is unique as it integrates technology in pedagogical practices as new e-learning solutions linking students and teachers.

Framework – the individual modules are project-oriented, alternating between training course, individual work, project work and guidance. Each module ends in a concrete product, which each participant develops for his or her own teaching. We do this to ensure that the teacher's day-to-day work forms part of the project and that work efforts pay off as they contribute to the actual teaching.

This is the essential idea behind this framework; namely to ensure a transfer between course module and the teacher's day-to-day work.

What you get:

- Schools – teachers become better e-skilled. Better pay off on hardware investments. Kick start of knowledge sharing.
- Teachers – get to know how new media can be integrated to become a natural part of the daily class. Through common experience, teachers will upgrade their individual e-skills.
- Students – become more engaged and responsible. Mutually learning communities arise, because we learn from on another – teachers and students.

LEARNING QUALITY FOR ROMANIAN STUDENTS AT-RISK – THE EXPERIENCE OF AN EDUCATION PRIORITY AREAS PROJECT

Angela Teşileanu, Institute for Educational Sciences, Romania

An Education Priority Areas project run in 2012-2013 by the Institute for Educational Sciences

Since 2003, the Institute for Educational Sciences developed each school year, an Education Priority Areas (EPA) project, having the financial support of UNICEF and also some NGOs as partners. The project involved schools from different counties of Romania which had in common some characteristics, such as: being located in socio-economically disadvantaged areas and/or in communities with large Roma population; large number of students at-risk having poor school performance and being in danger to drop out the school; poor situation of the students' families.

The EPA project conducted in the school year 2012-2013 has as main goal the development of a system of intervention targeting the educational causes of absenteeism and drop out in the schools involved in the project.

The experience of the EPA teacher training programme as a support of the learning quality for the students at-risk

The face to face training course for teachers who teach *Civics* in primary and secondary education was conducted on the basis of some major options regarding the design of learning, such as: a) the deconstruction of didactic stereotypes in approaching the learning to *Civics*; b) the focus on significant learning, relevant for the needs of students at-risk; c) valuing in the formal education developed in school, in classes, of some acquisitions acquired by students in non-formal and informal learning. These options are interrelated; the first aspect regarding the didactic stereotypes that may arise in implementing the official curriculum, aimed at raising awareness of teachers about the need to design significant learning activities, taking into consideration real aspects of the teaching practice; but such a goal has as a starting point just the deconstruction of stereotypes and prejudices.

The practices of teachers are not only a starting point for designing the significant learning but also the turning point in designing a learning of a different kind. The argumentation of this claim can start from the following fact: practices that support the significant learning involve a certain philosophy of the curriculum implementation that goes beyond *learning about ...* (which corresponds to a cognitive, informative level), involving also *learning through ...* (which corresponds to a level of participation, of active involvement), and *learning for ...* (which corresponds to a level at which learning is reflected in the promoted values, attitudes and behaviours). In a situation where the teaching approach stands only in the transmission of knowledge (focusing on *learning about ...*), it is obvious that learning does not target the possible implications for other plans of behaviour (affective and attitudinal, moral and actional). At the same time, the option to support the formal education on the acquisitions of students in non-formal and informal contexts of education is based, on one hand, on structuring the learning situations, starting from the experience of students, and on the other hand, on increasing the relevance of learning, from the real life perspective.

The online interaction with teachers participating in the training course was designed in the form of online discussions in a forum. For discussions were set two topics: *How can be realized the teaching approach to Civics, so that the students learn through participation/by participating?*; *How can be used the project method in the activity with students?*; the course requires that each of these topics to be discussed with participants, for several weeks; for each topic are posted resources that can be used by teachers.

The training activities made the teachers to approach with "other eyes" the learning design, focusing, at least, on aspects, such as: a) identifying learning problems of students at-risk of dropping out and their needs; b) contextualizing curriculum in the learning activities conducted with students at-risk and designing significant learning activities where the emphasis is on practicing basic competences and not on transmission/acquisition of contents; c) valuing the potential of the students at-risk. The training course includes challenges and opportunities; challenges are related to the need to focus on the quality of learning in EPA schools, even if the teachers face with real learning difficulties of the students; opportunities are linked to the creation of real premises for change and for optimize the learning activity in EPA schools; this is possible through assuming by the teachers the role of factors of change.

SIMULATING INCLUSIVITY, BROADENING PERSPECTIVES

Lesley Shield, Christine Gardner, The Open University, United Kingdom

With the growth of synchronous audio- and audiographic tools over the last decade, environments supporting synchronous voice and shared workspaces have gained purchase. The use of synchronous tools can be seen as more 'inclusive' allowing participation by those previously excluded by distance and the time involved in travelling to the nearest face-to-face tutorial. However, adult part time learners need flexible study with opportunities to interact at times convenient to them. Online learning activities that rely on synchronous communication could limit inclusivity, with some learners being unable to participate in real-time events.

In this paper, we argue that while synchronous technologies may increase immediacy and, perhaps, 'presence' for learners, they can also exclude by their very synchronicity. We present the outcomes of a piece of exploratory action research in which we investigated how a synchronous learning activity might be designed to:

1. promote inclusivity for those unable to participate in real-time.
2. encourage learners to take responsibility for their own learning in a secure and non-threatening environment rather than depending on the tutor.

Within the context of a totally online postgraduate module for existing and new 'elearning professionals' who were located around the world we investigated the two questions above. This module employs the audio/videoconferencing tool, Elluminate to offer students synchronous 'tutorials'. Although these are intended to provide increased opportunities to communicate with fellow learners, there are various constraints on student participation due to the nature of the student body, technical difficulties and the dual effect of live English language-medium tutorials mediated via an often less-than-perfect audio-channel. Thus, a tool that is intended to promote inclusivity may not have the intended effect.

To explore the effect of going beyond the synchronous tutorial to promote inclusivity, we adopted an approach that transformed the 'traditional, hour-long tutorial structure of 'presentation, practice, production' into a *simulation globale* that took place over several weeks and made use of a range of synchronous and asynchronous tools. Two separate groups of adult, distance learners were invited to work together to collaborate in a redesigned version of an Elluminate-based tutorial that occurred towards the end of the module. The activity was designed to have four phases; each phase used a single tool or combination of tools to achieve the original learning outcomes and the outcomes added for the redesigned activity. Both qualitative and quantitative data were collected both during the activity and after its completion.

While only a small number of invited learners participated in the synchronous part of the redesigned activity, asynchronous activity in the wiki and collaborative group blog was, in contrast, relatively high. This seems to support our hypothesis concerning the necessity to offer alternative pathways through activities for distance learners.

Research evidence suggesting that the adoption of a persona allows learners more freedom to express themselves seems to be borne out in the responses from participants in the current study with learners moving beyond the boundaries of the module-provided materials, researching and sharing resources to reinforce their ideas, thus developing their abilities as independent learners.

IMPROVING THE LEARNING EXPERIENCE: SUPPORTING STAFF TO SUPPORT STUDENTS THROUGH PROFESSIONAL DEVELOPMENT AND APPRAISAL

Anne Gaskell, Roger Mills, St Edmund's College, United Kingdom

The quality and competence of teaching staff can have a direct impact on the student experience. Students report very different experiences from different institutions, for example in the UK's student satisfaction survey (http://www.thestudentsurvey.com/) and other similar national surveys. However, teaching and other university staff need support and development themselves to ensure that they can provide the best possible student experience.

This article examines one way in which the Open University, UK (OU UK) has implemented a process of career development and staff appraisal (CDSA) for all its 11,000 staff over the last 20 years. (Both authors spent most of their working lives with the OU UK). CDSA involves a regular discussion between a member of staff and (usually) their Line Manager in which previous performance, current plans and future objectives and development are discussed. In addition to supporting staff, the process also enables the alignment of University, departmental and individual priorities.

The origins of the process, which initially involved a relatively informal discussion between a member of permanent salaried staff and their line manager, are outlined and the issues and principles that arose are discussed. In the 1990s CDSA became a more formal annual process for salaried staff with documents and procedures agreed between University management and the University and Colleges Union (the negotiating body for University staff terms and conditions in the UK).

In 2010 it was agreed that CDSA should be extended and implemented for all the University's 7,000 part-time tutors (Associate Lecturers – ALs) by 2012, and the paper discusses the issues that arose and the very positive feedback received from an external evaluation of the experience of early adopters in February 2012. It is hoped that data from an evaluation in early 2013 can be included at the conference.

The CDSA process raises a wide range of issues about how staff can best support students and the quality of their learning, and how institutions can best support staff and their development. Information and issues arising from the process and evidence from evaluations will inform discussion at the conference and some questions are included at the end of the paper.

LEARNERS' EXPERIENCES ON ONLINE TUTORING: PEDAGOGICAL AND PSYCHOLOGICAL ASPECTS

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Introduction

Online tutoring involves more than a simple exchange of information between the online tutor (OLT) and the learners. It entails a series of interactive exchanges of a pedagogical nature that demand different roles from the online tutor together with the use of a variety of teaching strategies depending on the type of task, the type of interaction and the type of learner. While there is a vast amount of information related to the types of interactions that take place in online courses and how these interactions build up online communities, little has been researched about the online learners' experiences regarding online tutoring particularly attending the way in which learners view the pedagogical, affective and emotional support received from their tutor during a course.

This paper, aims to show findings of an exploratory case study where online learners (OLLs) expressed their views on how they perceived the feedback received during an updating online diploma course in Mexico. However, views on pedagogical and affective features regarding the performance of their online tutors (OLTs) inevitably emerged.

The study

Sixteen OLLs participated in the study. They are all language teachers (10 Mexican, 6 French and one Mexican-Argentinean) who took the online module "Evaluating Processes in Language Teaching" for updating purposes. The module lasted 12 weeks. Participants completed four units that involved a total of 20 learning activities including the final project that was developed during the course. Two OLTs were in charge of the course and each of them moderated eight participants throughout the course. They provided group and individual feedback to learners after each of the activities in an asynchronous way and accompanied them along the course. The data reported in this study are based on the results of sixteen questionnaires and 16 subsequent interviews given to all participants.

Findings

Two main themes emerged from the data obtained in the study. OLLs focused the answers related to the OLT's performance on pedagogical and psychological aspects. Regarding the former, OLLs agreed that the tutor's feedback is an essential element in online courses and should be present throughout the course. They see feedback not only as a way to praise learners' work or point out learners' weaknesses but view the tutor as a guide and as a provider of new information. OLLs added that the feedback provided by the tutor helped them to reshape their thinking and construct knowledge. In this respect, OLLs view in the tutor the content expert and therefore expect him/her to be knowledgeable, being able to answer doubts and to provide extra resources when needed. Furthermore, participants expressed that they expected timely, specific and relevant feedback after each of the activities they developed. Aspects such as the relevance of OLTs feedback, methodology, self-regulation and netiquette also emerged in the study.

Regarding the latter, learners addressed three main issues: motivation, the emotional and affective side of OLTs' feedback and the relationship with the tutors. Learners perceived motivational messages from different perspectives depending on their personality and individual differences. They also expressed their positive and negatives views towards the feedback received and shared their emotional reactions.

Final reflections

This small-scale study has shown only a few aspects of online tutoring. The pedagogical aspects mentioned (tutors' methodology, use of strategies, teaching approaches, provision of feedback) need to be addressed in more depth since they might be underestimated in an online environment. Any OLT involved in the delivery of a course should reflect on his/her pedagogical practices and think of ways in which he/she can make the learning experience more meaningful, rewarding and memorable for learners.

A NEW INDIVIDUALIZED ON-LINE LEARNING EXPERIENCE

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Assessment carried out on learners' competencies at their key stages throughout their education has a profound leverage on distance learning systems efficacy. One of the most important aspects of evaluation and monitoring of students in distance learning is the content of the teaching materials and how it is presented to learners. The research project Orbis Dictus, implemented by the Department for Educational Design (DiPED) of Roma Tre University, has as its main aim the representation of an innovative way to deliver an automatically adapted e-learning material based on lexical statistical computation and measuring relevant educational competencies such as reading comprehension. The project outcome involves developing a new technological model for learning interaction applied to new technologies. We are trying to design a tool useful for every learning need while focusing on the learning approach at the same time. In other words we created a complete, functional and user-friendly technological model for learning interaction (teacher and student friendly).

This paper provides an understanding of some tools when put together will form a functional and efficient automated system that starts with a test creation tool (LexMeter), a progress monitor (ProgressMeter) and a text modulator / adaptor (Adapter) that delivers a document tailored to the individual's needs based on his/her performance in the previous tests that provides the system with useful data for eventually a better understanding of the student's lexical knowledge and adaptation of the course materials accordingly.

Reading is one of the basic skills in learning and often, it could represent the main way of learning in distance education courses. In order to obtain an outline of the potential reader in a distance course, we identified in the first place the *virtual reader* profile, i.e. the optimal level of verbal competencies needed to comprehend texts presented in the course.

Hence, the underlying idea is that linguistic formulation of messages offered to students during the course is one of the most important characteristics in distance education. The *Orbis Dictus* model is considered innovative also for its capacity to adapt the message according to the learner's progress as it estimates and takes into consideration his/her lexical knowledge as one of the major factors to determine the efficacy of the message delivery.

In this contribution we presented an innovative new approach to the automated creation of the tests and subsequent modulation of didactic materials. The innovative method used to adapt the educational message and not the entire content leads to a new adaptation level considering that the modulation is a new factor that has never been highlighted in previous individualization approaches.

In addition, the Orbis Dictus educational platform, that integrates LexMeter, ProgressMeter and Adapter tools, is used in the am-learning project in order to evaluate the lexical skill of the University of Rome students "La Sapienza", the University of Modena-Reggio Emilia and the University of Rome "Roma Tre". The use of the platform during normal teaching activities for undergraduate students allowed teachers to track learners' progress during the course and have them conscious of their improvements.

The two different outcomes of am-learning project, the Orbis Dictus model and its implementation, represent the starting phase in developing not only a comprehensive educational theory but also an empirical experience of a new e-learning system.

THE ROLE OF LEARNERS AS VALUE CO-CREATORS IN E-LEARNING

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Introduction

The development process of distance education courses as well as eLearning courses has been conventionally seen as a tightly structured value chain from needs analysis through evaluation and continuous improvement. This development process has replicated and imitated the production processes and value creation processes of industrial goods. However, the value creation in modern eLearning environments is mainly based on active communication between different actors. Thus value is not created mainly through a well-designed production process, but rather through active co-creation between teachers, tutors, learners and the larger society. Also the understanding of value should be viewed from a new perspective – value should not be measured only as direct learning outcomes, but also as participation and involvement of the learners, co-learners, teachers, and supporters.

The role of learners as value co-creators

According to the modern view of eLearning, value is not created by effective provision and planning, but rather through a continuous dialogue with the learners. Other learners – co-learners – are becoming important actors in the value creation process. The role of the teachers and tutors is changing and becoming more challenging, as they become a part of on-going and ever evolving dialogues. In practical terms, four approaches can be suggested in accelerating value co-creation by the learners in eLearning.

Firstly, the expertise and interest of the learners must be understood, recognized and supported. Thus the learners must really be understood as "subjects, not objects" in their learning work. The learners should also be encouraged to share their knowledge, learning experiences and ideas with other learners. It should also be noted that encouraging rich user profiles enables users to describe themselves.

Secondly, the creation and communication of creative work should be recognized and rewarded. Thus instead of only recognizing compliance with learning objectives, the recognition and rewarding should include also active collaboration and contribution. Also the rewards in co-creation environments are different – the active contributors can also gain social capital, which can be an important motivator.

Thirdly, teachers, tutors and other actors should be introduced to this new value co-creation environment and also trained to utilize its full potential. In particular, this means that the roles are changing, but also the time allocated and used is in change. As the role of the teachers and tutors is altering, it should be recognized that their key role in the future is moderation. From the research of online communities we have learned that good moderation is generally desirable to improve information quality.

And fourthly, clear and unambiguous guidelines should be provided for all actors. Important areas to cover are, among others, immaterial property rights (IPR) and scheduling of work. Value co-creation does not just "happen", it must be planned and implemented properly.

Conclusions

We are moving in eLearning from closed learning environments towards open learning environments. Our learners are able to identify, assess and utilize good learning resources and content from the wide provision of the Internet. Simultaneously the role of the teachers, tutors and supporters is also changing, and their new key role is the facilitation of learning, knowledge creation, assessment and sharing.

At the heart of the new strategies for in eLearning is the understanding of value creation: is value created by a well-planned and well-controlled educational provision or is value created with the users in continuous communication?

WHO IS THE JOY OF LEARNING IMPORTANT FOR?

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The joy factor of learning came into the focus of educationalists due to the progressive educational movement and then the concept of Lifelong Learning highlighted the importance of attracting and retaining adults in education. However, it is not treated alike by the different stakeholders. As the results of the survey of BME suggest learners see the joy of learning through different lenses depending on a number of traits and learning related conditions. While the survey also suggest that digital learning environments tend to be more suitable for joyful learning our students still find the joyful elements of mainstream learning environments. These findings point to an increasing utilization of the 'good' parameters of both the 'old' and the 'new' learning environments. To make joy more embedded in different learning environments still much has to be done by the stakeholders in their relevant fields.

DESIGNING AN E-TUTORING SYSTEM FOR LARGE CLASSES: A MIXED-METHOD RESEARCH

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This study aimed at assessing the perceptions of 167 teachers about the tutoring system adopted in an online training course involving teachers from 20 Schools of Sesimbra, Setúbal and Palmela counties. The course, called "Distributed Knowledge with Web 2.0", was officially certified as a blended learning modality, with the duration of 50 hours, 41 of which occurred online in two editions, the first in February and the second in July of 2012, each one of them involving respectively 82 and 85 teachers, divided in four classes with about 20 trainees each. This blended learning course was designed at producing educational materials in digital format, and included autonomous and group activities, knowledge sharing and reflection. A learning environment, supported by the Ning platform, was set up. At the end of the course, the trainees answered to a pencil and paper survey, in order to evaluate the adopted online tutoring strategy. Additionally, the trainees' final reports contained evidence of how the trainees assessed the tutoring model component of the course; both the survey and the reports were the basis for this research. The results show that the teachers who attended the two course editions disclosed very positive perceptions about online learning, a modality they consider adequate to their current professional status and conditions. The trainees also showed their intention of, in the future, opting for blended training arrangements. Future developments of this study involve a content analysis of the tutor's posts, in order to understand more accurately the tutor's messages characteristics, in their social and cognitive dimensions.

HOW TO KEEP LEARNERS MOTIVATED AND EXCITED IN TECHNOLOGY ENHANCED LEARNING

Rahela Jurković , WYGS, Croatia, Peter Mozelius, Stockholm University, Sweden, Kevin Lowden, University of Glasgow, Scotland

In the 21st century there have been several reports on students' lack of engagement and academic motivation and that motivation is a key factor in academic success. The aim of the study was to describe and discuss how some selected models for motivation of students/adult learners could be applied in contemporary technology enhanced learning. The main approach is the case study strategy where a case study is defined as an empirical inquiry investigating real world contemporary phenomena that takes into account context. Case studies are strategies where the researchers explore and evaluate processes, programmes or activities in depth using a combination of data collection methods with the idea that the different sources of evidence together could generate a deeper understanding of the analysed phenomena. Our case study consists of three embedded 'units': the Zagreb unit, the Stockholm unit and the Glasgow unit, and three models for motivation explored in each unit.

In the Zagreb unit we are exploring the case of a Grundtvig workshop "Learn in Croatia about Cultural Differences", organised by WYG Savjetovanje (a private adult education provider) in Zagreb in 2011. The workshop involved 20 adult learners and trainers from 7 countries: Bulgaria, Croatia, Ireland, Poland, Romania, Turkey and the United Kingdom. The Stockholm unit case consists of two separate parts: a minor literature study on John Keller's *ARCS (Attention, Relevance, Confidence and Satisfaction) Model of Motivational Design* and an analysis of the university course *An introduction to programming* (ID:INP), a mandatory course for students following the programmes for Interaction design and Market Communication and Information Technology at the Department of Computer and Systems Sciences (DSV), Stockholm University. In the Glasgow unit we draw upon findings from a research project conduced over the past two years by researchers in the School of Education at the University of Glasgow that examines a new approach to Continuing Professional Development (CDP) in STEM (science, technology, engineering, mathematics) education for primary teachers. Making use of new technologies and working with an experienced media presenter, the project aimed to provide non-specialist teachers with greater confidence and motivation to teach science topics in the curriculum in a way that would enhance pupils' engagement with and enjoyment of science.

The main findings to emerge from the three different models studied are the following:

- Openness of learning environment to the learners' own interests and different learning styles can increase the value of learned in both traditional and virtual types of education;
- Supporting teachers/trainers by engaging them in undertaking practical, technology enhanced, experiments with pupils/students (such as creating shareable short videos) which improves their own practice and positively influences the motivation of learners, developing their evaluative understanding, team working and discussion skills;
- Communication, discussion and interaction among learners participating in the same course increases the effectiveness of their learning and motivates them for further learning, while scaffolding and facilitation sessions can increase learners' confidence in traditional education as well as in virtual online environments.

The conclusions based on comparison across the three models' findings are the following: effective learning for adults or children occurs when they are given opportunities to engage in shaping their own learning through practical experience as part of the learning process. Therefore, learners should be able to test their knowledge via interacting in an enquiring way with their learning context and solve real world problems.

PLAYING GAMES: DO GAME CONSOLES HAVE A POSITIVE IMPACT ON GIRLS' LEARNING AND MOTIVATION?

Lucy Kitching, Steve Wheeler, Plymouth University, United Kingdom

Information and communication technology (ICT) is an educational phenomenon, with an exponential increase in the use and range of technologies employed in today's schools. ICT tools can empower learning across the curriculum, allowing children to become active learners through interaction and collaboration, providing them with rich learning experiences. Prensky identifies three skills needed for 21st century learners to succeed; learning in virtual communities; communicating using video; and interacting with coding.

Robinson argues that the current education system remains rooted in the industrial age and thus education fails to offer learners the tools they need. He believes that collaboration is crucial for children to think divergently, and one way to enable this learning is through technology. Due to the reform of the National Curriculum (Great Britain, Department for Education and Employment, 1999), the next generation of learners, also contentiously referred to as the 'net' or 'digital' generation, will now be taught computer science and programming skills. It is thus claimed that future society will be able to develop its needs in many different industries such as video games and visual effects. Clearly, this is a claim that is yet to be verified, and much research is required to establish its veracity.

Games based learning and gamification are currently hotly debated topics in education and are ripe for study. Many schools are exploring ways in which games can be embedded into the curriculum, to enhance learning through deeper engagement and higher levels of motivation. This paper explores the use of game consoles to support learning for young students (ages 8-11) and evaluates their recent success in primary education. Over time game consoles and video games have been portrayed as a male oriented technology. This research investigated the current use of game consoles in learning and how it might positively affect a child's learning and motivation, but focused solely on female students' experiences. In the study we investigated the research question: 'Do game consoles have a positive impact on girls' learning and motivation?' A semi-structured questionnaire was distributed to girls in Key Stage 2 (n=49) across three schools that have already incorporated game consoles into their curriculum. The study found that game consoles and video games can have a positive impact on girls' learning and motivation and are key themes that have been raised by teachers. However, due to several limitations in this research some issues were not fully addressed, and we identify some future areas for research.

ADAPTIVE AND ADAPTABLE GAMEPLAY: AN INSTRUCTIONAL DESIGN APPROACH FOR INDIVIDUAL DIFFERENCES

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Introduction

This paper presents an instructional design approach to realizing effective adaptivity in educational games, and discusses various player and gameplay characteristics that can be integrated in learner/player-centred adaptivity algorithms.

Adaptive and adaptable gameplay

The majority of educational games today seem to implement a low-resolution form of adaptivity at the level of individual players, based on player profiles that are being obtained by stereotype modelling. For example, a player can be assigned to one of three difficulty levels based on a prior knowledge test. The problem with this low-resolution approach, however, is that classification is based on one single measurement at a certain moment, and that players are assigned to groups or predefined player types. Moreover, adaptivity models often do not take into account that game interactivity may induce cognitive load and may hence also determine in-game difficulty. In contrast to the low-resolution approach, a micro-adaptive approach is more dynamic, fine-grained and player-centered. For instance, the attempts on single items can be logged so that errors can be analyzed at run-time, or reaction times can be logged and used for realizing run-time adaptivity.

Taking an angle of attack inspired by educational research on individual differences, this paper presents an overview of player and gameplay characteristics that can be taken into account when developing micro-adaptive algorithms for educational games. First, it presents possible *sources* of adaptivity ("adapt to what?"):

- Prior and runtime player characteristics (e.g. prior knowledge, learning style/cognitive style/cognitions, gaming skills, personality, goal setting and motivation)
- Gameplay characteristics (i.e. in-game behaviours)

Further, we suggest possible player-centred adaptations, which are the *targets* of adaptivity ("adapt what?"). These include: gameplay mechanics, game scenarios, game worlds and objects, feedback, and learner control.

Conclusion

In this paper, two dimensions of adaptive instruction will be discussed: sources and targets of adaptivity. The sources include player and gameplay characteristics. Based on the sources, it can be defined what elements in the gaming environment will be adjusted (i.e., targets of adaptivity). Although source and target of adaptive instruction can be considered as crucial components in adaptive instruction, the framework for adaptive instruction also includes the time of adaptation (i.e. static or dynamic); method of adaptation (i.e., learner-controlled; system controlled; shared control) and context of adaptation (i.e. device, time, place). It should thus be noted that the topics covered in this paper only represent a small, although significant part of the broader framework of adaptive instruction.

With the conceptual framework presented in this paper, educational games researchers now have a tool that can be used to perform the following research steps: (a) the creation of game states based on valid and reliable measurements of player and gameplay characteristics; (b) the experimental validation of game states; and (c) the overall effectiveness of adaptive educational games.

NEW TOOLS FOR NEW STUDENTS – GAME ABOUT DECISION MAKING ADAPTED TO VARIOUS LEARNING CONTEXTS (GADEMAVO)

Anne-Dominique Salamin, David Russo, HES-SO, Switzerland

"Play is our brain's favorite way of learning thing" (Diane Ackerman, Deep Play)

University of Applied Sciences Western Switzerland (HES-SO) faces various challenges. One of the main challenges in the curriculum HES, in every faculty, is to train future professionals able to understand concrete problems, sometimes critical, to sort and organize a plethora of information and make appropriate decisions in extremely fast and changing situations.

On the other hand, university teaching experience shows that students regularly express difficulty in transferring theory to professional practice particularly in crisis or emergency situation. Besides, if they are able to apply procedures adequately, they are less prepared to produce new solutions to solve complex cases. The e-learning Center HES-SO Cyberlearn have assumed that providing them with a small-scale simulation game will sustain the emergence of proper competences and help student to be adapted to their future professional context.

Based on problem solving and decision taking, **GA**me about **DE**cision **MA**king Adapted to **V**arious Learning c**O**ntexts – GADEMAVO simulation game offers to our so-called digital natives students a new instrument. Based on playful interaction GADEMAVO will also provide concrete and meaningful information on students' practical use and feedbacks to help pedagogical designers to realize adapted instruments fitting these new public expectations.

Studies undertaken by Piaget on knowledge building-up, by Dewey, Freinet or even Montessori, who stemmed from the active pedagogical school, have demonstrated that playing games contributes significantly to the learning process. Additionally, two inquiries undertaken in 1993 and 1999, led by researchers at the University Paul Sabatier (science and medicine) (Toulouse III)[1], reveal that 77,5% of students appreciate serious games, and one third claims that the main attraction of a game consists in studying without being aware of it. The most recent inquiry dealt with oral activities carried out in all first year cycles at the IUT University. The use of games was voted in by 87% of the students. Only 37% claimed to enjoy magisterial lectures.

From a pedagogical point of view, using games seems a pertinent approach based on this new learning profile, to involve students, confront them to new ways for addressing knowledge and make them progress in a significant manner. Without replacing the older teaching means, a relatively moderate use of games might encourage students to interact, be active, be participative, while at the same time getting immersed in a well-appreciated fictive and playful universe, making it possible for the professor to maintain their attention, to strengthen their participation and to reach the set learning objectives.

The e-learning Center HES-SO Cyberlearn has, therefore, decided to refer to an actual case in order to estimate the possible benefits brought forward by using such a game in some of its university courses, by developing a simulation game. Our objective is three-fold:

- Engage the student
- Contribute to the development of the student's ability to make decisions in a complex environment
- Test the use of this game among this audience and assess the results, both from the point of view of the professors (reaching learning objectives and involving students), and the students (offering an unprecedented learning experience and improving their competence)

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[1] Communication at the Congress of APLIUT, Activités de création et activités ludiques, Angers, 10-12 June 1999 – www.lairdil.org

SEEKING FOR THE ADDED VALUE OF VIDEOGAMES AND SIMULATIONS

Sergio Vasquez Bronfman, ESCP Europe Business School, France

Videogames and Simulations (V&S) are becoming a hot topic in learning and education. A substantial amount of research and experiments had been done in the last ten years, which grows every month and every year. In this paper I explore the field of V&S by focusing on its added value for learning. In other words, my research question is: *What can be learnt with V&S that cannot be learnt (or poorly) with other pedagogical tools or techniques (such as case studies, role playing, problem-based learning, etc.)?* Building on the work of Donald Schön on reflective learning, Fernando Flores and Martin Heidegger on learning from breakdowns, my intuition is that V&S are the best environments for reflective learning because they create breakdowns ("surprises") very frequently, hence forcing players to reflect on and in action. In this sense, V&S can be referred as *breakdown creation machines.*

In order to search for the added value of V&S for learning I also build on the work done by James Paul Gee and his colleagues at Wisconsin-Madison. Their research program starts with the finding that many people (especially young people) are willing to spend many hours doing hard, long and complex activities, i.e. playing sophisticated videogames, and they enjoy it. Why these people don't spend so many hours doing other "hard, long and complex activities" such as mathematics, physics, biology, history, literature, etc.? What is in videogames that people love so much? Are there underlying learning principles embedded in games that teachers should apply in the design of their courses? Jim Gee's investigation is aimed at answering those questions.

The paper describes a business simulation done at ESCP Europe Business School, in its Paris, London, Berlin and Madrid campuses, for MiM (Master in Management) students. Data came from an evaluation questionnaire completed by all students that gives both quantitative and qualitative data. In addition to that, we have been able to access data by doing observation and participant observation. The results show that students practiced reflection-*on*-action when discussing the results after a simulation round (there are 6 rounds on this simulation) and when discussing their views during the decision process (because of the system's feedback), but only some students practiced reflection-*in*-action when preparing their decisions (based on system's feedback, the trial and error process, etc.).

Also our research show that, for this simulation, the added value of V&S can be summarized in two main points: a) the *systemic nature* of management: there are relationships between financial ratios, there are relationships between functions (the decisions you make when designing a car have an impact on production costs, hence in price, etc.), in other words there are always a multitude of factors to take into account; and b) students experienced the fact that the decision-making process is always done in *uncertainty* ("You can't know what other teams will do", "The situation is changing all the time", etc.).

Last but not least, in all of this learning players had fun (in particular "hard fun").

ENHANCING THE LEARNING EXPERIENCE THROUGH VIRTUAL TEAM TEACHING

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Co-teaching is not a new concept and has been adopted in both traditional and online classrooms. In a virtual setting, this form of teaching offers a variety of possibilities especially given the hallmarks of anywhere, anytime teaching and learning. Because instructors are not necessarily located in the same place, different pedagogical and managerial aspects need to be considered when implementing this form of online teaching. There are also enormous possibilities to be explored, which can add richness to both the learning and teaching experience. This paper presents the current literature on co-teaching within the online classroom and examines both the benefits and challenges of the approach, as well as presents strategies for incorporating co-teaching for the benefit of faculty, students, and administrators.

Instructors who co-teach online are separated in time and space from peer instructors and require many of the skills that teleworkers develop as they transition to working at a distance. These skills include: setting the boundaries of responsibilities, ensuring a balanced workload, delegating and taking charge when needed, sharing and co-creating, adapting to personal differences, and enhancing communication and presence. In deeply analyzing these skills, it is clear that all depend strongly on one important aspect: trust. An inherent feeling of trust, supported by actions, is essential for building the necessary relationship between co-instructors. Trust is not the same as friendship; friendship can be helpful, although it is not essential to co-teaching. A number of instructional benefits can be realized through online co-teaching, such as sharing of the workload, opportunities for learning new approaches from other instructors, and more flexibility. In addition, co-teaching can be an effective way to develop mentor-mentee professional relationships.

Learners also benefit from the co-teaching environment, for example, by learning from two instructors with different perspectives and experiences. In a traditional setting, two instructors cannot be talking at the same time, although in such a setting the identity, personality, and responsibilities of each instructor is more evident to learners. With this form of teaching, co-instructors can also provide more comprehensive and focused student support.

From a program management point of view, creating opportunities for co-teaching requires leadership and management skills that are not necessarily the same ones for running an online program. Managers of online programs need to be able to identify potential pairings through knowledge of faculty, create the proper environment for supporting co-teaching, put in place the correct incentives, and be an agent of change when dealing with resistance or personal challenges.

Within the Master of Distance Education & E-Learning (MDE) program at the University of Maryland University College (UMUC) and Oldenburg University, we promote and create real opportunities for online co-teaching. Such practices have reinforced relationships and expanded into larger collaborative projects. They have also imposed challenges and revealed limitations, specifically in regard to institutional support structures. In our presentation, we will discuss the benefits and the challenges of the practice of co-teaching online, offer a set of overall best practices, shed light on the major barriers, and discuss strategies for how these can be overcome. The findings that support this presentation have been gathered from the literature and our own practice and collected through a survey from faculty who have engaged in co-teaching models, as well as from those who have chosen not to co-teach.

ALIGNING ONLINE DISCUSSIONS WITH BLOOM'S CRITERIA FOR HIGHER ORDER THINKING

Conna N. Condon, Mehraz Boolaky, University of Liverpool, United Kingdom

The Problem

The importance of class discussion dates back as far as Kolb's study in 1984 when the process was identified as critically important to learning. They are used to achievement of online course objectives. According to Webb, Jones, Barker and van Schaik student achievement of learning outcomes was significantly related to student participation in discussions via original discussion question submittals and replies. Higher levels of substantive participation correlated to higher grades on course exams.

This approach assumes that students have the skills and culture needed to engage in critical thinking discussions (sometimes called arguments or debates). However, some studies have shown that students are not always effective at engaging in critical discussions. This may happen more often within institutions that grant access to students who are embarking on a programme of studies without a prior basis in critical thinking. Land found that enrolled students are often limited in prior subject matter coverage. Such students might face difficulties in efficiently and effectively commenting on each other's ideas and thoughts. Other students may have been culturally inculcated not to question tutors or authors as a sign of respect. They may hesitate to challenge what an author has put forward. Additionally, faculty might face challenges engaging students in higher order critical thinking for their own educational and cultural reasons. Facilitators may be subject matter experts but not critical thinking experts.

The Study

Strang hypothesised that 'teacher-driven Socratic questions (to rouse critical thinking conversations) will be more effective than facilitating traditional student-student discussion forum interaction', it was found that there were more interactions among students and mean grade scored was also higher. If a question asks who, what, when or where the student can quite simply find and report the answer. The student demonstrates research skills but no other thinking skills. Depending upon the method of presenting this unoriginal information the content will be measured as Bloom's Higher Order Thinking (HOTs) level 1 through 3.

Critical thinking happens when some form of 'why' is asked. Winsted suggests that creating a debate environment for the classroom discussions increases student engagement and stimulates critical thinking. Cooley also creates a form of a debate for her course. She notes that it is important to have such discussions because "Business students benefit from as much exposure to best communication practices as possible". The types of discussions and the facilitative support for accomplishing the discussions both contribute to the success. Ward addresses the use of Bloom's HOTS. In a study of 661 questions only 3% were higher order thinking as asking for evaluation. None asked for analysis or synthesis. In performing a content analysis of an accounting/operations management course this study found that lower order questions produced lower order answers. However, higher order questions frequently resulted in lower order answers, too.

The Solution

It was determined that in addition to asking questions designed to produce Bloom's HOTs answers, that students needed in-classroom tutorials, trainings and rubrics to facilitate and encourage the submittal of Bloom's HOTs essay. A Delphi Panel was formed to develop guidelines customisable to each course which would provide ongoing training to students and faculty in the art and skill of engaging in Bloom's HOTs discussions. A pilot course using the Delphi Panel's materials resulted in significantly increased use of Bloom's HOTs levels 4 through 6. The presentation will provide some information on the results of the content analysis. The focus of this presentation is the use of the Delphi Panel in the development of the Discussion Activities Guidelines.

"THE I IN WIKIS" – EXAMINING HOW CREATIVITY, COHESION AND WELL-BEING ARE EXPRESSED IN STUDENT COLLABORATIVE PROJECTS

Hannah Barton, Institute of Art, Design and Technology, Ireland

This paper sets out to compare the different approaches to a wiki assignment between Irish undergraduate and postgraduate psychology students. The differences in the expression of creativity in the wikis will be addressed with examples of creative elements from both undergraduates and postgraduate wikis showcased.

The differential use of icebreakers in establishing cohesion and setting the scene for a good motivational climate is also highlighted. The importance of establishing group cohesion through these activities and through critical reflection and communication to the well being and functioning of online learning groups will be established from the use of feedback from the student reflections which are submitted at the end of the assignment.

Suggestions on future research in terms of online learning group dynamics and creativity will be presented Creative material from the wikis will be shown through screen shots. A Sample of the wikis will be displayed in the presentation.

ONLINE COOPERATIVE WRITING AS CRITICAL THINKING ENHANCER AN EXPERIMENTAL EXPERIENCE

Antonella Poce, Annalisa Iovine, Università Roma TRE, Italy

Cooperative learning as an added value of knowledge processes

In a rapidly changing environment, success of structured organizations and, consequently, of people involved, depends on the ability to continuously self-reinvent for creating new sources of wealth and activating new opportunities of value creation. In this scenario, e-learning processes play a strategic role because they are strictly linked to knowledge production and knowledge creation, two fundamental ingredients of the innovation cycle. New e-learning tools, in fact, have the ability to rationalise and improve learning processes, allowing possibilities, which support interpersonal exchange of knowledge and consequent building of new knowledge. In this framework, cooperative e-learning activities, such as collaborative writing, is conceived as a new locus of competency development strategies. It enables the exploration of new knowledge domains and cooperative definition of new ideas and projects becoming an added value for knowledge society.

Cooperative writing and assessment tools: the experience at Roma TRE University

The full length contribution describes the theoretical framework which underlines that cooperative learning seems more effective in order to develop critical thinking skills and individual cross sectional abilities, but one of the main issues in online cooperative writing activities is connected to which assessment model is more suitable to identify and develop the above skills: how to assess each participant's contribution? Which experimental and evaluation model should be employed? In the academic year 2011/2012 LPS (Laboratory for Experimental Pedagogy) based at Roma TRE university (IT) carried out an experimental project, with the aim of enhancing higher education students' critical thinking skills, starting online cooperative writing activities. "Critical thinking skills and the reading of the classics", that's the title of the initiative, allowed to devise an assessment model to be used on texts, produced individually as well as cooperatively, to identify higher education students' critical thinking skills.

29 students undertook the pre-test (November 2011), which was a short essay on a text taken from Galileo, "Dialogo sopra i due massimi sistemi del mondo" (1632), and completed their work, as described in the contribution, on the e-learning platform dedicated to the project. On this platform, two lectures, on some passages taken from Rousseau, "Émile, ou De l'éducation" (1762), were podcast, then, students were asked to complete a cooperative writing assignment.

The data analyses were developed along the double diachronic and synchronic dimensions, in order to verify the evolution of students' critical thinking skills.

Results and conclusive remarks

Data collected show a significant increase of values (in the full length contribution details and graphics are given) in each category foreseen by the model used to assess critical thinking skills. Not-with-standing the fact that results obtained represent just indications about the direction to take in the study of such a complex ability as critical thinking, they encourage further deepening of the subject and the group of research is in fact carrying out the work also with groups of students coming from different areas (medical sciences, engineering and education).

FACEBOOK: WHERE STUDENTS ARE IN CHARGE OF THEIR LEARNING

Lynette Nagel, Mia Verster, University of Pretoria, South Africa

Facebook (FB) is integral to students' social communication and activities. It can distract from or enhance learning. Whether any meaningful learning takes place in FB groups without teachers is unknown and is the topic of this research. We explored how 123 students in architecture at a residential university created and used their own FB group for academic purposes. The course was mostly studio-based, with emphasis on design concepts, explored through practical projects. Theoretical subjects ranging from project management to environmental studies completed the curriculum. The FB group was started towards the end of their second year in order to share resources and ideas and communicate relevant information after studio hours; hence the initiator also linked up a Dropbox to the FB page.

The research followed a qualitative methodology to analyse how FB contributed to learning, using the Community of Inquiry framework (CoI) as compiled by Garrison, Anderson and Archer in 2000, which describes the dynamics in successful online and blended learning courses. The CoI, consisting of Social, Teaching and Cognitive presences, indicates the establishment of a learning community. The two November year-end exam periods each had the most posts, namely 1537 in the second year and 1318 in the third year. Although practically all the students followed the FB communication, just over half the class actually contributed posts during these periods.

Social presence comprises personal affective expression where students feel emotionally and socially connected because they have open communication, group cohesion and a shared identity. The findings showed that Social presence was the most prominent presence in both years' posts, containing humour and jokes and posts of an affective nature. It reflected the emotional ties among students who knew each other well from class and studio. Social posts peaked during critical periods in their studies as they shared hardships and encouraged others, while jokes and humour lightened moods. Social posts also provided open communication, where students could express themselves without fear of rejection.

