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## CHANGE, INNOVATE, LEARN

# **Re-Thinking Assessment, Evaluation and Qualifications**

## Maximizing Learning Outcomes Through an Assessment-Driven Blended Learning Solution

Danny Glick, ETS Global, France

Blended learning, the combination of computer-based learning with face-to-face instruction, is growing explosively at all levels of education (Allan & Seaman, 2010; iNACOL, 2010). Research indicates that decision makers and educators have embraced blended learning. Technologyenhanced learning is increasingly becoming the learning model of choice at all levels of global education. National education plans initiated by ministries of education in countries such as the United States (Transforming American Education: Learning Powered by Technology), Singapore (iN2015 Masterplan), and Israel (Adapting the Education System to the 21st Century) indicate that ministries of education are giving technology a truly strategic role in their long-term education plans. These reforms call for applying advanced technologies used in our daily lives to the entire education system to improve student learning. Notwithstanding this dramatic growth, research suggests that computer-based courses suffer from lack of mindful learning processes (Glick & Aviram, 2011; Aviram at al., 2012; Glick, 2012), which leads to inconsistencies between the curriculum we teach, the teaching methods we use, and the assessment procedures we adopt. Research clearly indicates that computer-based activities should be carefully aligned with the desired learning outcomes and with processes of assessment and review (Beetham & Sharpe, 2007) which provide frequent and diverse forms of assessment throughout the course.

ETS, the world's largest nonprofit educational assessment organization, calls for a paradigm shift from linear, summative assessment to personalized, formative assessment where intelligent scoring engines offer an assessment-driven learning experience. Similar to targeted advertising where consumers receive personalized offers, ETS' assessment-driven approach to learning places the student at the center of the learning process by providing ongoing, personalized assessment which reflects his/her learning goals, performance and cognitive abilities . This approach has a profound impact on learning as it ensures academic quality, time and cost effectiveness. First and foremost, assessment-driven learning maximizes learning effectiveness by identifying the standard of work that a student is presently achieving thus providing information about progress to date. This will in itself help a student to understand what is expected of him/her in relation to academic expectations and give suggestions as to how to develop work further in order to improve. In terms of time effectiveness, assessment-driven learning ensures that students are studying only the parts they do not know, and thus avoiding lectures and other activities where they have already got the knowledge. Finally, assessment-driven learning maximizes efficiency and cost effectiveness by focusing the learning effort towards the final goal. By keeping students

# New Skills for Employability Today and Tomorrow

## **Breaking the Wall**

Frank A. Baklid, Bærum Kommune, Norway

#### **Breaking the wall**

- How to break down barriers between the use of ICT in school and at home
- And how to change current practice in the classroom?
- To do so how can we build robust ICT system that works when tomorrow comes,
   from any device and from all over the world?

#### Introduction

Suppliers of ICT systems to Norwegian schools are monopolists because we are a small country with a limited market. We can even look to the total of the entire Scandinavian market, and it's the same issues we face. And how can we deal with this?

It is also about breaking down barriers between ICT in schools and the administrative ICT activities. Separating them is not a success, it is rather a question if schools can go ahead and show the way.

In Norwegian municipalities students and teachers are not considered as important users of IT systems, and it is often given low priority compared to other users, such as administration. And how can we break down these barriers?

#### How to break...

By looking at ICT challenges from a user perspective, the "walls" between users at schools and the suppliers have been broken down, and there is a greater understanding of what is the need for the individual student and teacher. It is not ICT itself that is the driving force anymore, more the less it's the teacher who sits in the driver's seat. By taking hold of the work processes for the teacher in planning, implementation and evaluation, Baerum has managed to get the suppliers into innovative processes that challenge the suppliers of ICT systems to think differently. The suppliers are demanding a close dialogue with the municipality of Baerum and are receptive to our suggestions and statements. We're improving the quality and awareness of it in schools for less money.

#### **Change of practice**

In order to change current practice in the classroom, it is essential that teachers become more aware of their work and are about to change their working methods to digital didactics. Our definition of digital didactics refer to teachers skills in using digital tools as an integral part of the instructional goals, content and methods, -both in planning, implementation and assessment for learning, all to support students learning process. In the present and the future society is not about owning knowledge, but to get an overview and control, and to know what kind of knowledge exists and where to find it. We must adapt ourselves to think digital and exploit all the potential opportunities that digital methods provide. A society in constant change requires teachers who can work with innovative modeling that support a digital key competences for lifelong learning.

