



Media & Learning News

European Commission doubles the Erasmus+ budget



For anyone interested in accessing European Commission Erasmus+ funding, the future is looking positive with the doubling on 30 May of its budget to 30 billion euros for the period 2021-2027. Building on the success of Erasmus+, the

next programme will provide learning and mobility opportunities to 12 million people, in comparison to 4 million people in the current programme. Its focus on “evolution, not revolution” means that the 'Erasmus' programme will continue to cover schools, vocational education and training, higher education and adult learning - youth and sport, but in a more streamlined manner. Read more about the next generation of Erasmus+ [here](#).

Increasing employees memory 'with interactive video

A recent posting on the HiHaHo blog points to interesting research findings about memory and memory loss and highlights how adding interactivity to video clips can help employees to retain more information than they might otherwise be able to do. HiHaHo call this their 'Triple Blend Learning' approach which supports learners by adding 'online learning boosters' which are used to anchor newly acquired information in employee's brains. Read the full post [here](#).



How television used to be made



'How Television Used to be Made' is a website linked to over 100 videos documenting the history of television production technology. It is now in Beta version, and it's creators would like your opinion of its usefulness, and any suggestions for improvements. 'How Television Used to be Made' is the result of the ERC funded ADAPT project, which reunited old broadcast equipment – both film and video – with the professionals who used to use it. The footage has been edited to provide versions that are short (bitesize/lecture), medium (seminar) and long (more or less real time for research). They've covered all stages of 16mm film (including the lab and telecine), and outside broadcast. They will shortly add material on video editing from tape-to-tape to fully digital, taking in Paintbox graphics as well. Take a look at the [website](#).

Videos on personalised learning in the classroom

European Schoolnet recently posted 10 short videos in which teachers from Italy, Estonia, Ireland, Portugal and Switzerland present different approaches to personalised learning in the classroom. Here you can find



examples of students creating their own textbooks, teachers using flipped classroom approaches and electronic devices, flexible spaces for personalised learning and much more. [Watch the videos](#) and see what teachers do to put personalised learning at the centre of their practice.

Check out how European universities are changing

The European Commission recently published the Bologna Process Implementation Report which provides a wide-ranging and detailed picture of how the European Higher Education Area (EHEA) has been moving forward since 2015. This has not been a period of radical change. Instead, for most countries, the recent years have focused on consolidating the implementation of reforms. In the report, more than 70% of universities report that they have adopted novel modes of delivery including e-learning and flipped classrooms. Read the full report [here](#).



Featured Articles

Deep learning with videos – the utility of online and collaborative video analysis

by David Graf, University of Bern, Switzerland



In most universities the use of videos in education is well established. However, this use is usually limited to the capturing of lectures or the integration of learning videos in MOOCs or in inverted classroom settings. Comparatively less common is the application of video analysis for didactic purposes, although it offers numerous opportunities for deep learning.

At the University of Bern we promote the Opencast Annotation Tool, a free and open source software, for such scenarios. Most teachers use it with its integration into ILIAS (our learning management system) to profit from its elaborate rights management options. The tool itself allows for the setting of two types of annotations: *Free text annotations* are used for writing any kind of comments or remarks while *Labels of categories* can be placed via configurable category sets. Having set your own annotations in public other users can then view and comment on them. The resulting annotations are timestamped and can be exported for further analysis (using Excel or SPSS). As everything is done by means of a browser there is no need to install any software to work with the tool.



Different types of didactic scenarios are either made possible or facilitated by this tool. It can, for example, be used to **enrich any kind of video material**. Students can be given the opportunity to make notes or mark challenging passages in a video or in a recorded lecture. They can discuss those passages with fellow students at a later point and use the timestamped annotations to easily access the corresponding positions.



Teachers can add further information to a video such as marking important sections, providing an index or giving more details. Or when implementing an inverted classroom, teachers can ask students to write questions, which they can screen and collect before class to tackle some of them later in class.

Other teachers use the tool for **theory- or category-based video analysis**. They ask their students to analyse some video material (e.g. a videotaped counselling meeting, a teaching situation, a recorded speech or any kind of performance) using a set of categories. This set depicts the theory or the observation criteria, which were introduced in the previous meeting. The results of the analysis can then be discussed and deepened in class. This can result for example in a case-based learning scenario on the basis of videographically recorded real or fictitious cases.