Teaching presence indicates activities that contribute to organisation, design, facilitation and direction of processes that result in meaningful learning. Even without a facilitator, Teaching presence was the second most salient presence in both years, as some students assumed a teaching role and initiated discussions that provided both teaching and cognitive presence. More posts reflected this presence in the third year, and related mostly to design and organisation-type activities providing administrative information, which was required in specific subjects.

Cognitive presence results from activities that foster critical thinking, indicating deep and meaningful understanding of a concept. It is based on the Practical Inquiry Model and consists of four phases, initiated by a Triggering event, followed by Exploration, Integration and Resolution phases. Cognitive presence, though the least salient, reflected the difference between the two years' subjects. The need for discussions often originated in studio, particularly in subjects that required deep conceptual understanding and interpretation. As one interviewee said, "one cannot stay in studio 24/7"; hence the conversation followed them home on FB. The second year leaders generated new ideas and challenging discussions, and also did a lot of explaining, which were coded as Exploration. The third year yielded fewer Cognitive presence posts. Students then mostly discussed particular readers or articles to approach their projects, which were coded as triggering events, but were not followed up by online exploration of new ideas. Interviews with selected participants confirmed that some third-year subjects required factual answers rather than interpretations, and that the nature of projects had changed from collaborative to individual, which explained the difference in CoI presences between the years. The nature of the subjects and projects prompted different kinds of participation in FB, and the FB group strengthened cohesion in the class.

Students felt strongly that lecturers were not welcome in the FB group they owned and regarded as private space. There is evidence that some individuals responded more on FB to the challenges of abstract subjects, while others responded more to factual content that would improve their marks. Facebook use was individual, transient, and reflected the personality and priorities of the users. As students had different learning challenges and priorities, they had different ways of using the social platform to address those challenges. By controlling their social platform, they were in charge of their learning.

WIKIS AND OPEN SOURCE SOFTWARE – ESTABLISH COLLABORATION COMMUNITIES

Lindsay Noël, University of British Columbia, Canada

Technologies for e-learning, particularly collaborative web-based programs, are valuable pedagogical tools that facilitate open learning and distance education. Collaborative online programs are electronic platforms that enable users to review, edit and contribute content with the purpose of cooperatively developing new understanding. They are especially effective teaching mediums because they reflect the tenets of distributed cognition, situated education and constructivist learning, which are particularly useful for teaching.

This paper begins by presenting a review of the literature related to collaborative e-learning technologies. It focuses on wikis and open source software because their purpose is primarily to facilitate joint enterprises and collaborative work. They are also particularly useful in academic contexts and can easily be incorporated into online lessons. This paper presents the various types of wikis and open source software that are applicable to educational settings. It discusses current trends in cooperative online teaching. It also examines potential drawbacks of cooperative platforms, followed by means that educators can mitigate these problems. The paper then presents the pedagogical advantages of using collaborative web-based programs, especially in terms of how they support distributed cognition, situated education and constructivist learning.

Because of their benefits, this paper proposes ways in which collaborative web-based tools can be employed to facilitate learning. It also presents means of supporting spatial and temporal flexibility using these mediums, especially in terms of distance education programs. Applying collaborative web-based platforms using the methods discussed in this paper will help educators enhance the sharing of information, contextualization of content and construction of knowledge in order to optimize learning.

This study shows that collaborative web-based programs are particularly beneficial to teaching. It also demonstrates that they effectively support student learning in online environments. This is because they encourage teamwork, create communities of practice and promote learner-centred instruction. Given their numerous benefits, this study recommends that collaborative online platforms be further incorporated in educational contexts.

THE EDUCATION LAYER – "BOXED-OUT" AND SHARED E-LEARNING

Eva de Lera, Universitat Rovira I Virgili, Magí Almirall, Llorenç Valverde, Universitat Oberta de Catalunya, Mercè Gisbert, Universitat Rovira I Virgili, Spain

Abstract

This paper proposes a new paradigm to change the current online learning spaces and practices. The Education Layer is a new outside-the-box (literally) learning management system for higher educational institutions to truly accept the Internet as the largest learning hub, therefore making learning more engaging and efficient. This newly designed system is in its preliminary design stages and hopes to pave the way to a new generation of learning management environments. Its objective is to truly adapt the these environments to personal learning styles and student's online daily practices and behaviours, to help them achieve their learning objectives with increased motivation and engagement, within their institution, and beyond (sharing courses and resources with other institutions).

Introduction

Through a simple-to-install plug-in, all students of higher education institutions will be able to easily and quickly download and integrate a top or bottom Education Layer (EL), similar to a bookmark bar, activated through a simple click whenever needed, in all of their desk and mobile devices. The EL contains the student's preferred information and interaction options, considered necessary-by-them to help them guide toward achieving their courses' objectives (communication feeds, deadlines, resources, repositories, etc.). The layer can be used by one institution or by many, by sharing courses, communities, services and resources.

Key benefits

1. Easy to use tool designed for the digital native, accustomed to share, connect, build, save and create.
2. Highly engaging and unobtrusive way for accompanying students in their learning path (avoiding the hassle of going back and forth between browsers/environments, the unnecessary time-consuming obstacles/information and the limitations brought about by a "boxed-in" educational environment or learning management system).
3. Allows for simple sharing of courses, resources and more, amongst other partner institutions.
4. Easy to install, following similar common used plug-in instalments.

The Education Layer aims at freeing the learning potential and path from the institutional box (learning management system or personal learning environment), and welcomes the internet as the individual's library and world of resources, tools and interactions of all types. The layer is 24/7 and is not limited to the usual institutional restrictions. Its main role is to support and guide the students, mentoring them in their path to learning, while maintaining quality, high engagement and motivation.

Embracing the reality of the digital natives is a requirement and a need for higher educational institutions. To believe that digital natives will sit down and read all of the assigned books from cover to end, to believe that they will not have any other browser open while they are in "our learning platform" or that they will not listen to another expert but their faculty member is, simply, a mistake. If we think that the latest information is in our institutional libraries, and that our community is the best for our students, then we would be making a mistake.

The overall objective of the Education Layer is to become an extension of current higher educational online learning environments to increase overall satisfaction and motivation, providing learners with a new way for pursuing their learning goals and objectives, one which is more effective, efficient, and engaging: The Joy of Learning.

WRITING YOUR WAY TO READING – ON THE COMPUTER WITH A SOUNDING KEYBOARD AND A SYNTHESIZER

Kari Gregersen, Vox, Norwegian Agency for Lifelong Learning, Norway

Project for adult immigrants and description of the method

In 2011 Vox, the Norwegian Agency for Lifelong Learning, started a project to pilot the method "Writing your way to reading" in Norwegian language training. The background was the need for increased knowledge about methods and improved quality in literacy training for adult immigrants. The method: a sounding keyboard and a speech synthesizer are connected to the computer. When you touch for example the letter k on the keyboard, you will hear a voice pronouncing the sound of the letter (not the name of the letter). When the word is completed on the keyboard, it is read out to the learner.

Background and context

Functional reading and writing skills are a prerequisite for participating in various arenas in Norwegian society. Learning to read and write for the first time when you have reached adulthood and in a language you are unfamiliar with, is both time-consuming and resource-intensive. The idea of starting with writing instead of reading is not new. The Norwegian Arne Trageton from the University College in Stord revitalized a 200 year old approach to learning to read already towards the end of the 1990's. He then started working with the method "Writing to read" on the computer, specially focussing on that the children should not start off with handwriting. In 2004 Peter Elbow was referring to older projects when he advocated changing "Reading and Writing" to "Writing and Reading". In Sweden special education teacher Mona Wiklander developed Arne Trageton's method further, adding a sounding keyboard and a speech synthesizer for children speaking their native language. Building on experience from Sweden, the method was then tried with children speaking Norwegian as a second language before being introduced to adult immigrants from 2011 onwards.

Literacy training for adult immigrants

Learners often have a poor basis in oral language when they start their Norwegian language training. The texts that they are to write should use the oral language of the adult learner as a starting point. In literacy classes the participants are often at different levels in their language learning process. Some know some letters, others do not. It is a challenge for teachers to explain the connection between the abstract phenomena of sound/phonem and letter/grapheme to learners who have no knowledge of written language and in addition, do not understand the language the teacher is using. Adults with no experience of writing usually take a long time to develop handwriting that is efficient and that corresponds to what is expected of an adult. The learners often have little or no knowledge of or experience with ICT.

The project

The project is exploring the effect of the method in literacy training for adult immigrants. In 2011 and 2012, the method has been tested in different schools for adult learners in different parts of Norway. Vox' wants to find out if:

- The method creates a linguistic awareness of the relationship between sound and letter.
- The speech synthesizer is a help in reading (decoding) and spelling.
- The method takes care of the need for adapted training to a greater extent than traditional training in reading and writing skills.
- The participants may start from their individual level.
- The focus on oral teaching is increased and requires the teachers to work systematically with oral teaching.
- Writing on a computer increases the digital competence of the participants. In 2012 digital competence was a goal in the national curriculum for the first time and it is integrated in all the competence goals for language learning.

Results

Experience so far is positive. Vox started out intending to investigate whether the method was effective in teaching adult immigrants how to read and write. We experienced that it also created joy and pride in learning: "It is positive to observe that the computer tools also inspire the students to write their own texts", "The students are very motivated and the level of activity is high when they are working on the computer". More findings will be available in June 2013.

INNOVATION IN UNIVERSITY LEARNING WITH NEW TECHNOLOGIES

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Educational innovation should be regarded as a dynamic, multidimensional and open process, immersed in a socio-cultural reality. It should contribute to personal growth and to the improvement of institutions. Nowadays, terms like innovation, reform, renewal, and change, are used and frequently found especially in university contexts after the Bologna Process has been adopted. It involves necessary and desirable changes resulting from new approaches to knowledge acquisition by means of new information and communication channels. A key element underlying concept renewal and innovation of the processes in higher education is the so called teaching-learning model directed towards to the development of skills, driven not only by the new educational trends, but also regarded as mandatory by law. A research conducted by a multidisciplinary group attempted to identify the degree of digital competence of Spanish university students, which is required for the use of virtual communication methods. It also established the training needs expressed by students and the problems they underwent when using virtual tools.

The obtained results allow us to infer the digital technological literacy. Although this literacy is progressing and spreading, it is not universal and, therefore, seeking innovation based on new technologies deems necessary. The research reveals the need to continue defining the concept of virtual core competences, as well as the fact that students must receive continuous training in these competences. Other findings reveal some concern about network security and the distrust of data provided by chats and forum users, since the digital gap and its implications keep on growing. As an educational foresight of this research study, we propose a new target focused on the appropriate training for using virtual tools, regarding competence, knowledge, expertise, respect and no aggression. An emerging ground opens to higher education: the training for a safe use of virtual communication tools in the network, as a resource and purpose of academic innovation.

'SMART E-DUCATION' – DIGITAL WHITEBOARD TO TABLET INTERACTION TO ENHANCE ACTIVE LEARNING FOR E-LEARNING 2.0

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E-Learning 2.0 propagates the usage of social networks such as blogs and wikis to establish collaboration. The target is to offer an environment, which fosters the intrinsic motivation of the students. However, the main issue of such services is how to activate the students to reflect on the given lecture content by using external services, which are not integrated into the whole learning framework. Therefore, this paper suggested an experimental setup with a special focus on the use of a digital whiteboard, which provides the possibility to always interact in different forms with the fellow participants. Learning units can be embedded into given students' group workflow, which guarantees the active involvement of the participants.

Another advantage from the teacher's point of view is the assessment of the students. Exams can directly be done on the devices. Teachers prepare their tests and simply share them with the students. After finishing the exams students just need to save their modified documents and the teacher can access the exams. The teaching staff can also grade the active participation in class. They see how active the students are or if a student is totally inactive. Students, on the other hand, have their learning material always accessible and up-to-date. All activities are saved; students can later review the discussed issues. They can communicate with each other, talk about homework, share results while working in teams or just 'keep in touch'. The social aspect must not be neglected.

In order to achieve this ambitious aim and to effectively embed ICT in educational environments a clear strategy for a management information system (MIS) is needed.

This system should comprise the following basic specifications:

- Enable users to access the system away from the organization.
- The platform interface shall be accessible to its users via mobile devices.
- Identify and verify users uniquely.
- Enable only access to information appropriate to the user's role.
- It shall be possible for learner to import and export information by the platform.
- Support shall be provided for managing profiling information of students.

Basically, a MIS should serve as clear indicator as regards performance at an individual or group level. As a result, several benefits for different stakeholders such as students, teachers or administrators arise. Students can plan their next steps according to their current process with a focus on their identified shortcomings. For teachers it creates the possibility to find the best pedagogical strategies or needed content by being aware of the individual student's learning profiles. Another benefit might be the dynamic management of learning materials and content enriched by examples originating from the students themselves, which might improve their understanding within the learning group.

Therefore the proposed setup enables a classical classroom scenario in an virtual environment which strongly centres on students' learning as well as it focuses the effectiveness of teacher's instructional methods.

ENHANCING LEARNING WITH AUGMENTED REALITY: TEACHER CANDIDATES' PERSPECTIVES ON OPTIKAR[1]

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The aim of the study is to determine how a teacher candidate feels about using a learning material enhanced with augmented reality. This study investigates users' feelings, opinions, expectations, acceptance, pleasure and deeper emotions regarding the experience of the OptikAR application. OptikAR is an example of a simple marker-based augmented reality system. A simple augmented reality environment consists of a camera, a computational unit and a display. The camera captures an image, and then the system augments virtual objects on top of the image and displays the result.

This project uses augmented reality to enhance the user experience regarding Basic Geometrical Optics and Experiments such as The Law of Reflection, Reflection and Ray Diagrams for Plane and Curved Mirrors, the Law of Refraction: Snell's Law, Total Internal Reflection, and Critical Angle. OptikAR is designed to turn hard-copies of basic experiments in geometrical optics into a digital, interactive experience. Augmented Reality brings virtual information or objects to any indirect view of the user's real-world environment to enhance the user's perception and interaction with the real world.

The participants of this study are four students (1 male and 3 female) from the fourth undergraduate year of the Eskisehir Osmangazi University, from the departments of Computer Education and Instructional Technology, Educational Sciences, and Guidance and Psychological Counselling. The findings represent student perspectives from a sufficiently diverse range of education faculty. Participants took part in this study in a study office utilizing their personal computers. By following the application guide provided to them, they tested the OptikAR experiment sets voluntarily. During this process, the researcher conducted observations and took notes. Following the completion of the guides, a semi-structured interview was conducted with each participant to obtain their impressions.

Of the impressions gathered from the prospective teachers, 39% were regarding the application, 26% were regarding learning, 16% regarding their satisfaction, 13% were regarding other matters, and 5% were regarding negative impressions. Participants have expressed their opinions regarding the application as interesting (10%), fun (9%), motivating (9%), easy to use (7%) and realistic (5%). The opinions of prospective teachers regarding learning were; it makes learning easier (7%), it allows for flexible learning (6%), it provides memorable learning (5%), it increases the will to learn (4%), and it materializes the topic (3%). 16% of the teacher candidates expressed their satisfaction through their different and varying experiences. We may gather their expressions that generally they liked the system under this heading. They found the application plain, impressive and creative, and shared their pleasure regarding the fact that the application is accessible through the internet without any setup. The will to utilize similar applications in other lessons and beyond the scope of learning along with the economical possibilities that such applications may present were evaluated under the 13% of other impressions. In addition to these positive impressions of OptikAR from prospective teachers, 5% expressed negative opinions. These negative opinions consist of the visual, symbolic and textual selections in the user interface design, along with criticisms of the utility of the program and issues regarding the environment in which the study was conducted.

Generally speaking the impressions of teacher candidates regarding OptikAR may be gathered under these five headings. In addition to the opinions expressed above, various suggestions were made regarding the font, colours and explanations provided in the user interface of the application. Enhancements were made based on these suggestions. Despite the fact that learners found applications enriched with Augmented Reality to be interesting, fun, motivating, easy to use, and realistic, further research into the supplement it provides to learning is required for deeper evaluation. Such applications ease the learning of learners, provide a flexible learning process and economically materialize abstract concepts and topics. Such products which increase the will to learn and provide memorable learning could prove valuable in the learning of children through entertaining education (edutainment). Despite the development of educationally appropriate designs, users have demanded customization options regarding the user interface. Such customization options are an important factor in learner satisfaction.

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[1] This study is derived from the doctoral thesis that was prepared by Yasin Ozarslan. The research conducted for this article is original research. This study has been conducted with the expressed knowledge and approval of Mr. Ozarslan's thesis advisor Prof. Dr. Mehmet Kesim and the Anadolu University Social Sciences Institute.

CASE STUDY: CONSTRUCTION OF 56 INSTRUCTIONAL TV PROGRAMMES FOR ENGLISH LANGUAGE LEARNERS IN TURKEY

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Introduction

From November 2010 to May 2013, several groups of teachers collaborated to construct a series of 56 Instructional TV programmes on English Language Learning for Turkish students. The TV series forms part of a four-semester course, one Language Level per semester, 14 TV per Level. The first cohort of students completed the final semester in June 2013.

The rationale behind the use of broadcast TV is two-fold. Firstly, streaming from a website would not be feasible due to low access to broadband in Turkey. Secondly, TV can reach audiences in neighbouring Turkish speaking countries.

The TV programmes were scripted in the UK and produced in Turkey. Cambridge University Press had sold the *Touchstone* self-study materials (Print and CD-ROM) to Anadolu University in Turkey. They also sold Anadolu my services as a Production Consultant for the accompanying TV series. I liaised between Anadolu University (the TV Production Centre and the Languages School) and the UK (the staff in Cambridge and the scriptwriters in Oxford). In the UK we worked on several drafts of the scripts, adapting them to conform to pedagogic design principles and to facilitate multi-camera studio production in Anadolu University.

The self-study instructional format

The term *Instructional* in the paper's title is used deliberately to distinguish the TV programmes from the general interest videos that are often used by classroom teachers as a resource (e.g. movies or documentary programmes in English). In contrast, the instructional videos described in this paper are self-study teaching/learning videos, in which the presenters operate as teachers of English Language, who recap and explain the usage of English in a series of specially tailored dramas. Pauses are provided for viewers to practice key phrases.

Pedagogic design principles

In the conference presentation, twelve video clips will be screened to explain how the design of the TV programmes accords with the principles in Table 1.

Table 1: Pedagogic design principles for each chapter of the content

1. Hook a. Shock / surprise / delight b. Fascinate, entertain, appetise, create suspense	**5. Sensitise** a. Consistent style b. Reassure / build confidence c. Conform to video grammar
2. Signpost a. Set the scene / Introduce b. Signpost: what's coming later c. Chapter Heading: what's next? d. Focus: what to *look out for* (or, *to listen out for*)	**6. Elucidate** a. Restrain image/audio density and pace b. Enhance legibility/audibility c.. Maximise Cognitive Clarity
3. Facilitate Attentive Viewing a. Pose questions b. Encourage prediction	**7. Reinforce** a. Repetition (with a different angle) b. Re-exemplify c. Compare / Contrast
4. Enable Constructive Learning a. Disclose context, allow discretional attention b. Invent visual metaphors c. Scaffold the construction of knowledge	**8. Consolidate/ Conclude** a. Recapitulate b. Consolidate / Summarise key features c. Chapter Ending

VIRTUAL REPRESENTATIONS IN 3D LEARNING ENVIRONMENTS

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This research explores the affordances of virtual worlds to serve as an online collaborative learning place for students by increasing social presence and engagement. Students from Education departments formed Avatars which represented them in collaborative meetings and activities. The research compares Avatars' appearance between students from different countries and cultures. Analysis of observations, questionnaires and interviews examine the ways participants use Avatars to represent themselves. Seeking educational opportunities in technology based learning environments, 3D environments enable learning, which simulates face to face encounters while retaining the advantages of online learning. The study examines the choice of students' Avatar appearance in relation to their appearance and their prevailing social and cultural norms. Does the user's appearance effects his/her Avatar's appearance? Does the user's culture effects his/her choice of Avatar? Do 3D environments blur multicultural differences? Do similarities between students and their Avatars contribute to their learning experience, and if so, in what way? Results indicated that although virtual 3-Dimention environments provide freedom in appearance, external contexts create powerful boundaries and expectations, leading many participants to seek online social acceptable appearance influenced by their cultural norms, as well as by online group identity. This preferable appearance enhanced their learning experience by strengthening their ability to assimilate in the group and to succeed in collaborative group tasks. This study extends the dual-congruity perspectives of Avatar Choice Model to a conceptual framework based on quad-congruity perspectives, adding the importance of online group and focus on the constraining effect of offline culture and norms on virtual representations.

PLAY SCHOOL – A SITE FOR PLAY, COLLABORATIVE ENGAGEMENT AND LEARNING

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The children's television program *Play School* is approaching 50 years of broadcasting to young Australian children. It is the second longest running children's television program in the world. Based on the original BBC production, *Play School* has been screened across Australia twice each weekday on the national broadcaster since 1966. Contemporary thinking and research in early learning highlights the importance of the early years and family as partners in children's play and learning. This paper outlines results from research investigating the contribution of *Play School* to a healthy start to life for young Australian children, in particular the results pertaining to children's engagement in play and learning as a consequence of viewing the program and the flow on effects to parents as co-players and teachers. The results of the research indicate that key elements of the program support child engagement and parent child interaction that are conducive to learning both during and subsequent to the viewing experience. The results of the study have significant implications for considerations of the key conference theme – Students energised – Enhanced learning experience by participation and collaboration.

Play School explores themes selected for the interest to children and for the potential for play and exploration within the playful and child centred focus of the program. The aim is to encourage learning through play and interaction across a range of developmental domains and to support the development of positive dispositions to learning such as curiosity, creativity, and problem solving. Playful approaches are evident in the style of the program delivery as well as the content. The adult presenters while not child-like are curious and playful, creative and curious and willing to solve problems collaboratively.

Methods – Results and Discussion

There were a number of components to the research investigation. These included an online survey, in-depth questionnaire and observations of children watching *Play School* within a preschool setting.

Results of the online survey provide useful data regarding viewing conditions; child responses during the Play School program; child responses after the *Play School* program and parent/carer perceptions of the benefits of the program. When asked about viewing conditions the respondents indicated that *Play School* was almost exclusively viewed at home with the number of episodes viewed each week ranging from once per week to 28 times per week, and the average of 4 viewings per week. Both morning and afternoon viewing were equally accessed. 33% of children mostly watched Play School alone, 42.4% with an adult(s), and 25% mostly watched with other children. Child responses *during* the viewing of *Play School* indicate that almost 50% of children use objects from home in response to the program such as their own toys, recycled materials, or dress-ups. This data suggests a high level of engagement and responsiveness to the program that is manifest in playful responses. Child responses *after* the viewing of *Play School* that were observed by the adult survey respondents indicate that almost 50% of children reported on incorporated *Play School* ideas in play. Parent responses to the in-depth questionnaire provided useful qualitative data regarding *Play School*'s contribution to children's play and wellbeing. Some examples include:

> *"I really love the less than polished Play School vibe. I love that my kids perceive it that they can do craft, sing and dance like the presenters because it is ok to make mistakes on Play School."*
> *"I love that they leave in the 'oops moments' and we see presenters recover from these with humour and dignity." "I have learnt a lot about how to speak to children from Play School."*

Conclusion

The results of this research indicate that *Play School*, as a quality television program designed for children, can facilitate opportunities for shared viewing and collaborative relationships. Shared viewing can enable parents and carers at home to observe children's responses to *Play School*, and collaborate in play and learning. Co-viewing adults are valuable role models who can support children to engage in play-filled big action, dancing and singing. As collaborative play and learning relationships develop these also create further opportunities for revisiting ideas derived from *Play School* ideas for later implementation and shared participation in experiences of daily life such as cooking and gardening. The child responses to the playful interactions and the playful approaches to learning modelled by the adult presenters suggest that parents and other family members, who may be unsure of how best to interact with young children, could find a useful model in the presentation style of the presenters on *Play School*.

CREATIVE LANGUAGE LEARNING IN MOBILE ENVIRONMENTS: ICT SUPPORTED CREATIVITY IN THE *LANGO* PROJECT

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Europe is undergoing a set of novel and often challenging demographic, social and economic transformations. In the present circumstances, the impacts of socio-economic change, mobility, adaptability and uncertainty have all contributed to a systemic re-evaluation of the role and purpose of the learning required to participate in communities challenged by a dramatically difficult external environment. This paper addresses these needs in the framework of innovative learning. This reflects advanced ICT innovation but also the language skills, cultural competence and practical needs of diverse learners in often challenging environments. This paper situates innovative ICT language tool development in the context of a dynamic partnership approach that addresses inclusion, migration and effective integration as part of the language acquisition dynamic.

It is in this new and emerging milieu that multilingualism can be viewed. Language acquisition, skills and confidence are critical components of participatory citizenship. It is no longer the best use of available resources simply to transfer a set of language skills and competence into passive students. It is now more than ever a sustained effort to engage teachers, families, communities, employers and migrants, all as learners, in an enterprise of enjoyable discovery around difference and diversity – of which a second language is a key element, but part of a wider learning trajectory. Apart from the purely linguistic knowledge, LANGO addresses levels of cultural awareness. This is designed to embed cultural information about the countries where the target languages are spoken. LANGO language learning activities are delivered in a calendar format, with each lesson designed per day. This aims to develop the type of mastery which can be achieved in a period of sixty hours of learning by devoting only ten minutes per day during a year: on evaluation, this represents an excellent return for a limited (but consistent) effort.

Language on the Go (LANGO) is an innovative project funded under the Lifelong Learning Program of the European Union. The project involves six partner organizations in four different European countries (Bulgaria, Cyprus, Ireland and Malta) and has been developed to explore opportunities offered by new and advanced information and communication technologies to encourage learners to acquire, maintain and augment their existing language skills. The project consortium has developed a multilingual language tool that is designed to apply interactive learning approaches and innovative e-learning platforms. These provide computer assisted and mobile assisted language learning within a framework of attractive and easy learning content. The LANGO project has designed this innovative e-learning tool to support individuals engaged in learning four languages: Bulgarian, Maltese, Greek and Russian. The methodology and structure prioritize ease of access and mobility for learners at all points. Clearly, both the methodology and technologies can be used and applied to other languages at later stages.

The design and structure of the language-learning tool aims to support language acquisition primarily by adult learners. From the target groups identified by the project partners, many of these learners have a number of specific learning needs as well as challenges. These include diverse educational backgrounds, levels of literacy, degree of social integration and legal residency or legal/economic migrant status. The LANGO project taps into initial language learning and is designed to be enjoyable and non-intimidating, particularly useful for target populations who may not have engaged in formal learning contexts for some period of time. LANGO products and methods focus on what learners typically need or want to say at various stages of the communication process.

VIDEO COLLABORATION IN EDUCATION: BUILDING A FOUNDATION FOR THE DIGITAL AGE

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Introduction

Video collaboration technologies are becoming more common in education at all levels around the world as the walls of the classroom disappear. It is moving from a "nice to have" classroom enhancement to a "must have" necessity. This Center for Digital Education whitepaper shows how video collaboration is an essential part of the K-20 education environment as it:

- enables a more productive learning experience
- engages students while giving them the applied skills needed for today's workforce
- and facilitates significant cost savings

The shift in the education landscape toward video collaboration is occurring due to a number of factors.

Mobility

Learners are increasingly mobile. Almost two-thirds of students aged 10-12 and 90 per cent of those 14-17 have a cell phone while smartphone usage is at 44 per cent for secondary students and 49 per cent of university students. Likewise the movement toward bring your own device (BYOD) has led to a massive influx of tablets and other devices during the last 18 months.

Why Video Collaboration is Essential to Education

Video collaboration provides many benefits for learners, faculty, administration and campuses. Among them:

- virtual face-to-face distance learning enriches curriculum, enables cross-cultural exchanges and interviews with subject matter experts, and enables more productive, relevant, personalized, and interactive learning
- provides equity in access for programs and expanded services while increasing professional development opportunities
- improves learning by up to 400 per cent according to the visual teaching alliance

Video Collaboration is Improving Education around the World

Numerous case studies are highlighted in the full abstract but a few examples from around the world include higher education institutions such as Manhattan School of Music who utilizes video collaboration to enable faculty to be mobile and University of Northern Iowa who uses video collaboration on iPads for student teacher assessment in the field. Gippsland TAFEs in Australia teach trade skills such as welding or construction by using webcams attached to headsets so faculty are hands free and students see what they are doing. From executive MBA programs to workforce development to early childhood learning, video collaboration is improving learning for all ages.

Conclusion

Our full abstract provides numerous supporting research statistics and information that you will find helpful in seeing how barriers of time and of place are breaking down, allowing students to learn in much different and more profound ways than ever before. Not only is learning more flexible due to mobile video communication solutions but it can be eye-opening and life-altering as students experience new worlds, new ideas and new possibilities.

THE EFFECT OF MOBILE EDUCATION ON THE SENSE OF OWNERSHIP, MOTIVATION AND JOY IN LEARNING

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We have visited both middle and high school to talk to the students and the teachers in order to figure out what their current process of learning was and what they would like to change in order to improve it. We talked about patterns of learning, their needs and problems. We also talked about their idea of a perfect school and the solution of the problems they are dealing with.

We have found out that homework is a growing burden, that additional after curriculum activities also fill up students' schedules but the students see them as necessary as the school is not providing all the needed instruction[1]. Only very few students were able to practice their interests and pleasures. High school students used multiple number of textbooks for each subject to check multiple perspectives. The Internet is a rare source of knowledge since it is deemed unreliable. Students reported computers as not very convenient for learning as it brought distractions and was often noisy (?!). Also students' own notes were very useful and highly valued. The biggest problem communicated to the researchers was the concentration.

The participants were shown different graphic designs to rate them and explain the reasons behind their choices. The students revealed a strong dislike towards white colour which they associated with boredom. Cheerful graphics and clear divisions of the text were preferred. Inclusion of multimedia was highly praised.

The subjects were also asked about additional features that could help in their learning. Each of the students was asked to rate the presented add-ons in two categories: according to their usability and attractiveness (fun). The additional ideas the students had included: recorded and written notes, greying out (brightening up) the parts of information that the student "absorbed", position marker and a few more.

We have picked up on an interesting habit that the students have trained themselves almost unconsciously to. When working with written printed materials that provided both introduction, solution and the testing in the same format (mostly written words and algorithms), the students learnt to pick up on certain patterns which they would later on reproduce at answering the questions. We have designed a multimedia solution to avoid that.

Following up on the first research we have provided the kids with the test version of the product. As it turned out the mobile technology gave much more than just easiness of use. Tablets are perceived as great toys which make the learning seem more friendly. They are comfortable and allow a choice of learning environment. Our application is designed to take advantage of the 3-R's of mobile learning: Review-Refresh-Reinforce. Learning with mobile devices has been proved to be more effective if short lessons are to be practiced (review), if it is used to highlight important points (refresh) and test learning recollection (reinforce).

Anytime anywhere learning gives a power to choose, to decide, to determine key aspects of learning. It makes learning more relevant as it can be studied when needed. And choice is an important factor for attention. Attention is crucial for engagement and retention. Since the device is personal and hand-held (or not even that) and usually customized (with apps and content), the learning feels more personal than in a book.

The best way to enhance memory is to elaborate the information, to work on it from different angles, to personalize it. The learner needs to focus on the meaning of the information and the best way to make learning understandable is to provide real-world examples. Memory is enhanced by associations: when the new information can be embedded into an old one, or if there is a pattern in it. It all improves the retention and retrieval.

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[1] The schools we chose are regarded as ones of the best in the area and the students are quite ambitious as well.

MOBILE DEVICES AS INNOVATIVE RESOURCE IN THE UNIVERSITY LEARNING EXPERIENCE

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The concept of ubiquity brings a deep technological convergence among various devices that make it possible, and the coexistence of what is real and what virtual. This is also creating changes in how we learn and also how we teach as well as the teaching resources we create. We focused on these three facts in today's global society under the Spanish Group research EDU2010-17420 Sub EDUC 2011-2014: *Ubiquitous Learning with mobile devices: design and development of a competence map in higher educatio*n. The ultimate goal is to create a standardized competence model valid to be used by different agents and in different scenarios. Mobile devices represent an innovative alternative that can support potentially an improvement in the teaching-learning processes. As objectives we document and analyze the state of the question on ubiquitous learning environments in Higher Education based on the use of laptop, smart phone, e-books and consoles. The total sample involved 461 students. The frequency of use of the diverse devices as learning tools was: Laptop 61.4%; Smart Phones 29.3%; E-book 11.5%; Console 12.1%.

The data and reference texts analyzed refer specific features of mobile devices for educational purposes such as portability, small size and weight of the device, social interaction, collaboration and data sharing with other users, context sensitivity, connectivity, individuality, expansiveness. Regarding the construction of knowledge, students express greater motivation and interest in learning; mobile devices ease interaction between pupil-teacher, teacher-student and among learners and teachers. Likewise, they realized the development of autonomy in the learning process and their self-regulation.

In absence of standardized models to guide instructional design with mobile devices it is of particular interest to analyse the trends of the development of mobile technologies subject to be used in ubiquity scenarios. No doubt, the ubiquitous learning shapes a new educational paradigm that arises from stems from new media technology with mobile devices. This learning provides other means of interaction and access to a wide range of contents. In this embodiment, students can extend the benefits of classroom education and enhance their academic development accessing, via mobile devices, online courses, audio and video lectures, podcasts, intercommunication with peers and teachers, rating scores consultations among other resources.

After analyzing the results, we can conclude that it is strictly necessary to test new models of innovative learning activities concerning dimensions of site, time and space and also consider topics such as: Lifelong learning, reflection and involvement in curricular learning processes, integration of mobile device technology in all levels of education to connect students and professors from universities around the world in a seamless community web.

INTERACTION EQUIVALENCY IN THE OER AND INFORMAL LEARNING ERA

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Presentation Outline

This paper aims to clarify issues and challenges that the field of education has encountered in the context of Open Educational Resources (OER) and the increased emphasis on informal learning. This work is guided by insights from the Interaction Equivalency Theorem (the EQuiv) posited by the second author. In this presentation, we first provide an overview of the core concepts of the EQuiv. Next, we explain how the EQuiv framework can be used to analyze interaction designs (among and between students, content and teachers) for online and distance education. Furthermore, relying on the functionality of the EQuiv, the paper examines the major issues formal education is confronting due to the ever-growing availability of OER and the informal learning opportunities they create. In conclusion, this paper explores the changing role of formal education in an era of learning when online educational resources and opportunities are readily accessible, and in many cases, completely free of cost to the learner.

Interaction Equivalency Theorem

The Interaction Equivalency Theorem (the EQuiv) was originally posited by Anderson. Historically, the Three Types of Interaction model represents the first systematic use of interaction as a defining quality and characteristic of distance education. The model defines the critical interaction in educational contexts as having three essential components: learner–content, learner–instructor, and learner–learner interactions. As an extension of Moore's model, the EQuiv, which consists of two thesis statements on the appropriate interaction design for realizing deep and meaningful learning experience, was created to provide "a theoretical basis for judging the appropriate amounts of each of the various forms of possible interaction." The EQuiv hypothesizes that any one of high-level student–content, student–teacher, or student–student interactions alone can lead to effective learning. Furthermore, it believes that utilizing more than one type of high-level interaction, although usually more costly, brings higher satisfaction. The implication is that from a cost/time perspective, any interaction at half-mast only produces weak learning and that combining all three types of interaction, (at any level), may be the least cost-effective and efficient.

The EQuiv in the Contexts of OER and Informal Learning

The main focus of this presentation is to clarify an emergent role of formal education. The availability of ever-growing quantity and quality of OER and informal learning opportunities relate to the "opening" of the traditional education systems in which "accidental interaction surpluses" are considered increasingly important variables in the formal educational curricula and systems. From the EQuiv perspective, "formal education" apparently should cost less if it hopes to survive in an era when opportunities for alternative forms of free education grow rapidly. A learner should also be provided increased control over his/her learning design, which can be achieved by creating necessary *surpluses* as well as *reductions* to provide the most effective and efficient, yet personalized levels of learning. The ability to *manage the cost and time of learning* is becoming extremely critical to formal students and lifelong learners in this emergent world of network-enhanced learning.

In summary, in a context of access to OER and many informal learning opportunities, time–cost efficiency has become even more critical in choosing the best learning. The quality-time-accessibility triangle posited by Daniel, in reference to the external vectors of education and mega-universities, may now be re-phrased as institutional vectors and individual learner vectors of *quality-time-cost,* especially in areas where the issue of accessibility is more attenuated by the Internet.

The authors believe that formal education will best meet emergent needs only if it provides education that creates adaptable models of high-level interaction but enables the learner to augment or choose adaptations that meet their constraints and time and money resources. This minimalism is seemingly the only way to survive in the ever-tightening world economy. The formal educational system is losing its traditional status and authority as the only authentic education provider. Now is the time to accept this change and recreate our institutions for service in a networked, lifelong learning context.

NAVIGATING THE RISK SOCIETY – HOW THE EDUCATIONAL ENTERPRISE GETS STUCK AND WHY IT NEEDS POETRY

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The paper addresses the key question posed by the EDEN 2013 Conference: "How can we do our best to make learning a thrilling experience for learners, including providing a sense of joy in the virtual classroom?" It explores the proposition that the dominant organisational culture and modus operandi of the educational enterprise is based on 'stuckness' and resistance to change. This creates barriers to 'thrilling' and 'joyful' learning – even in the face of advances in the adoption of ICTs to support more innovative teaching and learning. The paper reviews the factors that lead to stuckness in the organisational enterprise with reference to 'life politics' theory in sociology and with regard to organisational psychodynamics. It presents an approach to dealing with stuckness, based on an 'alchemic model' of innovation and discusses how this model will be applied in two research projects – IGUANA and STAY IN – recently funded under the European Commission's 'Lifelong Learning Programme'.

JOY AND CREATIVITY IN THREE DIMENSIONAL VIRTUAL LEARNING ENVIRONMENTS (THE CASE OF SECOND LIFE)

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In the last years the technical capabilities of computers have increased and the internet speed has become faster and affordable, serving some applications that require both. One such case is that of virtual worlds, creating entirely new conditions for distance education. The best-known virtual world today is Second Life, which this year celebrates its 10th birthday.

To date there have been thousands of studies on the "Second Life phenomenon", but in this paper we are only concerned with the concepts of joy and creativity in the virtual world.

The literature review shows that joy can affect learning conditions and eventually the same learning outcomes. At the same time it seems that creativity is positively associated with joy.

Research has shown that virtual worlds are received as pleasant and game like by their users, while there is strong evidence that they reduce the students' mental load and situational anxiety.

To attract users, social networking sites, invent attractive activities, individual or group for their users. Virtual worlds, unlike 2D social networking sites like Facebook, rely for their operation mainly in the creativity of their users.

Transactions made on this site are governed by an "economy of aesthetics" and as such, require creative skills. Users to the extent that they get pleasure and satisfaction from the use of the virtual world, move from the role of the viewer in the role of digital creator (Digital creativity). Therefore the immersion in the environment is due to the positive emotions that are induced to user and results in the creativity of the user. This creativity is recycled into the virtual environment providing joy to others and putting them in the same cycle. This cycle constitutes to a great part Life Long Learning!

UP TO A 5 STAR LEARNING ENVIRONMENT! A SHORT REFLECTION ABOUT EDUCATIONAL CHALLENGES FOR 2013

Filip Vervenne, VIVES (KATHO), Belgium

Education has gone through huge changes since the sixties… Yet, there are still some interesting challenges. Check out with me 5 major suggestions to create a future proof instructional and curriculum design…

Forget about learning outcomes

Our educational system is – or should be – ready for a decided shift towards a more humanistic, holistic and organic approach of learning environments. A first step in the good direction is leaving the learning outcomes for what they are. Do not waste your time and just **draw some general competences.**

"Engage me or enrage me"

Try to **engage the students in the whole cycle of the learning process**. Nowadays it is very common to engage the learner in the learning activities with assignments, group work, collaborative tools and tasks. Good! Of course! First **take your time to draw together at least some essential competences**. Work together on an agreement about the competences you want to explore together. Avoid the word "learning", I prefer to talk about observation, exploring, investigating, etc. It helps to get the right trigger and spirit for lifelong learning. The second recommended mutual engagement can be **the design of the learning event**. The win-win is the mutual learning effect and the honest sharing of responsibilities. The third challenge and, probably the most difficult one – because it is a delicate matter: engage the student in **the design of the assessment**. I am not referring to the questions – although could be – but about when, where, how (…) the assessment will take place. Shape the assessment together and, the trickiest level, assess your assessment together!

Think deming

The best theoretical models are modest and the Deming circle is a very good example for that. **Plan-Do-Check-Adjust** your instructional and curriculum design and engage the learner in each step you make. Think Deming and link, connect, realize each step of the PDCA with the learner. Check this simple framework on different levels: a single activity, a course, a series of events, a curriculum design Using the Deming circle is very 21st century because it is concrete and yet holistic enough to be applied and transferred in very different (educational) contexts. It confirms that learning is a process and integrates different learning theories. It is a simple key to better quality.

Make learning exciting

Creativity is the drive and the spirit to establish an attractive and exciting learning environment. An attractive learning environment leads to the second star: engaging the student. Making learning exciting is not about trying out as much as possible, using loads of tools and methodologies you do not connect with… It is all about **the right and well-balanced cocktail of approaches and methodologies**! Not flashy but eclectic. This will make the learning effect stronger.

Interconnect

Try to connect or even more: interconnect! Star 1-4 are about connecting too, but there is more … There are 2 dimensions and 3 different layers in this connection. That is how it became … an interconnection.

