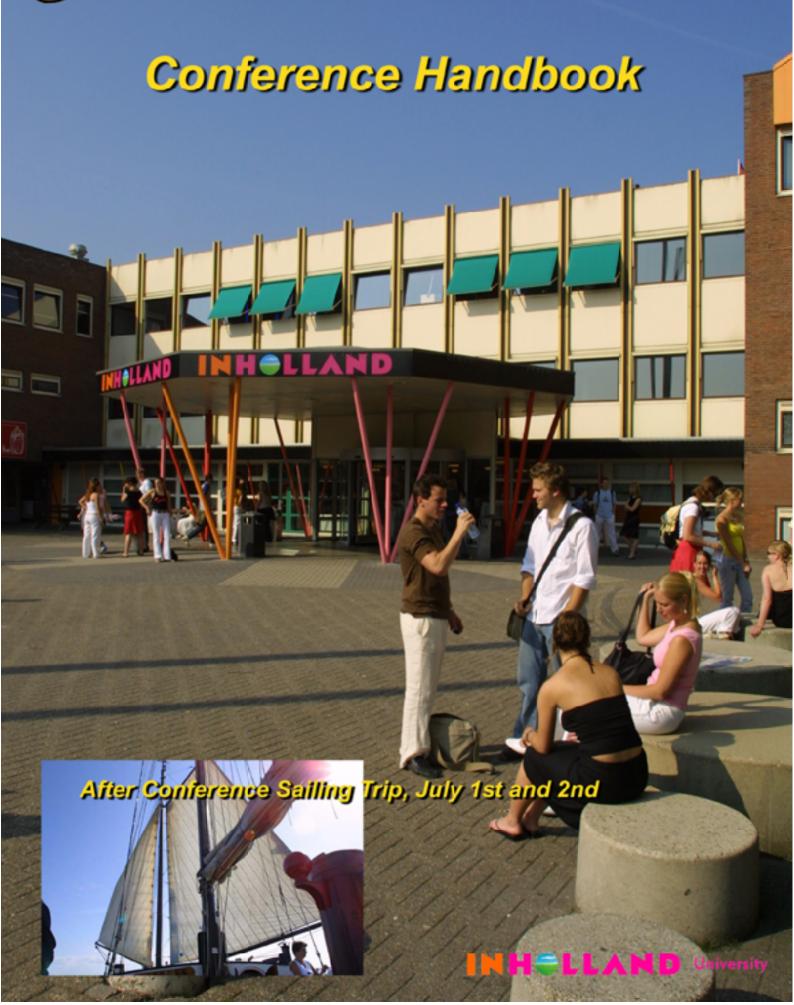


Amsterdam June 28th - June 30th





# **Preface**

"INHOLLAND wants to lead, giving shape to developments around us and broadening our horizons."

It's a compelling idea that is part of our institution's planning document. It affects all facets of our education programs and everything we do.

The growth of the knowledge economy is one of the most important developments in our society. INHOLLAND strives to educate and prepare students to be intelligent and creative participants in this knowledge economy. Our students are familiar with new technologies and their applications.

An electronic learning environment is the key to time and place independent learning. E-learning is also a gateway to knowledge and experience. INHOLLAND recognizes the importance of E-learning. That's why one of our associate professors focuses on the optimal integration of ICT in learning and the development of a new way of learning made possible by ICT. This benefits both INHOLLAND and society.

To all participants of this Fourth DIVERSE International Conference on Video and Video Conferencing in Education, I wish you a great learning experience. Good luck!

Jos Elbers

President, INHOLLAND University







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# Welcome

# Welcome to the fourth DIVERSE conference

I would like to welcome you to this, the fourth DIVERSE conference, on behalf of the DIVERSE Committee and the organisers. I am pleased to say that this is the biggest conference in our short history, which is surely a sign that the excellent reputation that DIVERSE conferences have developed for quality, relevance, friendliness and fun is spreading. It is also a sign that we are being successful in our aim to stimulate and embed the use of video-based methods into teaching and learning, because there is an increasing demand to learn from good and innovative practice around the world.

And I can use that last phrase with confidence. The DIVERSE network discussion list now has members from 28 countries, and everyone attending this conference not already on the list will be added to it so that you can keep up to date with DIVERSE activities.

This year's conference continues to more than justify the 'international' in its title, with presenters and delegates from many countries. And the venue for next year takes us once again across the Atlantic, this time to the USA, to Nashville, Tennessee, hosted by Vanderbilt University. You will hear and see more during the conference about this exciting opportunity to meet old DIVERSE friends and new in the Grand Ol' Opry, or on a riverboat, in the world capital of country music and, increasingly, popular music itself.

Once again, welcome, and I hope you have both a profitable and an enjoyable conference, in this splendid city of Amsterdam, which it is a pleasure just to walk around, and which has so many interesting sights and museums.

If you have any problems, queries or suggestions, please do not hesitate to talk to me, or another member of the committee.

Professor Chris O'Hagan DIVERSE Chair





# Welcome by INHOLLAND lectoraat eLearning

INHOLLAND is very pleased to welcome all participants to the 4th DIVERSE International Conference on Video and Videoconferencing in Education, from 28 to 30 June 2004 at the INHOLLAND University in Amsterdam. It is important to have the opportunity to share and reflect on practical experiences and know how and to discuss the way forward.

The conference theme fits very well in the INHOLLAND University for Professional Education's policy, which strongly focuses on educational innovation paralleled by a more prominent role for eLearning. One of the immediate results of this policy was the establishment of an INHOLLAND lectoraat (professorate) for eLearning.

In competence oriented higher education the need for flexibility and made-to-measure material increases continually. Moreover, an increased demand for time- and place independent learning comes about. As a result, the quest for ICT applications in education also become more and more important and forms of eLearning are being implemented. From now on, education in higher education will be characterised by 'blended learning'; a combination of 'contact education' and 'distance learning'. Here, eLearning plays a crucial role.

The INHOLLAND lectoraat eLearning started to focus on some specific research topics: one of these is the role of the eTutor or coach in student-led blended learning, the other: how can Learning Objects contribute to better competence- and student-oriented education with made-to-measure programmes?

If you are interested in the research of the Lectoraat eLearning, do not hesitate to visit the site on http://www.inholland.nl.

Dr. Guus Wijngaards INHOLLAND Lector eLearning





# Welcome by the SURF Organisation

In front of you is the programme for the fourth DIVERSE Congress. This special congress is focused entirely on 'video and video-conferencing in teaching and learning'. Following similar gatherings in Derby (2000), Banff (2001) and again Derby (2002), DIVERSE will be taking place this year in Amsterdam, hosted by INHOLLAND, a university of professional education. A varied array of international presentations and demonstrations is sure to captivate your interest and inspire you to apply the available technologies in a meaningful way in order to support the learning process.

SURF (www.surf.nl/en) is delighted to be taking part in the organization of the fourth DIVERSE Congress. In the Netherlands SURF is also active in the field, both from the point of view of educational support through Information and Communication Technology (SURF Webstroom: www.edusite.nl/webstroom/english) and technological development and services for use in education (SURFnet: www.surfnet.nl/en).

Sadly, the founder and current Chairman of DIVERSE, Professor John O'Hagan, will be resigning from his post this year. We hereby express our gratitude to him for establishing DIVERSE, which is now the international meeting point for the video and video-conferencing community in higher education.

We trust that DIVERSE 2004 will contribute to the development and application of video and video-conferencing in higher education. We also hope that the event will be fruitful and of course colourful for all participants, speakers and organisers involved.

Finally, please note in your diaries that DIVERSE 2005 will be taking place at the Vanderbilt University in Nashville, USA on [date]. The organisers of the congress hope to be able to welcome you there as well.

Bas Cordewener and Tom Dousma (SURF Platform for ICT and Education) Roel Rexwinkel (SURFnet)







# **Conference Committee**

- · Prof Jon Baggaley, Athabasca University, Canada
- Mark Childs, University of Warwick
- Claus Knudsen, Royal Institute of Technology, Sweden
- Mike O'Donoghue, Lancaster University
- Prof Chris O'Hagan University of Derby (Chair)
- Johan Oomen, Netherlands Institute for Sound and Vision
- · Lori Schnieders, Vanderbilt University, Nashville United States
- Rob Symberlist, JISC
- Adrian Vranch, University of Plymouth
- Murray Weston, British Universities Film and Video Council

# **Local Organisers**

- Arne Horst
- Helma van de Pol
- Pieter van Parreeren
- Tom Visscher



# **Maps & Directions**

# Directions to (Hogeschool) INHOLLAND University **By train**

From 'Schiphol-Airport'

- Take a train into the direction 'Lelystad' or 'Hilversum' buy a ticket to 'Diemen-Zuid'
- · Leave the train at NS-station 'Diemen-Zuid'
- · At the train station, take the main-exit
- Turn at the exit left en walk straight ahead through the park (5 minutes) until you reach INHOLLAND University. The first building you'll see is Bergwijkdreef.
- The conference is at the other building, so turn left and walk through the car park. The entrance is of **Wildenborch 6** is just around the corner.