# TOOLS TO TRANSFORM CONTENT AND PRACTICE

# Video: The New Language of Learning

## Video in Training – The New Rules: Providing an 'Anywhere, Anytime' Solution for Learners

Martin Addison, Video Arts, UK

Video has been an indispensible development tool since the early 1940s, when training films were first created by the armed forces in Britain, Germany and America. Designed to inform or instruct, these films were projected in auditoriums to large groups of personnel. The big attraction of using film was its impact and its ability to provide authoritative information quickly and consistently.

Technological developments in the decades since then have seen video evolve through various changes in format, including 16mm film, VHS video tapes, DVDs (using digital video) and now video-streaming. Each of these provided greater flexibility and resulted in new ways of using video in development.

However, the reason why video really became a popular training and development tool was not because of technology. Video stimulates, engages and entertains people, triggering them to think, feel and do things differently. It allows complex ideas, particularly ones around soft skills behaviour, to be put across in a short space of time. Through storytelling and parable, video can provide context for a training message and it can be used very effectively as a catalyst for conversation. By showing a scenario that portrays someone else with the same issues, individuals can be encouraged to admit to themselves that they too need to change.

#### Video as a support tool

In the early days of training videos, a tutor would show the entire video and build their session around the content. However a 30-minute video was not always digestible for learners or students, so pioneering tutors began to use video content more judiciously, either as an ice-breaker to set the tone for the day, as an example to reinforce key points or to review the learning and re-cap the themes that were discussed. Video has been utilised at each stage of the learning cycle, to improve the retention of messages and to make training more effective. With the advent of DVDs, split into learning 'chapters', using video clips became much easier.

## Machinimas (Videos in 3D Worlds) of Language Learning Conversations

Heike Philp, let's talk online, Belgium

Invitation to join an EU funded project proposal directed at organisation who are experienced in language teaching and learning in a virtual world.

#### Concept - Draft

CAMELOT CreAting Machinima Equips Live Online Teachers

The goal of CAMELOT is to equip language teachers with the know-how to learn the techniques of producing videos of language learning conversations in 3D environments / virtual worlds.

A video of a 3D environment is called "machinima" and is a neologism derived from the combination of *machine* and *cinema*. Technically it means recording the screen of the 3D application and the challenges are similar to film production techniques. The actors are avatars, 3D representations of individuals who are online anywhere in the world and the anonymity of an avatar helps not only the film production but also the very conversation itself.

For a set of samples of machinimas, please look at the following sites

- Machinima Language Learning http://avalon-project.ning.com/page/machinima
- Machinima Culture and Art http://avalon-project.ning.com/page/machinima-ii

Prerequisites for this expertise is a certain familiarisation with the 3D environment, hence CAMELOT builds on the expertise acquired through AVALON (Access to Virtual and Action Learning Live ONline, 2009-2010), 143643-LLP-2008-UK-KA3-KA3MP. In the AVALON project, language teachers learned how to teach a language in a virtual world.

#### Live Online Video Concept

Compared to language learning conversations recorded with traditional medium such as film cameras, actors, settings such as in a hotel or an office, there is a distinct difference in the case of recording in virtual worlds such as Second Life: Learners can join these online environments and can navigate to the virtual site where these videos were shot and can re-enact the conversation with avatars at hand. This independent of where in the world the learner is located.

#### **Skill Sets**

The focus of CAMELOT, 'Creating Machinima to Equip Live Online Language Teachers' centers around three main areas

- methodology
- technology and
- intercultural competence

Language teaching and learning methodology is needed to produce language teaching conversations which may be part of a blended course and e-learning material designed to complement a live course. Machinimas can record authentic conversations in situated learning contexts. Digital storytelling and emoting (a way of expressing action in the third person singular, often used in roleplay) are important elements of new skills needed to master creating machinimas.

# Language Learning for the Global Interconnected World

## DaF-Collage.eu: Teaching and Learning a Foreign Language in a Constructive and Creative Way

Ruth Burbat, Universidad Granada, Spain

#### 1. Background and main objectives of daf-collage.eu

*daf-collage.eu* is a portal for teachers and adult learners of German language carried out as a recent research project in the context of a teacher's innovation programme, subsidised by the University of Granada, Spain(2). It is based on the results of a long-term study(3) on the learner's willingness towards learner's autonomy in the foreign language classroom beyond the own teacher experience. In this sense it should be mentioned that the design of the different applications provided by *daf-collage.eu* has been realized according to the student's problems as well as to the many advantages which offer the principles of learner's autonomy.