The first dimension or connection is the connection with the learner. Try to connect with the learners' 1) experience 2) talents 3) learning style.

ICT AND EDUCATION: LESSONS LEARNED FROM THE LIFELONG LEARNING PROGRAMME AND FUTURE EUROPEAN INITIATIVES

Eva Birinyi, Peter Birch, European Commission, Education, Audiovisual & Culture Executive Agency

The Lifelong Learning Programme of the European Commission

The Lifelong Learning Programme 2007-2013 (LLP) supports the development of Europe as an advanced knowledge-based society, with sustainable economic development, more and better jobs and greater social cohesion, while ensuring good protection of the environment for future generations. In particular, it aims at fostering interchange, cooperation and mobility between education and training systems within Europe so that they become a world quality reference.

ICT plays a crucial role in education and the programme specifically recognises this with the particular objective of supporting the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning. Moreover, Key Activity 3 – ICT is a specific action of the LLP dedicated to ICT in education. It supports transnational co-operation in innovative ICT-based learning approaches covering lifelong and life wide learning.

Since 2007 a number of successful projects and initiatives have received support from the EU through this programme. Looking back at its achievements we can trace the evolution of EU policies around the implementation of ICT in education, and make sense of the evolution of practice, research, and technology. The Programme has also contributed to supporting (innovative approaches and) pedagogical innovation in areas not yet fully explored.

However, mainstreaming successful approaches within educational systems has been less successful. Future initiatives therefore aim at taking stock of the knowledge acquired and focusing on large scale projects that can make a difference in the articulated world of education in Europe.

New policy initiatives

In preparation of the new generation of the programme from 2014 in the fields of education, youth and sport, the European Commission decided to launch a series of pilot projects on policy experimentation in order to provide opportunities for countries to test – in real life situations – the implementation of innovative educational policies addressing European goals. Specific calls for proposals were launched in 2012 and 2013 encouraging European policy cooperation in the field of school education (with a specific focus on creative classrooms and early school leaving).

Projects selected in 2012 will experiment with different themes such as the use of ICT tools (tablets, ePortfolio) in different educational systems, their role in developing and enhancing personalised and active learning, developing new classroom technologies, etc. They will also provide practical guidelines for schools as well as recommendations for policy makers for mainstreaming successful outcomes, and transferring good practice between countries.

The European Commission would use the results of these initiatives in the design and development of future policy and new programmes.

More information: http://eacea.ec.europa.eu/llp/index_en.php

THE SCIENTIX OBSERVATORY: ONLINE COMMUNICATION CHANNELS WITH TEACHERS AND STUDENTS – BENEFITS, PROBLEMS AND RECOMMENDATIONS

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Scientix, the European Commission's DG Research and Innovation's community for science education in Europe includes since January 2013 the Scientix Observatory which aims to provide short overviews on a number of topics related to Science education projects. This paper concentrates on the format, benefits and problems encountered in communities of practice (CoP) and chats carried out by four projects: inGenious, Xperimania V, DESIRE and FuturEnergia. While inGenious' CoP last six weeks, DESIRE's CoP are only three days long. When looking for answers to specific questions, the DESIRE format works better but requires the information to be completed by shorter events or face to face workshops. When tackling general topics, longer CoP open all the time and facilitated by teachers, ensure the participation of teachers. inGenious and Xperimania V chats have experts replying via audio, while in the FuturEnergia chats answers from the experts are provided in writing. The latter are better for schools with older technical equipment but the audio ones are better when having a larger number of participants. The most efficient chats are carried out with a maximum of two experts, address up to 20 classes (400 pupils) and the chats have associated either an additional activity (like a competition) or the transcript which furthermore serves as an additional teaching resource.

During the presentation the characteristics of the CoP and chats of the four projects will be introduced and the benefits and problems of each further discussed.

FOSTERING A STAKEHOLDER MODEL IN ONLINE LEARNING TO PROMOTE INFORMED SOCIAL ENGAGEMENT

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The Emancipation of Learners

One of the challenges currently faced in online learning environments is the attempt to reach learners by transposing place-based teaching methodologies into an online forum and expecting an equivalent level of success. This is rarely the case, as pedagogy changes along with the learning platform. Pedagogy must therefore drive the use of technology in order to better prepare students to engage in an increasingly complex world. Learning is enhanced by utilization of critical thinking and evaluation of available information. As such traditional learning methodologies are ineffective as they do not promote reflective reasoning. Rather than conscribe to the established roles of teacher and student, a shared role of "stakeholder" is proposed to better describe the collectivistic nature of information gathering and appraisal. The concept of a stakeholder of learning outcomes implies that everyone is engaged in the same process, and that there is a shared sense of responsibility in both learning and teaching tasks. Each stakeholder is thus empowered to participate in a democratic learning process, developing an identity as both a learner and a teacher simultaneously.

Critical thinking can be encouraged through the sifting and winnowing of available online resources and through assignments that help students self-reflect, connect experiences with social issues, and reach an understanding of course material. By instilling a culture that promotes the sharing of deeper and more substantial topics, knowledge translation can occur within any forum. Social media sites have been proven to be effective due to a reward system (i.e. Facebook "Likes") which encourages users to repeatedly visit the site. Incorporating such social reward systems within learning communities can help to further integrate learning into users' daily lives.

Learning as Social Duty

The dichotomy of social duty necessitates learners to simultaneously embrace their freedoms and their obligation to choose moral and ethical lives amidst their own subjective presence in the world. In turn, instructors must appreciate the far-reaching potential of learning outcomes as more than a measure of right and wrong. Yet in the massification of online education, it is too often brushed aside in favour of meeting arbitrary quantitative outcomes. Transformative learning however must be rooted in personal appraisal of divergent ideas and opinions. For such reasoning to evolve, each stakeholder needs to be afforded the opportunity to engage in subjective evaluation.

A stakeholder's effective participation in society requires a certain level of knowledge and the ability to discern the quality of information sources. Today's society bears witness to the strains created by the availability of limitless sources of information that allow stakeholders to pick and choose only items with which they agree. This reinforces a hardening of opinions around widely divergent views of the world, and an inability among stakeholders to critically evaluate the reliability of the information they consume. Stakeholders are continually challenged to actively seek out and evaluate heterogeneous information sources, without prejudice or predetermined constructs.

Social engagement in the complex, all the time – anywhere information age offers learners an unprecedented opportunity to learn and teach simultaneously within a vast array of online environments. A stakeholder model is a mechanism for understanding the intertwined roles of teacher and student, recurring in rapid succession. As the stakeholder wades through multiple sources of information online, relevant abstracts are subsumed and shared back into the information collective to await the discovery by other stakeholders. This allows for knowledge to build in a cumulative manner and for personal interpretations of information to evolve with each passing iteration. The cyclical nature of stakeholder engagement promotes deeper levels of understanding through the process of refinement, reflection and critical evaluation. Thus, it is through this mechanism that stakeholders develop the skills to more fully participate in civil discourse and assume a rightful place in global contribution.

INNOVATION AND OPENNESS THROUGH MOOCS: UNIVERSIDADE ABERTA'S PEDAGOGIC MODEL FOR NON-FORMAL ONLINE COURSES

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In face of the recent but fast growing interest on Massive Open Online Courses (MOOC), many universities, both open and traditional, have been discussing strategies to implement this new format of educational delivery. The huge success of the experiences from the top universities in the United States has been an inspiration worldwide. Universidade Aberta (UAb), the open university of Portugal, has developed an institutional pedagogic model for open online courses, thus issuing an institutional standard practice model for MOOCs.

UAb has in place since 2007 a Virtual Pedagogical Model that establishes the standards for all its educational offering. Its design and implementation was part of the institution's strategy for innovation in distance education and played an inducer role of institutional transformation in the framework of UAb's transition process towards becoming a fully online university. The model is patented and consists of a cluster of institutional-wide pedagogical standard practices each dedicated to one type of educational programme or course. In face of the most recent developments in online educational practices, UAb decided to review its model more extensively. Thus, a new variant of the model specifically dedicated to open online courses was designed and is now under testing. This initiative marks the pioneering design of the first institutional pedagogical model for MOOCs.

UAb's model for MOOCs builds upon the four main pillars of the university's pedagogical model: learner-centeredness, flexibility, interaction and digital inclusion. There's a combination of autonomous and self-directed learning with a strong social dimension. It also articulates flexibility with the pacing necessary to help students get things done in face of their pressing everyday commitments.

There are elements in all types of MOOCs that are interesting and useful, but none of them fit exactly UAb's pedagogical model. In accordance, UAb's model incorporates elements from existing MOOCs but adds other relevant aspects that derive from our experience with online learning and its integration in the larger context of the institution's pedagogical model, as well as the work that has been done regarding open educational resources and open educational practices. MOOCs in this pedagogical model, following the current terminology, can be labeled iMOOCs, with their focus on individual responsibility, interaction, interpersonal relationships, innovation and inclusion.

UAb will offer a pilot iMOOC on The Lived Experience of Climate Change[1], following the principles stated above. Moodle (version 2.4) will be used to centralize the main information regarding contents, resources, suggested activities, schedule, etc. It will also harbour the discussion forums, one of the places where participants can interact and debate on relevant aspects of their learning process. This will be integrated with Elgg, an open source social networking platform to be used as an institutionally supported PLE.

Most of the response from European higher education institutions and politicians to the MOOC phenomena has been characterized as a need to react to the tremendous success of the top US universities. This is clearly a wrong choice. The success of the North-American MOOCs relates to their specific regional and national contexts. In the case of the US, we cannot forget how OER can be a most valuable tool for the consolidation of the higher education sub-system of community colleges.

In Europe, the dramatic social implications of the current economic crisis clearly put a challenge to institutions and represent a major opportunity for massive open online forms of education. But, reality shows pedagogical models and traditions vary significantly across the continent. Even so, there's clearly ground for cooperation in Europe by sharing resources and joining institutional initiatives, up scaling their impact. UAb's pioneering initiative demonstrates this possibility, by developing a specific institutional approach, highly embedded in its own pedagogical and organizational culture, but also closely articulating it with a network of European partner institutions, namely open universities, thus aiming at a much larger audience.

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[1] The Course will be based on available OER produced in the framework of Lech-e (LECH-e – Lived Experience of Climate Change E-Learning, http://www.leche.open.ac.uk), an EU-funded project led by the Open University.

FIRST UNED-CSEV EXPERIENCES ON MOOCS DESIGN AND DISSEMINATION: BALANCE OF RESULTS

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Education is moving towards global openness and accessibility facilitated by new learning environments and tools based on technologies that have become key drivers in educational innovation. This is the general setting where MOOCs (Massive Open Online Courses), the recent breakthrough in the field of education, are flourishing.

Despite their short story, MOOCs are conceptualized as the evolution of networked learning and indeed it has become the educational buzzword of 2012, as some of the most prestigious US Universities have recently embraced and developed the concept. In fact, early examples prompted by the best American Universities, such as EdX (Harvard, MIT and Berkeley) and Coursera (Princeton, Stanford and Brown amongst others), have attracted hundreds of thousands of participants who contribute to both the materials and organization of the course.

The phenomenon, which has been likened by the president of Stanford University to "a digital tsunami", seems to sweep aside conventional university education. Whether or not the rise of MOOCs will prove to deserve such attention, there is no doubt that something very important is taking place in the educational system, raising profound issues regarding its main components, such as the role played by both teacher/student, evaluation and certification methods, the distributive and interactive character of learning or their inclusive role given their open and free nature.

In this context, both **UNED COMA** and the **UnX Entrepreneurship Community** are MOOC-based projects targeted at the Ibero-American world involving disruptive methodologies that are highly agile, scalable, flexible and aligned with the new digital environment.

UNED COMA and **UnX** are ground breaking projects that somehow have become a landmark for having generated innovative and imaginative solutions to some of the challenges faced by MOOCs. UNED COMA, which is a key element of the global strategy put forward by the National University of Distance Education (UNED), has provided the first formal-accreditation experience all over the world. So far, nearly 400 certificates[1] have been launched and many more are expected shortly. Additionally, UnX (the first Ibero-American Community for Digital Entrepreneurship aiming at piloting new methodological models to transmit knowledge in online environments), has pioneered a brand -new concept of "community", which transcends the mere interaction amongst participants inherent to MOOCs, to fully explore its possibilities as a melting pot of entrepreneurial ideas and as a space of exchange.

Even though the potential of MOOCs is promising (and not only in the educational sphere), several challenges are still pending in the agenda. Some of them demand further efforts and more work on: creating trustworthy online certification methods and other blended certification models; learning analytics; innovative self-assessment materials and disruptive methodologies based on social and collaborative system or the federation of different MOOCs platforms and course repositories.

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[1] Figures as of 11 April 2013

OPEN DISCOVERY SPACE

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Through the creative use of new technologies, effective content organization, and learning processes that respect local school problems, Open Discovery Space tries to address the challenge of the "social appropriation of knowledge" by empowering all school audiences, but mainly teachers, pupils and parents. The approach to be followed contributes to the development of self esteem, an increased "sense of belonging", and an improved perception of one's own capacity to solve problems and contribute to the "construction of the surrounding community". These factors have been clearly related to the development of "social capital" and a greater degree of conviviality and peace. The school component and the community dimension of the project place an emphasis on developing certain key values and attitudes that play an important role in this process, such as the capacity of team work and a spirit of collaboration as a way of developing learning networks and communities. Consequently Open Discovery Space is promoting Open Education as key approach to opening up contents, learning and collaboration. The main outcome of this process will be the Open Discovery Space portal: a community oriented social platform where teachers, pupils and parents will be able to discover, acquire, discuss and adapt eLearning resources on their topics of interest.

THE NORDIC ALLIANCE FOR OPEN EDUCATION – STATE OF THE ART, CHALLENGES AND OPPORTUNITIES

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Are the Nordic countries forerunners in Open Education? What is the state of the art, barriers and opportunities of Open Education in the Nordic countries? What are necessary actions on policy, institutional and individual levels? These are the main questions of this paper.

The Nordic countries seem to be a good ground for openness and sharing: the Nordic countries share many values related to education and technology development; the political and governmental institutions are quite similar – there is also a tradition for exchange of knowledge and solutions between the countries. In this paper, we briefly give an introduction to OER and reflect on the state if the art of Open Education in the Nordic countries. In expert workshops by the **Nordic Open Education Alliance**, barriers and possible interventions to overcome them were explored. Based on these, we formulate recommendations as well as propose implementation actions. This study is based on a position paper[1] from the Nordic Open Education Alliance.

A **variety of initiatives** provides open or at least accessible content in the Nordic countries. We have collected practices across the Nordic countries in collaboration with the POERUP project[2] which has made significant efforts to map OER across Europe. It can be observed, however, that a lot of regional / institutional initiatives exist but are not linked to national initiatives and thus are not networked appropriately. There is at present a lack of national strategies and policies in how to best exploit the potential of OER in the national education system as a whole and a similar lack of coordinated Nordic initiatives. Furthermore, there are very few collaborations across the Nordic borders. As a conclusion, OER has received considerable attention but has not been exploited fully yet in the Nordic countries.

The **barriers** identified in the Nordic countries are rather similar to barriers found in different domains across Europe. We see that there are barriers on all levels: On a policy level, there are no policies in place to promote and support OER in the Nordic countries. The same is the case on the institutional level – there are almost no policies which is a strong contrast to for example Open Access which is widely accepted and promoted by educational institutions. On an individual level, we have explored that still awareness building is necessary. Furthermore, it is essential to overcome fears, for example regarding IPR and licensing. Also, recognition and motivational issues play a major role.

As a **conclusion**, we can state that the identified barriers provide a clear picture of the Nordic situation on OER. We see still a lot of obstacles but also potentials and promising possibilities to overcome the barriers. The barriers and possible actions can be used as a basis for future action planning on a policy, institutional and individual level. We can strongly recommend future collaboration to utilize the potentials in the Nordic countries. Furthermore, the great basis of available resources and pedagogical approaches can be a strong base to strengthen the Nordic position on the global educational market by establishing and exploiting international collaborations.

We believe that a regional approach can bring the Open Education movement forward. The **Nordic Open Education Alliance** brings together stakeholders across the Nordic countries and thus aims at contributing towards collaborative research, discourse and policy support. This community encourages the further discussion of this study and in particular recommendations.

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[1] http://www.nordlet.org/?=position

[2] http://poerup.referata.com/

LIMITS OF JOY

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The paper does the following: (i) it argues that the 'joy of learning' (theme of the conference) cannot be assessed by simply by focusing on internal factors, such as use of technology, instructional design or student support; (ii) external factors such as labour market prospects, raising tuition and accumulating student debt are to be considered. Central to the argument is the construction of an analogy between the US housing bubble (the 2008/9 sub-prime mortgage crisis) and the student loan bubble. (iii) In a third step the paper looks especially at distance education and analyzes its peculiar efficiency potential. Being often attributed to the wonders of technology it is associated with a combination of 'capital-for-labour' and 'labour-for-labour' substitutions which impacts faculty status.

The motive behind the paper is that the author feels that the promotion of access to Higher Education not anymore lives up to the promise of personal development and social upward mobility but is in danger to degenerate into luring students into a long term debt. Distance educators hence should pay more attention to the changing external conditions.

I FEEL LUCKY AND PROUD! THE SIGNIFICANCE OF DIALOGIC COLLABORATIVE GROUPS IN DEVELOPING PROFESSIONAL COMPETENCE AMONG AMBULANCE WORKERS

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Introduction

This paper seeks to explore education and learning related to development of professional competences among ambulance personnel. We draw on and present experiences from adult students in a flexible continuing education program at Lillehammer University College (LUC), the National Paramedic Education (NPE, 60 ECTS). The following two questions are central: How do Paramedics as adult learners experience their participation in reflective dialogues in collaborative groups across different stations (workplaces)? And how do they relate these dialogues to their own professional competence development?

We draw on qualitative and quantitative data from evaluations of three student groups (120 students). Together with a socio-cultural perspective on flexible and adult learning, we have analysed how the students experience the relevance of the National Paramedic Education. Dialogic collaborative groups are a well established learning method and based on the assumption that participation in dialogues in heterogeneous groups might enhance reflection on activities, demands and challenges in students' daily work. This is relevant, since a central competence goal in the study programme is to be able to guide other colleagues and to communicate with other related professions, such as health workers, medical practitioners and so forth. Ambulance personnel are not familiar with higher formal education in general, and participation in dialogic groups as part of formal educational settings in special. The students are expected to participate in dialogue-groups with fellow students and colleagues at their own and other ambulance stations.

Our main focus is on how students perceive their participation based on how they describe dialogic groups as relevant activities in terms of competence development. We highlight to what extent dialogic groups manage to connect learning in formal educational settings and the workplace as learning setting. We analyse how the students experience their participation in dialogic groups, how they manage their own learning across groups and across formal an informal learning contexts, and how their competences are being regarded and further developed in their daily work. We discuss the relevance of reflective dialogue for professional competence development. Our main intention is to suggest some criteria for analysing professional competence development by use of dialogic collaborative groups. By reflecting on, and discussing a specific case and empirical findings within this theoretical frame we want to contribute to bridge a potential gap between formal and informal learning at the workplace.

The importance of participating in dialogic groups

Our results illuminate the importance of participating in dialogic groups but not at any cost. The students experienced that participation in groups contributes to sharing ideas, thoughts, knowledge, competence and self-reflection related to work-practice. However, they emphasized that group work is hard work in terms of planning and processes. They emphasized the importance of facilitating for efficient group work in terms of agreements, dedicated members and planning for predictability and well structured work.

However, and perhaps more far-reaching – an overall consequence from participating in formal education are the ambulance workers feelings of pride, identity and affiliation. They feel happiness from being the chosen ones, to be a "Paramedic" with capitol P, and achieving formal documentation of professional competences. Our results indicate that we need further investigation into how employees and employers utilize knowledge and competences earned in formal education. This is defined as an unexploited issue in research on adult learners. Our planned study can hopefully contribute to fill this gap.

ATTITUDES OF THREE GENERATIONS TO SMARTPHONE IMPLEMENTATION

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Introduction

Teaching in the 21st century, a time in which the ICT revolution is in full swing, requires teacher and student preparation to educational settings using relevant, meaningful and challenging teaching methods, and by leading innovative pedagogy. The disparity between educational standards and reality outside educational institutions is increasing. Alternative learning infrastructure such as mobile technologies are becoming more common, and are challenging long held, traditional modes of teaching. Benefits of mobile learning are expressed in different facets of education including cooperative learning, contextual, constructivist and authentic learning. Wireless devices are perceived by some teachers as a threat to their authority and a distraction to the educational process. To change the perception of mobile devices as a threat, the authors propose to examine the contribution of such technology to teaching and learning. Harnessing the availability of mobile devices and mobile Internet technology for teaching and learning can empower learning anywhere and at any time as well as allowing better access to knowledge. This in turn makes learning relevant and adjusted to the information-savvy society in which we live.

Mobile phones and mobile applications offers a wide range of opportunities to educators and learners as well as the community by preparing its members for the wide range of subjects and skills necessary for the 21st century. Incorporating mobile technology in teaching can provide a chance for educators to bridge the gap between the school environment and the extracurricular environment. Allowing learners to use technologies with which they are fluent can empower students and enrich learning, and make it more meaningful and relevant. Embracing these technologies that are broadly regarded as a nuisance, if used correctly, is certainly more constructive than the attempts to fight and resist technology in the classroom.

While it is clear what educators and pedagogues think of mobile integration in the classroom, student opinions are still underexplored. The aim of this study is to examine student and instructor attitudes toward the implementation of smartphones in education: the types of usage they suggest and whether they think that smartphones should be implemented in academia as well as in schools at all.

Methodology

This study was based on experience with three factions: 67 middle school students, college students and their instructors, 42 students studying towards a Master of Education degree in teaching combined with a teaching diploma, and 18 college instructors, from various disciplines. The study was conducted through qualitative and quantitative analysis. Relevant information was collected based on the questionnaires, correspondence and personal journals and interviews.

Findings and Conclusions

There was a difference in the way the three generations relate to smartphones and mobile technology and in the difficulties various groups face. While the middle school students were very excited about the prospect of incorporating cell phones into their learning and almost did not experience technical problems, the college students and their instructors needed much more technical assistance during the activities. College instructors need more exposure to the value of technology and time to become adept at using mobile technologies before they are ready to incorporate them into their teaching. College students need to be taught the best methods, to help them recognize the value of mobile technology.

This study sheds some light on the questions that each new technology raises during its first stages. As students stated, it is important for teachers to know the affordances and benefits of this technology, as well as to be aware of the difficulties that are part of the process of implementation of a new technology. Through slow, gradual introduction of the technology into the classroom, teachers can gain pedagogical experience without being overwhelmed.

EXAMINING THE CULTURAL COMPONENT OF PLAR: PRIOR LEARNING ASSESSMENT & RECOGNITION FOR DISTANCED EDUCATION STUDENTS IN MYANMAR

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Introduction

This paper drew on the intercultural communication theories of Hall and Hofstede to explore cultural considerations in the implementation of a Prior Learning Assessment & Recognition (PLAR, know as VNFIL in the EU) process with mature adults in Myanmar who were seeking to earn a Canadian university credential via distance education. PLAR offers mature students the opportunity to accelerate their studies by accrediting learning gained from informal and non-formal sources. The PLAR process requires students to express their learning in terms of formal learning outcomes, either the outcomes of specific courses or broader outcomes associated with a program. This learning is typically expressed in a portfolio, which includes a narrative description of learning, supported by documentary evidence such as work samples. A large-scale study in the USA and Canada has demonstrated that mature students who earn credits through PLAR complete their studies more quickly, earn grades as high as students who do not use PLAR, take more courses, and have greater persistence towards program completion. That is, PLAR can enhance mature students' motivation to persevere with distance education programs. No research exists, however, on the exportation of PLAR to a different socio-cultural context in conjunction with exportation of higher education via distance learning.

Method

The research participants were 15 Myanmar students (8 males, 7 females) aged 22 to 37 years who were enrolled at a private training organization. They first participated in a portfolio development workshop led by the organization's Training Director, who guided the students in demonstrating competency in eight areas: communication, information organization, problem solving/decision making, numeracy, critical thinking, intellectual maturity, independent study and learning skills, and applied knowledge and abilities. The workshop drew on the material designed for distance education students involved in the PLAR process. Following similar procedures to those normally used with TRU's distance education students, two PLAR assessors evaluated the students' written portfolios independently and then conducted joint interviews with each student to determine what credits might be awarded. Because of the poor telecommunications infrastructure in Myanmar, the evaluation interviews were held face-to-face, rather than by teleconference, which is the usual practice in Canada. The second author collected observational data during the portfolio development workshop, as well as interviewing each student individually about his or her experiences during the workshop. Once the students' portfolios had been assessed, but before their results had been communicated, each student was asked to complete an on-line questionnaire about the assessment process. The Training Director and the two PLAR assessors were interviewed about their experiences and also contributed field notes. Both authors identified emerging themes and supporting quotations independently that were later validated with each other.

Findings

This study demonstrated that, with local support, students from an Asian culture context can be successful with a PLAR process designed for Western distance education students. Analysis of the qualitative data revealed four themes: Distinguishing Knowledge from Skills, Modesty, Impact of Mentoring, and Difficulties with Supporting Evidence.

Conclusion

The research showed that Intercultural Communication theory was useful in highlighting difficulties stemming from cultural differences that the students encountered in preparing their PLAR petitions. In future implementation of PLAR via distance education in new cultural context, attending to such difficulties and providing appropriate support will enhance student success.

THE JOY OF LEARNING IN LATER LIFE – THE AP(P)TITUDE OF TABLETS FOR SENIORS

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In Europe a large number of citizens is still not eIncluded because they lack the necessary eSkills. The digital divide is especially true for the third agers. According to Eurostats (2011) about a quarter the EU-27 population aged 16 to 74 years old have never used the Internet, the 55 to 74 old group only 40% have at least once a week access to the Internet and for example in Germany the group of older users above 70 years, only 28.2% use the Internet regularly. The main reasons for this situation are lack of awareness about the potentials, as well as economic, technical and high emotional barriers. In a study of White et al. new elderly Internet users showed compared to a control group trends towards more autonomy, less loneliness and depression and a more positive attitude towards computers. The use of internet and e-mail also seems to have a positive effect on quality of life, mainly because of the new opportunities for social interactions. This goes in line with activity theory, a well-known gerontology theory which states that active aging and the continuous involvement in meaningful activities has a positive impact on life satisfaction and aging. That this effect can be produced by teaching older adults how to use a computer is shown in the study of Shapira, Barak & Gal. The popularity of tablet-PCs throughout Europe is increasing very fast. For the first time 2012 more Tablet-PCs were sold as standard PCs including notebooks. For example in Germany, 13% already have a Tablet-PC, in the group of 60 years and older, 6% use a tablet-PC. These facts have motivated us to design a field study to identify the potentials of tablet-PCs to support older people to engage with ICT and discover the joy of learning by using these inspiring devices for accessing the Internet and discovering the collective memory and knowledge on the Internet.

The study we designed is aimed at discovering the potentials of tablet-PCs for promoting the acquisition of eSkills amongst the older generation; for supporting the development of learning models and programs using tablet-PCs. In order to investigate the potentials of mobile tablet PCs two field research strategies were applied: 1. a Pilot-Study: twelve seniors had the opportunity to exercise on a tablet-PC (iPad3) and were asked about their experiences; 2. Comparison Study: two matched study-groups (iPad-group, Notebook-group, each with 18 participants) were composed. Both groups went through a computer-course including four weekly sessions with duration of three hours. Participants learned basics about the use of their devices, the use of internet and different communication possibilities. The first indications regarding high level of satisfaction, motivation and rapid learning progress that could be identified during the pilot-study was confirmed by the comparison study afterwards. In the comparison study the iPad-group developed the same or higher level of eSkills as the notebook group despite the fact that the factors pre-knowledge, familiarity with the device and number of learning hours in-between the training sessions were much lower in the iPad-group. At the end the iPad-group was higher motivated to proceed. These are indeed astonishing results that give a first indication on the potentials of tablet-PCs for the target group. We can conclude that tablet-PCs have a huge potential for supporting less motivated and technique-related senior citizens to access the Internet and enjoy learning in later life.

Our results support the potentials of Tablet-PCs as very supportive to overcome initial motivational barriers, the (almost) intuitive user interface can be handled after a very short training time and the first successful tasks can be experienced very quickly. Tablet-PCs can cope best with age-related impairments such as visual, auditive, sensory and motor impairments. For these reasons it is essential to develop comprehensive tablet-PC training dedicated to the very heterogeneous group of senior citizens, which are still off-line. In this sense, it is absolutely crucial to explore new innovative paths to support the older generations to actively take advantage and participate in the information, communication and social Internet world. The social and economic advantages are extremely high: supporting active aging and ICT competence development also means to give individuals to stay longer in an independent living situation and relieve some pressure on the social security systems across Europe. And it also contributes enormously to feeding back knowledge and experiences of a life to society in general.

REIMAGINING AND REINVENTING DEMOCRACY THROUGH DIGITAL STORYTELLING – GLOBAL CITIZENSHIP EDUCATION IN THE "RIGHTS" PROJECT

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This paper presents the objectives and first results of the RIGHTS project (pRomotIng Global citizensHip education Through digital Storytelling). The main aim of the RIGHTS project is to promote the Education for Global Citizenship (EGC) by enhancing interactive teaching in secondary schools in Europe through the use of Digital Storytelling (DS). A key question is how to include young people into politics and how to create an education that supports their development to become active citizens. Researchers criticise civic education for being formal, irrelevant and unable to engage students in democracy and politics. It is claimed that school should become an arena not only for learning about democracy but for practicing democracy. There is a need of new ideas and methods when it comes to civic/citizenship education.

Digital Storytelling has proven to be a powerful and effective learning tool in stimulating creativity and critical thinking through the combination of the ancient art of telling stories with different digital tools. It allows students to approach subjects in a creative and interactive way and at the same time to develop transversal competences for lifelong learning such as digital competences, social and civic competences and cultural awareness and expression.

Based on a research made by the partners, the project has developed an e-learning course for teachers in EGC. The main focus of the project and the course is to promote the teachers and students ability to *reimagine* and *reinvent democracy* through the implementation of an innovative didactic methodology by using digital storytelling as the main method in a global citizenship education. The RIGHTS E-course appeals to the intrinsic motivation of secondary school teachers and students to learn, to do a better job, and to enjoy doing it.

The paper describes the educational, pedagogical, cultural and motivational benefits deriving from the applied methodology. The basic idea of the project is that allowing the students to have a voice and to actively participate in democracy both in school and in society, is a powerful way to support their development to become active citizens.

The RIGHTS project is funded with support of the European Commission under the Lifelong Learning Programme – Sub-programme Comenius. Eight partners (schools, non-profit organisations, universities, cultural organisations) are involved in this project and they come from 7 different European countries Italy, Bulgaria, Spain, Portugal, Turkey, Switzerland and Norway[1]. The Italian university "Guglielmo Marconi" is the leading partner of the project.

Read more about the RIGHTS project on www.rightsproject.eu.

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[1] The Italian university "Guglielmo Marconi", the Italian NGO C.I.E.S (Centro Informazione e Educazione allo Sviluppo onlus), the Bulgarian Gender Research Foundation (BGRF), the Portuguese NGO APS (Associação de Professores de Sintra), the Istanbul Provincial Directorate of National Education (ILMEM), the Norwegian University College of Hedmark (HUC), SEED association from Switzerland and TRÀNSIT Projectes from Spain

EDUCATIONAL ROBOTICS AND SOCIAL INCLUSION

Paolo Tosato, Barbara Baschiera, University Ca' Foscari of Venice, Italy

During the past few years, new technologies based on the use of artificial environments and technological artifacts (educational simulations, microworlds, robots) that radically changed the traditional methods of education and that promise to change them even more, have been developed. The design of these tools was inspired by Piaget's theory of cognitive development, later revised by Papert. In particular, a technological artifact that is becoming increasingly popular and affordable in school contexts is that of robots. Nowadays, robotic applications affect different areas of our life and are gaining increasing importance in the scientific, economic and cultural field. Therefore, making children aware of developments in robotics is increasingly important for citizens' training and in maintaining commitment to lifelong education.

This article focuses on the impact of these applications in educational world, paving the way for the birth of a new field of research called Educational Robotics. From this point of view, robots offer students and teachers a method through which to learn to negotiate their own point of view with the others, taking into account many differences in opinions. In this way, the learning path offered by educational robotics is not the result of an individual, but is rather the result of a set of processes of social interaction that take place while collaborating in groups, thereby creating more positive attitudes towards learning, paying more attention to emotional and social aspects of learning and moving to a competence-based approach that values learners as well as their prior experiences. In particular, through educational methods that make use of robots, it is possible to develop key competences in science and technology, as well as social and civic competences, which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment.

This paper investigates mainly how educational robotics can increase social inclusion in secondary schools, taking account of the way educational robotics can change the learning experiences of users to make them more inclusive, involving different students in the process, and encompassing cultural heritage and learning style. Most talented students and those with learning difficulties will be involved in the design, construction and programming of small robots, working as a team, pooling their talents and their different intelligences, in a way that recognizes the fact that the intelligence of the others is the first step to a full integration of foreigners and students with special needs.

To test this hypothesis an experiment was run. This involved 20 students of secondary school (primary level) in different activities, using LEGO Mindstorms NXT Robots. The research findings highlighted how "reciprocal teaching" improved the integration and the involvement of students with behaviour disorders in robotic activities, demonstrating how the use of robotics may represent a valid support to teachers and students alike. Moreover, students with behavioural disorders (namely, attention deficit, hyperactivity, emotional disturbances) found a source of low-impact autonomic self-control and self-fulfilment brought about by the interaction with the adults. It was the error in robot operations to act as such a source, governing time and the sequence to be followed.

Notwithstanding this, it is not possible to generalise the findings of a single experiment. Activities with secondary school students confirmed that educational robotics support social inclusion, and the adoption of methodologies that involve the use of robots allow both teachers and students to develop digital and collaborative skills, stimulating creativity and innovation in the process.

CARER+: TOWARDS A DIGITAL COMPETENCE FRAMEWORK FOR CARE WORKERS IN DOMICILIARY CARE

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Digital competence in domiciliary care work

This paper outlines the conceptual background, methodology, and evidence-based results of the research carried out to inform the development of a CARER+ digital competence framework for care workers in the domiciliary care sector. The research has been conducted within the CARER+ project that aims to develop the digital competences of care workers to improve the quality of life of older people.

Technically clear-cut and specific application scenarios such as telecare and assistive technologies are only one of the drivers towards an examination of the digital competences of care workers and care working sector. The research described here to inform the CARER+ digital competence framework for care workers is based on the assertion that being digitally competent transcends mere technical dexterity and cannot be reduced to instrumental knowledge and skills such as operation of specific software. Rather, digital competence is to be understood as an inter-play of technical skills with more comprehensive, transversal knowledge, skills and attitudes such context-adapted communication, critical handling of information or reflecting one's (digital) identities. In the frame of the CARER+ project, the central research question has been formulated as follows: How is the transversal or non-domain-specific aspect of digital competence manifested, supplemented and modified through its contextualisation in care work?

Methodology

Four research methods were carried out in 7 European countries to investigate the relevance of digital competences in the care sector, as well as to identify the digital knowledge and skills likely to emerge within care workers' activities in the near future:

- Content analysis of competence-related sources in the care sector such as IVET and CVET curricula, qualifications frameworks and standards, occupational standards and job descriptions, and certificate supplements.

- Expert focus groups bringing together 5 to 10 experts in each country to discuss three topics: the relevance of digital competence in care work at present; new digital possibilities and application scenarios; specific digital skills and competences for care workers and caregivers.

- Individual expert interviews, following the lines of inquiry of the focus groups.

- Questionnaires to care workers and caregivers, mapping quantitatively their current level of digital competence; evaluating the relevance of digital technologies in their work; and assessing the related needs of care recipients.

Results

The majority of expert sources confirmed that notion of digital competence can already be seen as useful and needed in the elderly care sector, and that it will gain a more central position in a near future. This will partially be due to rapid developments in telecare and assistive technologies that are being translated from cutting-edge experiments into commonplace practical solutions. As importantly, every-day digital technologies such as personal computers, tablets and smart phones are entering the lives of the elderly and the work of carers. However, many experts warned against exaggerated digital optimism and indiscriminate futurism as the average level of digital competence among carers remains sub-optimal.

An up-skilling scheme for care workers based on a specialised competence framework was thus seen as beneficial for the sector. The research collected a body of concrete evidence on particular areas of digital competence applicable in care work that will be synthesised into a framework in the next project steps.

MAINTAINING ACADEMIC INTEGRITY WITH ONLINE PROCTORING

William Dorman, CEO Kryterion Inc., United States of America

As the number of students in distance education continues to grow across the globe – the pressure for quality online proctoring or invigilation solutions also increases. A global shift toward online learning is occurring and technology demands are increasing for online testing solutions that can evaluate learners effectively while maintaining academic integrity. Mass adoption of online learning has generated a demand for technology tools that can help online programs deliver quality learning and assessments to students.

The technology to proctor distance learning and certification exams comes at a crucial time in the advancement of distance education and resolves important issues in this field.

To address this challenge, Kryterion, Inc. has responded by developing one of the most comprehensive professional proctor career paths available.

Kryterion is a full-service test development and delivery company that provides world-class online testing technology integrating item banking, test delivery and real time reports; while leveraging a global network of testing centres. Kryterion provide a full range of Online Proctoring (OLP) proctoring solutions to distance education to cater to a range of security and cost requirements and is the market leader in live online-proctored exams, which utilizes remote video monitoring to supervise test takers where they live, learn or work.

The Kryterion online proctor centre eliminates a potential conflict of interest when teachers are proctors for their own students. It also enables institutions to ensure that the person taking the test is actually the person that is supposed to take the test.

A Professional Proctor has one job – to monitor test takers. Proctoring from a centralized online proctor centre gives the proctor access to valuable resources, including proctoring software and support when needed. Kryterion Proctors undergo background checks, psychometric personality evaluations, references, 100 hours of training and a qualification exam. Kryterion Professional Proctors enable institutions to maintain high levels of academic integrity – as more students enrol in online courses and demands for industry quality control and assessment come into play.

On the surface online proctoring appears to be a straightforward solution to maintain academic integrity, deter cheating and protect against test content piracy. In practice, the execution of this service is complicated with many variables including:

- Accommodating time zones of test takers
- Adjusting for the length and types of tests
- Providing for various types of cameras and microphones
- Allowing client-specific test aids such as calculators or books
- Accommodating inconsistent Internet connection, quality and speed
- Eliminating scheduling conflicts
- Removing the possibility of collusion between test-taker and proctor

ASSESSMENT THEORY AND PRACTICE IN THESIS SUPERVISION: A STUDY OF INFORMATION AND COMMUNICATION TECHNOLOGY ENABLED SYSTEM (SCIPRO) FOR EFFECTIVE EVALUATION

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Introduction

This paper discusses Information and Communication Technology (ICT) support for thesis supervision assessment from a theoretical point of view. A case study methodology was selected due to the qualitative nature of this research and data collected through the observations and development team discussions. The thesis supervision process is the unit of analysis, and "SciPro" was selected as a critical case for the study. The selected case, "SciPro" is a web based information system and provides informational and communicational support for the overall thesis supervision process.

Thesis supervision assessment

Thesis supervision is one of the most complex and problematic pedagogical method which has features of Problem Based Learning (PBL) and Self Regulated Learning (SRL) methods. The academic institution provides a general structure for a thesis supervision process, but supervisors and students are not restricted in the process of designing and executing their individual theses. According to the complexity of the thesis supervision process, assessment is more challenging than traditional classroom teaching methods. Although, assessment methods are in many forms in literature, based on the nature of the case, formative assessment and summative assessment methods were selected. Formative evaluation concentrates on ways of improving a project or a programme while it is still on-going. Summative evaluation is undertaken after the project or programme has been completed and judges its overall effectiveness in a specific point. Thesis supervision is a complex, unstructured and problematic process and should use both types of assessment methods to maintain the quality of the process and product.

Discussion

Two previous studies were selected from formative assessment, which suggest frameworks for implementing formative assessment in the learning process. The first study recommends seven principles: 1) Facilitates the development of self assessment (reflection) in learning; 2) Encourages teacher and peer dialogue around learning; 3) Helps clarify what good performance is (goals, criteria, standards expected); 4) Provides opportunities to close the gap between current and desired performance; 5) Delivers high quality information to students about their learning; 6) Encourages positive motivational beliefs and self-esteem; 7) Provides information to teachers that can be used to help shape the teaching. The second study identifies three processes with the different agents (teacher, peer, learner) and suggests the framework, indicating that formative assessment can be conceptualized as consisting of five key strategies: 1) Clarifying and sharing learning intentions and criteria for success; 2) Engineering effective classroom discussions and other learning tasks that elicit evidence of student understanding; 3) Providing feedback that moves learners forward; 4) Activating students as instructional resources for one another; 5) Activating students as the owners of their own learning. Steps in SciPro (practice) are discussed from beginning to end with related to seven principles and five strategies. The dissuasion mainly focuses on how SciPro has implemented these suggestions with the support of ICT. In addition to these two research findings, finally, discuss how SciPro can be used for summative assessment.

Conclusion

Formative assessment methods can be utilised to enhance the quality of thesis supervision throughout the entire process and summative assessment methods measure the quality of thesis in a specific point. As discussed in this paper, we argue that SciPro is significantly supported for implementing findings of assessment theories on the thesis supervision process. The main limitation of this study is we did not cover all the relevant assessment theories, and we suggest conducting a study of assessment theories and thesis supervision in detail to shape up a specific model for thesis supervision assessment.