# By underground railway

The congres is reached easily by metro.

- At the central station you can take line 53 (red line) in the direction of Gaasperplas and hop of at 'Diemen-Zuid' or 'Verrijn Stuart weg'.
- Descend the stairs and turn left and walk straight ahead (5 minutes) to **Wildenborch 6**.

# By car

- You're driving at A10. Take exit junction 'S112 Diemen-Zuid/Duivendrecht'.
- · You're driving at the Gooiseweg.
- Take the second junction 'Bergwijk park'.
- At the traffic lights, turn left, you're driving at the Daalwijkdreef .
- Turn left after a couple of hundred meters direction 'Bergwijk park'
- · You're driving at the Bergwijkdreef
- Then take the first junction Right (Eeckholt) and then the first Right again (Wildenborch).
- At the end of this road you'll find INHOLLAND University. (Wildenborch 6)



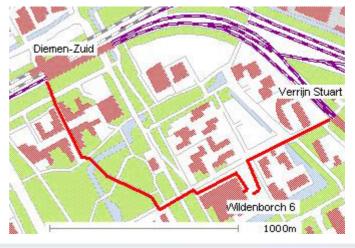
Our first meeting-point will be on **Sunday** evening the **27th** at **21.30 h** at the North-Side of Central Station.
Take exit NOORD

Central Station is easily reached from Schiphol Airport by train.

If you arrive by train, your station to remember is Diemen-Zuid.

The underground line 53 (direction Gaasperplas) stops there as well. One station ahead is possible too.

There will be hosts at Diemen-Zuid to help you with your luggage.

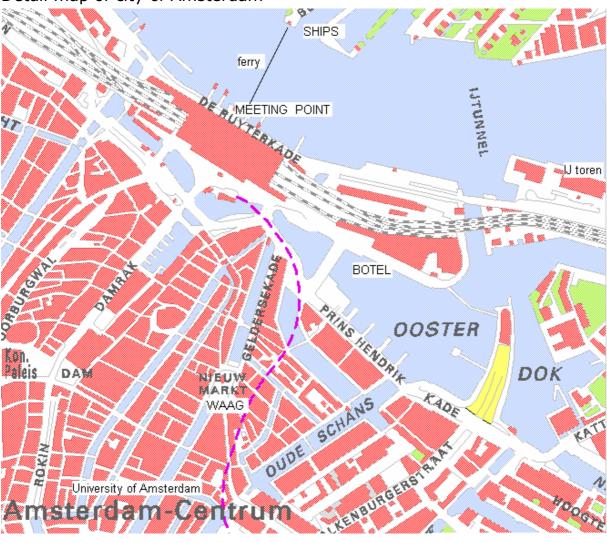


Balloons will mark the footpath to Wildenborch 6

You can register Monday the 28th from 9.00 h onwards



# Detail map of city of Amsterdam



At the North Side of central station, **the ferry (Buiksloterveer)** is located, this is our **meetingpoint**.

**The ships** are located at the other side of the river IJ.

**BOTEL** is a 5 minutes walk.

At **The IJ-toren** we'll have dinner Tuesday-evening at 19.30h

Wednesday-morning we'll walk to the **University of Amsterdam**, Oudemanhuispoort 4-6 (via the Red-Light district) and afterwards we'll visit **"The Waag"** 





## Directions to IJ-Tower

#### Address IJ-Toren

Piet Heinkade 55, 1019 GM Amsterdam Postbus 808, 1000 AV Amsterdam

Telephone: 020-3486290(restaurant) Telephone: 020-3486229 (office)

Fax: 020-3486921 (attn. P. Mesman)

Directions to the IJ -Toren

From Alkmaar/ Zaanstad as well as from Haarlem/Utrecht/Den Haag

- Take the Ring A10 Amsterdam in Easterly direction.
- On the ring A10 take junction S114 Zeeburg, Artis.
- Drive through the Piet Hein tunnel, keep to the right and follow "Central Station".
- Follow the signs "Passenger Terminal" (PTA).
- The IJ-Toren is on your right.

# Parking

The parking lot is under the building. Halfway down to the first floor there is the parking machine. The entrance to the IJ-Toren is at the back of the parking lot



# Reception and Information desk

After entering the building "Wildenborch" through the revolving door, you will find the Conference information desk straight in front of you.

There you can check in and receive a badge and an information-bag (Handbook Diverse 2004, Visitors Guide Amsterdam, a block note and other useful stuff).

If you still have your luggage with you, you can leave it to the hosts; they will take care of transporting the luggage to your accommodation (Botel or Sailing ship). If you have made your own hotel arrangements you have to collect your luggage at the end of the day and take it to your accommodation.

If you have any questions during the conference, please ask the hosts they will wear white T-shirts with the DIVERSE logo and "CREW" at the back. The organisers (wearing badges with a red dot) are also at your disposal.

#### **Conference Committee**

Members of the Conference committee are recognised by the blue dot on their badges.

# **Technical queries for presenters**

Please do not use your own laptop for your presentations; there will be not enough time to connect them in between presentations. Please put your presentation on a CD-rom. If you have any problems please contact the information desk.

#### **Tea and Coffee**

Tea and coffee are permanent available at the Information Market.

#### Lunches

Lunches on Monday and Tuesday are being served at the Information Market. Lunch on Wednesday is going to be served at the sailing ships.

#### Daily after party

On Monday and Tuesday drinks and snacks will be served at the Information Market. See your schedule for the right times so you won't miss them.

#### Dinner

Dinner on Monday is optional, you will have the "evening off" to visit Amsterdam and have dinner in the restaurant of your choice. The "Visitors Guide" will help you finding your way.

Dinner on Tuesday is at the IJ Tower. Our hosts will accompany you to get there. If you miss them please see the directions elsewhere in this handbook.

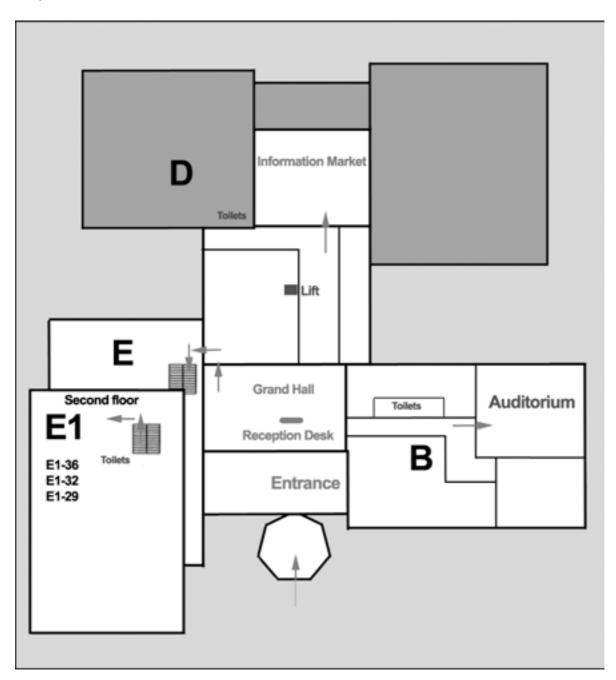
#### **Smoking Policy**

INHOLLAND University has a **no-smoking policy** everywhere inside. You will have to smoke outside the building.

2004



# Map of Wildenborch







# **Overall Programme**

## **Sunday June 27th**

21.30 Meet at Amsterdam Central Station

Delegates attending the full conference and staying overnight in one of the ships will board one of the Hollands Glorie fleet ships. The ships have made port behind the Central Station. Delegates not staying at one of the ships will register at the Botel hotel.