If students are recorded when fulfilling certain tasks (e.g. in teacher- and communication-training or in rhetoric courses) those recordings represent a promising source for reflective learning scenarios. In the scenario of **video-based self-reflection**, students reflect on their own actions retrospectively. By taking an outside-perspective, they process their own actions consciously and process them actively, ideally on the basis of some theory. They are able to recognise their own behaviour patterns, habits and become aware of their own strategies for action.

In the **peer coaching scenario**, students give each other feedback on their individual recordings and discuss them together. Such an approach is equally beneficial for feedback recipients and providers. The feedback recipients benefit directly from their peers' feedback. The feedback providers not only evaluate the feedback recipients' performance but often—at the same time—their own actions as well. In doing so, they practise giving feedback—a key competence that often receives little support in study programmes.

Beside those use cases in teaching the tool is also used in **research projects**. The participating researchers are able to conduct analyses at their own workstation, can analyse the same video simultaneously and export the gathered data for further examinations.

For more information in general go to our [website](#). For further technical details about the tool see its [Github entry](#).

Editor's note: David Graf will be presenting his work on Friday 15 June during a presentation session on best practices in the use of video to enhance learning impact at the Media & Learning Conference.

New ways of thinking about educational video

by Estella Griffioen & Zac Woolfitt, Inholland University of Applied Sciences, The Netherlands



Estella Griffioen

At Inholland University of Applied Sciences, the [research group](#) teaching, learning and technology conducts research into the role of video to support learning in higher education. Data was collected from 8 cases (A-H see below) in which pioneers initiated educational innovations with video. Five types of video were examined in relation to these cases; web lectures, You Tube clips, screen casts, student/teacher generated video and live lecture capture.



Zac Woolfitt

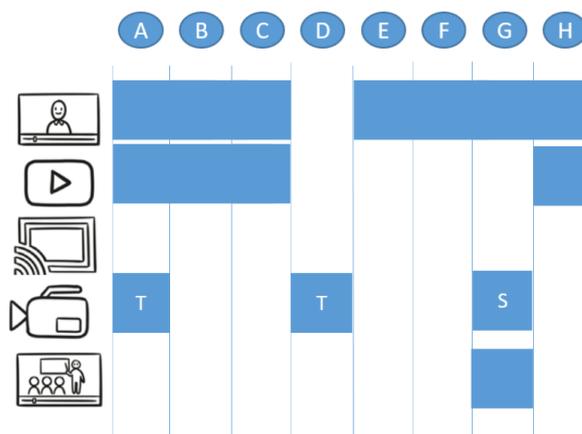
In all of the cases examined, the reason to use video originated from the didactic side (educational pull). There were a number of different reasons to use the video, including curriculum renewal, activating student learning and extending study time.

Due to the many variables between the cases, the process of analysis was complicated. The data was related to four different educational models in order to identify patterns, commonalities and relationships.

The TPACK model of Koehler and Mishra (2009) was used to examine the relationship between teacher, course content, technical relationship and educational context. Constructive Alignment (Biggs, 2003) examined how video content was aligned between learning goals, course content and course assessment.

The five stages of learning which are activating existing knowledge, collecting information, processing information, applying knowledge and reflection (Mellander, 1993) were related to the different cases and video types. This resulted in an understanding of the affordances of the different video types.

Finally, the different types of video and the interactions between lecturer and student were examined through the conversational framework of Laurillard (2004) to examine what function video fulfilled at the conceptual and application level.



However, since these four models can be applied to education at a general level, the question remains; what can we learn from these models regarding the specific affordances of video and the contribution of video to the learning process?

By plotting the different stages of learning against the five video types, it transpired that the web lectures and You Tube clips were used mainly for activating existing knowledge and acquiring new knowledge. The video formats of student generated video could be more easily applied across all five stages. No case specifically used screencast but this video format has potential across the different stages of learning.

Analysing video use using the conversational framework of Laurillard showed that video on its own does not result in improved learning. When the teacher takes an active approach to deploying the video at both the conceptual and application level this can increase the chance that the video component (its content and various affordances) will contribute to the student learning.

Taking this a step further, examining the five video types from the perspective of Mellander and Laurillard, it can be suggested that by their inherent nature, the affordances of Screencast and Student Generated video can operate at many levels.

Five elements emerged as playing an important role in the success of the educational innovations.



- Pioneer/Teacher. In many cases the pioneer who initiated the innovation was also the person in the video and the teacher on the course; level of expertise, fluency with video, ability to connect video content to course goals.
- Learning goals; clearly written, well defined, linked to video content
- Content and subject matter of video must be relevant to the course.
- Technical aspects; availability of appropriate equipment, staff support and functionality.
- Course assessment; students are assessed on content or activities that are present in the video.