EXAMINING AT A DISTANCE – HOW DOES IT WORK?

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The Open University of Israel (OUI) a distance education institution offers undergraduate study programs in a variety of disciplines and Master programs in some disciplines. The course material which is especially developed for the OUI students is distributed by snail mail or via the Web. Tutorials that are not mandatory are being held in study centres, assignments are submitted on a predefined schedule via the internet. The only time students are required to come to a study centre is when taking exams. The logistic underlying the exam system is complex, and so is the academic aspect of the system.

The OUI offers three different exam sittings in most of its courses. Student who fail in one sitting have a second chance in a second sitting. The course team strives to ensure that the level is equal in all the exams.

The *MATMON* system was primarily designed to improve preparation and checking of assignments and exams. The system helps the teaching staff to design and assess exams and assignments, and create an exam and assignment database as well as an item bank for each course. The database affords easy and efficient retrieval by characteristics, and serves as an archive. It includes statistical data on exams over the years. Designed with an advanced and user-friendly interface, the system includes a security mechanism that provides access to each coordinator's courses only. We used the system to analyze the *CS1 introductory course* exams in order to shed light on phenomena we observed along the years, and try to improve the preparation of the exams which serve as the main assessment instrument.

The CS1 course is based on 20 videotaped lectures placed on the course website and contain all the material covered in the course. We teach Java, using the BlueJ environment.

The course does not require any previous programming knowledge, and even students with no background at all can achieve a high level of success in the course. Since we have an open admission policy, and this is usually the first course students take towards an undergraduate degree program in CS, the students are very heterogenic in their level of knowledge and skills when they enter the course.

Most of the students in the CS1 courses prefer to take one of the first two sittings. The students who take the third sitting are usually the students who failed in the first one, and this is their second chance to pass the exam. Therefore, we were not surprised to find that there was a considerable difference of 7 points between the average of the grades of the first two sittings and that of the third one. The average of the grades of the first two sittings was 58.01 (out of 100) while the average grade in the third sitting was 51.04. This result was found to be statistically significant ($p < 0.0001$).

However, we noticed also that there is a difference of about 3 points (out of 100) between the average grades of the two first sittings. The average of the grades in the first sitting was 59.79 (out of 100) while the average grade in the third sitting was 56.60. It is not a big difference, but it is statistically significant ($p=0.0006$). Since our analysis revealed that the exams are quite similar, we think students who are not quite sure about their knowledge, prefer to take the second sitting and to have more time to study toward the exam.

Based on MATMON's data we can not only differentiate between different sittings of an exam, but also find how students coped with different types of questions, and check the way we composed the exams trying to be fair while keeping a high level of the exams.

We found that the average grade of the questions that required writing code is lower than the comprehending code questions. This result is in line with the professional literature.

To conclude: the issue of finding fair tools of assessment is a crucial issue discussed in the professional literature. When referring to distance education this becomes even more crucial since the exams are taken at a distance. The logistic of the exam system is complex, the alternative nowadays is of course the trivial one but problematic of web based exams. At the moment because of the known drawbacks we do not consider shifting to web based exams.

AUTOMATISED EXAMINATION OF PROGRAMMING COURSES – DESIGN, DEVELOPMENT AND EVALUATION OF THE AUTOEXAM ONLINE SYSTEM

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Traditional hand-written exams are still the main assessment method in programming courses at Swedish universities. To assess students' knowledge and programming skills has seldom met any objection, but the fact that skills in code construction are tested by paper programming in written exams have been questioned by researchers. Several conducted studies indicate that computer based examination would be a more natural environment and that the most authentic form for programming examination should be to solve problems at a computer. In other parts of the world like China, web based examinations are widely used and paperless examination is an accepted and well-known term.

The aim of this study is to describe the development of the web-based *AutoExam* system and discuss how the software system might contribute to modern programming education. AutoExam is an online software system prototype where skills in the Python programming language can be assessed with questions that can can be answered and stored in an environment that simulates the Python standard editor IDLE that often is used in introductory programming courses.

This study has been carried out with Design science as the overall research strategy where the process can be divided into six steps: 1) Problem identification, 2) Objectives definition, 3) Design and development, 4) Demonstration of the artefact, 5) Evaluation and 6) Communication. Semi-structured interviews were conducted with two programming teachers as a pre-study to collect data for the design of the artifact. The system is designed and deployed as an online system where the artefact is constructed by using the Python programming language and the *Django* web development framework. The system is implemented with a Model-View-Controller approach where the code is divided into three separate layers. The implemented prototype was evaluated in test examinations by students with basic skills in the Python programming language. Answers from the students' tests were analysed by using the *One-Way Anova* analysis method.

The results were insignificant but showed a slightly better result for answers that were generated in the AutoExam environment. Findings show that there are no significant differences between the automatised examination environment and traditional pen and paper assessment in the test examinations.

Our recommendation is that the kind of automatised examination of programming skills that is described in this article should be tested and evaluated in larger student groups and during longer time than what has been done in this limited study. If the system in the future should be used as an online system with students taking the exams by distance there are security issues to handle. Otherwise the outcome of this study is promising from the teachers' as well as from the students' point of view. One well-discussed problem where a system like AutoExam would be an improvement for all involved stakeholders is that computer generated answers would eliminate bad handwriting and reduce the so called "halo effect", at the same time as it would facilitate the correction process for teachers.

COMPETENCES AND RUBRIC ASSESSMENT

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The aim of the rubrics designed in this experience is to monitor student progress through continuous and educational evaluations, a retroactive process that should allow feedback and monitoring of the whole process of teaching and learning in order to detect difficulties in building strength in different content areas and acquiring competences as soon as possible.

Method

Considering that the final goal is to test the efficacy and effectiveness of a rubric for assessing a specific competence, a non-experimental research design was carried out with a descriptive and interpretive purpose and typical instruments were employed in a qualitative research process: content analysis of discussion groups and forums on the subject used by the students. The authors avoided arbitrariness, subjectivity and generalisation by systematically categorising responses according to previously established criteria.

Results

The most important aspects can be organized into three categories of analysis.

Problems detected during the validation process

All professors have noted two difficulties. On the one hand, the difficulty in relating the specific indicator with the ability intended to be measured and on the other, the difficulty in determining which activities are best suited to develop the different indicators of the competence to be assessed.

Advantages of using rubrics

That was examined both from the professors' perspective and the students' perspective.

Validation

In order to validate the rubric after its design, it underwent an assessment by expert judges, all of them university professors of other subjects, who were asked to explain what they understood each of the designed indicators to mean.

Students were also assessed on the subject content using a multiple-choice test and the designed rubric. It should be kept in mind that the multiple-choice test is based on a continuous numerical score while the rubric on a discrete numerical score. But the average of the two techniques was similar since the average for the multiple-choice test was 7.88 and the average for the rubric was 8 among the twelve groups of students.

Conclusions and Discussion

Considering the results obtained, we can conclude that the rubric is valid for evaluating this competence, but it also allows educational evaluations to be made, since students are informed which competence components they have totally mastered and which need improvement.

EARLY TESTING OF E-EXAMS IN CALCULUS AT UNIVERSITY LEVEL

Morten Brekke, University of Agder, Norway

Abstract

The aim of this work is to show the results of early testing using eAssessments on the course Mathematics I MA-154, mathematics for bachelor and master students in engineering. This course has graded written examination and 5 approved written assessments throughout the course. This is lots of work to administer, approve and grade. Having worked for the past 10 years with projects in eLearning, I wanted to use some of my knowledge to make grading easier. I started searching for suitable tools that could do this work for me. I ended up using Pearson and their textbook Calculus: A Complete Course by Adams and Essex. Students get access to a powerful online homework, tutorial, and assessment system called MyMathLab Global when they buy the book. My ultimate goal is to fully implement this assessment system so that exams are taken and graded electronically. Autumn 2010 to 2012 were used to do the first testing of this system.

Introduction

Having lectured on the MA-128 Calculus course (now MA-154 Mathematics I) at University of Agder in 2009, it was clear to me that I would make big changes in relation to how the course was presented. In 2009 I took over the course at short notice and did not have any time to change course arrangements from previous years. The earlier scheme was not bad but it was taught in the traditional way (board education, compulsory exercises and assignments). With the election of MyMathLab Global I have a tool that satisfies most requirements for eLearning. Here I can give students assignments, tests, quizzes and exams. Questions can be randomised, so that students can get a new question if they want to practise more. The test module allows me to give a test that immediately gives students feedback on their scores. Student feedback indicates that this is motivational. In this paper I will describe the work performed in MyMathLab. I will also comment on the results and whether MyMathLab is a suitable tool for electronic exams on computers, from now on referred to as eExams. Can MyMathLab set the right grade for the students? Will students get a grade on eExams that is appropriate in relation to what they have achieved?

Innovation and relevance

MyMathLab gives me a full overview of my students' performances. So then it was time to test out eExam on my course. First I wanted to see if it was possible to grade the result of the exam electronically. This would save me a lot of work since I have more than 450 students on my course. Then I wanted to see if it is possible to handle 450+ students conducting the eExam at the same time on our campus. This was my plan:

- Autumn 2010: test out the eExam on a limited group of students, and compare results of the ordinary grading against electronic grading by MyMathLab.

- Autumn 2011 and 2012: try out the eExam on a large group of students. The main focus here was to see if everything would work; laptops, power supply, wireless network etc.

Conclusions

Results from these years of testing eExams using MyMathLab have only given positive results so far. The full potential of MyMathLab is still not used or been investigated. Feedback from students is very positive: they say the tool is challenging and exciting. Some adjustments are required but there are no major problems that are not resolvable. My experience with MyMathLab has been very positive. Students are happy even though it is in English and not Norwegian (except the questions I have written myself in MyMathLab). There have been very few technical problems throughout and support from Pearson is good.

THE MEASURABILITY OF EXCELLENCE − THE BUDAPEST BUSINESS SCHOOL MODEL FOR THE ACHIEVEMENT EVALUATION OF PRACTICE-ORIENTED TRAINING

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It has become imperative to use well-defined criteria for the evaluation of the achievement of Institutions of Higher Education (IHEs). Obviously, subjective judgment will not do, and exact measuring can only be applied with certain limitations. Statistical methods, however, can be applied. The authors start this presentation by demonstrating how important statistics can be wherever we are faced with (and might be misled by) data and conclusions drawn from them. The authors give an overall picture of the latest developments in Hungarian Higher Education, and, specifically, how they affect their school, the Budapest Business School (BBS) at different levels and forms of training. BBS, with about 19,000 students, is the second business school in Hungary.

In the second part of the paper, they examine the market value of useful and practical knowledge, emphasising the difficulties of quantifying. They provide a model that could be applied to set measurable standards for the evaluation of IHEs concentrating on practice oriented training.

Statistics as a means of measurement

The 21st century is building a society based on knowledge. The concept of knowledge-based economy has frequently appeared in recent business publications. This is typically characterised by the accelerated flow of information, the linkage between business and science, and the increasing importance of knowledge. Higher education as part of all social systems is the flagship of knowledge transfer. Whenever we want to assess its accomplishments, we will have to choose the appropriate measurement tools, which will always include statistical elements.

Thinking statistically and understanding stochastic processes have become universally acceptable. Some statistical indicators are widely used in everyday speech, such as GDP, consumer price index, employment rate, national debt, and so on. Such statistical indicators are also used for evaluating the achievement of IHEs, too, and problems are often discussed in a new language – the language of numbers, or more precisely statistics.

We have to bear in mind all that when we deal with the issues of higher education. And indeed, the more information we are receiving (as is the case in a digital world) the more competencies are needed and the more circumspection is required to understand and analyse the wealth of data available.

A few facts and the latest developments of Hungarian Higher Education

Hungarian higher education is in a transitional state. A new *National Law on Higher Education* was adopted a little more than a year ago, which means that some new regulations have since been introduced, but some issues seem to be still unresolved. Most of the unresolved issues are closely connected with how to finance higher education, but there are a few more.

A model for the evaluation of practice oriented training

The most important task of higher education can perhaps be defined as generating functional knowledge to be utilised in the economy and to provide for other needs of the society and subsequently pass on this knowledge to the students. That is why Budapest Business School has chosen this motto: *We want to provide our students with useful knowledge*. Being the largest college in Hungary and having a record of ranking and evaluation made by Hungarian periodicals and business papers, BBS may qualify as a good example of a college of applied research. They are, obviously, subjective judgments, which we are understandably proud of.

LEARNING BY REMIXING: ASSESSING STUDENTS DESIGN OF MEANING IN THEIR DIGITAL RESPONSES TO ACADEMIC PROBLEMS

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Situated within the socio-cultural perspective on teaching and learning this study draws on theories of multimodality, social semiotic, mediated discourse, new media and remix culture to investigate the multimodal interactions in year 8 science students design of meaning in their digital multimodal responses to academic problems using the web. The purpose of this study is to design, test and evaluate a "learning by remixing" learning environment to support the students' learning of scientific concepts and development of multimodal literacy practices within the scientific semiotic knowledge domain. And the aim is to develop a pedagogical model for learning by remixing which supports the students' development of multimodal literacy for knowledge construction in the new media age. This paper investigates the types of multimodal interactions the students remix using the modalities they have available on the web in their design of meaning in their digital responses to academic problems. The objective is to propose a multimodal interactions framework for assessing students' design of meaning in multimodal digital artefacts.

The World Wide Web (web) has evolved into a multimodal, interactive, visual and aural experience. The techniques of previously separate media have been united in a common new media environment and the manipulation and construction require knowledge of visual, aural, and interactive conventions. We now live in a networked knowledge society where the web has grown into an essential medium for communication, socialization, and creative expression. In March 2011 the web population was 6,930,055,154 (Web World Stats: Usage and Population Statistics, 2011.). In the history of literacy, no other technology for reading, writing, and communication has been adopted by so many in such a short period of time. In this "digital culture" the possibilities for the manipulation of text, images, video, and audio files have increased dramatically, and our students live in a world filled with self-authored, customized, and on-demand content, much of which is easily replicated, manipulated, and redistributable (Hughes & Lang, 2006). The web and computational media have given them the tools to create, remix, and share content on a scale that had previously only been accessible to the professional gatekeepers of broadcast, print, and recorded media outlets. According to Lenhart & Madden 50% of all American teens are active "content creators". "Content creators are teens who have created or worked on a blog or web page, shared original creative content, or remixed content they found online into a new creation." These content creators, no longer passive receptors of content, take on the role of producers; they re-use and remix the existing store of knowledge and culture to produce their own social and creative innovation, producing a new dimension of creativity. According to Jenkins contemporary creativity is no longer focused towards creating original content but is a practice of rip, mix and burn, where content is taken, appropriated, adapted, mixed, and distributed in a way in which consumption of media and information become a productive act of remixing, transforming and creating new content from various sources. As Lessig, Manovich and others states, we now inhabit a "digital remix culture".

TOWARDS A SCIENTIFIC EVALUATION OF LEARNING EFFECTIVENESS

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In recent times, educational researchers have developed methods for evaluating learning effectiveness using insights from modern cognitive psychology and some of these methods, such as those based in cognitive load theory, have support from scientific studies. These methods, however, are reliant on first person verbal reporting rather than the third person observation common in modern science. This paper outlines several new approaches to studies of mental processing that may offer evaluations of learning effectiveness that are based in scientific empiricism. The paper focuses on approaches based in studies of problem solving using fMRI and eye movement tracking as well as studies of the physiology of human interaction and examines how methods based on these approaches may compare with methods used currently. Additionally this paper discusses how such scientific approaches may be linked through a broad perspective based in descriptions of information processing systems derived from combined studies of cognitive psychology and integrative biology. This perspective may offer potentially valuable contributions to the development of scientific methods for evaluating learning effectiveness, and teaching practices more generally, as well as methods for comparing and evaluating educational philosophies.

Introduction

Any evaluation of the effectiveness of learning requires that there is some clarity in describing or defining what is meant by learning and memory, a topic that has been the subject of many recent studies in a number of differing disciplines and using a number of different experimental methods and protocols. This paper focuses on learning and remembering in an institutional setting, such as a school or a university, where the learning is conscious, such that it requires engagement of attentional and working memory processes and leads to the storage of information in long-term memory. Such conscious learning depends on the interaction between the nervous system, though sensory detectors of some kind, and the environment, and in an institutional setting there may be a number of ways that learning may be inoperative rather than ineffective. The environmental information that would normally be received by the nervous system, for example, may be blocked in some way, such as through a problem with the function of the retina in the eye. In other cases, the environmental information may be received at sensory receptors, but the processing of that information may prevent it being remembered in any conventional sense, for example, in visual dyslexia or Irlen syndrome. Additionally, there may be internal processing connections or mechanisms that may impair or inhibit learning and memory functions, such as seen in people classified as being within the autism spectrum.

This paper outlines some of the investigations that have had an impact on the evaluation of learning effectiveness, both in educational research and in practice. This paper does not focus on learning that is blocked or inhibited in the ways described above, but rather on evaluating whether classroom learning, in general, may be effective. The paper begins by describing empirical methods, based initially in the use of pre-tests and post-tests and sometimes including verbal reporting protocols, that were developed over the last 50-60 years through information processing approaches to education and which have been extensively developed through research based in such modern educational theories as cognitive load theory, both in a classroom setting and online. The paper then considers methods that have extended the use of verbal protocols through more impartial examinations such as those that use eye-tracking and brain imaging, and through investigation of the physiology of emotional states and drives, since these may be necessary features of learning and memory. This paper finishes with a focus on how combination studies in cognitive psychology and integrative biology (an umbrella term for studies related to biology, including genetics and neuroscience) may lead to scientific evaluations of learning effectiveness, and to improvements in teaching and learning interventions that reflect this scientific evaluation.

EVALUATING LEARNING ACTIVITIES: A DESIGN PERSPECTIVE

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Our action research project explores how an Instructional Design department in a single-mode distance education institution can gather formative evaluation on learning activities in online learning environments. The research framework consisted of three phases: design, analysis and evaluation. The first phase of the project was conducted to collect learning activity designs, determine the best way to represent them, as well as capture instructional designers' perceptions of good design. We will examine how an Instructional Design (ID) team can develop a meaningful process, which uses learner feedback, as well as professional reflection, to improve their practices, policies and learning activity designs. This project focuses on planning, developing, implementing and then revising an evaluation process that will help determine the effectiveness of learning activities, designs and courses. Literature relevant to the evaluation of learning activities and the design process was also reviewed.

Data related to the effectiveness of our learning designs was gathered through workshops and learner surveys. By analyzing and reflecting on these findings we determined our design team's guiding principles and rules, and then considered how making those principles explicit could improve our practice. We also wanted to determine whether or not students could see the characteristics of these guiding principles and good learning design in the courses. Finally, we were interested in how students perceived the value of independent and interactive or collaborative learning activities.

Through this project, learner feedback data was shown to be an important factor when reflecting on practice, as designers examined their basic assumptions about what and why activities are successful, but other factors, such as those that can outline how to improve processes (sharing with colleagues, developing activity templates) will also need to be taken into consideration when building a reflective model for change. We will also share how this project has affected policy and process at our institution, resulting in the implementation of an ongoing process for evaluating the effectiveness of our courses and learning activities.

DESCARTES AND ASTERIX? HETEROGENEITY, A KEY TO INCREASE THE JOY OF LEARNING? TWO CASE STUDIES IN FRANCE

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Innovative pedagogy refers to an improbable blend of talents, when Asterix meets Descartes. What kind of teaching/learning methodology will allow us to find a second childhood, the joy of learning as we go down the path of Lifelong Learning at work, at home, and in learning communities? How do we let "*adolescents*" and juniors show the way to adults and seniors; can we continue to turn a deaf ear to their needs as amphitheatres empty out, while Google Scholar and I-Tunes U allow students ample opportunities to personalise their learning? Shall we continue to organise (even if virtual) classes with passive students, built on the model of traditional, vertical and outdated pedagogy? The French paradox is Asterix interacting with Descartes in schools, universities and even at the workplace. In the country of telematics with the minitel, today we appreciate *Serious Games* and build French speaking MOOCs which stimulates the learners' curiosity. What happens when pedagogues, native to the country of Descartes and Asterix, meet Anglo-Saxon didactics? **What are the ingredients for success to keep customers, pupils and even students awake, active and happy?** The didactic revolution is fuelled by the enormous impact of web 2.0 and social networking in private and public life. Shall we resist change or surf on the opportunities of mutation welling up like a tsunami? **Ethics are fundamental**: public and private organizations have to make decisions. They must choose economic models to make massification and individualisation co-exist. Shall we build Europe based on UNESCO's principles: education for all, at anytime, anywhere, or shall we choose education for the best, wealthy and most able physically, morally and socially? Collaborating through diversity and heterogeneity must be experienced, making choices easier. This is the game to play, the challenge we chose.

Case Study 1: M@ster AIGEME, eLearning & Education to Media at Sorbonne Nouvelle Paris 3; University without Boundaries in Ile de France

In the professional M@ster AIGEME, we mainly use socio-constructivist approaches: the students' project is central to individual and collaborative work through individual and collective ePortfolios. We organise "personalised" learning, although complicated to manage. While following their programme of study, students are also trainees in a wide variety of workplace settings in big ore SME's, organisations, universities in France or abroad and NGOs. They produce work on real tasks which are demanding and time-consuming and are a basis for transforming "pedagogy" inherited from the 19th century into "didactics", giving the central role to the learner. They learn to collaborate in international and heterogeneous teams (teachers, IT or language specialists…) for managing projects together. Distance Learning makes change inevitable: acquiring knowledge, learning by doing, learning to communicate, to behave, to change, and to collaborate through formal and informal activities and tools.

Case Study 2: The Personal Learning Environment for French Language Acquisition at Institut Mines-Telecom

This case study describes the framework for an experimentation in the fall of 2012 with Personal Learning Environments (PLE) at Telecom School of Engineering (TSP) and Telecom School of Management (TEM) in France to support French language and culture acquisition among foreign students enrolled in a diversity of Master's and Doctoral programs.

These two case studies put into practise an innovative Theoretical approach (the ANR TRANSLIT, putting the accent on interdisciplinary – the media, digital literacy and information literacy) **and eQuality European Approach: Intercomprehension, Gaming Approach, Mobile and Sensitive tools seems to be solutions towards eQuality in Europe**. The case studies illustrate how very traditional institutions of higher education, the Sorbonne and Institut Mines-Telecom, are implicated in **migrating from directed learning to "self regulated learning"**. Technology and massively available digital content are providing learners in France and Europe the power to personalise what they learn and how they learn it. Connecting heterogeneous groups of learners across cultures, languages, disciplines, professions and generations, liberating them from the constraints and confines of the classroom and providing them a space where they can creatively co-construct knowledge and skills. Quality standards are evolving through the FIED's influence in France and through important European research groups. They **provide an alternative model to the American view linked to equality**. Ethics is central to build a sustainable economy where the diversity of human beings replaces choices made by the markets. **A possible roadmap for Europe** might be to follow the trails of Asterix and Descartes, succeed **in personalisation and massification, contextualise interdisciplinarity, informal knowledge and ergonomics, respecting the value of differences and heterogeneity**, just to be happy. Would this not be an exciting challenge for Europeans in the 21st century?

ONLINE TEACHING FACULTY DEVELOPMENT IN SPAIN: CHALLENGES AND FUTURE PERSPECTIVES

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The current European Higher Education Area (EHEA) is fostering the development and implementation of a teaching and learning model in which teaching roles are being challenged and shifted.

Beyond the fact competence-based design for programs is the core issue concerning this new scenario, it is also true that the use of the Information and Communication Technologies (ICT) could be considered as a driver for this change, and a helpful ally for teachers to better develop their role in this context. The integration of ICT-based practices and online education into universities have extensively been spread out worldwide in the last years.

Online or blended programs are the most significant way in which most of the universities are facing this situation, even if their aims are twofold: to increase the number of students and to adapt themselves to the new methodological approaches in an easiest way. Consequently, the organization of teaching, as well as cultural issues related to, have been adapted.

Teachers' professional development becomes a key issue to get the highest levels of quality teaching and learning considering this situation. There is a discussion about the kind of competences teachers have to have to teach online. Some authors consider there are a set of teaching competences that are the same, no matter if they are going to be used in a face-to-face environment or in an online one. Some others say the competences are quite similar, but also recognize some differences in order to teach much more efficiently.

But many other authors take into consideration that ICT change the educational context a lot, so in order to handle online teaching, no matter if the delivery is going to be blended or fully online, teachers should get a number of specific online teaching competences. These specific competences should be achieved through training and experience, so different programs have been put into practice to increase the capacity of teachers to become good online teachers too.

Again regarding the context in which teaching is going to be performed, Bawane and Spector highlight that the characteristics of the programme, the role the teacher has to perform, and the resources available (financial, functional, and human) require specific competencies from the teachers in order to successfully carry out their mission. Considering the previous references it is logical to state that online teaching faculty development is a must to efficiently teach in online environments.

TEACHERS' USE OF TECHNOLOGY AND THEIR IDEAS ABOUT LEARNING

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Introduction

Although technology and its application to educational contexts has presented educators with an opportunity to fundamentally change the way instruction occurs. Teachers have at their disposal the means to create enriched, engaging educational experiences in classrooms that are student-centred. Yet technology has failed to deliver on its promise because it has ignored the two fundamental principles which underlie the creation of a learner-centred classroom: (i) instruction is based upon a profound understanding of learning, and (ii) lessons are developed from the perspective of the learner. Therefore, if implementing technology does not transform classroom practice, the issue may be with teachers' understanding of effective learning and effective classrooms rather than their familiarity with technology. Consequently, in this study we examined teachers' knowledge about effective learning and effective classroom practices, and their use of technology.

Participants and Results

Ten elementary school teachers were observed and interviewed. The teachers were nominated by the school district as being exemplary teachers who were known to use technology. A total of 32 lessons were observed and teachers participated in individual interviews. Observation and interview protocols were analyzed using qualitative and quantitative techniques.

Of the 32 lessons observed, two-thirds were characterized as whole class instruction led by the teacher; one-quarter were considered independent work while the rest were structured as activity centres. Just over one-third of the lessons were mathematics. Just over one-half of the lessons were categorized as being teacher-directed and six of the teachers were considered to be teacher-directed (TD) as opposed to learner-centred (LC).

Although teachers had a general sense of effective learning and effective classrooms, they had relatively little to say. Teachers knew that learning occurred when students were engaged and worked collaboratively, but they did not articulate how or why this was so. Likewise, teachers did not provide much explanation about effective classrooms but LC teachers provided more description than TD teachers.

Teachers reported that technology could be used to engage students in learning and provide a means of supporting differentiation. While a number of singular explanations for how technology could enhance learning were provided, no common understanding emerged. LC teachers had a more sophisticated understanding of technology than TD teachers.

Discussion

Our findings in this study suggest that while teachers might have an intuitive sense of effective classroom practice, their articulation of what constitutes effective learning and how technology can be used to support it is superficial. Our results also indicated that LC teachers had a better understanding of both technology and learning than TD teachers. We suggest that professional development should continue to support teachers' use of technology because teachers who were sophisticated users of technology tended to be learner-centred. But we also suggest that professional development should focus on helping teachers to develop a more sophisticated understanding of learning and the principles of the learner-centred classroom. The issue may be that teachers cannot use technology to develop a learner-centred classroom because they do not have a profound understanding of the relationship between a particular technology and learning.

OPEN LEARNING APPROACH WITH REMOTE EXPERIMENTS

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The education in applied sciences, engineering, and technologies is one of the Key Competences for Lifelong Learning (2006/962/EC) and priority areas in the educational strategy in European Union. There is a widespread consensus in Europe that industry requires well educated STEM graduates. Since students' motivation to learn depends upon the knowledge and skills of the teachers, teachers should have access to high quality and real-life-based resources to build their competence, to support students' improvement, to familiarize with contemporary research and development, and industrial needs in STEM.

The OLAREX project consortium realized that the knowledge and skills requirements exchange between school and industry through the university expertise should be established. For this purposes the consortium was been granted by Lifelong Learning Programme of the European Union (518987-LLP-1-2011-1-ES-KA3-KA3MP).

The main project purpose is to innovatively implement ICT-based learning materials, remote experiments, and e-didactic methods into formal and non-formal lifelong learning settings. It will enhance and modernize science, technology, engineering and mathematics (STEM) curricula, foster student creativity and motivation, and develop professional skills and insights about the impact of evolving technologies.

The whole process is being organized in the framework of Olarex project objectives which are the following:

- to define the school/academia ICT needs for knowledge and skills in the STEM;
- to build teachers', students', and museum employees' e-didactic competences in the STEM;
- to develop practically-oriented learning modules with remote experiments and integrate contents and functionality in e-learning portal;
- to enhance and modernize the teaching/learning tools and methods for formal and non-formal lifelong learning institutions;
- to initiate the school-enterprises linkage.

The organized training courses for teachers, future authors of learning materials and modules, and museum employees build the e-didactic competences in the STEM by providing remote lab work explanations, offering practically-oriented approaches for strengthening educational programs and technical practices. During the training, teachers integrate at least one learning module into their curriculum, test them in their classrooms, and encourage their students to apply what they learned in a final project. The six comprehensive learning modules with remote experiments – in English and the national languages of the partners – have been prepared based on the target groups' requirements.

Learning and teaching materials have been incorporated in an e-platform with personalized learning environment. The remote experiments as a part of the OLAREX museum exhibition emphasize hands-on experience, and context-based learning, making this output a unique non-formal e-learning tool.

The aim of this paper is to present the results of the first training sessions organized in Olarex project and to discuss how Olarex facilitates integration of remote experiments in teacher professional practice.

More than 250 teachers registered to Olarex courses aiming to gain e-didactical competences and to integrate remote laboratories in their STEM subjects. As courses were designed in all partner languages, there were 30 versions of courses and 30 versions of modules all in all (more information is provided at the project website www.olarex.eu).

Olarex project contributed to teacher training on how to use remote laboratories and to improve practice at secondary schools considerably. Teachers showed great interests in using remote labs at their classes.

STEERING A SAFE PATH THROUGH THE SOCIAL MEDIA MINEFIELD – TRAINING AND SUPPORT FOR EUROPEAN PROJECT MANAGERS

Sally Reynolds, ATiT, Belgium

Introduction

This presentation will highlight the Web2LLP project, which aims to boost the dissemination strategies of LLP projects through providing personalised support and training on the integration of social media, as well as through identifying best-practices and sharing resources. This project began in January 2012 and involves partners from 6 European countries, it is a two-year multilateral project supported by the Lifelong Learning Programme (KA4, Dissemination and Exploitation of Results).

Main project activities

In practical terms, the team is making available the following:

- Online resources to support project managers and others who want to enhance their skills and knowledge in the use of social media for dissemination and exploitation purposes.
- A week-long face-to-face intensive training course for project managers on the effective use of social media in February 2013.
- Online courses in English, French and Italian aimed at LLP project partners provided in a modular flexible structure starting in April and continuing until October 2013.
- An online help-desk available to LLP projects aimed at providing expert help and support in response to the typical issues that arise.

Summary of project presentation

This presentation will begin by highlighting the main findings of the project partners in terms of the needs and experiences of LLP project teams. The presentation will then go on to provide a summary of the experiences gained by the project partners as a result of the training courses that will have been delivered by June 2013. This summary will cover the following questions:

- What social media tools and services do European project partners find most useful?
- What types of project activities lend themselves best to social media support?
- What types of expectations do European project partners have in terms of social media?
- What are the main barriers to the use of social media tools by European project teams?
- How can training and support such as that provided by the Web2LLP partners be turned into a sustainable and effective strategy

Finally, the presentation will conclude with a summary of the main tips and recommendations emerging from the experience of the Web2LLP project partners about the use of social media to support European collaborative project work.

TRANSFORMING CONFLICT, TRANSFORMED LEARNING: COLLABORATIVE PEACE STUDIES AND ENGAGEMENT IN INNOVATIVE PRACTICE

Alan Bruce, Universal Learning Systems, Ireland, Maria-Antònia Guardiola, Universitat Oberta de Catalunya, Spain

This paper analyses the experiences, structures, methods and techniques involved in deploying advanced technologies to support learning in the field of peace studies, reconciliation and conflict transformation. Issues and tools developed around reconciliation, peace, mediation, justice and conflict transformation have often achieved positive and enduring results. This produces challenges in designing and developing the courses, methods and techniques that can enable conflict transformation specialists and practitioners to be best equipped to deal with the many difficulties and obstacles that lie in the way of effective peace creation. The availability of ICT supported learning mechanisms has allowed the construction of novel and engaging courses that enable conflict resolution specialists to acquire the analytical, methodological and applied skills to make a significant impact in the zones in which they work.

This paper looks at two contrasting approaches that have been deployed for students using distance and supported learning, coupled with a strong e-learning support network for frontline community conflict resolution specialists. It does this through comparative analysis of international best practice using two models of courses that have engaged learners in Catalonia and Northern Ireland. The overarching aim of conflict learning and peace studies is to give an overview of the issues and themes of conflict transformation in the context of post-conflict relationships, trust-building and the dynamics of reconciliation. The development of advanced ICT support for courses and the adoption of e-learning has proved a challenge and opportunity for this field. Peace and conflict studies represent an extraordinarily wide and diverse set of issues and topics. The development of social media instruction supports and web-enhanced programs has also allowed direct engagement of those who have been directly affected by conflict and post-war settlements to input directly to discussions and research.

The *Master in Conflictology* is a flagship program of the **Open University of Catalonia (UOC)** and its Campus for Peace, Cooperation, Development and Sustainability – created in 2000, coinciding with the International Year for the Culture of Peace by UNESCO. Training in conflict resolution has experienced significant demand. The multiple possible applications are key to the success of several studies on demand for conflict resolution offered by UOC's International Graduate Institute. This includes the first general International Master in English, launched in 2009-2010. Taught in on-line format, the course is designed to meet the learning needs of a wide spectrum of learners and stakeholders. **Expac** developed the *Conflicts of Interest* course with support from the European Union. Expac developed a range of training and project support interventions around investigation of the historic causes for Irish conflict. Expac developed multimedia materials and extended to consideration of European and international conflict zones with engagement of an Academic Coordinator in 2006. Accreditation was secured from Queens University Belfast in 2010.

The two courses and programs under consideration in Catalonia and Ireland reflect different needs, traditions and expectations for different target student cohorts. But what they share is a need to engage communities affected by conflict and professionals involved in conflict resolution alike in pro-active and transformative ways. How e-learning can capture and extend the emotional as well as pedagogic demands of those on journeys of reconciliation remains to be seen. In that context, collaboration and partnership between programs such as these point an interesting path for ongoing exploration.

"CAN SCHOOL ACTUALLY BE MORE DIFFICULT THAN THIS?" PERCEPTIONS OF NIGERIAN STUDENTS ON HOW TO SUCCEED IN ONLINE INTERNATIONAL POSTGRADUATE PROGRAMMES

Annamaria Szilagyi, Laureate Online Education, The Netherlands

This paper aims to present learner perceptions on successful online learning from the perspective of Nigerian students currently enrolled in or graduated from the online international postgraduate (master and doctoral) programmes of the University of Liverpool, delivered by Laureate Online Education. Success in e-learning is regarded as reaching tangible goals and passing the required academic milestones in order to graduate from the programme and receive a master or doctoral degree. The paper presents the findings of a qualitative phenomenological study from the standpoint of cultural anthropology pointing at the Nigerian cultural context. The study includes socio-economical status, gender- and ethnicity-related questions that may have an impact on learner success in online education. After the analysis of cultural components, the article presents the perceptions of Nigerian adult learners on the profile of a successful online student, and it also explores the proposed 'how to' for succeeding in online programmes whilst living and working in Nigeria. The findings are based on semi-structured interviews with 17 Nigerian students and a focus group discussion with 12 graduated Nigerian students.

Online study cannot be viewed as detached from the local context, which includes the family environment and the challenges that individuals are exposed to within the Nigerian society. Residents in Nigeria have to face a series of external difficulties, including electricity shortages, internet connectivity problems, political unrest and strikes, as well as being tied to strong cultural values, such as the importance of family when making career-related decisions or gender roles influencing the set-up of priorities and the allocation of study time. Based on their personal online learning experiences in the challenging Nigerian cultural context and noticing the differences between Nigerian face-to-face and online learning methods students constructed the prototype of a successful online learner, who is organized, dedicated, disciplined, expert in time management, avoids burn-out, has personal motivation and support from the family and work environment, enjoys hard work, is flexible and open to learn, reads, interacts and performs, uses internet as a tool for education and fights tirelessly the negative social aspects and the local challenges of his/her country.

THE MOTIVATED, THE ENCOURAGED, AND THE WILFUL IGNORANT

Thomas Richter, Heimo H. Adelsberger, TELIT @ University of Duisburg Essen, Germany

In e-learning scenarios, learning is understood as a self-directed process. In such an educational scenario, a constantly high level of motivation is the most crucial success factor. If learners lose their motivation in a face-to-face scenario, the educator still has a chance to recognize it and to intervene and support the regain of motivation. In e-learning scenarios, this chance rarely is given; without recognizing the learners' mimics and gestures as tools to communicate satisfaction or frustration, the instructors depend on the explicit communication of threats against the motivation of the learners. Just, in many cultural contexts, communicating frustration towards or criticising the instructor is not considered being appropriate and thus, particularly in such cultural contexts, it is unlikely to happen at all. However, the main reasons for students' dropping out even in face-to-face scenarios have been found as being ineffective study strategies, a mismatch between expectations and content in the study-program, and a lack of motivation.

Regarding the common treatment of the learners' motivation, parallels to once common practices in the health-care sector appear to exist: As long as a learner is considered being *motivated* (healthy), nothing is to be done. If a learner shows symptoms for loosing motivation (acutely ill), he is being *encouraged* in order to bring him back on track. Once a learner is considered having become *wilful ignorant* against motivation-supporting efforts (chronically ill), no particular activities to solve the problem are taken; instead, symptoms are combated, e. g. bored learners in classrooms are demanded not to disturb others or "simply" are excluded from the lecture. For the sector of health care, this model can be considered being more or less out-dated, as many health policies implemented programs to strengthen and preserve health, e. g. through fostering sportive exercises, raising peoples' understanding of healthy nutrition, and setting up programs to avoid/deal with stress. Transferring this change from reactive to proactive health care to the educational sector would mean to strongly support initially high-motivated learners not to loose their level of motivation.

The aim of our research is preserving the learners' initial motivation in educational settings by avoiding unnecessary conflicts that could decrease the learners' joy of learning. In order to get a better understanding of particularly culture-related factors that could jeopardize the learners' motivation in international e-learning scenarios, we developed and exemplarily implemented the standardized questionnaire 'Learning Culture' in the Higher Education contexts of Germany and South Korea. Regarding motivation, we analysed how the students evaluated their own motivational predispositions towards outer influences, their purpose of learning and affections towards particular knowledge, and their strategies to deal with educational tasks that appear unmanageable or too difficult for them.

In our bi-national study, we unexpectedly found little significant differences between the answers of both contexts' students regarding motivation. However, we were able to derive some general recommendations:

The students from both contexts stated that they easily could be motivated. In our questionnaire block on feedback, all students reported experiencing laud as highly motivating; good work results thus should not be taken for granted but explicitly acknowledged. This already might encourage students at all motivational levels; the initially/still motivated, those who need motivational encouragement, as well as those who appear wilful ignorant against any kind of motivation-supporting activities. When designing and implementing international programs, we, as institutions/instructors need to be aware that depending on their origin contexts, learners might have experienced basically different educational settings and thus, their idea of what is "normal" may highly differ from ours. As most students stated that they are not easily discouraged, delivering clear information on demands and expectations at the beginning of a course and/or program could make the difference between acceptance of cultural and/or design differences and frustration, and help preserving the students' initial motivation. Just to give some examples of such basic differences: Regarding examinations and student research projects, the Korean system is seemingly more open towards accepting partial results than the German system. Korean students "already" appear to gain motivation when particular knowledge is demanded by instructors and useful for examinations; German students, in contrast, do neither experience the instructor's demand nor demands of an examination as motivational enough but prefer understanding the actual benefits of their learning efforts regarding the "big picture" and like to influence the choice of contents according to their fields of interest.

AN ANALYSIS OF ASSIGNMENT FOR IMPROVEMENT TEACHERS TRAINING BY DISTANCE EDUCATION IN KOREA

Yong Kim, Korea National Open University, Korea (Republic of South Korea)

Introduction

Teacher training by distance education makes it more convenient for teachers to take a wide variety of training courses. Currently, it is reported that 69 distance education training centres provide distance education for teachers, and that approximately two hundred thousand teachers have received distance education. Despite such a quantitative growth, it seems that there are not sufficient efforts to improve the quality of distance training or to revitalize it, and what improvements should be fulfilled should urgently be discussed to remedy the situation. To ensure the qualitative improvement of distance education training, quality control by the distance education training centres is important, and it seems that the successful implementation of government policies is crucial as well. It will be of great use for distance training when the government executes consistent policies and offers appropriate assistance. The purpose of this study was, therefore, to examine the opinions of the administrators of the distance education training centres in an attempt to determine priorities for the revitalization of teacher training.