### **Monday June 28th**

9.00-onwards registration starts

9.30-11.30 Sessions (pre-conference)

11.30-12.00 Tea break

12.00-13.05 Sessions (pre-conference)

13.15-14.15 lunch

14.15-15.00 Opening plenary

15.05-15.50 Keynote address **Steve Molyneux** 

15.50-16.20 Tea break

16.20-17.25 Parallel sessions

17.30-20.00 Drinks reception and infomarket

Evening free

## **Tuesday June 29th**

9.00-9.15 Tea

9.15-1000 Keynote address Erik Huizer

1005-10.35 Parallel session

1035-10.50 Tea break

10.50-12.30 Parallel sessions

12.35-13.35 Lunch

13.35-14.40 Parallel sessions

14.40-14.55 Tea break

14.55-16.00 Parallel sessions

1605-16.50 Keynote address Jim Morrison

1700-18.30 Drinks reception

1930-22.00 Indonesian buffet at the IJ-tower

#### Wednesday June 30th

8.30-9.00 Walk to the University of Amsterdam premises

9.00-9.45 Presentation Waag society for old an new Media

9.45-10.00 Video impression of the last two days

10.00-10.45 Chris O'Hagan reflecting on 5 years of DIVERSE and looking ahead...

10.45-11.00 Closing remarks

11.00 Leave university

# Excursions

Choice between

- 1. Waaq Society for Old and New Media
- 2. Excursion to the "Onse Lieve Heer op Solder" church (optional, not included in the fee)

12.15 Back to accommodation

13.00-17.00 Sailing trip on board the Hollands Glorie fleet to Muiden (included in the fee)

17.00 Transfer to Schiphol Airport or Amsterdam Central Station

### After conference sailing!

#### Thursday July 1st and Friday July 2nd

Optional sailing trip for two days on board the Hollands Glorie fleet.

We will set sail at the IJsselmeer!

# Friday July 2th

17.00 end of sailingtrip. Return at Central Station Amsterdam



# Schedule Monday – morning June 28<sup>th</sup>

	09.00-onwards: Registration					
	09.30-10.20 Opening Pre-Conference: Wiebo	e Nijlun	sing, Van Hall Institute <b>Auditorium</b>			
Webstroom pilot project	10.25-10.55: <b>Do's and don'ts of video in legal education.</b> Page 27/32 Tomas Oudejans and Cora Jansen, Tilburg University  Auditorium	Webstroom pilot project	10.25-10.55: Streaming Video in International Education.  Page 28/36  Wim Dechering and Henk Frencken, ICLON, Graduate School of Education Leiden.  E1-32			
Webstroom pilot project	11.00-11.30: InnoBus: an interactive video case for business students Page 27/35 W.Bandsma, University of Twente Auditorium	Webstroom pilot project	11.00-11.30: Using streaming video as a reflective tool in teacher education (UvA)  Page 28/38  Anne Bannink, Gee van Duin, Anne-Martine Gielis, Judith Janssen, Peter Klencke, Anjo Roos, University of Amsterdam  E1-32			
	11.30-12.00: Tea break	Inform	nation market			
Webstroom pilot project	12.00-12.30: <b>Motor Disorders in Streaming Video</b> Page 27/33 Natascha Lubberding, Vrije Universiteit Amsterdam  E1-36	Webstroom pilot project	12.00-12.30: Competences Proven with streaming video Page 29/39 Joep Stassen, Sjoerd Eeuwen, Tom Visscher, INHOLLAND University.  Auditorium			
		Webstroom pilot project	12.35-13.05: Diagnostic Skills in the realm of special education and child rearing profession Page 29/34 Frank Hamers, Jan Krol, Helma Koomen and Femke Scheltinga, University of Amsterdam  E1-32			



# Schedule Monday - Afternoon

14.15-15.00: Opening plenary Auditorium

DIVERSE network: Professor Chris O'Hagan (Chair) INHOLLAND University: Guus Wijngaards SURF and SURFnet: Roel Rexwinkel

15.05-15.50: Keynote address: Professor Steve Molyneux **Auditorium** (Director of the UK E-Learning Lab and Professor of Advanced Learning Technologies at the University of Wolverhampton)

#### 15.50-16.20: Tea Break Information market

seo	16.20-17-25 Access for All: Making Streaming Media Accessible. Page 44/64		16.20-16.50 Interactive Television for the Italian Ministry of Infrastructures and Transportation. Page 48/68	no	16.20-16.50  Delivering teacher training by streamed media and video conferencing technologies.  Page 50/71		16.20-16.50 Using Virtual Reality Models to Teach Theatre Studies. Page 46/63
ld Services	Ross Little and Mary Cuttle	ЭС	Walter Gatti	ducation	Oliver Griffin	Classroom	Mark Childs
Theme B: Video production and	Cuttle [1 hour workshop]  Theme D: Video Online	$\Box$	E1-36 16.55-17.25 Digital Video Study- Materials: Enhancing Engagement, Feeling of Freedom, Control, and Ownership. Page 48/81	Theme F: Video in teacher E	E1-29 16.55-17.25 Developing presentation skills and peer-assessment Page 50/90	Theme C:Video in the Clas	E1-32 16.55-17.25 Digicol. Page 46
Ţ			Edna Yaffe, Meira Privman, Boaz Mermelshtein, Gaby Hayoun Shoham		Kitty Wortel		Wies Verschoor Riet Kulk
	Auditorium		E1-36		E1-29		E1-32

17.30-20.00 Opening drinks reception: **Information market** Eerde Hovinga (Netherlands Institute for Sound and Vision)



# Schedule Tuesday – Morning June 29<sup>th</sup>

			00.00	-09.15 Tea <b>Ir</b>	oform o	tion market			
	Dr. Erik		09.15-10 r (Director of	0.00 Keynote business dev	Addre:	ss <b>Auditoriu</b> ent for NOB (	cross medi	a facilit	ies
Video Online	10.05-10.35  Mindful video. Page 48/78  Michael O'Donoghue a Julie-Ann Sime	Professor Internet Applications at Twente University    Description   10.05-10.35:   New Dynamics in Streaming   Media.   Page 44/67     Page			Broadcast and Archival video	10.05-10.35: Video at the University: to whom and why? Page 52/75  Peeter Kukk and Toomas Petersell  E1-32			
	10.50-11.20: eStream: Increasing the use of Streaming Media in the Classroom. Page 53/59		10.50-11.20 Live Strear budget. Page 44/85	ning on no-		10.50-11.20 Profession Developme Teachers for conference Pedagogy. Page 50/70	al ent of or Video-		10.50-11.20: 'BBCi Hull': the social revolution has been televised'. Page 52/83
	Helena Bijnens		Marijn Tijhu	is		David R. Ge Karen M. Fi			James Richards and George Auckland
an Coperation	Auditorium 11.25-12.30: Reaching the Teachers Page 53/76	25-12.30: Backing the lackers age 53/76  atascha Lubberding ive Young reia Asensio  11.2  Bui and App the Flas Pag  Sam  12.0  Proposition of the Flas Pag  Lea	E1-36  11.25-11.55: Building Learning and Teaching Applications Using the Macromedia FlashCom Server. Page 44/74	eme F: Video in teacher Education	11.25-11.55 Tutorials to conference connecting trainee tead remote rurs Page 51/84	y Video- : with chers in al schools	and Archival Video	E1-32 11.25-11.55: Denmark's Movie-and TV Commercial Archive. Page 52/80	
Theme H: European Coperation			ideo produ	Sam Kenne	edy	Video in te	Dilwyn Robo and Geoff C	erts-Young	Henning Olesen
			12.00-12.30 Production Provision of based Con Learning. Page 44/58	and of Video- tent for e-	Theme F:	12.00-12.30 Video strea an input fo electronic discussion value state about socie personal responsibil Page 51/60	ming as r s and ments etal and ities.		E1-32  12.00-12.30: Davideon as Best Practice: streaming video and the uses of archives in higher education. Page 52/55
			P.Balaouras L.Merakos			Thomas Jaç			Susan Aasman Pim Slot
	Auditorium			E1-36			E1-2	9	E1-32