The main objective of *daf-collage.eu* is to serve as a support to students in their learning process and to provide them with different tools in order to facilitate the understanding of the German language and to help them with the organization of all new aspects they have learned. Furthermore, *daf-collage.eu* pretends to make use of the high potential of internet and the virtual environment to promote the immersion in the foreign language and culture, taking in special consideration the problems and obstacles a student might encounter.

In this article, we would like to underline the practice of the learning and teaching environment in relation with the wide range of application possibilities of daf-collage. For this reason, in the following section we will focus on a detailed description of the tools and applications offered in *daf-collage.eu* which allows to verify to what extent the portal can really contribute to organize the teaching and learning of the German language in a constructive and creative way and to provide orientation to teachers and learners.

In general, this article will centered more its attention on the student's tools and applications due to their highly innovative character. However, this does not mean that the teacher's applications are less relevant in terms of their methodological impact.

The article will conclude with some reflections about our recent experience and future perspectives.

#### 2. Tools and applications from daf-collage.eu

#### 2.1 Tools and applications for student's use

As mentioned before, the aim of the analysis-tools of *daf-collage.eu* is to provide support and orientation to students, therefore they can easily create their individually organized digital learning notes, always and everywhere available through the digital cloud. These analysis-tools are distributed across five categories:

- VOCABULARY
- GRAMMATICAL ASPECTS
- COMMUNICATIVE INTENTIONS

## Individualised ICT-Enhanced Language Learning: From WebQuests to Virtual Study Space

Libor Stepanek, Masaryk University Language Centre, Czech Republic

This paper presents an analysis of new collaborative and interactive tools and activities within an ICT-enhanced university language learning setting with the aim to describe their development, use and effectiveness.

The Masaryk University Language Centre - Centrum jazykového vzdělávání Masarykovy univerzity (CJV MU) is the leading language learning institution in the country. In recent years, CJV MU has initiated complex improvements and innovations of language education in the Czech Republic. New projects concentrated on design, development, piloting, evaluation and implementation of novel courses, testing and cutting edge ICT tools. The areas in focus included CEFR, flexible materials format, authentic situations, creative processes, community-of-practice communication and individualised language learning. The aim of CJV MU initiatives was to engage university students in real (or reality-close) academic and expert situations to a greater extent and to improve not only their language competences, but also their expert, ICT and socio-cultural skills in their complexity. The effort resulted in: (1) over one hundred new and innovated ICT-enhanced soft skills and language courses for academic and specific purposes; (2) new methodologies and teacher training materials for creative and ICT-enhanced language testing and teaching; (3) a new online adaptive test; (4) an interactive Virtual Study Space – Virtuální jazyková studovna (VJS); (5) sets of new software and language learning programmes (e.g. MU Peer-Review® or interactive CEFR familiarisation activities); and (6) the EU funded Impact Project whose ambition is to foster general improvement of tertiary language education in the Czech Republic at the national level.

This paper brings a detailed picture of the Virtual Study Space (www.vjs.muni.cz) in the context of CJV MU successful activities and describes it as a new collaborative open learning resource with social network features. The Virtual Study Space was created according to the wishes and needs of its prospective users, namely teachers and students, in order to provide a framework for flexible and constructivist community-of-practice based work in the following manner: First, students and teachers were addressed to express their needs and wishes in the areas of an ICTenhanced language learning support and individualised learning in a questionnaire. Then, the technical framework of the VJS was designed and created. Once the framework functionality was successfully piloted, the content was produced and divided into seven broad categories. The VJS content production included classification of links, creation of interactive online activities (such as video tasks and interactive CEFR familiarisation activities) and new software (e.g. CJV MU Peer-Review®). Finally, the VJS was opened to the public use and its content has been constantly being changed according to the new needs of its users.

Currently, students are offered over 300 interactive materials focused on language for academic and specific/expert purposes that reflect their individual learning styles (ranging from classified web pages and online courses to video activities and virtual consultations). Students can also improve their language skills in the "tips of the week" section in more general contexts. They can influence the content of the VJS via the framework forum or by adding new materials to the student section.

Teachers can enjoy sharing hundreds of materials, lesson plans, best practices and testing modules in a CJV MU database or in the open sections of testing, methodology and teaching tools. Teachers are encouraged to initiate development of new materials. Results of such initiatives include video tutorials, CEFR-familiarisation activities or the automatic CJV MU Peer-Review® system, which improve learning and reduce teachers' workload.