Method and Result

Every distance education training centre that numbered 69 was investigated to find out their opinions on the operation of the centres or national policies. In the degree of agreement to the items on national policies and the operation of the distance education training centres, they agreed most to the item was "the personnel in charge of it have a superb professionalism". The second most agreed item was "an internal quality control system is established in relation to the development and management of contents", and the third most agreed item was "each training centre developed and offered specialized contents". The fourth most agreed item was "the government pushed ahead with e-learning policies in a systematic way. In their awareness of the importance of each item, they placed the largest importance on the item that the government should offer a lot of assistance for distance education training, and another item that they considered most important was that an internal quality control system should be established in relation to the development and management of contents. They attached the second most importance to the item that the personnel in charge should have a superb professionalism, and the third most important item was that each training centre should develop and offer specialized contents. The fourth most important item was that the government should push ahead with e-learning policies in a systematic way. Furthermore, as a result of asking the participants which would be most important for the revitalization of the distance education training centres, and they placed the most importance on the item that the government should offer a lot of assistance for distance education training (40.0%). The second most important item was that an internal quality control system should be established in relation to the development and management of contents (15.0%), and another second most important item was that each training centre should develop and offer specialized contents (15.0%). As a result of investigating top priority for the revitalization of the distance education training centres, they gave the first priority to the item that the government should offer a lot of assistance for distance education training (22.5%). The second priority was the item that the government should push ahead with e-learning policies in a systematic way (15.0%), and another second priority was the item that plenty of personnel should be in charge of it (15.0%).

Conclusion and Suggestions

Distance education training could become a means to enhance the competence of teachers to take the quality of education to another level when it gets more prevailing. This study attempted to discuss what improvements should be fulfilled in government policies in order to expedite the revitalization of distance education training. For enhancement of online teachers training, the government needs to support more such as teachers training policy to expedite the spread of distance training, quality assurance of online contents and more convenience method to attend online training such as smart devices usage.

ENERGIZING THE CLASSROOM: RECONCEPTUALISING LEARNING SPACES FOR HIGHER EDUCATION IN THE 21ST CENTURY

Kate Reader, Morris Pamplin, Annemarie Cancienne, Laurence Solkin, City University London, United Kingdom

Introduction

City University London has developed new learning spaces that avoid the 19th century style lecture theatres commonly used in Higher Education Institutions today, and has been exploring and developing flexible innovative learning spaces that aim to support emerging pedagogies and enhance the joy of learning. This paper focuses on the evaluation of one of these flexible learning spaces, designed to enable collaboration and innovation within the classroom. With the addition of tablet technologies, flexible furniture and a wireless infrastructure that can support students' own devices these rooms can move seamlessly between a traditional classroom and a computer lab, in a space designed for collaboration and group work. The evaluation evidences that the blend of mobile devices with flexible learning spaces can enhance the student experience, and provides an opportunity for academics to explore new pedagogies.

The iPad Cart Project

As part of a wider University Learning Spaces project, the School of Arts and Social Sciences combined an iPad Cart with flexible classrooms that contain movable chairs and tables (including node chairs), magnetic squiggle glass on multiple walls, and a projector, visualiser and PC at the front of the room. The project was created in order to meet the following aims and objectives:

- To provide a flexible classroom, that can move seamlessly from a traditional classroom to a space suitable for collaboration and group work with online or computer based activities.

- To provide classrooms that enable academics to experiment with a range of pedagogies not previously available due to the fixed nature of the computer labs on campus.

- To experiment with "the classroom of the future", creating a new model for classroom teaching at City University London that will enable us to stay ahead of our competitors in terms of flexible, innovative, effective and learner-centred teaching.

- To ensure ALL students have access to tablet technology ensuring those that cannot afford their own devices have access to emerging technologies, and are given the opportunity to gain the same digital literacy skills as their peers.

Methodology

Semi-structured interviews were conducted academic staff that used the iPads to understand whether they met the needs of staff and students, to explore how the iPads were used to support teaching and learning, and to gauge the level of support needed.

Conclusion

The evaluation showed that given the right environment, staff are ready and able to adapt their teaching to develop more active learning methods with students. The different cases of use show that the iPads are being used in a large variety of ways in conjunction with flexible learning spaces, and this has created opportunities that had not previously been available. Access to the iPads meant that students had more choice around which device or operating system they prefer to use to suit their needs, while ensuring the classroom was equipped with technology that had the right capabilities, battery life and software to provide a reliable classroom setting for academics. The flexibility of furniture and the devices themselves led to a space suitable for collaboration and active learning, while still maintaining some of the benefits of a traditional computer laboratory.

INSTITUTION'S ROLE IN SUSTAINABILITY OF THE E-LEARNING APPLICATION

Sandra Kučina Softić, Zoran Bekić, University of Zagreb, Croatia

The e-learning is seen as an efficient tool in the reform of higher education and modernisation of the universities to the needs of the 21st century. In order to implement ICT and e-learning technologies, universities need to create a vision of the desired end state and develop an e-learning strategy with proposed measures in that direction. Traditional, research oriented universities, like the University of Zagreb, have to find the way to implement new technologies in traditional values of the university education and ensure the success of the set goals in the implementation process.

The University of Zagreb is traditional and research oriented university with 340 years of tradition in the field of higher education. It is the largest Croatian university with more than 60,000 students and 33 schools covering all fields of the human knowledge. Besides welcomed diversity, this brings along additional challenges in achieving the integration and speed in realisation of necessary changes at the University.

The reform of higher education linked to the Bologna process has brought new demands to education itself, as well as to the overall university management. The use of ICT and e-learning technologies was seen as a significant change driver in education as well as an opportunity to modernize and answer to the social pressure towards wider access to higher education and lifelong learning. Therefore, adaptation of new technologies into existing organisation and education was one of the steps taken by the University of Zagreb. The Strategy was developed with the aim to provide a positive, stimulating environment and to foster implementation of e-learning The Strategy did not impose any model of education as it was foreseen that any obligatory and uniformed model would fail at a large and diversified traditional university like this.

One of the first steps in the sustainable e-learning implementation process was to ensure constant, sustainable and quality support to teachers and students. The E-learning Centre at the University Computing Centre was established in 2007 as the focal point for the systematic take-up and support of e-learning across the university. The E-learning Centre tries to ensure all levels of support in implementation of e-learning in the educational process users might need; from technologies (such as the university e-learning platform, the e-portfolio system ...),training, tutoring and consulting in use of technologies to development of learning materials and e-courses. The Centre also encourages the setting of the local support teams at schools and cooperates with them. It is also important to recognize teacher's time and efforts involved in the developing and running e-courses.

For the monitoring of the e-learning application and implementation of the E-learning Strategy, annual surveys have been conducted since 2007. Surveys provided information on the existing conditions of e-learning at the University of Zagreb and also school's management plans and attitudes towards e-learning and its implementation in the university education. Surveys have been performed on the annual basis and are filled in by the official representatives for e-learning at all 33 schools of the University of Zagreb. In that sense surveys provide mainly visions and attitudes of the school managements on the situation and perspective of ICT usage and forms of learning developments in the educational process at the University of Zagreb. The survey results showed high diversity between 33 schools as expected. Based on received results, the university management is able to get a general picture on the implementation process, detect weak points and set the next steps in the systematic implementation process.

In paper the survey results will be discussed as well as the institution's role in the e-learning application at the University of Zagreb.

EXPERIENCES ON BLENDED LEARNING AS AN APPROACH IN HIGHER EDUCATION

Mats Barthelson, Brittmarie Myringer, J. Ola Lindberg, Mid Sweden University, Sweden

This paper focuses on experiences of Blended Learning when it is applied as part of an approach to build capacities for e-learning in higher education. Specifically, it builds on the efforts of several academic subjects as they struggle with the implementation of a model-project aimed at generating generic forms for applying Blended Learning within the university.

Blended learning is a concept that combines traditional face-to-face teaching with online learning. The concept Blended Learning has evolved over the years. According to Singh & Reed, Blended Learning could be in different forms and what is actually blended may vary.

Though the concept of Blended Learning is easy to grasp, it offers considerable complexity in its implementation. It is important to integrate the face-to-face and online technology appropriately, if the "blend" is not appropriate the final learning output may not be satisfactory.

In 2011, Mid Sweden University formulated an overall university strategy within five areas concerning education. One of the top two prioritized areas were e-learning, and the university formulated the vision for 2015 to be recognized as successful in e-learning, both among students and staff, in comparison with other universities in Sweden (and in the world). E-learning should be considered an approach for education both off and on campus. From one of the departments at Mid Sweden University, an ambition was to develop different aspects of Blended Learning in their teaching and learning. The overall objectives of the project that was initiated in 2011 were to develop a consistent approach for the development of courses and programs structured according to the principle of Blended Learning.

Theoretically, this paper builds on a case-study design. This implies coming to understand the particularity and complexity within one single case, and for this purpose building on data gathered in different ways. Empirically, this paper builds on interviews and written experiences concerning the project. Included have been strengths and weaknesses of the approach.

The lessons learned and discussed in this paper include difficulties in finding the right blend of online and face-to-face activities, and the difficulties in accommodating different student groups and teaching practices in the rather loosely defined concept of Blended Learning. For instance, the strengths and opportunities lie to a large degree in the development of new pedagogical practices and not just new ways of using technology. Providing the right kind of material with the right kind of complexity and technological standard is not easy, and often the effective practice builds on the idea that less is more. Leadership at the department (or even university level) is important to provide the right conditions, technological standards and support, which benefits the teachers to develop their practices. What seems to be working best is to practice a light version of Blended Learning rather than one where the blend is to be described to be all-in. A common theme is the need for a leadership at all levels of the university acknowledging the importance of and commitment to Blended Learning.

MONITORING ICT INTEGRATION – HOW TO INCLUDE EARLY CHILDHOOD EDUCATION

Stephanie Kerckaert, Katie Goeman, Hogeschool-Universiteit Brussel, Ruben Vanderlinde, Bram Pynoo, Johan van Braak, Ghent University, Jan Elen, Katholieke Universiteit Leuven, Belgium

Context

In 2007, a novel ICT curriculum for compulsory education in Dutch-speaking schools was launched by the Flemish government. Simultaneously with the implementation of these ICT attainment targets, a call for a broad-scale monitoring arose as government, researchers and practitioners wanted to gain insight into the return on investment and the effects of ICT implementation on teaching and learning practices. This paper reports on the extension of a previously validated monitoring instrument, called MICTIVO (Monitoring ICT Integration in Flemish Education). Adaptation of the instrument, which was employed in an extensive monitoring study during 2007-2008, was necessary because actors from early childhood education indicated that integrating ICT into early childhood education is possibly significantly different compared to primary or secondary education. This is due to cultural dissimilarities between learning in the preschool sector and learning in primary schools; the early childhood curriculum is less prescriptive and has different norms for professional practice. As a consequence, a considerable amount of survey items within the first edition of the monitoring instrument were not applicable to or appropriate for the early childhood education context.

Scale development and validation

The current study focused on the primary testing of the adapted version of the MICTIVO instrument. A new scale for measuring ICT use was developed, which takes into account the specificity of the pedagogical context of early childhood education, and the possibilities of ICT within this context. In this way one can obtain valid data and information about this educational level.

Exploratory factor analysis was carried out in a previous study. Confirmatory factor analysis was used on partial data from the second edition of MICTIVO. Participants (n = 305) were asked to judge the extent to which they agree with a number of items (n = 11). The results show a good fit between the hypothesized model and the observed data (df = 40, χ^2 = 110.35, χ^2/df = 2.76). The fit indices are GFI = .94, AGFI = .89, CFI = .97, RMSEA = .08, indicating a good fit. Furthermore, the results indicate that two types of ICT use can be distinguished: 'ICT use supporting basic skills and attitudes' (n items = 5) and 'ICT use supporting contents and individual learning needs' (n items = 6). All coefficients are between .48 and .91. The average score for 'ICT use supporting basic ICT skills and attitudes' is 70.24 (SD = 24.77). Regarding 'ICT use supporting contents and individual learning needs', the average score is lower (M = 57.34, SD = 22.23). Preschool teachers indicate they put a stronger focus on the basic ICT skills of their pupils then on using ICT to support contents or learning needs. In addition, it seems the grade in which a teacher works is an important factor related to the amount of ICT use in early childhood education. This stresses the importance of 'developmental appropriateness': a teacher has to judge what experiences with ICT are appropriate for a particular age and a certain kind of child.

The developed scale can be used in further quantitative research on ICT integration in preschools. Also, they can be employed in order to help teachers identify which forms of ICT use are not present in their current teaching, but could be interesting to work with in the future. In this study, teachers agree that they rather use ICT to support basic ICT skills and attitudes. ICT use supporting contents and individual learning needs occurs less, but could be considered more innovative. It is important to notice that two items, focusing on individual learning needs, have the lowest loadings on '*ICT use supporting contents and individual learning needs*'. It is possible that there should be three factors: ICT use supporting 1) basic ICT skills and attitudes, 2) contents and 3) individual learning needs. This means that future research could try to expand the number of items focusing on individual learning needs and, a fully separate factor could be developed to assess ICT use regarding this aspect.

OPORTUNIDAD: FACULTY AS GAME CHANGERS INTO OER-OEP ENHANCED LEARNING EXPERIENCES

Marcelo Maina, Open University of Catalonia, Spain, Antonio Texeira, Open University of Portugal, Portugal, Cristóbal Cobo, University of Oxford, United Kingdom

OportUnidad is an action-research project financed by the European Union under the ALFA III programme aimed to promote Open Educational Practices (OEP) and Open Educational Resources (OER). This joint initiative is a step forward to address the global challenge of a more inclusive education. The project is lead by 4 European and 8 Latin America Universities and it includes a network of over 60 EU and Latin American higher education institutions.

OEP are defined as practices which support the production, use and reuse of high quality open educational resources through institutional policies, which promote innovative pedagogical models, and respect and empower learners as co-producers on their lifelong learning path. OEP address the whole OER governance community: policy makers, managers and administrators of organizations, educational professionals and learners.

This workshop aims to share the main achievements accomplished by the project related to the elaboration of a common OEP Agenda, as well as the adoption of institutional strategies to implement this agenda at institutional level (also known as local Roadmaps). Secondly, it will present and discuss the development of a training course for university faculties' focus on how to use and reuse OER in a pedagogically-rich context and afterwards how to promote advocacy actions that ensure the local sustainability of the initiative. Finally, the workshop is intended to sensitize other institutions to participate in this initiative, joining the debate and contributing to the development of the EU-LA Common HE Area under the principles of open education.

The workshop is articulated around a presentation of the OportUnidad core results and two parallel discussion groups about: "EU-LA Open Education Agenda" and "Faculty as game changers: A flexible OER-OEP training course". It will also leave room for discussion and participation about the bottom up strategy being adopted to promote Open Education.

As the OportUnidad project crosses a decisive phase, the workshop constitutes a unique opportunity to support the development of EU-LA HEI relationships while providing productive feedback in the expansion and consolidation of the open education movement.

OPEN EDUCATION FOR ALL – THE ROLE OF ICT
SEMINAR OF THE VISIR NETWORK

András Szűcs, Livia Turzó, European Distance and E-Learning Network, Alan Tait, Open University, United Kingdom, Anthony F. Camilleri, EFQUEL, Belgium, Rita Misiuliene, Northern Lithuania College, Lithuania, Michael Goldrick, Learning Development & Disability Services, National College of Ireland, Ireland

Background

The need to equip European citizens with new skills is recognized in the recent EC policy documents (Europe 2020 Strategy, New Skills for New Jobs, Innovative Europe and the recently launched Grand Coalition for Digital Jobs) where ICT gains a highlighted role.

In order to acquire digital and key transversal competences, to exploit ICT fully in learning, three gaps should be addressed: an "understanding gap": the theories of changes and the intervention logics; a "networking gap": improved flow of information among ICT-for-learning experts and practitioners; and a "mainstreaming gap": the micro-innovation practices in school, university, VET or adult learning must be made visible to mainstream bottom-up use of ICT.

By working to close these gaps, the VISIR network aims is to support the leap towards the meaningful and widespread use of ICT in learning through a brokerage mechanism between practice and policy making.

Building on this previous work in the field, the VISIR network will articulate on three levels of analysis and action: i.e.: the macro level (education and training systems), the meso level (organisations providing teaching and learning opportunities) and the micro level (teaching and learning opportunities themselves).

Aim and scope of the event

The theme "Open education for all – the role of ICT" will be presented from a broader perspective, beyond the often used OER context: about openness of education from the perspective of making education "... open to people, places, methods and ideas" – introduced by the example of the most successful European initiative of the OU UK.

VISIR aims to emphasize the role of bottom-up, innovative and successful cases in the shaping of the educational landscape. Therefore, two selected grass-root innovators will present their ideas and cases about recent successful practices:

Women Technology Entrepreneurs is an online programme that brings together core elements of entrepreneurship training sprinkled with key aspects of technology curricula, focused on the needs of nascent and early start female entrepreneurs. To develop technology and entrepreneurial potential encouraging course which would contribute to economic growth and new jobs should be encouraged. E-working provides the potential for self-employment & the development of local economies.

The presentation "RoboBraille in Education" will consider the need for free assistive technologies such as RoboBraille's text-to-speech engines and the importance of inclusive learning and teaching practices. The presentation will also present the results of a recent European Project, RoboBraille in Education, where good practices in using RoboBraille were captured in six different countries.

The workshop will also give ground to a discussion with the experts on the basis of the following questions:

- What are the strong and the weak links presently in the "chain" of the Open education movement?
- What are the relations between the preferences, motivations, aims of the governments, academia and the professional community in this field?
- Which tensions and synergies may be identified?
- Along which interests may the e-learning community be best involved, mobilised in the OER movement?
- How did the business model of the OER movement develop and what steps can be expected in this rapidly changing field in the near future?
- Shall we expect considerable changes in the geographically very different landscape, approach and practice of OER? (US – EU – Developing world – etc.)?

WOMEN TECHNOLOGY ENTREPRENEURS

Rita Misiuliene, Northern Lithuania College, Lithuania

Summary

Women Technology Entrepreneurs is an online programme that brings together core elements of entrepreneurship training sprinkled with key aspects of technology curricula, focused on the needs of nascent and early start female entrepreneurs. To develop technology and entrepreneurial potential encouraging course which would contribute to economic growth and new jobs should be encouraged. E-working provides the potential for self-employment & the development of local economies.

Defining the Issues

Gender Imbalance

- Significantly lower levels of women across the EU are involved in entrepreneurial activity.
- Women in the IT workforce accounts for only 28% of total despite research indicating gender diversity fuels problem solving and innovation – the driving force of the knowledge economy.
- There is a need to tailor entrepreneurial strategies that address the specific needs of women entrepreneurs.

The WTE consortium will:

- Unlock the potential of women technology entrepreneurs;
- Promote women's possibilities to participate in entrepreneurial activity;
- Facilitate growth of local economy.

Responding to Change

The Technology and Entrepreneurial potential of women are sources of successful economic growth and should be encouraged in every society. The utilisation of technology can be an instrument to stimulate women's entrepreneurial activities. This facilitate continues professional development of WET professionals. It is important to create a closer connection between employment and educational in entrepreneurial training.

The course includes tested pedagogic strategy and tutor induction programme, which facilitates the continuous professional development, creating closer links with the world of labour and addressing the current educational deficits in entrepreneurship training. An ICT curriculum is developed on four different skill levels and potential work areas. This technology curriculum was merged with appropriate entrepreneurship development training tailored to address the needs and potentials. Any person who has opportunity to access the Internet can be enrolled into this course, so he or she can learn on his own pace and abilities.

Curriculum linking ICT and entrepreneurship achieves both processes and content oriented to innovations through the multi-actor structures established in each of 8 countries. Also it includes the development of the hybrid technology and entrepreneurship curricula, WET induction and pedagogical strategy. The development of a Digital Opportunity Road-map for future entrepreneurs also represents significant innovation and will identify entrepreneurial opportunities.

'Think small first' approach is adapted to entrepreneurship induction for WET professionals, training for target groups and business development models. When people think 'entrepreneur' they invariably think 'Bill Gates & Microsoft', 'Michael O'Leary & Ryanair', etc. While these are excellent examples they are the exception rather than the rule and can be off-putting. Many WET professionals surveyed in the development of this proposal doubt their capacity to deliver real value in the entrepreneurship training area.

The web portal is fully accessible in compliance with WCAG 2.0 to support access for entrepreneurs with a sensory impairment. It provides a series of links to support entrepreneurs beyond the initial training and business start-up phases, i.e. mentoring, networking, micro-finance, etc.

Curriculum was developed with the help of stakeholders, i.e. working entrepreneurs of the region. This partnership strengthened the relationships between educational institution and business world. Developed product contributes to the development of distance learning provision.

FOSTERING THE JOY OF TEACHING AND LEARNING THROUGH OPEN EDUCATIONAL PRACTICES

Thomas Richter, Christian M. Stracke, TELIT @ University of Duisburg Essen, Germany, Sofoklis Sotiriou, Ellinogermaniki Agogi Scholi Panagea Savva, Greece

Open Discovery Space (ODS) is the largest e-Learning project which ever has been funded by the European Commission with a budget of 15.3 Mio € and involving 51 partners from 20 European countries. ODS started in April 2012 and will end in April 2015. It focuses on the school sector and aims to design and develop innovative learning methodologies and instruments by promoting and realizing Open Education. ODS will open up content by centralizing the access to European learning content repositories, open up learning by extending the repositories' functionalities through an own toolset that bases on innovative insular solutions on teacher/school level, and additionally, open up collaboration through fostering the open exchange of knowledge, experiences, and educational activities. That will be achieved through providing a community platform, which will be implemented on the European level but also can individually be implemented on school, regional, and/or national level.

As participants for this workshop we invite all interested stakeholders from any kind of educational scenarios. Virtual participants are welcome and will be able to follow and contribute via provided online conference facilities. After the introduction, we will encourage the participants in an action research setting (in small moderated groups) to 1) exchange their experiences about their use of Open Educational Resources (OER) and regarding strategies to find and adapt OERs and 2) discuss barriers against the use of OERs in education and jointly develop possible problem solutions.

As ODS will develop a web portal that is designed to support its users as good as possible, it is crucial to facilitate common practices regarding the use, reuse, and adaptation of Open Educational Resources (OERs) and to solve possible barriers against it. The research for ODS mainly takes place in the context of school education. However, the content of the repositories that are and will be linked through the ODS portal is not limited to the context of school education and thus, also supporting other educational sectors and scenarios. At this early stage of the project, it is very helpful to know how future users from other contexts estimate and experience the use of OERs, which strategies they have developed to overcome barriers and which barriers still jeopardize their use of OERs. The EDEN conference has a multidisciplinary audience, consisting of practitioners, researchers, policy makers, educational managers, but also technicians and users and is related to the European context. Thus, it is the ideal platform, firstly, to disseminate the project's aims and attract new affiliated partners for cooperation, secondly, to exploit and discuss the project's results in its targeted context, and thirdly, to foster the development of a culture of openness amongst stakeholders in the European countries.

COME AND CHECK THE QUALITY OF TECHNOLOGY ENHANCED LEARNING PROVISION

Airina Volungevičienė, Estela Daukšienė, Danutė Bačinskienė, Vytautas Magnus University, Lithuanian Distance and eLearning (LieDM) association, Lithuania, Anthony Camilieri, EFQUEL, Belgium, Dénes Zarka, Budapest University of Technology and Economics, Hungary, Claudio Dondi, Scienter, Italy, Marta Palacio, FFEUSCADI, Spain, Gábor Cser, EDEN, United Kingdom

Problem issues addressed

Are you aiming at quality? How can ICT contribute to the quality of teaching and learning, to the quality of institutional management, or to the quality of professional skills development? Do these questions interest you? These are the issues Revive VET project (www.reviveproject.eu/VET) partners are also addressing at and investigating.

The scope of Revive VET project

REVIVE VET project aims to review and revive VET practices applying innovative ICT integration methodologies and building online communities of VET professionals, who collaboratively work together, seeking to improve the quality, attractiveness and accessibility of VET services. The project consortium has already been working for several years and designed and adapted quality criteria grids and methodologies for measuring TEL quality. One of the project results, which is also publicly available at project website (www.reviveproject.eu/vet) is the "Analysis of existing practices, available methodologies and institutional needs on ICT application". It showed that the areas of ICT usage ant the educational institution vary a lot; however, the most popular ones are – modernization of education services and curriculum development. It also showed that most of educational institution representatives just do not know online networks and professional communities that would help with the ICT integration into education. The analysis results also revealed the need for more information on the methodologies of curriculum development using ICT, case development and peer review. So the partnership has been working on the issues.

Revive VET project partners and their involved internal and external experts have identified quality criteria for the application of ICT on the 3 levels: 1) institutional integration, 2) curriculum and 3) professional skills development. The validation of the quality criteria for application of ICT in VET on the 3 levels takes place at EDEN Oslo conference workshop. The validated quality criteria will be available online for the interested institutions. They will also be integrated in the case development, peer review and curriculum design methodologies via training materials on the use of these methodologies. Current project activities focus on the case development on the selected level by various partner and other educational institutions and will be followed by the peer review of some of the cases. The best presented practice, innovation or the most coherent cases will be made available publicly online. Therefore, EDEN Oslo conference workshop also invites the participants to join Revive VET community for quality in CVET under NAP area to become 1) case authors, 2) experts and peer reviewers, 3) guardians of ICT integration quality in CVET!

For more information, please visit us at EDEN Nap area or project website www.reviveproject.eu/vet.

Short description of the workshop at EDEN Oslo Conference

The aim of the workshop is to introduce Revive VET quality tools to TEL providers to enhance their skills to apply quality assurance method of peer reviewing and to contribute to the initiative of Opening Up Education. **The objectives of the workshop** are the following 1) to introduce the concept of peer learning and via peer reviewing; 2) to explain how peer reviewing and case development contributes to Opening Up Education; 3) to implement peer review and revive technology enhanced learning (TEL) provision on institutional, curriculum and professional skill development levels; 4) to discuss how peer reviewing meets the needs and challenges of TEL providers.

TEL providers face various challenges in TEL service provisions: how to measure the quality of services, when and how to organize staff training and how to measure and improve their skills, how to measure the quality of TEL curriculum and meet the target needs. TEL providers use a lot of ICT solutions, but internally they are quite closed from the public, managing their cases and content within closed virtual learning environments for registered users. Revive VET project invites TEL providers to build their cases using Revive VET methodologies and to exchange their practices, to open up their cases for peer reviewing, in order to peer learn and improve the quality of services. This workshop will introduce the importance of such exchange and will train participants on how to use Revive VET quality tools.

WHY SPEND TIME ON OPEN EDUCATIONAL RESOURCES?

Ulf Sandström, Swedish Association for Distance Education, Mats Brenner, University of Gävle, Sweden

Brief summary

The concept of Open Educational Resources (OER) are teaching, learning and research materials that are open and free to be used by everyone. The OER movement has become a World Wide movement and during this workshop, we will showcase Swedish OER initiatives, best practice and available resources on the Internet. We will discuss free course materials and how they are usually described under the creative commons licenses in a digital form of "right of public access" to course materials. How does the creative common licenses supports the use of learning resources, spreading schemas and also in some cases how they are sold. How much of the course materials in the future will be OER? We do not know, but Swedish association for distance education (www.sverd.se) believe that the development power of the open educational resources will be dependent on the impact and possibilities of sharing. Challenges ahead for open educational resources OER will be:

- Finding their way to good solutions for OER in the field of copyright and intellectual property rights
- Require durability to learning resources exchange and the need for new models on how it can be done safely.
- To describe needed open standardization of technology and information labelling.
- Quality issues and relevant learning resources descriptions should be encouraged.

Individuals' arguments

They simply want to create a better world and form strong networks with like-minded people. Then we have examples of many successful blogs where the engine is to actively share, making a name for him/her- self and willingly create revenue. Then we realized that too much learning resources have been locked up and lost its value and then it is better to let the material freely. Look for example at UR's (Swedish Educational Broadcasting Company – Sveriges Utbildningsradio AB) website www.ur.se in Sweden, about 8,000 videos suddenly went released for use in teaching.

If you ask institutions

They also improve vision and see OER as a way to repay taxpayers for the people. Institutions are competing with each other. Massachusetts Institute of Technology MIT took 2001 off a major OER movement since they advertised and marketed almost all their courses on the internet open, free and freely available. Then, it is hoped to recoup materials in a better condition when it is examined and used by many. Institutions want new research and new students and the competition for this is to drop the course materials free as nice marketing.

The authorities' OER arguments

They want more people to be given the opportunity to educate themselves and supporting the OER to encourage widening participation to higher education. It would also bridge the gap between non-formal, informal and formal learning. Then there's the political will to the knowledge society supporting lifelong learning. MIT has received a lot of goodwill in that they were the first to open their learning resource archives. UR in Sweden releases 8,000 movies free via their website.

What steps will be taken in the future?

"There is a clear trend towards learning today increasingly takes place through networks and the digital social environments, both informal and formal." Outcome measures will be Networking initiatives www.hig.se in the OER area and sharing of OER experiences. Showcases discussions and dialog both virtually and physically.

ICDE-EDEN JOINT WORKSHOP ON OPEN AND DISTANCE LEARNING FUTURES: THE INCREASING SOCIETAL IMPACT OF ONLINE EDUCATION

António Moreira Teixeira, Universidade Aberta, Portugal, Gart Titlestad, International Council of Distance Education, Norway

Globalisation and the imperatives of the network society are affecting education almost everywhere in the world. The growing need for education clearly outstrips the capability to respond in ways that are efficient and sustainable using traditional formats. In this context, open and distance learning delivered and facilitated by the internet and advances of ICT may be the only way of meeting future ever more complex and diversified student demands. In Europe, the growing success of open online education is closely interlinked with its capability to meet the demanding societal challenges of the current decade. However, the development of workable and relevant regulatory frameworks that are transparent and not overly bureaucratic are imperative to the success of open and distance learning and realisation of its benefit for students and its contribution to the solution for mounting education pressures. Governmental, cross-border, Inter-agency and inter-institutional collaboration will all be necessary to fashion a robust framework and public profile for open and distance learning.

To contribute to this pivotal discussion, ICDE and EDEN have joined efforts and resources. As a preparation for the upcoming SCOP 2013, to be held in Lisbon later this year in November, ICDE has recently produced a policy briefing suggesting how open and distance learning can help meet the increasing demand globally for higher education and whether regulation, or its absence, advances or hinders this agenda. Some initiatives that need to be put in place for advancing open and distance learning as a solution have also been outlined. This contribution should be discussed by all stakeholders and the EDEN Fellows as the European think tank for Distance and E-learning can offer a privileged contribution. In fact, the Fellows have been addressing in recent years the future development of open, distance and e-learning in face of the emerging societal challenges. At the EDEN 2012 Annual Conference in Porto, in a dedicated workshop, a number of alternative visions were presented and explored a set of alternative scenarios for e-learning in Europe in 2022 with the participants.

At the EDEN 2013 Oslo Conference, ICDE and the EDEN Fellows will organize a debate on the increasing societal impact of online education and how the future scenarios should be met with policy and institutional strategy. This workshop will be a preparatory discussion of the debate to be held at the ICDE, EDEN and UAb jointly organized SCOP 2013 conference. Workshop moderators will introduce the topic and ICDE's Policy Brief. The document will be commented by a number of EDEN Fellows. Afterwards, workshop participants will be invited to discuss the document and the Fellows positions. At the end, the workshop moderators will submit the conclusions, which will later be discussed at an EDEN Fellows debate to be organized at the SCOP 2013 conference.

THE EDEN ONLINE NOBEL PRIZE COMPETITION

Yossi Elran, Carmel Bar, Naama Bar-On, Michal Elran, Weizmann Institute of Science, Davidson Institute of Science Education, Israel

Purpose

What is the joy of learning? Is it necessary for meaningful learning? And if so, how can it be distributed to students? The definition of joy, according to the online dictionary, is "the emotion of great delight or happiness caused by something exceptionally good or satisfying". The joy of *learning* is therefore the happiness caused when learning something exceptionally satisfying. How can we create such a situation? One of the most joyous and motivating engagements is participation and contribution in a large scale creative production. Theatre players feel this when they perform in a play; scientists feel this when they collaboratively crack the DNA code. This workshop hopes to create a similar experience for EDEN conference participants along with elementary and junior high school science enthusiasts around the world.

Objectives of the workshop

- to create a collaborative, multilingual and multicultural, joyous learning experience,
- to learn and use some available, easily mastered online tools for education, communication and evaluation and,
- to create a meaningful learning of the participants and the students collaborative learning experience (learning about learning)

Structure of the workshop

Prior to the conference, self-selected teams of students will compete in an online competition aimed at creating a large scale, "Nobel Prize winners' online interactive map". Each team will use open tools (mainly from Google Apps) to create multimedia presentations about past and present Nobel Prize laureates and their work. The teams will "pin" their presentations to an online map, at the correct location of the Nobel Prize winner. By the time the workshop begins, the map will be complete.

The first half hour of the workshop will be dedicated to learning about the tools that will be used in the session. Then, the participants will evaluate each team's contribution to the project, using open online tools and by conducting live video chats with the competitors around the globe who will be available at the allotted time. The winning team will be announced and a prize will be given. Finally, a virtual webinar panel will be conducted where the EDEN workshop participants and the students around the world will share their perspectives on the competition experience in particular, and on online and distant learning in general, enhancing peer to peer learning from the experience. This kind of activity is a great motivation booster. Not only do the participants create their own personal product, but they contribute to a much larger goal making it a win-win situation. Moreover, peer assessment by young students and including them in a variety of first and second degree evaluation processes is a rather novice concept and an experience in itself. The workshop will be based on knowledge gained from our experience in running online collaborative science and math programs for elementary and junior high school students.

ACCESSING LABS AND INFRASTRUCTURES REMOTELY FROM EUROPEAN CLASSROOMS

Evita Tasiopoulou, European Schoolnet, Belgium, Sofoklis Sotiriou, Ellinogermaniki Agogi, Greece, Agueda Gras-Velazquez, European Schoolnet, Belgium, Eleftheria Tsourlidaki, Ellinogermaniki Agogi, Greece

Europe needs young people who are skilful in and enthusiastic for science and regard science as their future career field in order to guarantee competiveness and prosperity. To ensure this, large scale initiatives are needed that engage students in interesting and motivating science experiences. Such initiatives should follow an Inquiry-Based Science Education (IBSE) approach to involve teachers as the main stakeholder and to ensure engagement of other stakeholders, e.g. science laboratories. Different projects have lately started aiming to encourage young people to engage in science topics, acquire scientific inquiry skills, and experience the culture of doing science by undertaking active guided experimentation. In order to carry out these projects effectively it is important to understand the needs and constrains of teachers, lab owners, etc., needs and limitations in order to connect classrooms across Europe with remote science laboratories.

The aim of the workshop is two-fold: on one side to introduce participants to best practices in the field of accessing remote science labs from secondary schools in Europe; on the other side to explore teachers' current teaching needs in order to introduce remote labs into their teaching. Participants in the workshop will have a chance to see three different projects dealing with making remote access labs accessible to schools: UniSchooLabS, Global excursion and Go-Lab. They will have access to the tools developed with a guided tour and will participate in an open discussion within the framework of Go-Lab Visionary Workshops which will be taking place across Europe during spring 2013. Additional participants will be joining virtually using Global excursion's MashMeTV.

It is important to open up remote science laboratories, their data archives, and virtual models ("online labs") for large-scale use in education. This enables science inquiry-based learning that promotes acquisition of deep conceptual domain knowledge and inquiry skills and directs students to careers in science.

MEETING SOCIAL JUSTICE GOALS IN ODEL: HOW ARE WE DOING?

Alan Tait, Open University, United Kingdom, Jennifer O'Rourke, Independent consultant, Canada

For many decades, the broad social justice goal of overcoming barriers to access to learning has been an underlying principle of open and distance learning. The participatory workshop will consider how elements of social justice affect specific aspects of open and distance learning, including access, curriculum, pedagogy, management and day to day operations.

Participants will have opportunities to explore and unpack social justice goals within their organization and consider how to assess achievement of those goals in practice. As well, participants will consider the extent to which achieving social justice goals is still realistic and relevant for today's ODEL.

TRANSITIONS INTO HIGHER EDUCATION: CAN THE USE OF DIGITAL MEDIA, SERIOUS GAMES AND VIRTUAL WORLDS SUPPORT LEARNING TO LEARN COMPETENCIES?

Alessandra Tomasini, METID – Politecnico di Milano, Italy, Ildiko Mazar, EDEN, United Kingdom, Gerard Casanova, Université de Lorraine, France, Päivi Virtanen, University of Helsinki, Finland, Anna Zoakou, Ellinogermaniki Agogi, Greece, Magdalena Jasińska, Maria Curie Sklodowska University, Poland

Project backgrounds and brief summary of the workshop/webinar

Transition from secondary school to university and moving back into training or education to reskill or upgrade competencies represent a challenge for any learner. Research suggests that an approach based on the development of learning to learn competencies could contribute largely in equipping learners to deal with these transitions more effectively. Furthermore, approaches using social media, social networks, digital media, serious games, virtual worlds, ePortfolio and blogs have potential to support the development of learning to learn competencies and to accompany citizens in transitions throughout their learning lives.

The eLene2learn network has been identifying and exploring the use of existing practices, tools and methodologies in the application of ICT to the development of learning to learn competencies. The approach taken by the network of nine European partners and the results of the first phase of the three-year project will be presented as part of the workshop that will be enhanced by an online webinar. After an introduction of the project, its past activities and first public results, the event will proceed with a presentation of national pilot implementations with direct contributions of teachers. This more explicit part will be followed by a "dynamic" questions & answers section and by a workgroup on highlighting strengths, challenges and future expectations of using digital media to support transition into higher education. The workshop/webinar will conclude in an invitation to participants to become associate partners of the network.

Objectives of the workshop

- to share and a discuss experiences on the application of ICT to the development of learning to learn competencies in supporting transition to higher education for school pupils and for adult returners;
- to collect ideas, experiences, concrete suggestions on experimented practices, tools and methodologies able to facilitate they replication in other contexts;
- to extend the network associate partners.

Justification of the importance/currency/need for the proposed workshop

This workshop and webinar will provide an opportunity for participants to witness how emerging pedagogical models work in reality, compare the presented cases to their own situations and work out how these models can be applied to their own practices. Moreover it will extend research evidence and ensure that the results and the activities of the eLene2learn project reach a wider audience beyond that of the network partners.

NORDIC PANORAMA BY THE DISTANS NETWORK

Hróbjartur Árnason, University of Iceland, Iceland, Karin Berkö, The Learning Centre in Jämtland, Sweden, Taru Kekkonen, Otava Folk High School, Finland, Torhild Slåtto, Norwegian Association for Distance Education, Norway

Background

Distance learning has been a vital component of community building in the Nordic countries. Great distances separate people, making online learning a welcome support for people who live in remote areas. Distance learning gives opportunities to those who want to stay in their local area to support its growth and at the same time pursue their studies. During 2011 and 2012 DISTANS, a network working to support the use of ICT to support adult learning, focused its activities on how the use of ICT and flexible learning can be used as a tool for regional development of remote areas in the Nordic countries. In this session, members of the network will present themes which all evolve around the use of ICT in education in remote areas. These presentations are based on the results of a two year series of symposia held in six remote areas in the Nordic region, where these issues were discussed in depth. DISTANS is a sub-network within the Nordic Network for Adult Learning (NVL) financed by the Nordic Council of Ministers.

Bridging distances

Hróbjartur Árnason from the University of Iceland will focus on how ICT has been used to bridge distances enabling people to pursue studies and enrich their lives, overcoming some of the restrictions connected to living in small peripheral locations. Instead of expecting students to move to the bigger cities or occasionally offering courses to local cohorts of students, the perspective was flipped. Universities and other providers of organized learning opportunities as well as local and national governments discovered online distance learning as a way to help people to study – people who otherwise would not. We will present some examples of how various configurations of online services have been offered in order to meet local needs in Iceland and other Nordic countries, and to what effect

Support for learners

Karin Berkö from the Learning Centre in Jämtland, Sweden, will talk about how local learning centres have supported students who want to stay at home during their studies. The local learning centres have been able to lead innovation and attract new students in remote areas through cooperation between companies, learning institutions and municipalities. Several remote regions in the Nordic countries have realized that raising the educational level in the regions can offer possibilities for new activities and new forms of work. We face a great demand for a more flexible workforce. Cooperation between regional authorities, educational providers, and the partners on the labour market may enable the development of suitable flexible educational activities. This includes provision of varied resources such as study centres, videoconferencing, and online libraries widely accessible in the Nordic countries.

Filling educational gaps

Taru Kekkonen from Otava Folk High School in Finland will talk about how it is possible to offer citizens, who have not been able to complete upper secondary school, the opportunity to do so through distance education. In traditional face-to-face education the students are supposed to adapt their life to the rhythm of the school. Flexible online education can change the situation upside down and place the student in focus. When the school is always open and any course is available non-stop, the students can adapt their school to the rhythm of their life and not vice versa. Online education can meet numerous learning needs that are not otherwise met in the traditional school system, and it can serve students that cannot otherwise be served at traditional schools. We will give some examples on how flexible online education can open new doors for students in Finland.

Online learning as part of a busy life in the North

Torhild Slåtto from the Norwegian Association for Distance Education will discuss about how online learning can be a part of a busy professional life. Some very interesting examples will be presented. For instance: Would you believe that reindeer herders could study in their work place in the mountain plateau in the North of the Nordic countries up to the Siberian steppes? When the Sami University College in Kautokeino invited them to study reindeer husbandry online they took this opportunity. Another example is the inhabitant living at the Northern border of Sweden, missing to have a profession. One day she decided to get herself an education, and started her online learning. It took her up to the university degree of teaching. After that she became an online teacher.

ANCHOR YOUR LEARNING AND MAKE IT LAST!

Alan Bruce, Universal Learning Systems, Ireland, Lucia Elena Petrescu, EuroEd Foundation Iasi, Romania,
Anca Cristina Colibaba, Gr.T.Popa University of Medicine and Pharmacy Iasi, Romania

Action is triggered by will and will is derived from motivation. However, constant actions with impact and relevance require more than the mere action. In order for all acts to contribute to a change they need to relate and to concentrically depart from a centre.