# Schedule Tuesday – Afternoon

			12.35-13.35 Lunch	Informa	ation market		
Theme A Evaluation and Rationales	Service Servic		13.35-14.05: Experiences in the Transition from ISDN to IP-based Video- conferencing. Page 49/62	E	13.35-14.05: Interactive Streaming Video Tool to Train Medical Protocols. Page 46/88	rvices	13.35-14.05: Analysing the Pedagogical Value of Video Treatment and Text in a Digital Media Application. Page 45/77
T	Maaike Van Leijen Clive Young Mireia Asensio	Conferencing	Sheila Buckingham Adrian Vranch	Theme C:Video in the Classroom	Mariëlle van Staalen Werner Degger	Theme B: Video production and Services	Richard McCarter
Theme D: Video Online	Auditorium 14.10-14.40: Tutor reflection and video formats for interactive lecturing. Page 48/79	Theme E:Video Con	E1-36 14.10-14.40: Video-conference Technologies as a Strategic Service within a Multi-campus University. Page 49/82		E1-29 14.10-14.40: Using of Digital Video in the Primary Science Classroom Page 46/86		E1-32 14.10-14.40: Pedagogic Evaluation of a Telepresence Environment. Page 45/57
Theme D: \	Michael O'Donoghue		Mallika Devi Rasaratnam		Yordanka Valkanova, Mike Watts		P. Balaouras C. Mouzakis I. Koubouri Roussakis, D. Mathaiou
	Auditorium		E1-36		E1-29		E1-32
			14.40-14.55 Tea brea	k Infori			
onales	14.55-16.00: How can New Technologies and Infrastructures provide New Opportunities for Video in Learning? Page 43/89	Video Conferencing	14.55-15.25: Video-conferencing from the Basement and the Suitcase. Page 49/56	Theme C:Video in the Classroom	14.55-15.25: Video Analysis of Physics Teachers' Classroom Explanations. Page 47/69	Theme C:Video in the B: Video Production and Classroom Services	14.55-15.25: Streaming Media Service at the University of Amsterdam. Page 45/66
aluation and Rationales			Jon Baggaley E1-36		David R. Geelan  E1-29		Jaap Tuyp Mariken Ederveen <b>E1-32</b>
Theme A: Evaluatio	(extended panel)	Theme E: Video	15.30-16.00: Video-conferencing Practices and Methods for Delivering Lecture Materials. Page 49/72	F:Video in Teacher Education	15.30-16.00: Video Cases in Teacher Education. Page 50/65		15.30-16.00: Using Web-based Video Simulations to Deliver Inter- professional Education to Health Care Students. Page 47/73
	Adrian Vranch		Ismo Hakala Pentti	Theme F	Jan Folkert Deinum	Theme	Brent Cunningham Ian Harding
	Auditorium		E1-36		E1-29		E1-32
	Professor James L. I	Morriso	16.05-16.50 Keynote on (Professor Emeritus of			or-in-Ch	ief, Innovate)
			17.00-18.30 Drinks	Inform	ation market		
			19.30-22.00 Dinn	or Ruff	et I Ltoren		



# Schedule Wednesday June 30<sup>th</sup>

8.30-9.00 Walk to the University of Amsterdam premises Oudemanhuispoort 4-6 Room A009					
9.00-9.45 Presentation Waag society for old an new Media ( <i>Page 91</i> )					
9.45-10.00 Video impression of the last two days					
Keynote address Professor Chris O'Hagan Chair DIVERSE (Page 92)					
DIVERSE 2005					
11.00 Leave university					
Excursion: Waag Society for Old and New Media  Excursion: 'Our Lord in the Attic' church (entrance not included in the fee)					
12.15 Back to accommodation					
13.00 -17.00 Sailing trip on board the Hollands Glorie fleet to Muiden (included in the fee)					
17.00-onwards: Transfer to Schiphol Airport or Amsterdam Central Station					



# **Pre-Conference**

# **Introduction of the Webstroom Projects (Wiebe Nijlunsing)**

Webstroom Pre-Conference

The Dutch Webstroom community will host this years' DIVERSE pre-conference. Webstroom was formed as a subsidiary of the SURF Organisation (Platform ICT in Education) to develop, share and exploit the use of streaming media and videoconferencing in higher education. Educationalists, Video production staff, content providers and technicians from various Dutch institutes are part of Webstroom, making it a truly multidisciplinary community. Webstroom facilitates a lively website and mailing list and organises specialist gatherings and plenary meetings throughout the year.

Furthermore, the SURF organisation earmarked funds to support so-called Webstroom Pilot Projects. Two calls for proposals were send out in 2002 and 2003. A major precondition for the proposals to be approved was a strong focus on evaluation and knowledge dissemination. The DIVERSE pre-conference will focus on the results of these innovative projects carried out over the past few years.

The nature of these pilot projects is characterised by their broad scope in both use of technique as well as their targeted application domain. In effect, we've seen projects aiming on building a digital library of clips, projects focussing on supporting teacher education, projects developing tools to archive presentations, projects building interactive video cases to name a few. All knowledge connected to these project is made available on the Webstoom website (link at: www.edusite.nl/webstroom) and is accessible for other institutions that are also planning to start projects involving streaming media.

During the pre-conference, seven Webstroom Pilot Projects will be presented in 30 minute sessions. Before that, there will be 4 minutes pitches to promote the presentations. Chair of the pre-conference opening session will be Wiebe Nijlunsing from the Van Hall Institute, Coordinator of the Webstroom Pilot Project programme.





# **Preconference Abstracts**

SURF facilitates WEBSTROOM projects. All projects deal with streaming video or videoconferencing in Higher Education. You'll find here the summaries of all contributions which will be presented at the preconference.

Do's and don'ts of video in legal education

Oudejans Monday 10.25-10.55 Auditorium

Presented by: Tomas Oudejans and Cora Jansen, Tilburg University

The Faculty of Legal Education at Tilburg University used streaming media to face the following challenges

Documentaries as a substitute for scientific education: The way students and teachers see documentaries as a substitute of scientific education;

High expectations of the broadcasts: The availability of digital films in the archives of the broadcasters. The usefulness of the descriptions in the archives of the broadcastings. IPR regulations;

High quality of the films is necessary: High quality of the films could not be realised for the students at home;

Search methods of teachers: Teachers of the different departments have a different way of searching for a video.

InnoBus: an interactive video case for business students **Bandsma** Monday 11.00-11.30 Auditorium

Presented by: W.Bandsma, University of Twente

The InnoBus Case presents an integral picture of InnoBus Ltd., a Canadian company producing buses for the Canadian and US markets. The company is in serious trouble, and might very well be facing bankruptcy soon. InnoBus Case helps students to develop integral managerial assessment abilities. Students learn how to pinpoint and acquire relevant information and use it to diagnose a company. The InnoBus case has an attractive non-linear approach, offering students random access to streaming video and documents. It suits student groups of many different sizes and levels.

Motor Disorders in Streaming Video

**Lubberding** Monday 12.00-12.30 E1-36

Presented by: Natascha Lubberding, Vrije Universiteit Amsterdam

In a WEBstroom project at the Faculty of Movement Science of the Vrije Universiteit Amsterdam research material was digitised and presented to students in a new, activating learning environment. The subject of the course is Motor Disorders at an Early Age. In the first year of a child's life, it's hard to make a diagnosis on what kind of motor disorder they might develop in a later stage.



Digital Ethology

**Burg** No presentation

Presented by: A. van der Burg

In this project analogue video material on animal behaviour is digitised and in the form of streaming video available through the Edunet (i.e. the educational intranet of the Van Hall Institute). The aim of this project is to make a beginning of a video library with relevant video fragments on the scope of animal behaviour with different animals in different situations. The streaming material is used as illustration and explanation in lectures or as tools for tutorials. It is also used in practical courses (for instance ethnology) to observe, recognise and quantify certain aspects of behaviour.

Streaming Video in International Education

**Dechering** Monday 10.25-10.55 E1-32

Presented by: Wim Dechering and Henk Frencken, ICLON, Graduate School of Education Leiden

The Department of Cultural Anthropology of Leiden University, offers several programs leading to a Masters Degree. Most of these programs use 'blended learning' as mode of instruction. The 'face to face' time available for some courses is quite limited. Therefore students are offered specific 'on-line' excercises and examples, which can help them to reach competency in these methods. The core pedagogical approach for these units is to allow students to see, follow and exercise 'expert' thinking and action. In the framework of the 'SURF Webstroom' project a number of different topic units have been produced, on CD-ROM and/or as streaming files made available on the Internet using Blackboard.

Surf Webstroom: Using streaming video as a reflective tool in teacher education (UvA)

Bannink Monday 11.00-11.30 E1-32

Presented by: Anne Bannink, Gee van Duin, Anne-Martine Gielis, Judith Janssen,

Peter Klencke, Anjo Roos, University of Amsterdam

For more than a decade the Graduate School of Teaching and Learning of the University of Amsterdam has been working with video reflection assignments. Student teachers are asked to reflect on a video recording of one of the lessons they have given during their teaching practice and discuss the footage with teacher educators of the School. A project was set up at the School to explore the possibilities of using streaming video for the reflection assignment. A website was developed as a learning environment where student teachers 'post' their (selected) video's and reflect on their teaching behaviour in an authentic teaching situation. Each student receives feedback on his or her teaching performance from peers ('critical friends') and teacher educators.