Editor's note: Zac Woolfitt & Estella Griffioen will share an overview of their findings at the Media & Learning conference in Leuven on 15 June during a session devoted specifically to considering the pedagogical advantages of using video.

Depth cues for improved learning of anatomy

by Stijn De Buck, KU Leuven/UZ Leuven, Belgium



Stijn De Buck

Most medical professions require a thorough insight in human anatomy. More specifically the relationship between the internal organs and the outer surface of a human being is of critical importance. Traditionally, this has been approached by offering sketches and drawings of selected parts of the anatomy to generate a solid theoretical understanding. Once the theory is assumed to be absorbed, medical students are exposed to real

human cadavers to explore a real anatomical object and consolidate their knowledge based upon their own findings. Finally, the study can be detailed by inspecting 2D radiological images and performing examination exercises.

In a first attempt to improve and innovate the way anatomy is taught, we have setup a collaboration between Prof. F. Rega, the Medical Image Computing group (Prof. P. Suetens), and the department of Radiology (Prof. R. Oyen) of KU Leuven/UZ Leuven to explore the possibilities of improved depth perception in a teaching environment. We explored two approaches. The first aimed at 3D perception of an entire class of students by using an autostereoscopic screen. The second employed a virtual reality (VR) headset (Vive, HTC, New Taipei City, Taiwan) which offers a much more personal experience even including interaction capabilities (see Figure 1).



FIGURE 1: THE PROPOSED VR EXPERIENCE ENABLES INTERACTION WITH THE 3D ANATOMY TO EXPLORE AND INVESTIGATE

For rendering anatomy with both stereoscopic devices, we developed software modules that enable real-time 3D content rendering in Mevislab (Mevis, Bremen, Germany) which is a medical imaging development platform. The autostereoscopic display requires the rendering of a depth

map in combination with a colour rendering to generate 8 slightly spaced views of a surface geometry. The VR headset required to generate a view for both the left and right eye (see Figure 2). By interfacing to the openVR library both views can be rendered to the headset and interaction from the user can be captured. The latter consists mainly of button pushes and movements of the hand controllers.

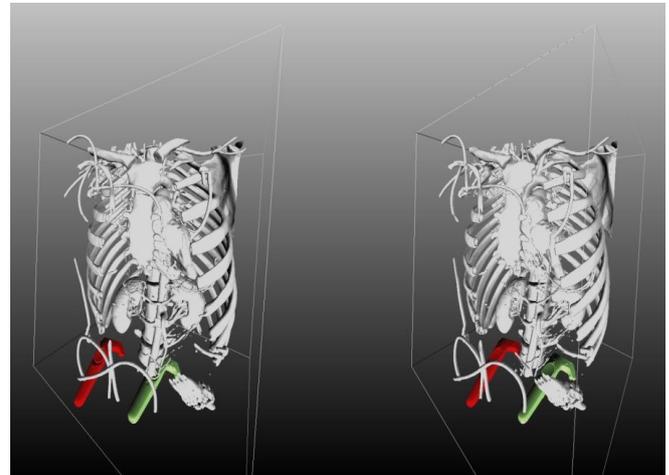


FIGURE 2: SIDE BY SIDE RENDERING OF THE LEFT AND RIGHT VIEW ON A 3D CHEST MODEL

Two anatomical representations were generated within Mevislab: the first represents the kidney, its blood vessels and urinary tract in relation to the bony thorax. The second represents the heart and aorta also in relation to the bony thorax.

Both techniques were tested in a course on surface anatomy where the goal is to learn the interrelation between patient external landmarks and the underlying organs/structures. After the experience, students were asked to provide feedback on the usefulness and the potential disadvantages they experienced.

The students considered both techniques exclusively positive for improving the understanding of 3D anatomy even though some students experienced some sort of discomfort with the device(s). In general, they favoured the VR headset over the stereoscopic screen mainly because the interface was more intuitive and the experience more interactive and immersive.

Overall, this case study indicates that adding more depth cues when studying anatomy could be of significant benefit. Moreover, compared to human cadaver training it could offer a cost advantage as well because the students could be much better prepared and a smaller amount of cadaver training sessions would be needed. The proposed approaches also hold potential to be used for advanced anatomy training where specific abnormal anatomy would need to be examined and could even be used by surgeons to prepare difficult interventions.