How does one grow and continue to add to their conscious/unconscious learning experience so that it transforms it into a dynamic resource which feedbacks and reacts to bring an added value to both personal and professional live?

What is that centre which we can all relate to in order to think better, act better, live better? Recycling information and life experience is one of the most rudimental means of valorising and adapting ready-made ideas and solutions. But are we always aware of the power and value of life experience which we can benefit from?

That is one of the priority objectives, written or unwritten, of all educational systems – to empower individuals by equipping them with the necessary analysis, transfer and adapting skills to cope with any life situation. Applying these skills requires a will and a scope on the part of the individual. Durable education and lifelong learning are based on learners' motivation as much as on their satisfaction. If learning is useful, if they like it and if they understand it then, learners are a step closer to self-driven education.

Brain studies have shown that learners' motivation is directly connected to reward (both intrinsic and extrinsic) and that study satisfaction is the result of the dynamics between the two. However, little attention has been paid to these findings in structuring school curricula and activities. Traditional educational approach still prioritises information quantity over its potential for exploitation in real-life contexts. This is one of the major causes for students' demotivation.

MyStory project (www.mystories.eu) has developed a series of materials which can be easily valorised to motivate learners engaged in the study of various subjects (history, art, medicine, active citizenship). Placing learning in real-life situations activates students' orientation systems and encourages them to filter their own intake and output. It is no longer what the teacher teaches that needs to be taken in. The brain of each individual selects and determines the focus of their (informal) study. This leads to a variety of individual study objectives and to a greater educative potential of the material used: "Let every eye negotiate for itself and trust no agent."

This workshop will thus present and discuss the issue of enhancing student motivation through school education with MyStory materials (as an example of good practice) so as to raise awareness on individual leaning needs and contextualised use of knowledge and abilities prior graduation. Motivating learners and giving them a sense of satisfaction in school impacts their attitude towards lifelong learning.

HOW TO POWER-UP COMMUNITIES BEHIND OER INITIATIVES

Bieke Schreurs, Open Universiteit Nederland, The Netherlands, Ildiko Mazar, EDEN, Paul Bacsich,
Sero Consulting Ltd., Grainne Conole, Ming Nie, Gabi Witthaus, University of Leicester, United Kingdom

Introduction

The learning needs of the EU population are challenging the traditional campus – nor are such campuses appropriate for many lifelong learners. Many believe that only an "open" culture will enable educational institutions to adapt to these changes and that open educational resources has great potential in this change. Traditionally, the Open Educational Resources (OER) movement has focused on the production, distribution, and retrieval of open content. Research in the field of OER focuses now on quality standards (i.e. OPAL) and investigates workable business models. But there is more to OER than the (needed) resources alone. A gap in terms of what has been done so far on European level is on the question of the 'end-user – producer communities' behind the OER initiatives and what it is that actually provides the energy that make OER initiatives work or not.

The Role of Communities in the Uptake of OER

For OER to function properly, empowering users is of particular importance but at present there exists little experience in how these communities come to live, function or how these communities are supported behind these initiatives. The importance of these communities can also be found in the UNESCO – COL Guidelines for Open OER in Higher Education. The guidelines advise students to take an active role in assuring the quality of OER through social networks and stimulate teachers to leverage networks and communities of practice. They believe that "Teaching staff can benefit tremendously from using existing online networks and communities of practice to collaboratively develop, adapt, and share OER, as well as engage in dialogue on their experiences in teaching and learning in higher education". Especially in the digital world and the use of digital learning materials the abundance of information and possibilities overwhelms teachers and students and they need people to assimilate, understand and make sense of it. In those areas where knowledge is the key aspect, people or peers are more important then ever. But how do we investigate these end-user-producer communities? And how do we get insights into the dynamics of support communities around the uptake of OER?

Social Network Perspective to OER Communities

Recent research in the field of communities, communities of practice and networked learning present possible theories, methodologies and research instruments to make interaction within communities visible through observation. Interactions within OER communities can originate from existing learning ties amongst the teachers and their peers or students. These learning ties form the channels through which the interactions, learning and support flow between the teachers. Visualising the learning ties within a community makes us able to investigate and reflect on the dynamics of communities.

D2L VS. NING: TEACHER PERCEPTIONS OF THE INSTRUCTIONAL EFFECTIVENESS OF TEXT VS. VIDEO-BASED REFLECTIONS IN ONLINE GRADUATE COURSE ENVIRONMENTS

Maria D. Avgerinou, The Hellenic Open University, Greece

Theoretical Background

In the past two decades reflection has become an increasingly significant component of teacher education curricula. One popular form of reflection is conducted on videotaped records of teachers' field experiences, and/or practice. However, research on the use of video in that context has not included a comparison of video-based to the traditional text-based reflections when both focus on linking theory to one's own past personal, and current or future professional experience.

Research Context & Methodology

This descriptive study examines 87 pre and in-service teachers' perceptions of the instructional effectiveness and impact of self-produced video vs. text-based reflections as instructional tools in six human development online graduate classes. The study focused on whether the visual reflection experience was different to the narrative one (and if so, how); what the reported advantages/disadvantages were for each type of reflection; what the participant liked/disliked about the visual reflection experience in particular; what learning occurred; and, how the participant would apply it.

Results

Overall, students found the visual reflection experience more challenging than the narrative both in terms of production and in terms of sharing. They reported developing their technology skills as a significant result of participating in the visual reflection activity. As advantages of reflecting via a visual vs. a text-based narrative, students report that via the former one can (a) see/hear others' talking, which creates (b) a more personable sensation overall, in particular due to (c) the conversational and casual style which is (d) more like a live classroom discussion only (e) more concise (due to the set time limit), and (f) more constructive. Students also report that (g) visual reflections allow "getting to know" others online, and also (h) support the use of new technology.

Among disadvantages students report such facts as (a) the steep learning curve of the overall experience; (b) the production of a visual reflection is time consuming and requires a lot of practice; (c) the editing of the entire video even if just need to correct one section; and, (d) the need to produce multiple videos to end up with a final one. In addition, students shared concerns about (e) online privacy, (f) lack of eye contact, (g) digital stage fright experienced when one feels self conscious and perhaps easily distracted in front of the webcam, and, (h) how challenging the visual reflections may be for non-native English speakers, but also (i) how less focused and less comprehensive because of their casual and conversational style.

Discussion and Conclusion

Despite the fact that most students admit to the many advantages of the video reflection, and report feeling more comfortable with practice thus more satisfied with the 2nd and 3rd video reflections, they would still opt for the written over the video reflections. This feeling is also shared by students who identify themselves as auditory learners and who at the beginning of this experience seemed to be more favourable toward it than producing written reflections.

EDUCATIONAL GAMES: PROPOSALS FOR INCLUSION IN THE PROCESS OF LEARNING WITHIN THE FRAMEWORK OF KNOWLEDGE MANAGEMENT

Leon Martinez Jorge, Tapia Rangel Edith, National Autonomous University of Mexico – UNAM, Mexico

Introduction

Games fulfil a number of educational purposes that go beyond the acquisition of knowledge and development of skills, helping to achieve student motivation. Considering the above and adding the increased use of Information and Communication Technology (ICT) in educatied games in recent years, the Coordination of The Open University and Distance Education (CUAED), an entity of the National Autonomous University of Mexico (UNAM), has fostered the development of educational games in formal and informal educational projects so, this time, we will focus on two proposals: Educational Games as Self- Assessment in Open Online Courses and Educational Games as Exercises in a Teaching Support Portal.

Educational Games

Gaming is a human activity that has been present all throughout history. Playing games, experts state, provides freedom and pleasure. Other outstanding features are that a game involves mental and/or physical activity, it is innate, it has the intrinsic purpose of enjoying the leisure activity, it organizes actions in a proper and a specific way, it helps people to interact with reality and self-affirmation, it promotes socialization, and it is limited in time and space; however, it is uncertain. From an educational point of view, the game allows for the development of all aspects in a person, in such a way that he can integrate himself into society quite easily, because he can develop himself in an imaginary world, with freedom and little responsibility. Gaming involves people in the cultural traditions of the society in which they live, by getting more familiar and meaningful learning. Gaming also accounts for the regulation and organization of joint activity, consensus and social conventions. The main objectives of educational games in a teaching-learning environment are the following: to promote interest in the learning contents, to stimulate the decision making process, to foster collaboration, to implement and consolidate the knowledge acquired, to encourage the development of learning skills, to propose dynamic educational activities and to encourage a favourable change in students' behaviour. Educational games mediated by ICT can be grouped according to their underlying pedagogical method, thus there are four types: those based on assessment (edutainment), based on cognitivism (that allow the player to identify and analyze problems, as well as to apply prior learning), based on constructivism (learning by doing), and the multi-model based learning (constructivism, experiential learning theory, the Kolb Learning Cycle and active experimentation).

It must also be stated that the two proposals developed by UNAM contain both evaluation and exercises; therefore they fall into the category of edutainment. That is, their structure is embedded within the instructional design process of a course or a thematic unit. These proposals are: a) **Educational Games as Open Courses Online Self-assessment (OpenCourseWare UNAM – http://www.cuaed.unam.mx/uapas/)**, where the trivia game was selected to support self-assessment processes that are based on the principle of multiple choice assessments. These games are preferred by educational process players, because the correction is made immediately. On the other hand, these games have the advantage that they allow for the creation of different versions of the assessment with the same questions. At the same time the review units take less time, allowing for the coverage of more content, by generating more questions; b) **The Educational Games as Exercise in a English Teaching Portal Support for High School Students (English Media – http://www.cuaed.unam.mx/english_media/)** aim at developing students' learning skills within a framework of thought and action. These games also improve students' performance by having volunteering repetition of the game, all of which sums up to increasing understanding with each repetition.

As a conclusion, the proposals here referred derive from an intrinsic interest that UNAM has in order to incorporate what is known as *The Knowledge Management* into its academic curricula. In this specific case, the *Process Approach* has been used in an effort to improve the steps to foster, consolidate and disseminate the knowledge of the teaching staff, supported by the ICT, for the benefit of the whole university community.

A GAMIFICATION PLAN DESIGN EXPERIENCE FOR PROMOTING ENGAGEMENT AND ACTIVE LEARNING IN AN UNDERGRADUATE LEVEL COMPUTATIONAL SCIENCE COURSE

Carlos Lizárraga-Celaya, Sara Lorelí Díaz-Martínez, Universidad de Sonora, Mexico

Motivation and engagement are often the most difficult elements to promote in a student. Game principles can give us insights on what makes activities fun and relevant to learn. Game based learning or gamification in education, enhances the learning process, by inviting student's own personal game experience, into a non-game environment. Independently of the educational delivery model, learning environments can gain much more effectiveness when merging learning activities and basic lucid principles.

Gamification in education is being used today by incorporating game elements, mechanics and dynamics in the student learning activities in order to motivate or influence student's learning process. The learning environment is enriched by granting prizes, such as badges, experience points for each accomplishment with a long term goal in sight, awarding extra points for solving complex challenges, and as a mechanism for transition to higher levels. Gamification helps students to engage, helping them making connections and to integrate easily into a specific learning community.

We all play, it is in our nature. In order to engage a player, a good game design must include: a continuous challenge, an interesting story, flexible or multiple choices for achieving goals, immediate feedback and useful rewards, combine fiction with reality. A player wins a game either by competing against other players or beating the game. The major reward is social recognition among peers and/or promotes self-confidence.

There are three basic characteristics that define a game: a clear goal or win condition; some difficulties or obstacles along the way; and collaboration or competition among peers.

In gamifying a specific student course, we will have to consider a non-traditional academic approach, by defining a game play, a reward system for activities, designing significant quests, determining experience levels and promoting collaborative work and healthy competition among students.

A gamification plan is presented, for a hybrid/blended undergraduate course in a computational science (Physics). The course development consists of a variety of assignments and tasks, which involves downloading and setting up software, engaging in learning activities like web quests, problem solving, elaborate products, upload required learning evidences, practice critical reflection and write about it in a journal, take quizzes for self-assessment and participate in a private online social network. This may be an example of a conventional course, where points and grades are given for the different student accomplishments.

How to build a gamification plan? Here is a short list of game elements for the course management and student participation:

- Badges are given as rewards for different levels and type of accomplishments.
- Construction of a rewards table for different number of badges and types.
- Defined methods of levelling-up, after completing assignments and tasks.
- As done in games, receiving experience points for defining grades, obtain specific badges or privileges, etc.
- Existence of a variety of options to achieve experience points: Reports, presentations, mind maps, etc.
- Design quests for solving a specific problem to solve, or in-depth report on a specific technique, etc.
- Promote participation by voting class activities, promoting experience feedback thru forums and discussions.
- Build an attractive gameplay to challenge students, to foster healthy competition, being fun to play and learn.

After having a table of experience points, earning of badges, a table of grades can be constructed for the semester activities. An accumulation of a defined number of experience points situates each student at a defined game level, which has to achieve, before continuing to the next level and complete the course. A correspondence table between game levels and official grades has to be defined, so that the students knows and looks forward to achieve.

GAME-BASED LEARNING: A DESIGN-BASED RESEARCH APPROACH

Sandra Law, Athabasca University, Canada

Introduction

Participation in science and technology disciplines at the post-secondary level has decreased in recent years. Even among students who have decided to study science there are serious misconceptions about the everyday practice of scientists and the role that scientists/technologists play in the broader society. This design-based research study represents an attempt to address deficits in scientific literacy by providing students with an opportunity to engage in real world problem-solving in the context of a digital game-based learning environment.

Design-based research

Although game-based learning has been explored at the K-12 level in many studies not as much work has been done on incorporating gaming approaches in the postsecondary environment. A DBR approach was chosen because it seemed appropriate for a project in the developmental stages and for situations in which there is a discontinuity between traditional or typical forms of educational practice and those forms that are the focus of the study (e.g. innovative approaches) (Design-Based Research Collective, 2003). Conventional experimental approaches to educational research tend to average out differences between treatments leading to the impression that a particular solution is no different than another.

The Problem

Over the decades science educators and scientists have explored different ways of increasing scientific literacy. One of the more recent approaches to this problem has been to ask students to solve ill-structured problems in relatively risk free settings. Other researchers in the area of scientific literacy suggest that contextualizing a topic or issue for learners (e.g. making it relevant to their lives and personal experience) leads to increased knowledge retention and improved scientific reasoning. Some recent research examines the use of game-based learning and simulations in the teaching of content knowledge in science and scientific literacy.

The Solution

The solution to the problem of scientific literacy pursued in this study was an alternative reality game The players individually assumed the role of experts in one of four fields (chemistry, biology, health and geology) and are asked to collaborate with their team mates to come up with a list of possible impacts of water quality and availability on human and animal health, industry and environmental health. In addition to impacts they are asked to briefly outline possible responses to climate change that will help mitigate its effects.

Conclusions

This study showed that feedback from instructors, content experts, learners and instructional designers can, over time, greatly contribute to an understanding of the effectiveness of a particular educational innovation. Designers do not always have access to the contributions of peers and those for whom they design (e.g. learners) and DBR presents the researcher/designer with the opportunity to gather discrete information about what does and does not work with a design, and with the technology being used to implement a design, and to incorporate this feedback immediately into ongoing design and development.

LEARNING BY USING THEMES FROM STUDENTS' AREA OF INTEREST

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In this study, to produce a more effective learning process, university students were asked to form an additional task on the course content according to their personal area of interest at the last weeks of the semester. The research is a case study which was implemented in the course "Learning Theories" with 14 graduate students, and the achievement was investigated by pre- and post-tests. The representations and expressions of students on the content of the course varied on a large scale of themes from nature to arts. Findings revealed a significant positive effect of this activity on students' both understanding and using the content.

REACHING THE GOAL OF ACADEMIC SUCCESS FOR ONLINE STUDENTS: A PSYCHO-SOCIAL PERSPECTIVE

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Student attrition, or dropout, is a long-standing area of worry with corresponding efforts to understand the phenomena both in regular on-campus higher education, in distance education, and in e-learning. Part of the motivation for this line of research in the e-learning area is to be able to design study experiences in order to reduce dropout rates and increase retention and student persistence. Attrition, or dropout, among the online student population has received a considerable amount of attention from social scientists, universities, as well as both private and public educational institutions. However, few studies have examined the successful online student and how these students have met their goals. The purpose of the present study was to examine possible factors relating to online student success in the academic setting. More specific what student characteristics, goal commitments and academic integration factors are salient when online students reflect upon how the met their goal of successfully completing their online education?

Method – Participants and Questionnaire

Participants were students who had completed their high school general studies courses online at the NKI Nettstudier. 368 students were invited to participate in an on-line survey, and we received 87 answers (24%), and 67 forms (18%) were fully answered. Based upon the Longitudinal-Process model of Kember we designed a questionnaire to address student characteristics, goal commitment, online academic environment and online academic integration.

Results and Discussion

Results showed that for student characteristics, most rated Interest orientation as the most important reason to choose the NKI online education. In terms of Goal commitment, most rated Creative career goals as important, followed by Executive/research and Further study orientation goals. Important aspects of the online academic environment/integration that helped studying was the NKI online Planning tool and other NKI net-tools. For the Online academic integration section we looked at learner satisfaction, and for this aspect the students rated Online self-efficacy and Learner-Instructor Interaction as important

NKI was perceived to be a real possibility for many to qualify for higher education. The results furthermore indicate that the online environment provided by NKI is an important factor in students' success, and that there may be much to gain from maintaining and improving the online environment. It may also be that the cooperation aspect or other forms of social belongingness may be developed by means of including ever developing social media in the study experience. The students' perceptions also indicate that NKI instructors are able to establish a good online relation with the students. The current study thus provides directions for future research when considering achieving academic success for online students.

PHRASAL VERBS FOR BUSINESS PROFESSIONALS: EXPLORING LEARNERS' ENGAGEMENT THROUGH THE LEXICAL SET STRATEGY

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Little has been written about the use of the lexical set strategy for teaching phrasal verbs in Latin America. Even though the incidence of phrasal verbs is significant in English-speaking countries, there has been little research on the teaching of these forms for specific contexts. Accordingly, this study explored the effects of using a well-defined teaching strategy on the learning of phrasal verbs by adult learners in the corporate offices of three different companies in Bogotá, Colombia. The goal of this qualitative action research study was to promote a more natural oral production by adult learners affected by significant limitations of time and instructional materials, including the absence of a set curriculum and/or syllabus. Data collection instruments used in this research included a series of recordings (video tape and/or audio files, a teacher journal, field notes, and interviews. Time and theory triangulation were used for maintaining balance during the process of triangulation. Data was analyzed following the grounded theory approach.

Consequently, the subjects of this qualitative action research study discovered a relationship between the lexical set strategy and their business habits for which the teaching and learning of phrasal verbs delivered satisfactory results. They learned by following a sequential and chronological ordering procedure, as well as by searching for visual processing techniques that enabled them manage and understand new units of knowledge (via either digital or printed media). In this study, the absence of materials triggered the use of technology in the classroom, a strategy/initiative taken by the subjects of this study who were used to employ technological devices in their daily business contexts. Students were able to seek and find their own tools as supplements to more traditional forms of instruction.

Furthermore, participants raised their language-learning awareness, recognizing their own learning styles and finding similar behaviours to their company values and distinctive features, such in the case of their leadership traits. They also demonstrated their interest in carrying out self-directed learning initiatives, especially in seeking innovative materials that aided their language development process. All in all, the study revealed effectiveness in the use of the strategy for teaching and learning PVs, and it offered learners a new way to learn PVs in contexts representing real-life scenarios.

STUDENT INVOLVEMENT IN EDUCATIONAL PLANNING AS A KEY FACTOR OF STUDENT SATISFACTION

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Constant changes in the Russian economy, globalization in general and joining the WTO in particular and consequently even tougher competition in the market have highlighted the necessity for companies to make their strategies more flexible and adjustable to present day challenges which in its turn has led to the need for training and retraining of their managers and staff. In order to meet such requirements the educational institutions providing such services have also had to reconsider their teaching policies. The Distance Learning Faculty of the Russian Plekhanov University of Economics (FDL) has also been evolving from a backup to the full-time bachelor programmes for young students to a fully-fledged training centre providing both degree programmes and elaborating new educational blocks aimed at updating professional skills and knowledge of companies' employees.

Teaching methods have also changed from simply supplying the learners with electronic textbooks, manuals, lectures and tests to interactive forms such as online lectures, webinars, simulators, virtual labs, etc. New challenges of time have dominated the contents of education for adult learners: if "basic market rules" were enough in the 1990s, now students require up to date knowledge in all spheres of economics.

Concept

After several years of constant involvement in upgrading courses for different companies' staff FDL has come to the conclusion that ready-made programme blocks do not always suit the needs of customers while customising the courses each time turned out to be expensive. So FDL has developed our own way of providing educational services to different learners – on the one hand leading to increased student satisfaction and on the other, improving cost-effectiveness. The basic concept of the approach is to engage the learners in the creation of the curriculum, negotiating schedules and forms of delivery of necessary information, and giving feedback on different stages of the learning process. The students can select from the readymade but constantly updated courses for distance learning, including electronic manuals, tests, lectures and simulators, but if they need some specific knowledge it can be provided by a live lecturer online or face-to-face, and discussed at the seminars and webinars. All the main principles of blended learning were tested on several companies in a pilot project.

The pilot project

The pilot phase included collaboration with four large Russian institutions which differ in size, form of ownership, structure and the industries they work in. The first one was the Federal Water Resources Agency (FWRA), the governmental body managing all state property connected with water resources, the second, the Vishnevsky Institute of Surgery of the Russian Academy of Medical Sciences, one of the biggest multiprofile scientific-research clinical establishments, the third, Ostankinsky meat processing factory, the leading manufacturer of processed meat foodstuffs in the Central Russia and finally Sberbank , the biggest state-owned bank in Russia. Each institution wanted the training programme not only to cover basic modern economic trends but also to be focused on their particular needs: the FWRA was interested in anti-corruption management, the Vishnevsky Institute wanted to concentrate on the effective management of healthcare institutions, Ostankinsky factory was looking for ways to manage innovations, and Sberbank needed the newest trends in banking and banking products. All four institutions are quite big, though three of them can be called "governmental" and Ostankinsky factory is a public company.

The goal of the FDL staff was to elaborate the approach allowing the construction of appropriate blocks of courses in the quickest possible way without damaging the quality. The basic ideas have been related in the article.

The result of the programme has demonstrated a high degree of student satisfaction and proved that flexible learning approaches can significantly influence this. Most of the students completed their training successfully and confirmed the importance of it both for them and for their companies. Seeing the demand for such services on the market the FDL is working further on elaboration of these short-term educational blocks using the same approach which is though undergoing constant improvement.

A MOOC TO BREAK THE DIGITAL DIVIDE: IBERVIRTUAL UNED COMA "BASIC DIGITAL COMPETENCES"

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The *Open Educational Resources* movement (OER) has shared thousands of online open materials and courses all over the world since 2002. The recent 2012 *Paris OER Declaration*, at the UNESCO *First OER World Congress*, represents its consolidation after ten years of worldwide development (UNESCO, 2012). Maybe more impressive has been the MOOCs movement (*Massive, Online and Open Courses*) over the last year. In 2012, the *Horizon Report* did not include MOOCs in the most important trends for the future of e-Learning, whereas the most recent 2013 report, explicitly says that in just one year we will be able to appreciate their great impact on the education field as a powerful emerging trend.

However, due to the digital divide, thousands of people still lack the most basic digital competences to take advantage of this training offer, even though many international organizations point up that these skills are essential in the 21st century. In this sense, the European Commission includes the Digital Competence as one of the 8 key competences for lifelong learning in this century.

In order to help overcoming the digital gap, and giving response to the European Commission demand for increased opportunities of training in digital competence, a MOOC on Basic Digital Competences has being proposed by UNED (National Distance Education University) of Spain, UAPA (Open University for Adults) of the Dominican Republic and CSEV (Centre for Virtual Education) of Spain. Its first edition is taking place in the first quarter of 2013, with more than 1,500 participants.

This course has been designed and developed within the framework for action of the Ibervirtual/AIESAD Project. The main objective of this project, created in 2010 and included in the XX Ibero-American Summit of Heads of State and Government, is to promote social inclusion by strengthening distance education in Ibero-American countries. One of its main lines of work focuses on developing skills for Distance Education including both, basic digital competences for teachers and students, and for the general public.

The main objective of this first MOOC represents an innovative proposal that aims to provide the basic digital skills that are necessary to access the opportunities offered by the Knowledge Society and, in particular, to benefit from the new global movement based on social and open learning.

Also, it aims to promote MOOC development in Ibero-American countries, taking into account that the recent Horizon report on Technologies in Ibero-American Tertiary Education, 2012-2017, places the use of MOOCs in a three to four-year time horizon, whereas a one-year time horizon is expected for other parts of the world. This fact is mentioned in the 2013 Horizon shortlist report:

> "The Centro Superior para la Enseñanza Virtual is encouraging MOOC enrollment to Latin American communities through a Spanish platform called unX: go.nmc.org/gyorb"

In sum, with the course *Ibervirtual UNED COMA: Basic Digital Competences* we expect to contribute to help breaking the digital divide and to improve social inclusion through the development of the skills required to be able to actively participate in the Knowledge Society, also taking advantage of the large training offer based on online methodologies, such as MOOCs. One of the main fields for testing the efficacy of this MOOC will be Ibero-American countries, as part of the Ibervirtual project.

First results will be available by April 2013, after the completion of the first edition of this course, and will be presented at the Conference. We hope to be able by then to give some responses to MOOCs current questions, inquiries and challenges.

LEARNERS GENERATED CONTENT AND OPENNESS OF EDUCATIONAL PRACTICES: QUALITY OF E-LEARNING AS JOINT VENTURE

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In the European approach, quality is considered through the different values and perspectives (producers/ deliverers/users of education), and the different levels of the educational process. Furthermore, the trends of research in this group emphasize the notion of quality as a participatory process where the learners/users vision is fundamental. The perspective of the user generated content quality framework stresses the idea of quality as part of dialogue and participation within an organizational learning process that support the generation of a "quality culture" and of "peer reviewed" quality. As a result of this debate, Quality cannot be considered as universal fact, but as a *multiperspective, multilevel and contextualized* process. Taking into account these developments the role of students has been considered crucial to define Quality. Le Preau pointed out that stakeholders are quality experts, and that quality can only be defined through taking into account their point of view. In spite of these advancements in educational research, the quality of eLearning in Higher Education seems to be linked to institutional traditions, as cultural factor associated to the tensions and contradictions of eLearning as valuable practice. We present in this work a design-based research experience in the context of Higher Education, where the authors attempt to show how two elements introduced in the educational process became crucial to enact teachers and students' reflection and collaboration on quality. The first element was the opportunity to opening (partially) the eLearning course, particularly regarding learners' generated content, in order to achieve quality through the transparency and visibility of educational practices; the second element was a participatory/constructivist evaluation supporting the quality of an eLearning experience from the point of view of the learner. Our work introduces the pedagogical approach as well as the methodology to analyse results, being collected. Finally, we briefly reflect about the importance of the students' voice, both in the process as well as in the products of educational processes, to boost the quality of eLearning in Higher Education.

PLAYING DIRECTOR: THE CONSTRUCTION OF DOCUMENTARIES AS A WAY OF A TEACHING/LEARNING METHOD

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The Administration course in Brazil is designed around three subjects: basics, vocational training, and its technologies. Basic training includes anthropology, politics, sociology, philosophy, psychology, ethics, human behaviour, economics, accounting, communication and information technologies and legal sciences. The sociology course deals with the creation of the Brazilian society and seeks to explore the aspects of culture, control, social stratification, rationality, power and the studies of the classical sociologists (Marx, Weber, Durkheim, Comte, and Tocqueville) all in the context of organization and working processes.

Since it includes a plethora of theoretical content, the students find it difficult to assimilate the subject with the actual practice of Administration, making it necessary to seek new tools to assist in the relationship between the theory and its application. This work presents the experience of the building documentaries about the books related to the content incorporated in the theme of the undergraduate Administration course from "Universidade Federal Fluminense" for students in the 2nd semester.

The first experience that used movies in a sociology course was the project with the movie "Mauá: the emperor and the king" associating it with the book "Roots of Brazil," from "Sérgio Buarque de Holanda", reported in the article, "Teaching Sociology from Roots of Brazil: a dialogue between a classic book and a historical drama film." Inspired by the success of the experience in the use of movies in the course, the teacher brought to the classroom the challenge of taking students away from the position of spectators to the position of create their own videos about the content of the course. It was then created, as part of the course, the project "Literature and Management Workshop: discussions about the organizational culture," which replaced the traditional cases used in the teaching of Administration by creating videos, and involving the students with the subject using media tools that are present in their daily routine. The idea was to bring the students closer to the main topics of the course. Thus, the students were induced to think in a way that goes beyond the overly fragmented models, simplified or overly complex, those often appeared in books, and they were challenged to create contents with their own ideas and understanding.

In the context of Open Educational Resources (OER) a Youtube channel was created called, "Sociology UFF" with the intention of combining all presentations and creating an environment that would enable access to this material, which contains not only a practical approach to the content, but also an approach from the students' perspective. The channel was also used as a tool for presentation.

The realization of this activity was quite enlightening for the teacher and the students. The project was highly assessed, having the critical point aspect related to the picture and sound qualities, but all with great relationship between the course and the book.

The monitoring of the activities showed a crucial step of a good result in order to ensure the progress and completion of deadlines for the presentation, and the quality they wished for the sound and picture. Since nobody had the access to use the tools for video editing, and cohesion between the ideas and the implementation of the content was very important so as to allow the use of the material with future classes of the course.

The project helped in the understanding of the content of the course and in the production of the content for the upcoming classes, which will now be able to have access to the material on the Internet. With this resource, it was possible to go beyond the universe of information traditionally used in classrooms and showed students how to observe and experience a new world of representations, where the opportunities were much richer. It was also observed that the project with the videos cannot be separated from the goals of the course; they were closely monitored throughout the semester and in the evolution of the readings.

PROMOTING PERSISTENCE IN ONLINE CALCULUS: A DESIGN-BASED RESEARCH STUDY

Sandra Law, Cindy Ives, Athabasca University, Canada

Introduction

High failure rates in first year calculus courses at the postsecondary level are a concern to educators in many jurisdictions. These rates have been attributed to poor study habits of students, changes to educational policy allowing students to graduate with fewer credits in mathematics, and too great emphasis on examination preparation in preference to skill development. This poster examines the published literature on problems with student retention and achievement in undergraduate mathematics courses at the postsecondary level, mathematics pedagogy, open educational solutions to problems with mathematical competency and technologies that have been used to improve the learner experience in online mathematics.

The Problem

Increasingly postsecondary students need to have some knowledge in mathematics to succeed in the work world. In the area of distance education it is often difficult to predict a student's level of preparation for their coursework given the diversity of that population. Some students are recent graduates, others are registered in a single course to complete their program elsewhere, and still others are mature students. Online instructional environments provide a number of challenges to students and instructors. Students may feel isolated and become disengaged from their institution leading to a reduced commitment to their studies. In the early years of the Internet there were definite limitations on an instructor's ability to display mathematical content online and their ability to interact with students and facilitate student-to-student interaction, particularly in the distance education context. With the advent of MathML the concerns around display of content have been reduced but not eliminated. Technology can also be used to ensure greater learner autonomy, timely feedback and directed guidance on how to improve their performance.

Proposed Solution

Consultations with various stakeholder groups led to the decision to develop a set of just-in-time learning modules intended to help underprepared students currently enrolled in an introductory calculus course. The basic design components for these standalone modules include learner support in the form of hints and immediate feedback, support for the display mathematical symbols, and use of open source software or development tools when possible. The decision to develop an in-house authoring tool was made after reviewing the options (e.g. intelligent tutoring systems, pedagogical agents, equation editors, open source tools, mathematical presentation languages) and discussions of development tools in the published literature. A prototype was developed using an in-house authoring tool called the Athabasca University Authoring Tool (AUTAT) which was inspired by Carnegie Mellon's CTAT. The authoring tool allows the user to create a few different question types (multiple choice, drag and drop) and to save the output as an xml file.

Evaluation

The modules developed for the first cycle of this DBR project were evaluated by a group of instructional designers and subject matter experts (SMEs) from the Canadian Virtual University (CVU). The feedback from the instructional designers included suggestions on how to provide better learner support (e.g. quality of feedback, navigation, length of assessments, layout, organization). Subject matter experts also provided their feedback and made suggestions on which content was essential in pre-calculus, kinds of examples that would help students, and the accuracy of content. As a result of this evaluation a set of draft design principles were developed which have been used in subsequent learning design projects. These design principles included: need for interactivity, importance of visualizing concepts through animations and interactive learning activities, role of accessibility in supporting a diverse group of learners and the role of open source tools in ensuring the sustainability of future initiatives.

VISIBLE STUDENTS, VISIBLE TEACHERS: GOING BEYOND THE ACCESSIBILITY IN DISTANCE EDUCATION

Patricia Arnold, Munich University of Applied Sciences, Germany

Introduction

The title of this contribution points to Hattie's study "Visible learning" that analyses critical success factors in learning by compiling more than 800 meta-analysis of successful learning. Hattie identified the central role teachers play as well as the utmost significance feedback has for students' learning achievement. What are the implications from Hattie's study for distance education, especially distance education in the higher education sector? Distance education has been praised for a long while as it offers flexibility in time and place. However, in addition to the praise of distance education for the raise in accessibility, there also has been put forward a lot of criticism: Academics feel they are losing their "teacher's presence". Scholars argue that the increase of online learning might lead to standardization that does not cater for the required cultural diversity and different local practices, especially in fields of social science.

This discussion forms the backdrop of the case study presented in this contribution. The basic outline of a distance education program in social work, the online degree program of *basa-online*, and its latest refinements are presented and analyzed, giving special attention to Hattie's findings. As a theoretical framework Lave and Wenger's community of practice perspective as well as Holzkamp's critical psychology perspective on learning are used to investigate the relevance of Hatties's findings for the design of the online degree program.

Case study *basa-online* – going beyond accessibility in degree programs for social work

For 10 years by now *basa-online* – an online degree program of social work – is offered jointly by a network of higher educational institutes across Germany. The program targets practitioners in the field of social work who lack a formal degree or training. Face-to-face instruction is organized in regular seminars for those subjects that are regarded as especially difficult to be studied in an online format, such as counselling techniques, communication skills etc. Additionally, online modules, also taught by faculty members, provide comprehensive study texts elaborated for distance education, enhanced with multimedia elements, presented in a learning management system (OLAT). As an overall design feature in the study program, the work experience of the students is used as a starting point to explore social work theories. In the context of two research projects the following refinements of the educational design were identified and tested:

- *Incorporating live classroom sessions*: Video-conferencing systems (e.g. Adobe Connect) allow for synchronous live events. Teacher's presence can be fostered as teachers can present a topic, embedding it in their own working context and directly answer students' questions. Students can present their work and share it with the learning community.

- *Providing a network archive of videotaped lectures*: At many universities of the network, lectures of guest speakers, inaugural lectures, etc. get video-taped. By building up an archive of these videotaped lectures across the network students can tap into valuable learning resources.

- *Enabling e-portfolios*: E-Portfolios are increasingly used for documenting and reflecting on lifelong learning and to develop meta-cognitive learning strategies. In addition, they foster personalisation and visibility of learning as students can showcase their work and receive teacher and peer feedback.

Acknowledgements

SUPPORTING DESIGN THINKING AS A BASE FOR ADULTS' EDUCATORS PROFESSIONALISM

Juliana Raffaghelli, Independent researcher, Umberto Margiotta, University Ca' Foscari of Venice, Italy

Adults education is considered one of the less structured, ill-defined in terms of practices and competences of the professional operating in the field. This situation applies particularly to the case of Intergenerational Learning (IL). While it clearly improves dialogue between generations through civic participation in common social and institutional spaces, initiating processes of informal learning towards the achievement – both by adults and children – of key competences for lifelong learning; it is also clear that ensuring IL through the creation of adequate educational environments is a challenge both for researchers and practitioners. On one hand, formal education promotes mainly intra-generational experiences, structured in learning contexts where little or no contact between among generations (beyond the technical role of teachers/educators) occurs. On the other hand, intergenerational learning also implies setting up adequate learning contexts for adults. In fact, events like parenting, cultural participation, support to the own kids schooling, social activities, engage adults and have the potential of taking them to reflect on their own condition as lifelong learners, from one side, and as *educators* of the future generations. This is the assumption of the A.L.I.C.E. project (Adults Learning for Intergenerational Creative Experiences) and main challenge, as evidenced by its aims and objectives (which can also be found at its website: www.alice-llp.eu). Accordingly, the need of intervening on adults' educators professionalism was seen from the beginning: professionals with the ability to understand new contexts of learning, and to reinforce the adults' key competences for the lifelong learning society without invading their sense of independence and protagonism in the social spheres of life. Therefore, authors developed an approach to support the adults' educators professionalism based on Learning Design and Design Thinking. In fact, the concept of *design* provided support in the sense that the educators base their interventions on the analysis of the context, the available resources, the educational problem and the participant's motivations, in order to orchestrate and represent *educational solutions* based on the theory of learning. These solutions would lead in time to a pedagogical reflection that can end up in further conceptualizations. As it has been emphasized by Conole, the challenge of Learning Design is representing teaching and learning as an integrated process, which is more frequent in other disciplines like music, chemistry, architecture, and so on. Design thinking could be considered a process of "imagining" the own future practice, but also, of thinking about a creative approach toward solutions that can be shared into a set of common professional values. This way, the relationship between *design thinking* and professionalism can be depictured as follows:

- At the level of the single educator: The more the educator improve their skills for design thinking, the more she will be able of planning and intervening in ill-structured problems, providing creative educational solutions

- At the level of the community of adults' educators: the more the educators are able of designing for adults learning, the more they can adopt tools to represent, share and discuss the own practices, reinforcing a field of professional practices, which is also part of the adults' educators professional identity. Technologies are a mean in the process of representation and sharing.

In our case study with the project ALICE, we have focused the instruments adopted to promote the educators design thinking, which is composed by five phases. Along these phases, the educators were invited to adopt tools to represent and understand the *creative process.*

NOOA – AN ONLINE INITIATIVE FOR LEARNERS AND COURSE CREATORS

Anne Fox, Pedro Fernández Michels, Maria J. Spilker, Nordic Online Academy – NooA, Norway

NooA and the Theory of Cooperative Freedom and Transparency in Online

NooA's idea is based on Paulsen's Theory of Cooperative Freedom and Transparency in Online Education. Understanding education as a cooperative activity, NooA's aim is to provide a setting that implies freedom (autonomy and independence) as well as cooperation. NooA provides flexible access to its courses, course completion within flexible margins and asynchronous communication that offers independence and freedom while learning and interacting with peers and teachers. Access is open to every person who feels capable of achieving the described course goals.

NooA – Mission, Values and Aims

NooA started in 2012 and was in November officially accredited in Norway as "nettskole" (net school). In December it was already accepted as a member of EDEN, NADE, and FLUID. Currently, NooA offers 10 courses and is developing 20 more courses with financial support from Vox. NooA's main mission consists in providing quality online education that creates sustainable value, public awareness and footprints to follow. NooA's values can be summarized as: economical, flexible, acknowledging, quality-conscious, transparent, and social.

NooA's principal aim is to become an international Learning Mall for Online Courses. In order to achieve this aim it is developing a multilingual learning community which aims

- to be an attractive partner for individuals, institutions and companies that develop, translate and offer online courses; to be acknowledged and accredited in several countries;
- to provide courses at least in English, Portuguese, Spanish, German, French, Danish, Swedish and Norwegian;
- to provide students with different backgrounds a great flexibility and, at the same time, learning value as a return on investment;
- to be among the largest Nordic providers of online courses.

In order to achieve this mission, NooA has established a powerful support structure that consists of the following elements:

1. The international Advisory Board consisting of experts in areas such as education, environment, art, literature, social awareness, technology and social media.
2. The Quality Board with the mandate of giving support to NooA in assuring, maintaining and developing the quality of NooA's scope, including information on courses and programmes, administration of courses and programmes and student services, course contents, teaching and learning methodology, evaluation of students, and teacher qualifications.
3. NooA is establishing a Student Commission with six representative participants among NooA's online students. Their mandate is to find an organisation form and an action plan to provide advice and suggestions for improved quality for NooA's courses and services.

NooA – In the Future

The initiative counts on the collaboration of partners in several European countries. NooA intends to be a reference not only for learners but also for course creators and small and medium size educational organisations in the sense that it offers transparent procedures for course design and delivery, an up-to-date LMS, and fair shares in the revenue from the course fees. NooA gives all necessary support to those who wish to transform their conventional educational programs into quality online courses.

For supplementary information about NooA follow NooA's Online Footprint: Campus.NooA.Info (http://campus.nooa.info); NooA in Linkedin (http://www.linkedin.com/company/campus-nooa); NooA-Blog (http://campusnooa.blogspot.no); CampusNooA on Facebook (https://www.facebook.com/CampusNooa); CampusNooA on Twitter (https://twitter.com/CampusNooA).

PERSONALIZED LEARNING & COLLABORATIVE WORKING ENVIRONMENTS FOSTERING SOCIAL CREATIVITY AND INNOVATIONS INSIDE THE ORGANISATIONS

Christian M. Stracke, Thomas Kretschmer, University of Duisburg-Essen, Germany

The ARISTOTELE project has the general aim to foster workplace learning of employees through the use of innovative information technology tools and environments. It starts from the fact that the wealth of European companies has progressively shifted from tangible assets (e.g. capital, resources) into intangible ones (e.g., knowledge, reputation, management skills, innovation processes, motivation, and attitude). In order to raise the competitiveness of European enterprises, it is extremely important to use information technology to support the provision of advanced solutions, finely tuned to the continuous change in competitive conditions in which organisations operate, capture and support intangible assets. Creativity and innovation inside organisations are directly related to the way people learn (informally and/or formally), collaborate, share ideas, knowledge, and organisational goals.