Project: SURF Webstroom Competences Proven with streaming video

**Stassen**Presented by:

Monday 12.00-12.30 Auditorium
Joep Stassen, Sjoerd Eeuwen, Tom Vissscher,

**INHOLLAND University** 

Reflection by streaming video with a new tool: VideoPoort and the Virtual Cutter integrated. Students film themselves in authentic work situations in which they show their progress in competences. They stream the tape themselves with a very easy to use tool. They select the most outstanding scenes. They paste these views in a (PowerPoint) presentation in which they show their learning process to their teacher and coach.

Diagnostic Skills in the realm of special education and child rearing profession

Hamers Monday 12.35-13.05 E1.32

Presented by: Frank Hamers, Jan Krol, Helma Koomen and Femke Scheltinga,

University of Amsterdam

The aim of the project is the development of a program which offers students the possibility to practise and to gain more insight in the field of activity of the special education expert and educationalist. In making a diagnosis, the special education expert or educationalist passes through the diagnostic process which consists of several stages.

The development of a web based video library for the Academic Centre for Dentistry Amsterdam

**Koopman No presentation** 

Pepijn Koopman Academic Centre for Dentistry Amsterdam

The Academic Centre for Dentistry, ACTA, has a collection of video tapes. The use of these tapes is restricted as both the amount of available copies and the number of video-television sets are limited. In addition, video tapes are in possession of teachers. In many cases teachers are not aware of the existence of video material owned by their colleagues. The aim of this project is to improve the disclosure of video material for both students and teachers by: converting the video material to streaming video, using metadata to describe the digital videos and developing a search engine which students and teachers can use to locate the videos.





### **Preconference Contributions**

# Digital Ethology

A. van der Burg, Van Hall Institute, the Netherlands

In the department of Animal Management of The Van Hall Institute (a University of Professional Education for Agriculture, Food Technology, and Environmental and Animal Sciences), the subject matter for the Bachelor programme of Animal Management (non-production) are the care and management of those animals and the related legislation and policy. The 'Animal Management' programme fills part of a growing (international) need for animal related professionals. Certain disciplines like ethology, behavioural physiology and experimental animal laboratory science are a major part of the animal Management programme. Observation of behaviour plays an important role in teaching the principles of those disciplines. For animal managers in Zoos for instance it is important to recognize stereotype

For animal managers in Zoos for instance it is important to recognize stereotype behaviour and workers in the field of laboratory animals must be aware of pain related behaviour.

In this project analogue video material on animal behaviour is digitised and in the form of streaming video available through the Edunet (i.e. the educational intranet of the Van Hall Institute). The aim of this project is to make a beginning of a video library with relevant video fragments on the scope of animal behaviour with different animals in different situations. All the video fragments are accessible by means of a search engine built in Java Script. The search engine works with predefined keywords or with free search terms and Boolean operators. Each fragment is accompanied by an html page; in this page a system of metadata provides easy and consistent access to the desired video fragments.

The streaming material is used as illustration and explanation in lectures or as tools for tutorials. It is also used in practical courses (for instance ethology) to observe, recognize and quantify certain aspects of behaviour. The advantage of the streaming technique is of course that those materials can be used time and place independently. A disadvantage is that you absolutely need a fast and reliable internet connection. In the workshop, demonstrations will be given to show some of the different applications.

In line with the developments in society and the policy of the department of Animal Management, these materials provide a positive contribution to alternatives (the 3 R's, replacement, reduction and refinement) in the use of experimental laboratory animals. The animal manager will probably be more able to contribute to a responsible and fundamental consideration of the moral interests of humans and animals in the research and educational context.

A. van der Burg a.vanderburg@pers.vhall.nl Van Hall Institute www.vhall.nl



# Do's and don'ts of video in legal education. Problems and solutions

Tomas Oudejans, Tilburg University, the Netherlands Cora Jansen, Tilburg University, the Netherlands

We will support all problems and solutions with several examples.

**Problem 1:** Documentaries as a substitute for scientific education Summary: The way students and teachers see documentaries as a substitute of scientific education. The availability of useful documentaries.

Solution: Neither the teachers or the students wanted to watch a documentary as a substitute of scientific education. The videos had to be useful in the practice. An example is a fragment of the program "Spoorloos".

### **Problem 2:** High expectations of the broadcastings

Summary: The availability of digital films in the archives of the broadcastings. The usefulness of the descriptions in the archives of the broadcastings. The films contain several copy- and personalityrights.

Solution: When you make your own prerecordings you can get round the copy- and personalityrights. With some technical protections we made the films only available for education purposes. An example of an own prerecording.

#### **Problem 3:** High quality of the films is necessary

Summary: Students did not expect DVD-quality of the films. High quality of the films could not be realised for the students at home.

**Solution:** The films contained no high quality so they could be played with Windows Media Player. An own videoserver gave the opportunity to keep the films in own management. With this videoserver we could give more attention to the source of the films. With VHS-tapes of the Audio Visual Centre of our University we were able to convert these tapes very quickly into digital files. With an own digital camcorder it is able to tape congresses or guest speakers at the University. With the simple program Pinnacle Studio you can edit the digital files and create a Windows Media-file. To make sure the students can even see the films at home with their modem, the films need to be multistream. To edit the films virtually, you can use the "virtual cutting machine". At the end, actuality-programs could we online within one or two days. For example "Actualiteiten Sociaal Recht".

#### **Problem 4:** Search methods of teachers

Summary: Teachers of the different departments have a different way of searching for a video. There are several ways of searching through the site of Juricam: by law-department, by hits or by searching trough an overview of all the films that Juricam contains.

**Solution:** By making different ways of searching and make it as easy as possible for the users, Juricam became a wonderful web based library with contains about 150 films that can be useful for legal education.

**Tomas Oudejans**: Oudejans@uvt.nl, manager ict and education Faculty of Law **Cora Jansen**: C.A.H.Jansen@uvt.nl, student Dutch Law, main subject Family- and Youth-law, operative as a student assistant at the department "Informatisering & Automatisering".



# Motor Disorders in Streaming Video

Natascha Lubberding, Vrije Universiteit Amsterdam, the Netherlands

### **Summary**

In a WEBstroom project at the Faculty of Movement Science of the Vrije Universiteit Amsterdam research material was digitalised and presented to students in a new, activating learning environment. The subject of the course is Motor Disorders at an Early Age. In the first year of a child's life, it's hard to make a diagnosis on what kind of motor disorder they might develop in a later stage.

In this subject, students learn how to look at early symptoms and how to respond to them. Students were given several assignments; one of those was given in an interactive workshop. A matrix was made in which the normal and deviating development is represented in pictures, photo's and streaming video. In the assignments students analysed a short video clip of young children with symptoms of a motor disorder. Students were asked to compare the video clip with the information given in the matrix. Students exchanged their findings in a VLE and directly afterwards, the teacher gave feedback on the assignment and gave more information about the particular children in the video clips: how did they develop their motor skills and what was the final diagnosis?

In this workshop participants will make a similar assignment as the students made, and the outcomes of the student surveys will be presented. How did students experience the interactive learning sessions? How do they see the supplement of (streaming) video in education? Do students learn more from assignments like these compared to other ways of learning?

#### **Outcomes**

Participants will have a hands-on experience of what the students went through as they were making the assignment, and they will learn what students thought of the assignments themselves. Hopefully, participants will leave the session inspired with new ideas for the use of streaming video at their own institution.

**Natascha Lubberding** is an instructional designer at the Vrije Universiteit and works on several streaming video projects. For WEBstroom, she is also editor of the Dutch videoportal. N.lubberding@ond.vu.nl



# Diagnostic Skills in the realm of special education and child rearing profession

Frank Hamers, Jan Krol, Helma Koomen, Femke Scheltinga – University of Amsterdam, the Netherlands

The aim of the project is the development of a program which offers students the possibility to practise and to gain more insight in the field of activity of the special education expert and educationalist. In making a diagnosis, the special education expert or educationalist passes through the diagnostic process which consists of several stages, from intake to conclusion and advise. The educationalist has to make decisions during this diagnostic process. Decisions must be based on theoretical knowledge and all information must be integrated. The computer-based programme offers both theoretical information and practical examples.