Based upon these results we aim to further build upon the VR experience and to enhance the experience, further reduce the cost such that this approach can be used in larger groups and to include more anatomical models illustrating the diversity in human anatomy.

Editor's note: Stijn De Buck will be presenting his work on Thursday 14 June at the Media & Learning Conference in Leuven during a session dedicated to exploring educational experiences with 360° video, augmented and virtual reality.



Tools of the Trade

Turn your smartphone into a smart light meter

by Mathy Vanbuel, ATiT, Belgium



If you are regularly setting up lights in the same place at a different time, and you are keen on keeping the same depth of field and feeling of light between background and foreground, it may be useful to have a separate light meter rather than just relying on the exposure control of your camera.

If you are an old-fashioned director of photography you are probably still carrying a Gossen or Sekonic in your bag. For the less critical lighting work, you can just as well turn your smartphone into a handy light meter. The Lightmeter app for Android by David Quiles looks like a vintage meter, but it is a complete and useful tool, with incident as well as reflective light metering (with a funky camera display in the centre of the dial). Of both methods, reflective measuring appears to be the most accurate, but this only in combination with a range of compatible smartphone cameras. Sensitivity can be adjusted from 3 to 6400 ISO. The app is available for free on the Android app store, the paid version gets bug fix updates, a handy hold button for incident metering, and a somewhat improved performance.

Media & Learning Association News

Countdown to the first Media & Learning conference about video in higher education

Over 200 people from 23 different countries have now registered for the Media & Learning conference which will take place in Leuven, Belgium on 14-15 June. 2 pre-conference visits are open to participants on 13 June, the first to visit Leuven Institute for Media and Learning (LIMEL) where KU Leuven educators and students find everything they need to produce high quality videos and the second to visit Health House, a showcase location for innovation and cutting-edge technology in the medical domain including medical imaging and image processing, AR/VR, 3D and virtual patients. Everyone registered is then invited to the conference welcome reception taking place in the Wagehuys Cultural Centre in Leuven which is kindly sponsored by the City of Leuven.

The conference itself will be a mix of talks, showcases and discussions and the organisers are delighted to highlight the conference exhibition which will include exhibition stands and demonstrations from Mediasite, Echo360, Kaltura, Panopto, Barco, Ubcast and CrowdBeamer as well as a host of timed demonstrations of different commercial and open source tools and resources developed to support the use of video in teaching and learning.

mediasite

echo³⁶⁰

KALTURA

Panopto

BARCO

UBICAST

crowdBeamer

As the amount of space for the conference is limited, the organisers have decided to close registration on 6 June. Find out more about the conference [here](#).

Media & Learning Association AGM

The annual general meeting of the Media & Learning Association takes place on 15 June during the Media & Learning Conference in Belgium. The meeting which will be chaired by Bernard Mullarkey, member of the board from IADT in Ireland will hear what the main activities of the association have been in 2017 and will provide members with an opportunity to meet face-to-face to discuss plans for 2018 and 2019. All members are invited and can put forward proposals for membership of the board for 2018-2019

Resources of the Month

Here are some recently added resources to the Media & Learning Resources Database:

- [Canva](#) extensive collection of professional-quality photos both paid and free and spread across 16 different categories.
- [Happy Online](#) promotes safe and responsible uses of Internet among children and adults. Download the Happy Online App or play the game online
- [YouthLearn](#) Media Literacy Toolbox includes activities, handouts, and curricular resources to support media literacy education in a variety of educational settings.
- [Video resources for English Language Teacher Education](#) - selection of videos of ELT classrooms as observation materials for English language teacher education.

Awards Schemes & Events

Critical Media Literacy in a Global World 11-14 June, Athens Greece

The Arts & Culture Unit and the Mass Media & Communications Unit of ATINER are organising a conference stream on "Critical Media Literacy in a Global World",



11-14 June, 2018, Athens, Greece as part of the 3rd Annual International Symposium on Culture and Civilization sponsored by the Athens Journal of Mass Media and Communications. Find out more [here](#).

Summer school in Lucca Italy 1-3 July



The International Association for Media Education is organising a summer school to share and explore new ideas related to the field of media education. The gathering will be hosted in Lucca (Italy) from Sunday, 1 July until Tuesday, 3 July. You can find out more [here](#).

For more information, to submit content or to unsubscribe from this newsletter, please contact the Media & Learning News Editorial Team.

Address: ATiT, Leuvensesteenweg 132, B-3370 Roosbeek, Belgium

Tel: +32 16 284 040 E-mail: news@media-and-learning.eu

Conference sponsors

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KALTURA