Enhancing the learning capability of an organisation is a key element to achieve integration and merging of intangibles. But still today learning capabilities of an organisation are mainly devoted to allow acquisition of personal knowledge, skills and competencies that are very difficult to share with peers.

Current Technology-Enhanced Learning (TEL) solutions are centred on contents with very limited personalisation capabilities and then embed learning activities in the content itself. In working environments, this type of rigid TEL solutions are integrated with the general enterprise learning objectives in a very simple (and often simplistic) way, e.g., through definition of pre-determined learning paths (courses) for classes of employees.

ARISTOTELE enhances learning and training of workers within their organisations by defining and developing models, methodologies, technologies and tools to support the emergence of competences and creativity by self-organised acquisition, processing and sharing of new information and knowledge with peers. The five strategic objectives for the ARISTOTELE impact are:

- Learning and Training (improvement of learning and training processes tailored to knowledge workers' needs and expectations);
- Human Resource Management (supporting Human Resource development, team formation, allocation, recruitment);
- Collaboration (improvement of collaboration among workers using social approaches and sharing knowledge);
- Improvement of knowledge management practices;
- Innovation (fostering of innovation processes).

The ARISTOTELE Evaluation Framework distinguishes four evaluation categories, which are (1) Concept validation of the ARISTOTELE models; (2) Usability study of the ARISTOTELE tools; (3) User validation of the tools and capabilities for end users; and (4) Software validation and impact measurement.

In level 4, the ARISTOTELE platform and tools are tested within two industrial partners from the health and telecommunications sector applying the following techniques: (a) Functional Testing; (b) Extended Oral Feedback on Usability; (c) Impact measurement: Interviews; (d) Impact measurement: Online Questionnaire; (e) Impact measurement: Key Performance Indicators.

STUDENT ASSESSMENT OF THE ROLE OF THE NEW MEDIA AND TEXTBOOKS IN CLASS AND IN INDEPENDENT LEARNING

Tomislav Topolovčan, Milan Matijević, Višnja Rajić, University of Zagreb, Croatia

The aim of this research is to assess the frequency of learning through the new media and from textbooks at home and in class, and the frequency of learning from exercise books, and the correlation according to the type of school and to the form the students attend. The survey conducted on a sample of secondary school students attending either vocational schools or *gymnasia* (N=524) showed that students, regardless of the type of school and form they attend, most frequently tend to learn from their exercise books, and less frequently through the new media. The majority of students sometimes use textbooks from which to learn, both at home and at school. The findings also show that *gymnasium* and vocational school students who more frequently use textbooks in class also tend more often to learn from textbooks at home. Vocational school and *gymnasium* students, both in the first and in the fourth form, who more frequently use exercise books for learning, less frequently learn from textbooks at home. First and fourth form students who more frequently learn from exercise books less frequently learn through the new media. Students who more frequently use textbooks in class also tend to more frequently learn from textbooks at home. All the subsamples show that students learn significantly less frequently with the aid of the new media, regardless of how often they learn from textbooks and exercise books. This study shows that the new media have not yet attained sufficient presence in Croatian schools.

THE VIRTUAL UNAM: ENHANCING LEARNING FOR DISTANCE EDUCATION STUDENTS

Haaveshe Nekongo-Nielsen, University of Namibia, Republic of Namibia

Background and the context of the study

Distance education in Namibia is still print-based and many distance students are reluctant to use technology for learning purposes. The purpose of this case analysis was to investigate the pedagogical value offered by the UNAM portal, a Virtual Learning Environment (VLE), developed by the University of Namibia (UNAM), after many attempts of venturing into using technology for learning purposes and whether the technology could be used to make learning more interesting for a much older student audience. The University of Namibia is a dual mode university whose current student population stands at 16,000 students, of which 25% is studying through the distance mode. Even though with a small population, Namibia is a vast country where in some areas distance students have to travel 300 kilometres (150 km per trip) to reach the nearest UNAM centre or regional campus.

Over two decades many authors have researched and discussed pedagogical issues in relation to the use of technology in open and distance learning. This study is framed on the knowledge that students' creativity, acceptance of using learning systems, higher order thinking, natural curiosity, ability to use knowledge meaningfully and the choice and control over their learning activities all contribute to motivations to learn.

Research methods

Through qualitative research design using a case analysis approach data was gathered from distance students who are enrolled for the Policy Studies in Adult Education course and using the UNAM portal, in addition to print based study materials. The case analysis is conducted in a natural learning setting, with learning activities designed based on the elements of curiosity, challenge and control, which were thought to enhance intrinsic motivations, and contribute to effective learning among students. The learning activities used for this case study were divided into three categories (1) introductory/pre-course activities; (2) instructional activities and (3) assessment activities.

Findings

The study began with the knowledge that if learning materials are designed to stimulate curiosity among students, challenge them academically and that the students have control over the learning materials they would attract them to use the technology, something that much older students are afraid to do. Even though the course is still half way into the semester, which will end on 27 May 2013, so far preliminary findings indicate that of the 73 students registered for the course, 42 were found to use the portal regularly and 30 students of the 42 responded well to teaching and assessment activities posted on the portal.

At this stage the findings are only on the number of users who responded to certain activities and not so much whether their responses in anyway contributed to effective learning. The analyses of student responses indicate that quizzes, scopes for examinations and feedback to assignments and tests were popular, followed by introductory or pre-course activities while instructional activities were the least popular.

Conclusion

The conclusion to be drawn from this study would not only look at how to attract students to using the technology but also at improving pedagogical features that enable students to critically engage with the learning content in a more innovative and creative ways and lead to effective learning. In this regard, preliminary findings indicate that the UNAM portal's pedagogical design could be improved to enable more interactions among students.

CASE CONNEXION – CASE STUDIES IN A VIRTUAL LEARNING ENVIRONMENT FOR USE IN THE THEORETICAL TEACHING IN NURSING

Linda Hauschildt Nielsen, University College Lillebaelt, Dorte Buxbom Villadsen, Pia Veje, University College South Denmark, Denmark

Based on problem-based learning method and a desire to support students' different learning styles The Department of Nursing Education at University College Lillebaelt and University College South Denmark have developed a virtual learning environment in the form of a ward at a hospital, where elements are provided to offer the nurse students the possibility to work with realistic case studies in a realistic virtual universe.

The fundamental aim in the problem-based learning method, and with it the virtual learning environment, is to improve the nurse student's professional skills in relation to identifying, formulating and analysing problems in practice in collaboration with others and done on a reflected basis considering possible actions and solutions within basic human values.

One of the didactic consequences of the problem-based learning method is that the teaching focus has shifted from the teacher's mediation of an academic curriculum to more functional academic skills, which emphasizes that students learn to apply academic theories, concepts and methods for solving problems in practice. The starting point for the students learning is an exemplarily and realistic case study which can be used as an example for similar situations.

Because of this the hospital ward – named CaseConnexion and constructed in Second Life, a 3-d virtual world – is as close as possible to the natural environment the students meet at a hospital. The students can enter the environment at all times and regardless of their physical location. They only need a computer and internet access. They move around in the guise of a personal avatar and communicate via voice or chat with other avatars representing other students or teachers. External persons with special professional skills can easily be invited into the environment, and students from other nursing programs may participate in the learning process in order to collaborate and share knowledge and experiences.

Two cases containing a number of nursing problems have been developed, and to make the cases as authentic as possible they have been developed by representatives from the clinical practise and teachers from different nursing schools.

Each patient representing a case is situated in a room and can in some way communicate his/her situation and needs to the students in a way that emphasize the need to identify, formulate and analyse problems in practice in collaboration with other, and on a reflected basis consider possible actions and solutions.

Case Connexion contains a range of interactive elements to perform nursing tasks and a range of exercises which support the student learning and coach the students in the required procedures. The interactive learning objects and exercises relatively easily can be changed and adapted to current needs.

Also the students can participate in virtual presentations held by practitioners as well as lectures. Currently it is across regions. But in the future it will be across nations to support an international learning environment among students, lecturers and practitioners in nursing education.

It takes some time and experience to smoothly navigate in Second life and you have to learn to use the interactive facilities. For some students – and teachers – this has been an insurmountable obstacle, and they have stopped using CaseConnexion, but to others it has been a new and challenging learning possibility in addition to other teaching methods.

ADVANTAGES AND DISADVANTAGES OF DIGITAL TEXTBOOKS

Gerard Gielen, Lieven Jacobs, Katholieke Hogeschool Limburg, Belgium

For hundreds of years, textbooks have put a world of knowledge in the hands of students. But while the way people learn has changed dramatically, the traditional textbook most of time has stayed the same. In the past years, leading technology companies in Belgium have made big strides in bringing tablet computers into classrooms and stimulating teachers to work with interactive boards. Textbook publishers now have changed their strategies and have made their textbooks digital. When these textbooks can be projected on the interactive board we can call them digital textbooks, digital boardbooks or e-textbooks. Digital textbooks mostly contain the same content and layout as hardcopy versions but are made available for web viewing or download to a computer. Digital textbooks offer various interactive functions, and provide the teacher and learner with a combination of textbooks, reference books, workbooks, dictionaries and multimedia contents such as video clips, animations, and virtual reality, both at school and at home, without the constraints of time and space. Teachers and learners can create or adapt their own textbooks while using the digital textbook, underlining the important parts, taking digital notes, and ultimately combining the contents with high-quality, reliable knowledge that is their own. But while the availability of new devices is certainly critical, the successful transition to digital textbooks relies on many interconnected factors. In using digital textbooks on tablets and the interactive board, device availability is just the beginning of new didactics. If a teacher or student needs to decide between an actual printed textbook and its digital textbook cousin, there are a few things that have to be considered. Both options have advantages and disadvantages.

- Advantages

  – Interactivity
  – Time-saving
  – All materials are combined together
  – Less weight for children and teachers to carry
  – Easy searchable documents.
  – Taking notes
  – Converting to audio files for learners with visibility or other learning problems
  – Always and everywhere available
  – Up-to-date information

New technology is leading innovation in the way publishers create textbooks. The idea of a static reading of paper books is being bypassed with a mission to create interactive content that brings subject matter to life through images, video and social media. The goal is to allow students to experience content in new ways that will help them be more effective learners.

- Disadvantages

  – Reliance on technology
  – Price related to computer dependency
  – Danger of still traditional teaching
  – Acceleration of learning process
  – Screen glare and eyestrain
  – Financial cost and technological problems
  – Easy working with?
  – Danger of quality of the textbooks

Technology provides an increase of learning possibilities for teachers and learners much more than can be accomplished through conventional learning means. Digital textbooks are only the start of the revolution in educational technology. Students learn the same concepts, but in a different way. The time that is saved by using electronic materials can be spent to help the learners with specific needs or to improve the learning process. Most of the publishers believe that the world is going digital, but they do not know how this will evolve at this moment. Essential for textbook publishers is to listen to the experiences of teachers and learners and do research about it, what is missing nowadays. In addition to making devices and content available, providing a user experience that engages teachers and learners is critical to the success of digital textbooks. This is a challenge for educators, not only for the commercial publishing companies.

ENTREPRENEURSHIP & INNOVATION IN THE BATTLEGROUND: NOVEL APPROACHES FOR THE CONTINUING PROFESSIONAL DEVELOPMENT OF TEACHERS IN EUROPE

M. Begoña Arenas, Scienter España, Ivan Diego, Valnalon, Spain, Sophia Protopapa, OLN Learning, Greece

Introduction

ET 2020 strategy recognizes that knowledge, and the innovation it sparks, are the EU's most valuable assets, particularly in light of increasing global competition. In this frame high-quality pre-primary, primary, secondary, higher and vocational education and training are fundamental to Europe's success. However, in a rapidly changing world, **lifelong learning needs to be a priority – it is the key to employment**, economic success and allowing people to participate fully in society.

This is the latest of a number of policy documents and recommendations advocating the spirit of promoting entrepreneurship and innovation in education. There is therefore a **strong need to go beyond theory** and give specific examples of how to promote entrepreneurship and Innovation in the classroom.

"*Teachers are a critical factor for change among students*", but too often bear the brunt of translating policy into practice. Seikkula Leino noted the teachers do not know enough about the objectives, content and methods of work for the promotion of entrepreneurship and innovation in the classroom. In the best case, they know what to implement, but not how, and it is no surprise that they feel often stranded.

Two novel approaches for the Continuing Professional Development of Teachers in Europe

Both the mENTERing and ADEPTT projects are designing and testing novel approaches to provide teachers and VET trainers with the necessary tools to operate on their 'battlefields', the classrooms.

mENTERing (http://mentering.eu/) is testing a sustainable **blended train-the-trainer course on mentoring skills and competencies for VET trainers** especially designed to encourage entrepreneurship while contributing to the cooperation between VET institutions, trainers, mentors, and stakeholders. The pilots are running in Bulgaria and Greece with the participation of 20 VET trainers in each country. Its learning methodologies include self-learning, face to face learning, webinars and action learning (for those VET trainers already mentoring students). By doing this, mENTERing supports the modernisation of VET practices and systems and promotes a blended lifelong learning approach.

ADEPTT (http://www.adeptt.eu) is testing a **training model based on strategies to promote entrepreneurship and novel approaches for learning in the classroom** as a means to develop not only the ability of trainers but also entrepreneurial mindsets among young Europeans and thus promote socio -local and regional economic development. The pilots are running in Iceland, Portugal, Spain, Norway, Flanders and Wales. ADEPTT teacher training module aims at boosting teachers' confidence to adopt more innovative and enterprising behaviour through a personalized and self-guided process that builds on enterprising elements already present in their teaching.

The combined results of both projects have the potential to become a clearinghouse for knowledge generation regarding novel approaches to support the challenge Europe has to face in order to adapt the Continuing Professional Development of the EU teachers and VET trainers to reality.

Acknowledgements

NEGATIVE EXPERIENCES ON SOCIAL MEDIA AND THE ROLE OF TEACHER EDUCATION IN ETHICS

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Introduction

The aim of this paper is to raise some questions concerning ethical dilemmas in social media related to teachers' professional development. We will present a study that examined whether pre-service teachers (n=475) describe negative SNS experiences differently depending on perceived relevance of ethical training in teacher education?

Background

From a Governmental perspective, the Norwegian education system aspired to be among the best in the world in relation to the development and use of Information and Communication Technologies (ICT) in teaching and learning (MER, 2004). Another political document Whitepaper 44 (2009) makes strong arguments for social networking sites (SNS) to be utilised as a support for learning. How these pupils and preservice teachers behave and the experiences they have on SNS can all be related to ethical dilemmas.

Theoretical framework

Professional teachers are role models in the application of ICT as well as in the use of social media in an ethical manner for their students. Some argue that teachers should be cautious with their use of Facebook as an informal channel. It has also been found that there probably is a negative relationship between pupils' use of Facebook and their academic performance. On the other hand others have found pupils to become more motivated when teachers present information about themselves, even though others also argue that ethical challenges maybe are different in SNS compared to face-to-face communication. One theoretical model that specifically relates to ethics and teacher education is the "model of ethical dilemmas in teaching" by Shapiro and Stefkovich. The assumption of the model is that there are different dimensions of ethics. One of them is the professional arena. Consequently, the assumption is that teacher training in ethics has an impact on the evaluation of ethical dilemmas in a professional way. The overall aim of this study is to raise some questions concerning ethical dilemmas in social media related to TPD. The research question is whether pre-service teachers describe negative behaviours differently depending on the perceived relevance of ethical training in teacher education?

Methodology

Data from preservice secondary teachers in their third and fourth years of study and students enrolled in the program for Post Graduate Certificate in Education (PGCE) were collected from six teacher education institutions in Norway during 2011. Questionnaires were distributed and filled out with an across site response rate of 80 per cent (N=475). The study was approved by the Norwegian Social Science Data Services (NSD). The mean age in the preservice teacher sample was 30 (SD =8.2, n = 438) and 64 per cent of the sample were female. The original Australian version of the questionnaire was developed in cooperation with Morris and the questionnaire consisted of open and closed response categories and was tested on relevant personnel before the study was launched. In addition to the five parts of the Australian original the Norwegian version of the questionnaire also consisted of part F which investigated SNS and teaching.

Results and discussion

The presentation will present some preliminary findings and discuss the theoretical and educational significance of these. A total number of 461 (97 %, N=475) of the participants had responded to the question regarding how adequately their current degree had prepared them to deal with ethical issues in the teaching profession?

The relationship between the understanding of ethics in negative experiences on social media and ethic training data will be connected to the different parts of the theoretical model by Shapiro and Stefkovich. The discussion may call for thoughtful, complex thinking and help students and teacher educators come to grips with their own ethical codes and apply them to practical situations.

EDUCATIONPLAZA – TEACHERS' PROFESSIONAL DEVELOPMENT

Sólveig Jakobsdóttir, Tryggvi Thayer, Svava Pétursdóttir, Thorbjörg Thorsteinsdóttir, Anna Kristín Sigurdardóttir, Hanna Rún Eiríksdóttir, University of Iceland School of Education, Iceland

Icelandic educators have been forming communities of practice (CoP) to meet the challenges of increasingly rapid technological change. The rapidly changing nature of the Internet and Web 2.0 tools are creating new forms of social interaction and production, which require new skills and literacies. Self-organizing communities of practice may be more effective in addressing educators skills needs than existing models of in-service training. In the proposed study we will explore the professional development of educators working in CoPs using social media and digital habitats to create dynamic learning environments.

Context

The CoPs (referred to as "plazas") that have been formed thus far, include the Language Plaza (LP), the Science Plaza (SP) and the Special Education Plaza (SEP). The LP, the first plaza, was formally launched on 16 November 2010 with the support of the Ministry of Education, Science & Culture (MESC) and various Nordic funding sources. The success of the LP during its first year prompted the establishment of the latter two plazas over the next couple of years. All plazas operate similarly; i.e. supporting teaching and learning, providing opportunities to share resources and professional knowledge experiences and strengthen the professional sense of community. Plaza members make extensive use of social media and digital habitats in addition to face-to-face meetings, seminars and workshops. In 2012 the Education Plaza (EP) was launched to provide a framework for existing and emerging plazas. Its role is to disseminate outcomes and facilitate and develop channels of communication for sharing of information; provide consultation on research and school development projects; facilitates requests for cooperation; and to connect the different activities and functions of actors in the school- and academic communities. The EP provides a collaborative venue to build bridges between the plazas and key players and stakeholders in educational development.

Objectives of the study

This study was started in the fall of 2012. Through a five-year period we plan to record, evaluate and monitor the progress towards the following objectives:

Education Plaza – Menntamiðja – objectives

- Facilitate the creation and sustainability of CoPs with the purpose of strengthening professional development.
- Strengthen links between community members and associated networks.
- Build bridges between key players within the Icelandic education system.
- Explore the use of new tools and technologies.
- Explore how teachers can improve their digital competences.

Each plaza – specific objectives/questions

- What is the appropriate role of stewards/community coaches in community building?
- How does active technology stewarding affect community participation?
- What activities contribute the most to plazas' goals?

Method

The study is an action research study, which emphasizes researchers' own practice and the implementation of interventions to bring about improvement. Researchers will employ a range of methodologies including, journaling, user surveys, social network analysis, focus groups and competence assessments. Methodologies will be selected to highlight individual and community learning and practices that contributed to learning.

Outcomes

The results of the study will contribute to existing knowledge about effective stewarding and knowledge development practices within CoPs. The results will be useful for EP's and other similar CoPs as they continue to promote and facilitate the establishment of new communities of educators.

THE TEACHER AND THE PUPIL: JOYS OF COMMUNICATION

Danuta Starikova, Moscow Institute of Open Education, Russia

How does a teacher feel in student's shoes? Teachers attending professional training can be divided into 3 groups:

- those who are ready and able to perceive new ideas;
- those who have a cyberphobia;
- those who strongly oppose any innovation and usually have dozens of reasons to complain.

The teacher's age has nothing to do with it. Let's analyze two complete opposites. The 1st group was quite easy to work with. The 3rd group showed implicit or explicit hostility because of the lack of information and practice. So, there is a large divergency between the modern requirements and teachers' principles.

ICTs broaden the teachers' and the pupils' minds:

- Children get more motivated and are eager to study in Moodle;
- According to Health Regulations (2.4.2.2821-10) 7-8 year old pupils can view static images on a whiteboard and on an individual computer not more than 10-15 minutes. It becomes possible in Moodle;
- Moodle makes it possible for a teacher to provide subject- subject teaching instead of subject- object pedagogic. Our training courses make it possible to differentiate the tasks according to the rules of age psychology;
- Moodle allows to see the results immediately;
- There is no need in making up pupils' achievement report in the end of the lesson or the school year as it is already done at the lesson in Moodle.

I created a networking project located on the Moscow city web portal (LMS Moodle) and aimed at the students of my upgrading professional courses. Unlike the traditional students mine do not follow the certain algorithm but they create their own algorithm for their current needs.

Here is the link to my training courses: http://nachalka.seminfo.ru/course/view.php?id=15285 (open entrance guest)

The technical features of the project:

- Any student of my course may edit networking project;
- It is possible to import the course in block or partly.

Each time we use a new set of tasks to better respond to practically challenges (at teachers' request). Our goal is to maintain the level of technical requirements for a task. During the lesson we do several different activities and it is always difficult to adapt the tasks for changing audience, and working on it is always a brainstorming session.

Follow the link to see the project cartoon: https://www.youtube.com/user/str047?feature=mhee

This project exists since December 2012. Teachers attending my courses managed to get rid of cyberphobia thanks to teamwork.

THE 'GROUPS': A NEW INSTITUTION IN THE GREEK PRIMARY EDUCATION SYSTEM

Konstantinos Karampelas, Sarantis Karvounidis, University of the Aegean, 2nd Experimental Primary School of Rhodes, Stamatia Mantikou, Vasiliki Liakou, Vasiliki Economidou, 2nd Experimental Primary School of Rhodes, Greece

The 'Groups' are an institution established in the Experimental Schools of Greece, in accordance with Article 45 of Law 3699/2011, which aim to "promote subjects such as mathematics, science, language, literature and other fields such as the arts, sport etc., to create nuclei of creativity and excellence that leverage the increased capacity of some students, without compromising their socialization". According to the theory of multidimensional intelligence-theory of multiple intelligences, the main axis of the operation of such educational institutions is to promote skills and talents and the interest of learners. These may relate to various skills as: linguistic, logical-mathematical, spatial, musical, figural-spatial, bodily-kinetic-and interpersonal communication. In addition to that, it is described that the introduction of such activities in the broader and wider established curriculum may include: planning activities, interdisciplinary and trans-disciplinary approaches, student work (projects), assessments and practical learning exercises.

The second experimental primary school of Rhodes is a public School with 15 teachers and 180 pupils. During academic year 2012-2013, Groups were introduced. The subjects of these groups are 'Mathematics', 'Environment', 'Reading', 'Information and Communication Technologies' and 'English through E-twinning'. A total of 75 pupils attend one or two of these Groups.

The implementation of an educational reform of any kind or size, in any educational system can be integrated and sustainable must make a deep impact in the educational system and the educational reality or educational culture society. The essence of the reform must be understood and shared by all members of the learning community. In connection to this issue, it is also argued that sustainable change must be extended to three dimensions. It must be deep, which means to be radically changing functions or activities conducted at the school. It needs to have width, to extend that directly or indirectly in many dimensions of school subjects and functions. Finally, it must have length; include a long-term goal and purpose.

As far as the Greek Education System is concerned literature has shown it has been resisting to change and reform, as the general educational perceptions, infrastructure and culture are concluded to be too rigid to accept innovations

Having in mind the above, it seems very necessary to investigate the possibility of the 'Groups' to survive in the Greek education system and the impact it may have. To do so, the following questions, must be answered:

1. What is the current progress of the 'Groups', in the school program?
2. What are the learners' perceptions towards it?
3. What challenges arise?

The most appropriate way to answer the questions is the action research. The fact that teachers investigating these questions, teach in the Groups themselves, gives them the opportunity to evaluate the institution and their work. Analysis of documents and samples of the learners' work, small semi-structured interviews with parents and learners as well as observation are the methods that can be combined to provide the answers and allow conclusions to be drawn.

As a conclusion, the 'Groups' are an institution that have stimulated interest in the school. The opportunity they provide for the teacher to design sessions and work, having a level of independence is highly beneficial for the school. This though may collide with the learners' expectations and the wider school culture.

Before making any generalizations, from the above conclusions, it is essential to point out several limitations of the particular study. The sample of the population includes male and female participants from a typical Greek primary school classroom. It was perhaps the most appropriate in consideration of the goals time and place restrictions. However, it is not large enough to make the research findings able to serve as grounds for accurate generalizations or definite future predictions.

STAFF DEVELOPMENT IN EARLY CHILDHOOD EDUCATION AND CARE – THE NEST PROJECT

Elvira Sánchez-Igual, World Association of Early Childhood Educators (AMEI-WAECE), Spain, Éva Szalma, Budapest University of Technology and Economics, Hungary, Renate Hahner, University of Erlangen-Nuremberg, Germany, Svenja Pokorny, Amitie, Italy, Kyriakos Lingas, Militos Emerging Technologies and Services, Greece, Begona Arenas Romero, Scienter Espana, Spain

Early Childhood Education and Care (ECEC), referring to services encompassing formal and informal care of children below school age, consists of a wide variety of formal and informal arrangements, with rather fluid — and country specific – transitions between social support services, the educational system and the actual care system. ECEC has been, since the 1992 Council Recommendations on Child Care, a recurring topic on European policy agendas. From an educational perspective the expansion of good-quality early childhood institutions is seen as indispensable for the educational attainment of the children and for the foundation of lifelong learning.

NEST – Network of Staff and Teachers in Childcare Services (www.nest-project.eu) is a European project funded by the European Commission within the Lifelong Learning Programme – under Comenius sub-programme –, with the aim of establishing a network in the field of staff development in Early Childhood Education and Care in Europe. The project is devoted to improving the access to relevant information, training opportunities and sharing of good practices and experiences among those active in the field.

The NEST consortium aims to establish the now missing network in the field of staff development in ECEC in Europe:

- to overcome the problem of isolation by creating links between institutions, practitioners and professionals;
- to collect existing learning resources for kindergarten teachers and early childhood educators as well;
- to include researchers of the ECEC field giving them opportunity to share and to access a wide, European community, and
- to provide policy makers with updated information and comparisons of data in the field addressed, contributing to raising awareness about the issue by directly involving policy makers at local, national and European level.

Stakeholder analyses showed that the target group of ECEC professionals have language and ICT barriers that makes effectively reaching them and providing them with mainly electronic resources more difficult that any other groups of teachers or trainers. The partnership set up a multilingual website where national working groups have been formed (from every partner country) and face-to-face meetings are organized. First reports from the national working groups show a growing interest for the services the project provides.

Continuous professional development (CPD)

Education and training of staff working in childhood education is a major concern for the present and the future of ECEC. Quality of services includes, above all, the preparation of teachers, nurses, and child minders to the social, cognitive and emotional development of the child. The NEST – Network for Staff and Teachers in Childcare Services – project established a network in the field of staff development of ECEC in Europe in order to overcome gaps in staff development and local, national and international professional isolation of the professionals working in the field.

The divide within ECEC between nursery schools (daycares) and kindergartens (pre-primary schools) as well as the family day care providers lays not just in their different qualification to enter the profession, but also affects their access to continuous professional development.

PLANNING AND IMPLEMENTING IN-SERVICE ICT-TRAINING TO SUPPORT DEVELOPMENT OF HIGHER EDUCATION TEACHERS' TECHNOLOGICAL PEDAGOGICAL CONTENT KNOWLEDGE

Jörgen Holmberg, Mats Brenner, Maivor Hallén, University of Gävle, Sweden

Theoretical underpinnings, planning and implementation of the in-service training

This poster reports on an in-service training initiative to support teachers' in their efforts to successfully integrate ICT to support learning. The target group was approximately 300 teachers at three different faculties at the University of Gävle, Sweden. The time period was 5 months.

Previous research indicates that initiatives to support teachers' pedagogical use of ICT tend to be characterized by a focus on technological skills. According to Mishra & Koehler the ability to successfully integrate ICT as a tool for learning means understanding the reciprocal relationship between technological knowledge, pedagogical knowledge and content knowledge. Learning to successfully integrate these knowledge domains in practical teaching to support learning is labelled TPACK (Technological Pedagogical Content Knowledge) by Mishra & Koehler.

The TPACK-framework was used as a conceptual foundation in the planning and implementation of this in-service training initiative. In addition to this we also acknowledged previous research on the importance for the teaching community to find ways of exchanging experiences of teaching with technology and contribute in building a knowledge base to support teachers when making design decisions. Hence we decided to offer a demand based in-service training where participation was voluntary and two separate but complementary initiatives were started simultaneously.

One initiative focused on identifying individual teachers' perceived need of technological/ICT support and training in the university's Learning Management System (LMS). These needs were then addressed in individual face to face talks and workshops between teachers and ICT-support personnel. Here teachers' content knowledge and pedagogical knowledge was reflected on in relation to their expressed needs for increased technological knowledge.

The other parallel initiative provided teachers with an opportunity to meet and exchange experiences about pedagogical ICT-use at lunch seminars. The lunch seminars had different themes based on suggestions by the participating teachers themselves and an opening speaker, often one of the participating teachers or an external expert who shared thoughts on and experiences of pedagogical ICT-use or the functionality of the university's LMS.

Lessons learned

Data was collected through surveys, observations and organized situations for reflection. Findings suggest that the TPACK framework proved useful as a conceptual tool for thinking about what successful ICT integration could mean and to help teachers question the common conception that learning technological skills is enough to achieve this. Overall the combination of the two initiatives was considered successful by participating teachers and organizers. Almost 50% of the teachers participated in the first initiative (voluntary support primarily in use of LMS and web conference tool). The chosen method of individual face to face support was much appreciated and considered effective as a means of learning how to successfully integrate ICT. However, as stated below, findings indicate that this integration would probably have to be further developed in order for teachers to develop TPACK.

About 17% of the teachers attended the lunch seminars on at least one occasion. The lunch seminar format was appreciated because of its conceived relevance to teacher practice and because of the format which allowed participation despite the often busy schedules of many teachers. However, the first focus of the large majority of questions, desired support and suggested lunch seminar themes concerned technological skills and only a limited number of teachers desired support in designing courses and/or trying new ways of teaching and working with ICT. There was also limited interest in learning about the web 2.0 features of the LMS (e.g. blogs and wikis). This indicates that additional initiatives are needed to further explore and critically discuss what successful ICT integration could mean and how to help teachers in their efforts to use ICT for pedagogical purposes. The in-service initiative described here has strengthened our conviction that this is not only a matter of expanding teachers' technological knowledge but that pedagogical beliefs and practices, as well as choices and representations of content, must be considered simultaneously.

THE WEB OF LEARNING – A SYSTEMS VIEW

Astrid Høgmo, Studiesenteret.no, Norway

Studiesenteret.no is to be called a network of more than 100 Norwegian communities, which cooperate under more than 50 learning centres throughout Norway. Through a "hub" they are connected in an organic learning system, where resources (courses) are "transmitted" from universities to local communities. This system is a part of enhancing knowledge as one of the obvious factors in building democracy.

Norway as a nation could proudly present the traditional public system of lifelong learning; with education free of charge from childhood to the highest university degrees. The country also has a history of thinking decentralised in many aspects. The urge to make life possible in rural areas is high, also in the time of a knowledge society.

The network, also to be called a system, has been facing many challenges and opportunities on the path towards 2013. Where technology, learning and organisational views are rapidly changing. The internet has opened the door for many revolutions. One of them is the revolution in the power of knowledge, where the ownership of knowledge is loosening up.

In this presentation we will share some of the exiting landscapes to enter in the next few years: where organic leadership is mixed with our systemic web of learning.

A CASE STUDY OF POLES FROM NORTH, SOUTH AND NORTHEAST IN OPEN UNIVERSITY SYSTEM OF BRAZIL: THE NECESSITY OF INNOVATION

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Since June 2011, a study about the Open University System of Brazil (UAB) has been carried out under the leadership of the research group "Teacher training and new information and communication technologies". In one part of the study, 10% of coordinators of all UAB poles, specifically in the North, Northeast and South region were accompanied to 1) define the professional trajectories of pole coordinators, 2) analyze how the pole coordinators understand the official systems of assessment, and, 3) describe the role of these new education territories in public policies of Brazilian teacher training as UAB system. The period of 2006 to 2010 was established because it was when 557 poles were already in activity (in 2012 the total was 618 poles). The regions in focus housed 64% of poles system assets in 2010. To extract data we used interviews, a simulation of mutual evaluation in regional pairs, and a netnography of the behaviour of these coordinators in Moodle – used at all procedures of this research.

The UAB system was established by decree in 2006, with the objective of articulating the public institutions of Higher Education, local delegates and the federal government. In 2010, 91 public Institutions of Higher Education worked in 557 poles with 200,000 students. Establishing advanced synthesized units of universities within the country is not a great innovation, but turning these units to the exclusive service of teachers and doing it by articulating diffuse spheres of control is a major innovation. So, in this system, innovation is considered a pillar and the poles are the limit of this innovation, because they are new education spaces and need new practices and professionals to make it real.

These poles are places equipped with laboratories, libraries, offices, classrooms and conference rooms and distance learners use them as meeting points. In general, we concluded that the present support centres had 10 to 15 courses, offering more continuing training than initial training in cities with 20 to 30 thousand inhabitants, 186 miles far from the state capital. The total numbers of courses offered at the studied poles are 908 and the estimated number of students is 25,000.

Among the actors in these centres, the most important is the pole coordinator. He is the professional who is responsible for academic and administrative management of the pole. According to our studies, the pole coordinators are: women aged between 31 and 50, specializes in some educational issues. In general, their initial training is varied, but predominate undergraduates in the area of human sciences, with emphasis on pedagogy. They have been working as managers at the local Education Department for the last 5 years, and they were introduced through UAB. They believe that the nomination for this position happened due to recognition of their participation in some innovative project or activity in the area of school management.

In 2010, 55 to 61% of UAB poles were evaluated by Ministry of Education (MEC) in an intermediate level of quality. It means that the poles had sufficient infrastructure for undergraduate courses in the area of the humanities, but with weaknesses for courses on physics, chemistry and biology. In other words, for MEC, the UAB system was still unprepared to answer the main demands for teacher training in Brazil. For the poles coordinators, the behaviour of the evaluators is punitive, their knowledge on the public system of distance education is restricted and their concern with the infrastructure is excessive. For the poles coordinators, the pole cannot be classified as a university *campus* or a great school. It is because this structure is more innovative than universities or schools. They describe this particularity noting that their activities were constituted by the continuing necessity to create innovative procedures to solve problems never seen before, ever when they were pedagogic coordinators of public school (north), municipal secretaries of education (south), political leaders or cultural agents across different states (northeast). Articulating the interests of different universities in the same place, and universities and municipalities are the key problems.

As we can see, the poles of UAB system constitute a broad, complex and internalized, but not yet an interconnected network. Creating discursive bridges between distinct points of view to understand UAB system constitute a huge challenge now. Promoting, by network, an intersection between the poles, universities and federal government could optimize and make a more sustainable public policy. Making this with innovative methods seems a correct way of how to contrive a lifelong to these lifelong learning program.

PROMOTING THE USE OF SOCIAL MEDIA IN FINNISH GENERAL EDUCATION

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Introduction

The use of educational technology is becoming more and more a part of everyday pedagogy in Finnish schools. New teaching methods are developed in response to the challenges of society and new learning cultures. Problem-solving, cooperation, and interaction skills are a key part of future working life skills. One way to promote a learner's ability to face future challenges is to draw attention to a culture that consciously supports collaborative and social actions. Hence we need to pay attention to collaborative teaching and learning methods in schools to support and promote the new skills. Social media has many characteristics that can be beneficial to a new collaborative and social culture, practices and methods in schools, teaching and learning. Several projects in Finnish schools are experimenting new and even quite unorthodox ways to adapt social media in teaching and learning. Teachers have also started to adapt social media and personal learning networks as a tool for their personal professional development. In this presentation we will discuss the use of social media and address some emerging issues and experimentations by pioneers in different schools.

The National Social Media Coordination Project

Social Media in Finnish General Education is a coordination project funded by the Finnish National Board of Education (FNBE). It was initiated in 2010 and, currently, it coordinates 20 FNBE-funded development projects related to the educational use of social media in pre-school, primary education and secondary education. The general objective of the coordination project is to support the development projects in their operations and to establish and strengthen the use of social media in education. The coordination project aims at gathering, processing and distributing best practices and experiences in the field and especially from the development projects funded by FNBE, guiding and supporting development projects working on the educational use of social media by sharing pedagogical and administrative practices, reporting and producing support materials, arranging training and seminars, and carrying out research on the use of social media in education. The desired impact of the project is more efficient and more appropriate wide-spread use of social media for educational purposes.

Issues Raised in the Development Projects

There are several issues addressed by the development projects, which relate to promoting, implementing and supporting educational use of social media. These issues extend from creating a new school culture, planning and governing curriculum work, and managing ICT facilities to the actual pedagogical use of social media in learning and teaching by learners and teachers. The issues and experimentations concern, for example, leadership, curricula and community construction, learning and teaching environments, learning and teaching methods, support for learning and teaching, and active cross-boundary participation. The gathering, processing and distributing of the best practices and experiences surfacing in the development projects is currently under way. In the presentation, we intend to discuss the issues and experimentations in more detail and give some cues to adopting social media in schools.

CVE – CORPORATE VOLUNTEERING FOR EDUCATION

Stefan Colibaba, Al.I.Cuza University, Anca Cristina Colibaba, Gr.T.Popa University of Medicine and Pharmacy, Lucia Elena Petrescu, EuroEd Foundation, Romania

Constant growth and development on the work market derives in the need of having better equipped and qualified staff. The speed of the technical innovation and the changes it triggers decreases the time dedicated to apprenticeship and induction. Employers raise selection standards and thus education itself should identify means and ways through which learners can increase their employability changes.

Corporate volunteering is one of the alternatives education has to better link and update to the requirements of the work market. Although corporate volunteering presents a really viable solution to liaise employers and education it has not been valorised to its full potential. Teachers and trainers play a most important role in bringing the two parts together.

The content and quality of teaching impact upon the students' performance after graduation and must be thus be kept under constant monitoring. Moreover, teacher training programmes need to be developed in direct connection to latest technological updates and innovations. The importance of this has been underlined by the European Commission in the common Framework for teacher competences and qualifications. However, collaboration with employers as a potential training source is still to be developed and supported.

CVE project addresses this need of aligning education to the requirements of the work market by training teachers and school representatives to analyse, plan and implement corporate volunteering projects which impact on student intake and performance.

Through the analysis implemented at national level CVE project team has highlighted the following:

- There is the need of awareness and understanding of the concept of corporate volunteering both for school and business representatives
- Volunteering activities between schools and business are mainly focused on charity and donations
- The potential of corporate volunteering in education needs to be illustrated through case-studies
- Formal education systems are yet to be adapted to embed collaboration with businesses that would trigger student higher performance and study relevance

As a result of these findings the project team has developed a research approach and case studies have been collected within all partnership countries. Research has shown that from the total of over 50 case studies less than half could be categorised as corporate volunteering activities. Although money donations and technical equipment did support education processes, authentic corporate volunteering activities would have had a far greater impact on the educational offer and students' intake.

The CVE training programme for school manager and staff is developed in a blended manner using online support in order to increase access to materials and to encourage international collaboration and sharing. During the training participants will be initiated in:

- Preparing an institutional analysis for their own school
- Identifying potential business collaborators at local level to commonly develop corporate volunteering activities
- Developing an implementation plan for corporate volunteering activities that would increase the educational performance of students

At this stage the CVE team has finalised the CVE handbook which is part of the Trainers' Guide. The material is available in several languages, online, on the project website at www.cve-project.eu.

THE CENTER OF JOB KNOWLEDGE RESEARCH

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Background

In the HRM domain the role of (job specific) knowledge is increasingly being recognized especially in the field of personnel selection. Most personnel psychologists nowadays seem to agree, that empirically at least, general mental ability (GMA or intelligence) is the single best predictor of job performance, regardless of job type. That is, of all predictors of job performance available today, general mental ability appears to correlate most strongly with job performance. Strangely, however, we know very little about why GMA is related to job performance, although leading authors in this field consistently claim that people who score higher on general mental ability acquire more job knowledge more quickly and are therefore able to demonstrate superior job performance. Job knowledge therewith appears to be a more proximal predictor of job performance than GMA. Job knowledge is not only predicated in intelligence, as education obviously also contributes to its development both directly, and by moderating the effect that GMA has on job knowledge (no matter how smart one is; if one has not received training in a particular job role one is unlikely to excel in it). Despite the high (meta-analytic) predictive validity of job knowledge, strangely it continues to receive scant research attention with only 2% of publications in the personnel selection field focussing on it, as opposed to other (relatively more straightforward) selection methods such as intelligence tests, assessment centres, and employment interviews.