The programme exists of three parts. The student can consult the database to find more information on a several topics. The database will contain written information, links to relevant webpages, short movies, etc. Second, The student can find more information about making a diagnosis in different situations and of several disorders. The student can search for reports of several diagnostic cases. Third, the student can pass (actively) through all stages of the diagnostic procedure which is illustrated by use of streaming video.

The programme can be used for different courses during the study programme, such as courses on making a diagnosis, a course on conversational skills and internship. The purpose of the different programme parts is depending on the aim and contents of the course. The lecturer will use the programme to support the course of lectures by showing parts of the programme during the lecture and by giving home assignments to students.

The programme has been evaluated by 100 students. The programme will be further adjusted and improved according to the comments of students. The programme will be used in the new study programme starting in september 2004. We will show a (preliminary) version of the computer-based programme.

Technical production: Frank Hamers, Jan Krol

Structure and content: Helma Koomen, Femke Scheltinga

Faculty of Social and Behavioral Sciences, Department of Educational Sciences

 $\hbox{E-mail address: fscheltinga@uva.nl / f.l.c.m.hamers@uva.nl}\\$ 



# InnoBus – an interactive video case for business students

W.Bandsma, University of Twente, The Netherlands

The School of Management and Industrial Engineering of the University of Twente has been consciously working on innovative ways to integrate information technology into its educational programmes. The InnoBus Case is the latest product in a range of interactive video courses, developed in co-operation with the Language Institute Regina Coeli, the Dutch Digital University and the SURF foundation.

#### **Case summary**

The InnoBus Case presents an integral picture of InnoBus Ltd., a Canadian company producing buses for the Canadian and US markets. The company is in serious trouble, and might very well be facing bankruptcy soon.

# **Learning objectives**

Bridging the gap between theory and practice, the InnoBus Case helps students to develop integral managerial assessment abilities. Students learn how to pinpoint and acquire relevant information and use it to diagnose a company. They are also taught to make decisions in uncertain circumstances, based on dubious information and under time pressure.

# **Activities & assignments**

To this end students can access company documents and video footage of interviews with InnoBus staff members and of a production process tour. After preliminary investigations students are given assignments to make business and process analyses, to perform calculations, to look for alternatives, and finally to draw up a sound business plan for survival.

#### InnoBus' special aspects

The InnoBus case has an attractive non-linear approach, offering students random access to streaming video and documents. It suits student groups of many different sizes and levels. It fits in a one day's seminar of a MBA program, and in weekly sessions during a full term, with or without restrictions on time frame and document access. Emphasis can be put on the use of theories from different fields in management sciences as well on the integrated use of these.

Making full use of internet technology, the course can be used as a web application. However it's also perfectly suited for stand-alone use. An extensive electronic teacher's guide is available, containing course outline, assignments and slides.

#### The presentation

Focus will be on three questions. To get a feel for the matter, the first one is how you, as a student, would save InnoBus, and what you would learn by doing so. The second one is about how you, as a teacher, could set conditions for students to get the most out of InnoBus. And finally there is the question how first time users valued their InnoBus experience.

W.Bandsma, University of Twente, The Netherlands



# Streaming Video in International Education.

Wim Dechering, Department of Cultural Anthropology, Faculty of Social Sciences Henk Frencken, ICLON, Graduate School of Education Leiden, the Netherlands.

The Department of Cultural Anthropology (CA) of Leiden University, the Netherlands, offers several programs leading to Masters level, for Dutch and international students, the latter in conjunction with the University of Bandung. Most of these programs use 'blended learning' as mode of instruction.

Courses in 'Methods and Techniques for CA' form an important part of the program. The 'face to face' time available for each of these topics is quite limited. Therefore we provide students with specific 'on-line' excercises and examples, which can help them to reach competency in these methods.

In the framework of the 'SURF Webstroom' project a number of different topic units have been produced, on CDRom and/or as streaming files made available on the Internet through Blackboard. The core pedagogical approach for these units is to allow students to see, follow and exercise 'expert' thinking and action. We try to use simple software programs and techniques for this approach.

# Some examples:

- **1.** One unit deals with two 'library' programs: Webspirs and Endnote . Through these programs experts can find and organise relevant literature articles, by searching worldwide library databases. To explain both programs there is only 20 minutes contact time available. We have made a screendump film showing these programs in action, using a CA example. Students can start and restart the film at different points and thus see and rehearse the experts steps. The aim is to show what the software can do for CA research. How to operate the software students easily find out themselves using software help functions.
- **2.** 'Homas analysis' is an important and difficult statistical method used in CA. In several steps relationships between ranges of factors are calculated. The proces is not algorithmic but heuristic: with each step the expert has to decide what is taken out and what remains in the dataset. The proces is comparable with diagnostic reasoning in medicine, in a way. In an example students see how experts choose and hear a rationale for each step. At several points students can also make choices that send them in 'right' or 'wrong' directions. For this film screendumps are also used, embedded in screens that allow for choices to be made.
- **3.** Our third example uses a film called 'Semmelweis'. This film shows a classical example of scientific reasoning and is spoken in Dutch. We have put in subtitles in in several languages . These subtitles are not visible for the students, but they can be searched for keywords, in different languages, to track specific spots in the film. Students are asked to search for hypothese that are generated. We plan to have a CA expert make comments to the film and put these in as another track of hidden subtitles too. Students can then search for 'experts words' in these subtitles to find certain methodological features in the film. Whether this 'intuitive' form of 'expert' metatagging of video is useable in an educational setting is part of our experiments with this video.

On the basis of our examples we have developed a one day workshop for University teachers covering three topics. Firstly an overview of strengths and pitfalls of the use of streaming video in education, secondly a number of pedagogic excercises enhancing the teachers ability to transmit expert thinking and action to students, using streaming techniques. Finally a hands on exploration of simple softwares to do this. During the session at the DIVERSE preconference we will show some of our products and discuss the pedagogical excercises of the above mentioned workshop.

Wim Dechering, Department of Cultural Anthropology, Faculty of Social Sciences

Henk Frencken, ICLON, Graduate School of Education Leiden, the Netherlands.



The development of a web based video library for the Academic Centre for Dentistry Amsterdam (ACTA)

Pepijn Koopman, Academic Centre for Dentistry Amsterdam, The Netherlands

In this workshop the participants will be given a short summary of the Webstroom project that was done at the Academic Centre for Dentistry Amsterdam (ACTA) in 2002. The result of the project is a web based video library and a manual which explains how teachers can use the library to locate video's and integrate them, or fragments of them, in their Digital Learning Environment. After the introduction and a short demonstration the participants will have the opportunity to work with the results of the project.

## **Project summary**

The Academic Centre for Dentistry, ACTA, has a collection of video tapes, of which a part is used in education. The use of these tapes is restricted by the amount of available copies and the number of video-television sets. Other video tapes are in possession of teachers who use some of them in education. In many cases teachers are not aware of the existence of video material of colleagues.

The aim of this project is to improve the disclosure of video material for both students and teachers. We tried to reach this aim by:

converting the video material to streaming video using meta data to describe the digital video's and

developing a search engine which students and teachers can use to locate the videos.

We have converted 24 video tapes (9 hours) to streaming video. We used different software programmes for different parts of the digitizing-process. We chose to use the MPEG-1 standard for the streaming video

because it is a standard which is supported by SURF. The MPEG-1 videos were placed at the SURF stream server.

To describe the video's we used the Dublin Core standard. During the project we found that some Dublin Core elements weren't fit for our purposes, so we decided to drop some Dublin Core elements and introduce some new elements. Some examples of elements we introduced to describe the video's are: 'Owner', 'Length', and 'Screenshot'. The elements which describe a video are clustered into three categories: (1) general, (2) educational, and (3) technical. The teacher who is the 'owner' of a video can change the descriptions of the general and the educational category. The administrator of the video library takes care of the technical description. The descriptions of the videos are stored in a database. First we used an MS Access database, but to be able to scale up and to gain better performance we upgraded to a MS SQL Server database.

To give teachers and students the option to locate videos in the database we developed a search engine. Users can give one or more keywords to create a search query. When the results (including screenshots) are displayed the user has the option to view the video and to request the details of the description.

The manual explains how the user can use the 'Virtuele Snijmachine' of SURFnet to select fragments of a streaming video found in the video library. Finally the user can integrate the complete video, or the fragment of a video, in a Digital Learning Environment (in this project Blackboard was used).