# **Special Educational Needs**

## Integrating Virtual Reality with E-Learning in Medical Education: Cost Effective Model in Developing Countries

Ahmad AlFaar, Children's Cancer Hospital, Egypt; Mohamed Alasmar, Ahmad Maher Teaching Hospital, Egypt; Islam Amer, Independent Programmer, Jolla Oy, Finland; Mostafa Abdelhameed, Obay Mohamed Abdel Ghaffar & Nabil Sabri, Ministry of Health, Egypt

Interactive multimedia and Virtual Reality production are some of the expensive activities to develop and integrate in eLearning. It costs a lot of time and efforts to produce one complete module with integrated interactive or virtual reality content.

Cairo University in Egypt has one of the oldest schools of medicine in the middle-east with 175 years. Along this period, huge amounts of specimens were collected in many disciplines, sorted and presented in several show rooms "museums". The specimens were kept in formalin glass containers and left on display.

Museums are left open for undergraduate and postgraduate candidates to visit and review the specimens along the year. The museums regulations limit access to specimens due to fears of breaking heavy glass containers, leaking formalin and/or damaging specimen. The medical education development center produced eLearning modules with simple photographing of two sides (frontal and rear). Such modules gained limited students' satisfaction as it did not provide a benefit over illustrated books. Students preferred illustrated books as it provide a handy way for revising the specimens before exams.

Medical students are like other youth in their age, they are exposed to the advances in multimedia production over the Internet and other science fiction cinematography. Aiming to improve the students' gain and provide a better inspection of the specimens, we have reviewed the available methods at 2003 for digitizing objects and found that there are two potential techniques, the first was creating 3D geometrical objects with designed surfaces and applied textures. This method has limitations like the need to install third party real-time rendering software on the user machine which use considerable computer resources beside low quality and immense efforts needed for creating few models either by manual design or laser scanners. The second technique was creating a Quick-Time VR models each composed of set of serial pictures giving illusion of manipulating a 3D object.

The idea was initiated by students working in the Medical Education Development Center in Cairo University School of Medicine. Those students were recruited for integrating Information Technology (IT) with medical education producing electronic educational materials and multimedia assisting educational activities. Their enthusiasm to making better understanding for their colleagues guided them to the idea of building image-based virtual reality QTVR because of the self-contained and interactivity properties.

One of the concerns was reducing costs to minimum as the center obeys tight governmental rules, so students had to use the available resources or create their needed equipments with limited purchasing.

## A Networked Learning Approach to Global Executive Development

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How do you develop an organisation's top leaders? What forms of training, development and education are most suited to executive and leadership development? Here's an analogy: The fastest way to learn a language is to live in a country that speaks that language; to be immersed into it. Perhaps, then, the fastest way to learn the complexities of managing and leading a global team is, similarly, to be immersed into that situation? Yes and no: chances are top leadership talent is probably too busy with their day job to even consider their professional and personal development. Finding the time to learn and grow, within this population, is the problem.

Increasingly, organisations need to develop a network of globally dispersed managers and leaders whose time for development is restricted, and who are facing increasing pressure to transform business performance significantly and swiftly. Imagine, then, an approach that brings together new technologies to enable executives to do just that: finding the time to develop themselves (and others) whilst being immersed in their day job.

Networked Learning is defined as a way in which an organisation's leadership talent undergoes development via being linked to:

- Cranfield's management and leadership experts
- Each other, and to experts within their organisation
- Customised learning resources

Networked Learning is an approach that connects an organisation's executives with leading management thinking and enables them to quickly and easily connect and share their experience and expertise with other executives across their organisation. This approach leverages the most appropriate social media and networking technology to embed executive development into daily work. Exactly what constitutes 'appropriate' will vary by organisation and by focus of the chosen leadership development intervention. But given that the network is the most central aspect of networked learning, rather than a particular type of technology, the approach utilises a range of techniques.

For instance, using a Microsoft SharePoint portal as the 'home' of a leadership programme, Cranfield:

- Provide templates for programme participants to record video diaries on their phones, for upload onto the portal, for sharing opinion with programme peers, coaches and Cranfield experts
- Set up Twitter<sup>™</sup> feeds, on specific organisation-related topics, into separate online project Teamsites on the portal to encourage discussion, and to demonstrate wider opinion on a topic
- Select summaries of best-practice papers and research and push these out via 'alert' functions
- Conduct a substantial amount of the programme via webinar, either as lectures, project update meetings, or as focus groups in the marketing and preparation for a programme
- Role model how to best use networking technology in the programme, but which can inspire participants in their technology use outside the programme.

Cranfield will share examples of how this Networked Learning approach has been integrated into the management and executive development programmes of Jaguar Land Rover, ANZ Bank, L'Oréal and Wartsila. The examples will give a brief explanation of the context of the client and