To date, little effort has been made in promoting of the abovementioned idea. The OntoHR project – Ontology Based Competency Matching between the VET and the Workplace – (www.ontohr.eu) was one of the first attempts to exploit and apply the concept for job knowledge ontology based selection and training for real jobs in the ICT VET sector. The novelty of OntoHR is that for students, who do not meet the selection criteria that apply to a particular position, we provide customized pedagogical content so that he or she can master the required knowledge and competencies efficiently. Once the merits of using this approach to match IT students to jobs have been further substantiated, the generalization of this methodology to other VET domains can be greatly facilitated by the dissemination of the deliverables of this project. This idea has been extended by the Med-Assess – Adaptive Medical Profession Assessor – project (www.med-assess.eu). In Med-Assess the application domain of these adaptive labour market driven assessments have been enlarged to the medical sector, more precisely to neuroscience nurses. In this context our adaptive assessment and training solution will assist medical organisations to test newly recruited nurses, to monitor knowledge, abilities and skills of current employees, provide personalised training on the basis of these assessments and track expertise across the organisation.

Objectives

Filling this increasingly conspicuous research gap may in due time put an end to the arduous process of first testing students to allow them to successfully exit Education, only to test them again upon organizational entry. Indeed in the future, we foresee that this technology might further facilitate the blurring of education to workplace boundaries by allowing the adequate and accurate measurement of time to proficiency in a particular occupation, while at the same time continuing the delivery of training content that is tailored to the needs of the individual student.

Therefore we want to foster research on Job Knowledge, which is one of the main facilitators of citizens' transitions between education and labour market but also between jobs within the labour market. How shall Educational institutions handle and process the data, coming from a system like OntoHR? What are the best ways to provide comprehensive feedback towards Educational institutions? With OntoHR and Med-Assess the work has been started to develop a matching interface, which matches job-roles and vocational education competences on a keyword basis, but there should be more in-depth investigation and analysis on this issue. We continue our effort to put Job Knowledge related practice and research into a wider context through an institutionalized research centre that is named the Center of Job Knowledge Research (CJKR). Our mission is to advance the application of specifically defined job knowledge in the areas of selection, recruitment, and lifelong learning, by modelling job knowledge and using it to construct jobs, predict job performance, and plan individually tailored interventions.

AWARENESS OF BUSINESS MODELS AT FIVE UNIVERSITIES, FIVE RESEARCH GROUPS AND FIVE ENTERPRISES

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This work-in-progress investigates if there is any outspoken awareness of business models for MOOCs (Massive open on-line courses) within

1. The management of five Swedish higher education institutions
2. Five academic research groups giving second-cycle courses at these institutions and
3. Five Swedish enterprises that are involved in research collaboration and courses with these research groups.

A smaller number of students attend second cycle education as compared to courses at more basic university education levels. Since the nature of the MOOCs' scalability is to accept as many participants who want to join a single course as possible, this type of course model is most frequent on the basic level. This raises some questions regarding the MOOC concept on the level of second cycle education, for instance if it is an appropriate form for developing expertise among people already active in the business sector. That kind of desired expertise can normally be found in second-cycle courses.

One of the most important results from collaboration between the academic and business sector is the improved ability to recruit qualified personnel. Collaboration can also increase the opportunities for using authentic data and case studies. From the enterprises' point of view it can, on the other hand, be considered to be a risk to reveal business information from inside the companies in interaction sessions in a course. Does a case unveil weaknesses and strengths in the company that are not meant to reach the public? Are the participants avoiding putting cases from their own company into the course depending on this or other risks? Are there any expectations to use "the crowd" for generating new ideas and solutions in the field of business?

c-MOOCs and x-MOOCs represent different kinds of massive open online courses. Their pedagogical foundations are different and the way in which social interaction exists is used in the courses sets them apart too.

c-MOOCs are related to connectivism and x-MOOCs are related to a cognitive-behaviourist perspective (Rodrigues 2013; Siemens, 2012). According to Rodrigues, x-MOOCs takes a more traditional one-to-many-perspective approach to learning, and uses videotaped lectures, online quizzes and automatic assignments. It has a great deal in common with existing traditional teaching but it may be scaled up.

In c-MOOCs, on the other hand, the learners' autonomy, peer activities, and social networking are more important. A large variety of tools, technologies and a distributed interaction characterize c-MOOCs: "The role of the facilitator is to govern knowledge coherence and then the learners form/transform it via exploration and deepening the exposed ideas" (Rodrigues, 2013). The idea of a self-regulated, highly motivated and autonomous learner is important. If a learning outcome in the course is to promote creative and original thinking – features that are needed in a knowledge-based society – the cMOOC can perhaps be considered to be the best pedagogical platform for the task.

The work-in-progress highlights the following aspects:

- What does the management at higher education institutions think about the MOOCs? What can the purpose of a potential MOOC be at each university respectively? Do their thoughts reflect any conscious or unconscious business model or pedagogical foundation? What about sustainability?

- What do the researchers in the research groups in these institutions think about MOOCs? Do their thoughts reflect any conscious or unconscious business model or pedagogical foundation? What about sustainability?

- What does the management in enterprises think about MOOCs as a way to train the staff? What do they think about the course models and does that thinking reflect their interest in promoting staff to attend?

TOWARDS E-LEARNING REQUIREMENTS IN VET

Dragana Kupres, Croatian Academic and Research Network – CARNet, Croatia, Agnieszka Chrząszcz, University of Science and Technology in Krakow – AGH, Poland

The article and the poster describe the development of the tool for self-evaluation of VET institutions for e-learning, based on the model of e-VET readiness in four aspects of organization; teaching and learning; technology; and cooperation. Self-evaluation tool, designed and tested during the partnership project, can enhance institution's awareness of the need for a systematic approach towards implementation of e-learning in VET schools and is easily adaptable to different VET areas, countries and contexts. The tool can be used as a starting point for analysis of specific needs and prerequisites for e-learning integration into VET schools and institutions.

The e-learning triad consisting of organization, technology and pedagogy, as basic categories needed to be taken into account when planning any e-learning, was modified to fit better into the context of VET sector:

- pedagogy was expanded into teaching and learning so as to be applied to activities of teaching and learning in schools, leaving out theoretical principles of pedagogy variously approached to in different countries.
- cooperation category was added as essential for a contemporary institution to connect vocational schools with labour market more closely and to extend the scope to the external partners and stakeholders (other schools, employers, local government and community and European project partners).

E-learning readiness was also defined in the four areas as a reference for feedback:

- **Organization** – school/organization is e-VET ready in terms of organization when it plans strategically the allocation of resources needed to support the e-learning development, including time, human resources and finances.
- **Teaching and learning** – school/organization is e-VET ready in terms of teaching and learning when it uses e-learning to reach the learning objectives defined in the curriculum, especially for the vocational subjects, in order to educate competent vocational experts competitive on the labour market.
- **Technology** – school/organization is e-VET ready in terms of technology when it ensures comfortable use of technology for all parties involved and brings technology from the workplace into classroom and vice versa.
- **Cooperation** – school/organization is e-VET ready in terms of cooperation when it provides ICT tools to all the partners and stakeholders so they can work together to define and reach common goals (learning goals, learning situations in the classroom or in the workplace) to prepare students for the labour market.

As a result, four groups of e-learning requirements were identified and described to provide feedback on the self-evaluation. The questionnaire is available on http://www.evet-ready.eu/ and is a result of the project titled e-VET Ready.[1]

WWW.KUNNSKAPSBASERTPRAKSIS.NO – ONLINE RESOURCE FOR HEALTH CARE PROFESSIONALS WORKING EVIDENCE-BASED

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Aim

Describe an online learning resource in Evidence-Based Practice (EBP), which is freely available for Norwegian health care professionals, teachers in health disciplines and their students.

Background

EBP has high priority within the health services internationally as well as in Norway, where health care professionals are required to work evidence-based. EBP requires that decisions about health care are based on the best available, current, valid and relevant evidence. EBP aims to provide the best possible care for the patient through combining research-based knowledge, experience-based knowledge and the user's knowledge and participation.

Teaching EBP builds on knowledge about adult learning and workplace learning as well as constructivist learning theory. Emphasis is on making the learning as relevant as possible for the participants.

The learning resource

With the requirement for all healthcare workers to work evidence-based, education in how to find relevant research, and critically appraise evidence from research is necessary. Bergen University College and The Norwegian Knowledge Centre for the Health Services developed an online resource to give health care workers and others an online overview of the principles of evidence-based practice. The resource site has been available since fall 2008 at www.kunnskapsbasertpraksis.no.

The online learning resource was created using existing knowledge from teaching experience in evidence-based medicine and is based upon the first edition of the workbook "Å arbeide og undervise kunnskapsbasert". The site is structured around the six steps of evidence-based practice. Each step is presented with a brief introduction and complemented by a screen lecture explaining key elements of this particular step followed by exercises and suggestions for further reading.

Intended use

The learning resource is intended to work as a stand-alone resource for health care professionals, teachers and students who want to learn EBP and as elements of a blended or online course in EBP. As the resource is presented in different modules, teachers can use parts of or all of the material in their teaching. The learning resource is intended to support lifelong learning.

Development of the website

The site is under continuous development. A master's degree evaluating the user experience and usability for the site, were completed in spring 2012. This qualitative descriptive study revealed that the users found the online course easy to use and fairly useful, but that they considered it too overwhelming as an introduction to EBP. The nature of the online course was also questioned and the participants in the study would rather describe it as an online resource or information site. Based on this study and general user feedback, a number of changes have been made to the site. The learning objects, assignments and quiz have been removed from the site in order to refine it as an online resource rather than a course. The course elements will be used in the development of a shorter, more specialized introduction course in EBP.

THE BOLOGNA PROCESS AND STUDENT MOBILITY – FIRST RESULTS OF THE SAGE PROJECT

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Student Advancement of Graduates Employability (SAGE) is a pan-European project aimed at increasing the knowledge of the effects of European higher education reforms implementation on the graduates' employability. SAGE also aims at enhancing the capacity of student representatives to take part in shaping and formulating policies designed to improve the rate of graduates' employability at European, national and local level. Research on educational policies and trainings for students and stakeholders are conducted during a three year project phase (10/2011-3/2014) and student representatives will be empowered to take a more active part in higher education and in national policy decisions regarding educational concerns. The project is coordinated by the European Student Union and its partners are four national student unions from all over Europe, a Romanian institution of the Ministry of Education and the German Innovation in Learning Institute of the University of Erlangen-Nuremberg. One research aim of SAGE is the review of educational policies and the analysis from the perspective of European students and student unions. As part of this research the report 'Bologna with Student Eyes' was written by the project consortium and the main results of one part of this report are summarized in this paper, namely the improvements and problems concerning student mobility during the last three years.

Mobility is one main aim of the Bologna process; students should be encouraged to spend some time abroad at another university. But this seems only an option for students from higher socioeconomic groups, as often grants or loans are not sufficient. Other frequent problems are language barriers, administrative issues, lack of information and higher fees for non-EU students when they want to study in an EU country. Whether these obstacles improved or not, was examined by surveying 38 student unions from 35 European countries. Mobility was only one topic of the 75-page-long survey; 26 questions were asked about internationalization and incoming as well as outgoing mobility. Most questions were open questions and this data was analyzed with content analysis.

The largest obstacle to student mobility is financing: 22 of the student unions consider this as the main problem. Also credit recognition, lack of information and guidance are issues which should be improved. Less often mentioned was the problem of language barriers and personal obstacles. Flexibility in the students' curriculum was also identified as a problem in seven countries. Compared to the data of the previous report three years earlier, big progress has been made in many countries on administrative support and available information, but little progress on better availability of language courses and recognition of study results/credits achieved abroad. A negative trend is visible on bureaucratic obstacles. On financing, trends differ between countries. In most countries ERASMUS grants are not sufficient to cover the cost of living and on this point no progress is visible for 12 student unions, a small progress for 11 unions, a big progress for Azerbaijan and Belgium and a negative trend for Italy. Only five of the 38 unions report that they have no problems with the portability of loans and grants. Portability of loans has become easier, but replacing grants with loans is not an option as this will increase the inequality gap between students with a different socioeconomic status. If in 2020, in all European countries 20% of all students should spend a period abroad, more progress especially on financial support needs to be done in many European countries. In particular, loans and grants need to be fully portable and ERASMUS grants need to be raised to meet the living expenses in different European countries. However, as this study only relies on a quite small sample of student union representatives, more data is needed to get a reliable picture of the situation for all students from different European countries.

ANALYSIS OF TEACHING-LEARNING POTENTIAL OF THE BME ALFA E-LEARNING SURFACE

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The development of information and communication technology (ICT) and e-learning forms is defined both by ubiquitous computing and the technical-social attributes of virtual learning space. This space can be characterized as organic learning environment, while its educational theory is based on e-learning. It gives multiple opportunities to exploit the dimensions of time and space, providing both asynchronous and synchronous learning forms.

In 2012 BME Faculty of Natural Sciences the teachers working at Institutes of Mathematics and Physics created the BME Alfa online practice surface. This initiative was intended to help the students prepare for entry tests required to be taken by some departments. Only after they have passed, the tests the students would be able to enrol to desired majors. Thus the students were able to participate in the creation and management of the e-learning environment in question.

This paper will give an account of the process how the questions were prepared and uploaded. Later it will examine the usability of the system and the scope of ICT used. Through the presentation of the BME Alfa functions the characteristics of the Moodle system can be acknowledged as well. Both the courses of Mathematics and Physics department will be introduced.

The main function of the e-learning environment is the downloadable curriculum, topic orientated tests, forums, chat and a mock examination.

The paper will then go on to usability issues of the environment, and an online survey conducted among students. In spite of the small percentage of students surveyed because a lack of time (only 30 out of 300), we can state that the received results were worth of analyzing.

Finally, according to the analysis and conclusions future development plans and guidelines are presented.

CHALLENGES OF OPEN EDUCATIONAL RESOURCES (OER) REUSE IN THE BRAZILIAN HIGHER EDUCATION CONTEXT: WHAT AUTHORS THINK?

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In 1999 six public universities in the State of Rio de Janeiro, Universidade Federal Fluminense (UFF), Universidade do Estado do Rio de Janeiro (UERJ), Universidade Estadual do Norte Fluminense (UENF), Universidade Federal do Rio de Janeiro (UFRJ), Universidade Federal Rural do Rio de Janeiro (UFRRJ) and Universidade Federal do Estado do Rio de Janeiro (UNIRIO) gathered in a consortium funded by the Government and created the Centre for Distance Higher Education of the State of Rio de Janeiro (CEDERJ). Initially it was focused to offer undergraduate courses for teachers of primary and secondary school.

Understanding the importance of sharing its educational contents, CEDERJ created in 2010 the OER TECA. It is mainly composed of printed educational materials developed to assist undergraduate courses in public institutions in the modality of distance learning. Those contents are produced by Professors from public Higher Education Institutions from the State of Rio de Janeiro. The production of those materials is paid by CEDERJ and the Creative Commons (CC) license given by the authors is the no attribution.

This research investigates what authors from the portal TECA think about the remix of their contents and the methodology used is the case study approach. Starting from interviews conducted with six Professors of Higher Education in public Institutions in the State of Rio de Janeiro we identified the main factors of stimulation and restriction of those professors regarding reuse.

The preliminary results show that the authors support the dissemination of their contents as open educational resource (OER). They have been paid for those productions and agreed with non-commercial use and no attribution license. The visibility provided by the repositories, such as TECA, is highly valued by all respondents. However their major concern is that the ideas and visions presented in their contents could be somehow twisted when adapted by others, this fear was especially among authors from the social science field. They also fear about the quality of the reused material, that it would lose the previous quality. Therefore the authors from social science and entrepreneurship are against the reuse of contents. The reuse was not a big concern among the authors of math materials; however for them the remix would have to go through its original author for validation.

This research suggests the need of a deep study about the resistance of the authors in the reuse of their educational contents. These elements would help policy makers from the universities to think about new models that would allow the reuse, respecting the limitation of authors that produce high-quality contents.

iREAD VERSUS PAPER READ: THEIR IMPLICATIONS IN THE CLASSROOM

Kamla Suleiman Salim AlAamri, Sultan Qaboos University, Sultanate of Oman

In past decades, people acquired and started the skill of reading using very initial and premature aids such as papyrus, stones, rubber or animal skin that would help them read their texts and achieve their goals. To date, with the advent of technology appliances and electronic media like computers, laptops, iPods, iPads, PDA, iPhones and so many other smart devices, reading behaviour has been enormously and increasingly affected in this digital age. Today, young learners the, "digital natives," live in an information- saturated environment and in a situation where they are placed and exposed to two different forms of reading: onscreen and classical reading. This research paper reports on a comparative empirical study between ireading or digital reading and classical paper-based reading and their implications in the classroom at Sultan Qaboos University. This research paper aims at identifying the differences that EFL students experience in reading behaviour when they do screen reading and paper reading. Another objective is to find out what system (modern or classical) students find more effective, user-friendly, authentic and more motivating in enhancing and developing their reading skill in an EFL context. Reflection diaries followed by qualitative semi-structured interviews were utilized as research instruments to collect data from potential participants. Participants of this study were English Language Specialist students doing their English courses at the Language Centre (LC) and a sample of Sciences Programme students doing their EAP (English for Academic Purposes) at the LC. It is hoped that findings of this study I help suggest better library services for students and library users, in terms of researching and reading. More importantly, the results should aid course designers and teaching material writers to choose, design, and consider the ongoing development as regards technology. Also significant, findings of the current study have offered recommendations to develop strategies to assist students with reading electronic texts and teach them the specific skills needed.

EMPOWERING THE PROFESSIONALIZATION OF NURSES THROUGH MENTORSHIP (EMPNURS) PROJECT

Ildiko Szogedi, Eva Nagy, National Institute for Quality- and Organizational Development in Healthcare and Medicines, Hungary

The profession of Nursing, varies greatly in how it is both viewed by others and operationalised across Europe. In part, this is a consequence of the significant differences in the way nurses are educated. One important aspect of this educational experience is the contribution of qualified nurses in the supervision of student nurses during their clinical placements. It is noted that a crucial factor within nurse education systems should therefore be the educational relationship between the qualified nurses and student which would ensure successful learning experience. In many countries this is known as mentorship, and provision is made for the formal education of qualified nurses as mentors to students in the clinical learning environment. However, such approaches are not universal because the mentorship models used by organisations in these countries are relatively unknown in others; there are already countries where qualified nurses do not engage in this process at all. This is in part due to the different ways in which the nursing profession has developed in different countries. With the modernisation of European nursing education we now seek to address such incongruence, and in so doing, promote an empowered and better educated nursing profession across Europe.

The EmpNURS is an international project and it is aimed at benefiting nurse educators, student and qualified nurses. The thematic field of the project is in advancing empowerment of nurses and the operational focus is in Mentorship programmes and their delivery and enactment in the clinical environment. The Action model of the project is based on previous work by members of the project team. Mentorship training courses will be developed and then implemented in four moderately new member states within the European Union. Each Mentorship course will be specifically geared to the cultural, professional and organizational needs of the participating partners. The anticipated project outcomes are: improved supervision skills of qualified nurses; a homogeneous range of Mentorship models which are adapted to specific nursing education needs in participating country; enhanced integration of education and practice organizations and promote congruity of European nurse education.

An impact evaluation of the EmpNURS project will be undertaken using both quantitative and qualitative methods, as well as an ongoing critical evaluation and support in the development of the mentorship programme. In particular the evaluation will assess the increased cooperation between health care services and education, and the impact upon the professional empowerment of nurses especially in joining Higher Education Institutions (HEI) and hospital organizations. The EmpNURS seeks to create permanent interchange of shared beliefs and development in nursing education support system.

The EmpNURS consortium consists of 11 full partner organisations. Seven of these organisations are HEIs and four are teaching hospitals working in collaboration with each other. Organisations are located in Czech Republic, Finland, Hungarian, Lithuania, Romania, the Netherlands and United Kingdom. The mentorship pilot programmes, consisting of the including Mentorship training course for clinical staff nurses and their subsequent undertaking of the mentor role with students – will take place in Brno (CZ), Budapest (Hungarian), Kaunas (Lithuanian) and in Iasi (Romanian). There will be a collaborative team of a delegate from an HEI and a hospital, who will lead each of the four Mentorship pilot programmes. The role of the partners from Finland, NL and the UK will focus on supporting the implementation of the Mentorship pilot programmes. Turku University of Applied Sciences from Finland is the coordinator of the EmpNURS project.

ALGO-BOT – SERIOUS GAME: THE GAME ABOUT CODING A GAME

Hervé Docq, Delphine Rousseau, Technobel, Belgium

Description

Algo-Bot is a game that will teach you the logic of programming.

How are we going to do that without being dull and boring? That is a very good question, and one that we actually asked ourselves when we took on the project. Luckily enough, we think we have found the answer.

In **Algo-Bot**, you are taking control of a little **robot dude**. You do not control him directly; you do not make him jump on mushrooms by pressing a single button either. Instead, you set up a **sequence of orders** for him: go straight, turn left, go straight again, turn right, etc. When you are done creating your little sequence, you pass it onto the robot: it will go around the power plant, following your orders. **In a nutshell**, the player manipulates sequential commands to order **Algo-Bot** around in an attempt to reach the given goal of the level.

Of course, your little **robot** cannot just roam freely; it has a job to perform. It must carry around toxic containers, sort them out and re-arrange them, and call on **smaller robots** to **help** him when he has too many of them. And you have to give him orders for every step that he takes.

Imagine the following situation: you have to get your **robot** around a specific arranged path, and you can see that this path is repeated a few times along a mission. What you have to do thus is to **create a separate sequence** of orders that you call each time you want the robot to go through that path. Exactly like how functions work in real programming! By **solving small problems** in the game, you are learning the logic behind it. You will be able to play with programming concepts such as variables, functions, conditions and groups.

We know how hard it can sometimes be to wrap one's head around some of the concepts of programming (been there, done that, bought the t-shirt), so we made sure that you are appropriately supervised.

There are two characters in **Algo-bot** that will help you throughout the game: **Tina**, and **the Director**. **Tina** is the **mechanical engineer** of the power plant. She is not afraid of getting her hands dirty and working hard, she likes to crack a good joke once in a while. She is there to **help** you learn the basics of the game and give you some **tips** when it is getting too hard. **The director**, as you can guess, is the **big boss** of the power plant. He is not funny. He is stubborn and only concerned about one thing: **efficiency in programming**. He will remind you of that fact whenever an opportunity for **optimization** presents itself.

Who is involved in the project?

Technobel tasked Fishing Cactus with making a game that would be used at our **training centre**. So they set out to create a game that will help people grasp the essential skills of logic that the programming craft requires. And that is how our little **Algo-bot** was born.

Technobel is a public training centre located in Belgium. It provides training for two mains audiences: unemployed people through long path trainings and students through short dedicated trainings. Technobel is one of four IT skills centre in Belgium. For two years, Technobel has focused on pedagogical engineering. This element is one of these realizations.

Fishing Cactus is a private company of 29 employees located in Mons, Belgium that was established by four industry veterans in 2008. With a core team which combines 30 years experience and over 50 released titles. Fishing Cactus creates compelling and high quality games, Serious Games and Advergames tailored towards digital distribution platforms such as iOS, Android, Windows, Mac, Linux, Xbox Live, PSN, Nintendo Wii et 3DS and Kinect technologies. The studio also creates games from both original ideas as well as from existing game designs or licenses.

RESPONSE IN 1-2-3 WITH STUDENT RESPONSE SYSTEM

Knut Bjørkli, John Birger Stav, Sør-Trøndelag University College, Norway

Background

Teachers in all levels of education – from primary school to higher education – face the same challenges: how do you stimulate interaction, collaboration and communication in the classroom? And how can you involve all students, of all levels, including the very shy ones?

To address these challenges, Sør-Trøndelag University College (HiST) began in 2009 the design of a student response system called SRS. This is a web-based voting system which lets students use their own computers or mobile devices to answer questions and quizzes during classes. Results are available right away, giving both teacher and students immediate feedback on learning progress.

The SRS can also be used as a catalyst for collaboration and communication between the students – for example by asking a conceptual quiz question which lets the students engage in group discussions or other peer learning activities. The SRS also makes it easier to include students who are otherwise reluctant to participate in classes, by offering the option for anonymous voting. Our research has shown that anonymity can be crucial to engaging students who are normally reluctant to speak up in class.

The response system has been designed in close collaboration with teachers and students in a number of countries, and the focus has been on methodology rather than technology. All this accumulated experience has gone into making a time-efficient tool and sound methodology for both teachers and students in any subject, at any school.

Features of the student response system

- Students can participate in votes using any device with a web browser and internet access – e.g. smartphones, pads, laptops etc. This eliminates the logistics of distributing clickers.

- The teacher can ask questions spontaneously – questions do not have to be uploaded to the system before the class.

- The SRS is very flexible and works alongside any application. Teachers can ask questions using any medium – and not just digital ones. Questions can be asked in a PowerPoint slide, a PDF document, written on a flip-over or just presented orally to the students. The SRS toolbar floats on top of all running applications, and is always available to run votes.

- A wide variety of question types – including a unique "tagging" feature which makes it very easy to ask multiple-choice questions around multimedia material such as images, animations or videos.

- The system supports both authenticated and anonymous logins, and can be used to track student performance (using authenticated login), or as a tool to stimulate interactivity and engagement in the classroom – or both.

- The SRS teacher interface has been carefully designed to be very easy to operate from any touch-sensitive digital whiteboard.

Research

The SRS has been developed on the basis of 3 years of extensive pedagogical research at HiST, and the system's effect on learners' motivation and student satisfaction has been measured through numerous surveys and focus-group interviews. A big component of the research done has focused on collaborative-collective learning patterns, and a PhD theses completed at HiST in 2012 investigated how different SRS methodologies affect student participation and engagement. This research provided invaluable input to the design of the SRS.

A NEW LEARNING NARRATIVE FOR OPEN EDUCATIONAL RESOURCES – THE OPEN UNIVERSITY EXPERIENCE OF THE ITUNESU APP

Mark Wade, The Open University, United Kingdom

The launch of Apple's iTunesU app in 2012 provided a new tool for organising learning narratives structured around Open Educational Resources (OERs). The OU is already well established as a major contributor of high quality OERs freely available via a number of channels including the traditional iTunesU, OpenLearn and eBooks.

The iTunes U app provides a tool which allows diverse resources to be constructed into linear and potentially branched learning pathways. The tool provides a standardised approach to structuring learning experiences, but provides freedom for the tutor or instructor to shape the linking narrative and interactive engagements with the student user.

Since the launch of the app the OU has created over 75 learning pathways that deploy a wide range of educational resources, from eBooks, text and audio visual assets from OpenLearn and iTunesU, purpose built quizzes and subject specific apps.

The experience of identifying and moulding a broad range of assets that vary widely in their duration and characteristics has simultaneously demonstrated some of the limitations and strengths of the Apple tool, and the demonstration will show a number of exemplars highlighting both.

The OU's early engagement with the iTunes U app at a time when few other institutions had started to work with it led to the development of a set of rules by a heuristic process. Pulling existing resources together to combine them into in-depth, well-structured learning materials required new processes and a new way of thinking about OERs.

The demo shows the OU experience of creating narrative links and a pathway through diverse resources and highlights the challenges in:

- providing a well thought out narrative ideal for self-paced (mobile) study
- identifying themes from a large and varied collection of OER material and forging credible narratives from it
- adding user value by creating new resources such as videos and quizzes

We will also discuss how this experience links in with other mobile learning projects at the OU, including the development of interactive eBooks and the launch of the OU Anywhere App.

BETWEEN HOSPITALIZED CHILDREN AND THE MINISTRY OF EDUCATION: THE ITALIAN PORTAL FOR THE SCHOOL IN THE HOSPITAL

Matteo Uggeri, Fondazione Politecnico di Milano, Italy

Scuola in Ospedale is a national project funded by the Ministry of Education (MIUR) to allow the students of every school level to keep on studying while they are ill. In every European country there are similar initiatives developed to provide services aimed to guarantee the right to education to all those students admitted to hospital, in day hospital or home therapy.

In Italy, since 2007, the Ministry decided to provide a portal to support this initiative, called PSO (Portale Scuola in Ospedale, Portal for School in the Hospital). This system has then been designed by METID, the Centre of Politecnico di Milano University aimed to e-collaboration and e-learning.

Now: imagine a teacher that decides to use part of his time to visit a 15-year-old student to teach him mathematics while the boy suffers from a strong leukaemia and has the 50% of possibility to survive. You can figure the need for this teacher to talk about his experience to other peers. Especially if, due to the cut of schools budget, the government cannot provide him a proper training to face such situations and has strong difficulties to monitor the huge quantity of cases like this one, in terms of expenditures and concrete actions.

PSO has then two main goals:

- for the Ministry of Education: gather, monitor and parse all the financial and organizational data inserted by the USRs (the school units of all Italian regions) about the activities undertaken for the school in the hospital and the domiciliary learning/home tuition;
- for the final users (parents, teachers and workers of schools and hospitals): find the necessary information (e.g. names and addresses of the hospital sections in each region or province, regulations about the activation of a home tuition project…) and allow communication among them.

Supporting the education and improving the learning quality for all the students with medical needs

The results in few words:

- a creation of a real online community of teachers that spread all over the Italian territory;
- the collection of several good practices found through the communication in the forum and then highlighted into the official blog;
- the possibility for the Ministry and for the parents of ill children to gather all sort of official information about the activities undertaken in schools and hospitals;
- a virtual place where finally people involved in this field can meet, get informed an communicate.
- definitive improvement of the learning quality and experience for the disadvantaged group made by all the students with medical needs;
- the distance between the institution (ministry) and the people (ill students, parents and teachers) has been shortened.

The impact is therefore huge, even in the 'real world'. In an era of strict budget limitations, hospitals and even more schools are gasping for money and they cannot provide proper solutions to the incredible variety of situations related to the children who need to keep on studying. With the help of the portal, each single initiative that takes place, for instance, in Bergamo (north Italy), can be shown, shared and then replicated in Palermo (south) in a similar way. Otherwise, the lack of funding can very often reduce the motivation of workers that operates in such difficult situations.

Moreover, being the Ministry directly involved, the portal becomes a real point of contact between the decision makers and the final users, which is a powerful way to influence the government about what really happens in the citizens 'real' (and difficult) life. Of course the theme of students' disadvantages is not only relevant to Italy, but has a worldwide importance, as also stated in many researches. URL: http://pso.istruzione.it

PHENOMENON BASED LEARNING – STUDENTS AT THE WHEEL

Taru Kekkonen, Otavan Opisto / Otava Folk High School, Finland

What if the students were holding the steering wheel?

What if the students of an upper secondary school had the freedom to choose what they want to learn, when they want to learn and how they want to learn? Is this possible in a formal school system? Can the aims set in the national curriculum be reached? What happens to the learning? Where does this place the teacher? Otava Folk High School dared to take the risk and let the students show the way. Teachers help in navigation but it is the students who hold the steering wheel.

Bits and pieces

One challenge that Finnish schools face is the fact that students often learn only fragmented information from a lot of school subjects. For them, it is sometimes difficult to see a bigger picture, figure out the causes and the consequences and to see the connection to the real world. The traditional and the most common way to teach in upper secondary school is based on teaching separate subjects by single subject teachers. Yet, the world that we live in is not divided into sections based on school subjects – neither is the natural way of learning and acquiring knowledge. So, we at Otava decided to do something about it.

Entities instead of subjects

We offered the students of Online Upper Secondary School for Adults the possibility to – instead of enrolling in a course in a specific subject such as mathematics, biology or philosophy – study a bigger entity, a real life phenomenon. The phenomenon to be studied could be e.g. hunger and thirst, welfare state, piracy, human rights or time. The idea is to integrate various subjects in the studying of one phenomenon. Each student can choose his/her approach to the phenomenon, set his/her targets him/herself and thus choose which (upper secondary school) subjects and courses he/she wants to complete while learning the skills and acquiring the knowledge connected to the phenomenon. This means that each phenomenon offers various subjects and courses to the individual students – depending on the approach and the interest of the student.

Out of school

We didn't want to close this kind of studying behind the school doors and thus took the phenomena out in an open and public online environment http://ilmiopohjaisuus.ning.com so that people in various roles and with different interests can attend. There are project managers, pedagogues, experts in the field of each phenomenon, media tutors, subject teachers, teacher teams – and students, of course. Lurking is also allowed and anyone interested from other schools and from outside the school world is welcome, too. The roles are often mixed and the teacher doesn't have to be an expert in everything. Expertise can be found also outside the school or – as it often is – among students.

Students in focus

In phenomenon based learning the students are placed in focus. That is why it goes without saying that there is a student also on stage at EDEN conference. Tanja Leppäviita, student of Online Upper Secondary School for Adults and a true expert of her own learning, is sharing her experience of phenomenon based learning in Otava Folk High School's demonstration in Oslo.

BIG FOOT – INTERGENERATIONAL LEARNING FOR SOCIAL COHESION, REGIONAL DEVELOPMENT AND … PLEASURE

Thomas Fischer, MENON Network EEIG, Belgium, Barbara di Pietro, Gouré Srl., Italy, Vanina Stoyanova, Centre For Development of North-West Bulgaria Foundation, Bulgaria, Glykeria Thymiakou, Christina Strapatsa, Trikala Development Agency – KENAKAP S.A., Greece

For the first time in the history of the World, the 65+ population will be nearly equal to that of younger generations.

The social and economic marginalisation faced by a vulnerable group such as elderly citizens, especially living in remote mountain areas, and the young people's migration to the urban centres due to the lack of job opportunities, is causing segmentations among the young and the elderly, is fracturing the connection between the generations and is preventing the exchange of learning opportunities across age groups and generations. This affects also the level of participation of the elderly in the economic and social-cultural development of their communities

Big Foot (http://www.bigfoot-project.eu; funded with the support of the European Commission under the Lifelong Learning Programme) in turn shows that intergenerational learning is beneficial for all generations where the older adults are potential economic resources rather than problems. Big Foot aims therefore at overcoming the marginalisation of vulnerable groups and at bridging the gaps among the generations living in mountainous areas by establishing 'Intergenerational Community Service Learning' approaches helping i) to maintain physically and mentally active lives and ageing of older people, ii) to make them feel they are actually useful to society and not a burden; ii) which in turn gives them a drive to contribute to community development, while improving at the same time the wellbeing of younger generations. It is also a tool focused on community integration and social dialogue, enabling and valorising the skills and knowledge of the older generation, combining traditional knowledge with modern communication tools and expertise in order to enable innovative, creative and productive joint solutions for local sustainable development.

Intergenerational learning of Big Foot and beyond is usually composed of: i) reciprocity and interdependence; ii) performing common activities and growing together; iii) addressing the different experiences of the different age groups or generations; iv) targeted towards the exchange of knowledge, skills, experiences, feelings and values; v) designed to foster critical reflection about how stereotypes tend to weaken the ability to perceive that there are individual differences between people and that; vi) aimed at counteracting a negative stereotype of ageing and takes into account the level of competence of the elderly and its relevance in the education of younger people.

The 'Intergenerational Community Service Learning' approaches were implemented on three highly different European regions. In Italy intergenerational learning centred on local cooking traditions, while the experiment in Bulgaria focused on the area of nature and tourism and the intergenerational approach in Greece was themed around local gastronomy, folklore culture; rural heritage, the environment and rural tourism. The Big Foot Experiments have been providing strong evidence to support the benefits of intergenerational learning for individuals, their communities and societies at large such as:

- Uniting segregated generations and building better understanding between generations;
- Encouraging active citizenship and social participation;
- Sharing societal and professional resources, tacit and explicit knowledge among generations;
- Challenging social problems cross-generationally;
- Addressing different social & e-Inclusion objectives and competence areas simultaneously;
- Supporting Lifelong and Life-wide Learning;
- Maintaining & building human and social capital simultaneously.

It finally does not really matter who were the seniors or who were the youth, as Big Foot simply throws out these names from the recollections the project was privileged to be privy to!

EUROCATERING LANGUAGE TRAINING

Agnes Svendsen, Sogn Videregående Skole, Norway

EuroCatering Language Training is an interactive and web-based learning tool for trainees, students and workers in the Hotel- and Catering industry

Communication skills are the essence of foreign language acquisition, especially in this sector where it is hard to find the right staff and where working conditions are often quite stressful.

EuroCatering helps the envisaged target groups acquire the basic specific vocabulary and the communicative competences to function efficiently in a kitchen or restaurant abroad by providing learning materials and instructional support.

It is freely accessible online in 12 languages: English, French, Spanish, Dutch, Norwegian, Slovenian, Galician, German, Italian, Finnish, Polish and Gaelic – written, audio and visual. The website provides realistic language training in virtual scenes in the kitchen and restaurant, illustrated glossaries of professional terminology in 12 languages, a pedagogical tool with interactions and exercises for reinforcement, a glossary of pertinent cultural work-orientation facts for 12 countries, and a video of pertinent gestures for kitchen and restaurant service, all linked to an open-ended learning platform.

It is based on the analysis of trainees' needs and has been developed by a team of language teachers, trainers and administrators in the partner countries (BE, DE, ES, FR, IE, IT, NO, PL, SI and UK), supported by the Lifelong Learning Programme of the European Commission.

The kit has been used extensively over the last 2 years: 50,000 visitors, 9,000 committed learners. It has been integrated into curricula at national level and in different countries.

The Reception / Accommodation area is the next step in the development of our web-based learning tool and will be completed by October 2013.

Link to EuroCatering: http://www.eurocatering.org/

CHANGING THE DISTANCE EDUCATION COURSE DESIGN MODEL

Rick Shearer, Andrea Gregg, The Pennsylvania State University, United States of America

Over the past few years there has been increased discussion in the field of distance education, around the concept of moving distance education and online learning beyond the simple replication of the face-to-face classroom. While this concept is not new in instructional design or to the field of distance education, it is one that is surfacing again as online learning matures, and as we reevaluate the approach of simply replicating the traditional experience into an online equivalency. There are probably a host of reasons that we originally adopted this replication approach including; the ability to ease faculty into the transition from face-to-face to online; providing students with what was viewed as an equivalent experience; and to help accrediting agencies and governments evaluate the experiences under known rubrics. However, what we as practitioners have not done, is to truly explore how to use these unique environments to reshape the learning experience and move beyond an enhanced face-to-face experience.

Today, with the greater adoption of online learning and distance education there is now an opportunity for us to once again be bold and experiment with different designs. Course designs that will motivate and draw people into the learning experience, similar to how some theorists in the field of instructional design have described changing the experience to mirror that of a great theatre experience. An experience that starts with a compelling hook that motivates and draws the learner into the learning environment with the desire to seek solutions to the problem presented.

The demonstration session of an Italian language course created jointly between The Pennsylvania State's World Campus and WPSU, the local public media station, showcases a design approach that starts to build the learning around the learning activities rather than the content in isolation from the learner experience. It is a blend of story telling and an immersed experience. The course opens with a video segment that sets the scene for a 15-day learning experience in Italy. Within the story line each actual instructional week in the course is a single day in the metaphor, and the course covers a regular 15-week curriculum. However, instead of simply moving through content and weekly activities we hope the students are immersed in the metaphor of travelling through Italy and learning the language in order to communicate with those they encounter as they move around the country while experiencing various aspects of the culture and the daily language. A virtual tour guide assists students enrolled in the course, and assessment is carried out at multiple levels, with several self-assessment instruments represented through gaming theory and recorded examples of their communications.

The demonstration session also highlights results of two pilots with small groups of students to assure the design model lead to the attainment of the stated learning outcomes, and will explore lessons learned.

NELLIP – YOUR PATH TOWARDS PERFORMANCE

Anca Colibaba, Gr.T.Popa University of Medicine and Pharmacy, Stefan Colibaba, Al.I.Cuza University, Monica Vlad, EuroEd Foundation, Romania

Among the many ingredients to success there are two which always ensure the relevance and addressability of the final output. These are the power of example and the wish to learn more through analysis. Added to the other elements which reside in the specificity of every initiative, analysis and illustrations of other similar situations provide the rigorous structure necessary for innovations.

The Network of European Language Labelled Initiatives is a Key Activity 2 Languages Project funded by the European Commission in the framework of the Lifelong Learning Programme.
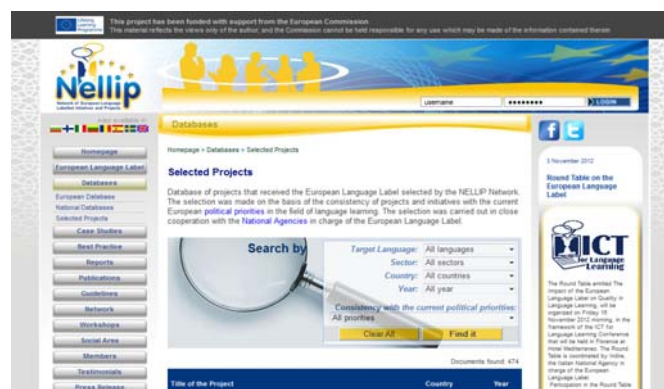
The aim of NELLIP is to promote quality in education by analysing and identifying the common quality criteria in a series of initiatives which have been awarded the European Language Label distinction. NELLIP does provide prescriptive indicators for successful projects. It does however emphasize quality resources, it underlines strengths, cohesive and coherent elements of best practices in the field of Lifelong Learning programmes. It helps identify quality criteria whose acknowledgement and implementation can help improve the efficiency, transferability and value of language learning projects in all educational sectors, including higher education.

Activities in the project were gradually developed so as to provide a research basis for the development of the online platform:

- National research
- Collection of examples of good practices
- Development of database and collection of good practices both at European and national level
- Analysis of material collected
- Development of support material for trainings
- Training implementation at national level

NELLIP materials and resources can be used by educational decision makers and educational specialists for further research.

Workshops are scheduled for the period of 2013–2014 and will address language learning providers offering them the opportunity to improve their activity by following the Quality Guidelines for Language Learning.

NELLIP project website http://nellip.pixel-online.org/info/project.php

Demonstrations