Pepijn Koopman, Academic Centre for Dentistry Amsterdam, The Netherlands



# Project: SURF Webstroom Self-reflection

Using streaming video as a reflective tool in teacher education

Anne Bannink, Gee van Duin, Anne-Martine Gielis, Judith Janssen, Peter Klencke, Anjo Roos Graduate School of Teaching and Learning (ILO), University of Amsterdam

#### **Background**

For more than a decade the Graduate School of Teaching and Learning of the University of Amsterdam has been working with video reflection assignments. For the assignments student teachers are asked to reflect on a video recording of one of the lessons they have given during their teaching practice and discuss the footage with one of the teacher educators of the School.

Two years ago a project was set up at the School to explore the possibilities of using streaming video for the assignment, in order to enable student teachers to incorporate the data they have collected into their digital portfolios. A software company was employed to design a (guarded) website and ten student teachers were recruited who were to act as guinea pigs and experiment with the electronic learning environment created. The pilot students kept a logbook in which they recorded their experiences. The issues raised ranged from mundane technical details (they had to digitalize and select their own footage) to self evaluation of their teaching behaviour in an authentic situation and the quality of the feedback on their teaching performance from peers and teacher educators. Amendments were made to the website and the procedure on the basis of the pilot group's comments and this year a larger group of students is working with the new and improved programme. Next year all students of the School will follow in their footsteps.

#### Workshop

This is work-in-progress. In the workshop students will show and tell about their experiences with the video reflection assignment and the website. Participants in the workshop will be asked to step into the shoes of teacher educators and give feedback to one specific lesson episode selected by the students. Finally, we would like to discuss how sharing streaming video of episodes of student-teachers' lessons may lead to more context-sensitive interpretations of classroom events, thus paving the way for high quality reflection.

Anne Bannink, Gee van Duin, Anne-Martine Gielis, Judith Janssen, Peter Klencke, Anjo Roos Graduate School of Teaching and Learning (ILO), University of Amsterdam Contact: jjanssen@ilo.uva.nl



# Competences Proven with Streaming Video SURF Webstroom project 2003-2004

Joep Stassen; teacher Small Business & Retail Management, School of Economics, INHOLLAND University

Tom Visscher (tool designer); ICT INHOLLAND; INHOLLAND Universit Sjoerd Eeuwen / Melanie van der Lee; Students Small Business & Retail Management

**The Case:** Show me how competent you are and I II give you the credits

**The School:** Hogeschool INHOLLAND located in Diemen has 10.000 students enrolled in several schools. Retail Management is a marketing degree in the School of Economics.

**The Programme:** Retail Management is a competence based study. The programme is designed on base of 18 fields of competences. Students work on these competences, each year on a higher level. Some competences are tested in a traditional way: written exam e.g. Others are tested on the job.

**The Students:** They study for a degree in retail management. Meanwhile they work as a manager at an assigned retailer. And while working, they learn and thus earning credits. Each year the growth in their work make moves to higher level job positions. Starting in the first year with two school days and three working days they end in the last year with only one school day and four working days, earning 32 out of 57 ects!

**The Issue:** How does the teacher know the students are competent? On what proof will he give the credits? It is the students duty to proof they are competent. So they write down their experiences in a so-called Reflection Report. This report is based on their own reflections and the reflection of their coach (boss) at work. The coach is trained and supported by school to be able to assess the students properly. The teachers will credit the student largely on base of the coach opinion.

**The Challenge:** Reflection by streaming video with a new tool: VideoPoort and the Virtual Cutter integrated. Students film themselves in authentic work situations in which they show their progress in competences. They stream the tape themselves and select the most outstanding scenes. They paste these views in a (PowerPoint) presentation in which they show their learning process.

The Evaluation: does it make a difference? It sure does.

First, the obvious gain is a more objective assessment of some competences. Formerly based on the blue eyes of student and coach, we (teacher and fellow students and future employers) now can see for ourselves the skills of the student at the floor. Second, by editing and preparing a video-presentation the student is forced to reflect thoroughly his own learning progress and come to the point quickly. Third, fellow students can contribute to the assessment (peer group assessment). Fourth, students integrate the video in their digital portfolio to hunt for better jobs.

Joep Stassen; teacher Small Business & Retail Management, School of Economics, INHOLLAND University joep.stassen@INHOLLAND.nl

Tom Visscher (tool designer); ICT INHOLLAND; INHOLLAND University. tom.visscher@INHOLLAND.nl Sjoerd Eeuwen / Melanie van der Lee; Students Small Business & Retail Management

Fifth, come and hear more at the workshop, some students will be present!





# **Keynotes**





James L. Morrison, Professor Emeritus of Educational Leadership and Editor-in-Chief, Innovate;

Higher Education in Transition: Lessons from the American Experience U.S. higher education is in a major transition period that will fundamentally change the way American colleges and universities will conduct their business in the coming decades. Although change in social institutions is seldom rapid, the combined forces of demography, globalization, economic restructuring, and information technology are

forcing US institutions to reconceptualize their markets, organizational structures, and pedagogical practices. The discussion period of this presentation will focus on the implications of this argument for European universities.

James L. Morrison received his PhD at the Florida State University in 1969. He was lecturer in sociology at the University of Maryland, European Division, and graduate assistant in sociology at the University of Munich (1964-65), instructor in sociology at the Florida State University (1968-69), and assistant professor of education and sociology at the Pennsylvania State University (1969-73). He moved to The University of North Carolina at Chapel Hill as associate professor of education in 1973 and was promoted to full professor in 1977. In December 2001 he became professor emeritus.

## **Professor Steve Molyneux**



Director of the UK E-Learning Lab and Professor of Advanced Learning Technologies at the University of Wolverhampton

Professor Molyneux is recognised as one of the UK's leading consultants in the use of technologies to support education, training and the transformation of communities in the Knowledge-Economy. He is currently Director of the Learning Lab and Director of the ADL Partnership Lab (UK) as well as holding a visiting Professorship and Senior Fellowship at the University of Wolverhampton's Centre for Learning and Teaching. Amongst his many government advisory roles he was a member of the Government's post-16 e-Learning Strategy Task Force and is chairman of the national Broadband Stakeholder Group's education sub-committee. In 2002 he was the only academic named in a leading computer magazine's Top 10 IT Hall of Fame.

#### Dr. Erik Huizer

Director of business development for NOB Cross media facilities, professor Internet Applications at Twente University;

Video over the Internet: getting rid of the computer
What are the recent technological developments with regard to digital
video distribution. What new opportunities do they bring, how will it influence the way
we use video. A concrete case will be described and demo-ed.
What are the obstacles (technical and legal) we need to adress before this becomes a
widespread reality.



Erik Huizer is professor Internet Applications at Twente University. Huizer is also Director Strategy, innovation and Business Development with NOB Cross Media Facilities, responsible for digital video broadcasting via Internet and mobile. Until june 2000 Huizer was managing director of the SURFnet Expertise Center. Huizer has been strongly involved with the GigaPort project, the Dutch project for the next generation Internet.

Huizer used to work for SURFnet by on projects that dealt with developing and introducing new services. He also initiated and participated in several Terena (RARE) Working Groups and EU projects, like the DESIRE 4th framework project. Huizer used to chair the RARE WG3 on Information Services and was a member of the Terena technical Committee. From december 1991 till april 1995 he was Area Director for the Applications area of the Internet Engineering Task Force (IETF) and as such a member of the Internet Engineering Steering Group (IESG). From 1995-1999 he was a member of the Internet Architecture Board. From 1999 till 2002 he was chairman of the Internet Research task Force (IRTF). Currently Erik Huizer is serving on behalf of the IETF as a Trustee on the board of Trustees of the Internet Society (ISOC).



### **Professor Christopher O'Hagan**

Learning Consultant Directorate University of Derby. Founder and chair of the DIVERSE network.

Postmodernism and the Integration of Video into Teaching and Learning Postmodernism is little understood outside those circles where it is discussed in meaningful terms. But unlike some other perspectives with philosophical foundations, postmodernism can genuinely inform one's

day-to-day professional activities. A lot of postwar educational thinking such as constructivism has been influenced by postmodern perspectives. Professor Chris O'Hagan will show how postmodernism does not throw out the past in the name of a glorious but can still find space for behaviourism, formal lectures, teaching (as opposed to learning) while helping to generate new approaches, such as in the use of technologies. In effect, postmodern educationalist have a big portfolio of methods and tools from which to choose. How can we learn from their experiences?

Chris O'Hagan is emeritus professor of educational development and learning consultant to the University of Derby. This is a part-time post, and he describes himself as "pensioned off but not retired." He was dean of learning development and head of the Centre for Educational Development and Media until July 2002 at Derby. He has played a key role in helping Derby become a leader in the UK in the use of educational technologies, including e-learning and telepresence teaching.

He has conceptualized a model for the campus university of the 21st century that he calls "The Cheshire Cat University"—to help imagine the kind of institution Derby is seeking to develop. The famous Cheshire Cat in Alice in Wonderland could make itself appear and disappear at will, manifesting itself in any ratio of virtual (invisible) to real (visible) cat. This irritated Alice. However, in the Cheshire Cat University it is Alice, the student, who decides how much cat, or university, she wants to "see." She is able to choose the ratio of face-to-face to virtual access that suits her particular personal, domestic, or employment needs at any given time, rather than the university (or cat) dictating it.

This is perhaps an impossible ideal, but partially achievable. O'Hagan continues to work towards such a goal, fuelling his interest in global and virtual universities. Derby is itself a member of the Global University Alliance, the world's first global virtual institution worthy of the title "university" in terms of the range of undergraduate and postgraduate courses on offer.



# **Conference Themes & Abstracts**

#### Theme A: Evaluation and Rationales

# Van Leijen 13.35-14.05 - Auditorium

Looking through Three 'I's: streaming video in practice.

Maaike Van Leijen (Universiteit van Amsterdam, The Netherlands) & Clive Young (Glasgow Caledonian University, UK) & Mireia Asensio (Lancaster University, UK)

JISC and SURF funded projects in the UK and the Netherlands have identified the need to promote the sharing of practice, reflection on practice and critical examination of the experiences. Although there appears to be some sense of community among technical and support staff, teaching staff users are dispersed and there is therefore insufficient sharing of pedagogic research and evaluation. The aim of this paper presentation is to contribute to the community development, particularly as is comes to sharing experience of pedagogic design.

#### **Vranch 14.55-16.00 - Auditorium**

How can New Technologies and Infrastructures provide New Opportunities for Video in Learning?

Adrian Vranch (University of Plymouth, UK)

Technologies and devices, media standards and infrastructures have matured rapidly during the past 5 years, leading to a raised level of awareness and widened expectations of new opportunities that video may promise for learning. This panel Session aims to provide a forum for exchange of experiences and lively discussion between delegates and panellists on how new opportunities for video in learning can most effectively meet the expectations and aspirations of the DIVERSE community in future years.



## Theme B: Video Production and Services

## Cuttle Monday 16.20-17.25 Auditorium

Access for All: Making Streaming Media Accessible. (Ross Little and Mary Cuttle, Glasgow Caledonian University, Scotland).

A brief introduction to the Click and Go: Access for All project will be followed by a presentation giving an overview of accessibility & streaming media in the e-learning context and exploring the available technical solutions. The presentation will be illustrated with examples of both accessible and non accessible media.

# **Garrison Tuesday 10.05-10.35 E1-36**

New Dynamics in Streaming Media (William Garrison, Learning Media Development University of Portsmouth, UK)

This session examines the potential to create dynamic video where each viewer has a uniquely tailored experience. This can be achieved through a combination of streaming media technologies, relational databases, and Digital Rights Management (DRM).

#### Tijhuis Tuesday 10.50-11.20 E1-36

Live streaming on no-budget. Marijn Tijhuis, Hogeschool van Utrecht, The Netherlands

Sending out multiple, simultaneous live streams covering events on your faculty, publish pictures and edited video material at the same time. All of that with no budget? Is that possible? A project lead by students at Academy for Digital Communications University proves it is.

#### Kennedy Tuesday 11.25-11.55 E1-36

Building Learning and Teaching Applications Using the Macromedia FlashCom Server. Sam Kennedy (The London Institute, UK)

Flash Video enables learning technologists and teachers with intermediate multimedia skills to experiment with a broader range of learning and teaching tools, such as synchronous videoconferencing and browser-based audio and video recording. Via a live demonstration different systems, this session will provide an insight into some of the rewards and constraints of Flash-based videoconferencing and sampling for learning, teaching and collaboration.

#### Balouras2 Tuesday 12.00-12.30 E1-36

Production and Provision of Video-based Content for e-Learning. P.Balaouras & L.Merakos (University of Athens, Greece)

This paper investigates how an effective production line should be set up, in order for video recorded courses to be effectively post-processed and flexible provided to the students in a variety of means, i.e., DVDs, CDs, or over Internet via Video on Demand servers and e-learning platforms.





## McCarter Tuesday 13.35-14.05 E1-32

Analysing the Pedagogical Value of Video Treatment and Text in a Digital Media Application. Richard McCarter (Sheffield Hallam University, UK)

The term video treatment applies to television programmes in order to explain its contents and structure. The term video format is applied to the style of video used. The focus of this presentation is on the use of video treatment and video format in a digital media application to support postgraduate learning. Evaluation results will be presented in order to investigate the value of digital video in the application.

## Balouras1 Tuesday 14.10-14.40 E1-32

Pedagogic Evaluation of a Telepresence Environment. P. Balaouras, C. Mouzakis, I. Koubouri, I. Roussakis, & D. Mathaiou (University of Athens, Greece)

A state-of-the art telepresence environment, with the purpose of supporting the teaching process, has been designed and implemented among three major universities in the Athens metropolitan area. This environment has been assessed from both the technological and the pedagogic point of view. For the pedagogic assessment, results obtained from a series of trials involving 120 students are presented.

#### **Ederveen Tuesday 14.55-15.25 E1-32**

Streaming Media Service at the University of Amsterdam. (Jaap Tuyp, Audiovisual Centre, University of Amsterdam, The Netherlands, Mariken Ederveen

Information Technology Centre, University of Amsterdam, The Netherlands) Since March 2004, the Information Technology Centre of the University of Amsterdam will offer a range of services connected to streaming media. The goal is to support the initiatives on streaming media at the University of Amsterdam. Support will be aimed at technology, production and educational development. The services include a support website and mobile recording equipment.



#### Theme C: Video in the Classroom

## Childs Monday 16.20-16.50 E1-32

Using Virtual Reality Models to Teach Theatre Studies. Mark Childs - University of Warwick, UK

The ARCHES (Antiquity-Related Collections Harnessed in Educational Scenarios) project at the University of Warwick is funded by JISC within its Exchange for Learning Project. Its aims are to develop a means by which digital resources can be re-purposed for different learning and teaching activities to develop learning and teaching activities that draw upon various digital resources and evaluate these developments. ARCHES also produced guidelines to good practice in re-purposing and using resources in learning and teaching.

# Verschoor Monday 16.55-17.25 E1-32

Digicol Video Project Wies Verschoor, Faculty of Law, University of Amsterdam, the Netherlands. Riet Kulk, ACTA, University of Amsterdam, the Netherlands

The aim of the Digicol Video Project was to permit students immediate access to a vast knowledge base which is to supplement the present lectures and tutorials. Over a period of two years, lectures and tutorials in the Faculty of Law of the University of Amsterdam were recorded and uploaded to the Faculty's streaming server. The presentation will focus on the evaluation results and acceptance of this new technology within the faculty

## Van Staalen Tuesday 13.35-14.05 E1-29

Interactive Streaming Video Tool to Train Medical Protocols. Mariëlle van Staalen & Werner Degger (UvA, The Netherlands)

At the Academic Medical Centre Amsterdam, a training method has been devised based on a Java web application. This application allows students to exercise required protocols that were taught in courses on how to handle emergency cases. Through the use of streaming video fragments in combination with metrics associated with the patients such as blood pressure, heartbeat and X-ray photos, a realistic situation can be simulated.

#### Valkanova Tuesday 14.10-14.40 E1-29

Using of Digital Video in the Primary Science Classroom Yordanka Valkanova, Mike Watts (University of Surrey Roehampton, London, UK)

At the University of Surrey Roehampton a study was conducted on creating a computer-based cognitive tool through applying digital video editing techniques that can provoke self-reflection in young children. It has attempted to answer two primary questions:(i) is creating of films about one's own learning activity could be a tool for self-reflection? (ii) And to what extent does the promotion of self-reflection improve children's achievements in science?



#### Geelan1 Tuesday 14.55-15.25 E1-29

Video Analysis of Physics Teachers' Classroom Explanations. David R. Geelan (University of Alberta, Canada)

The ways in which science teachers explain scientific ideas to their students are a crucial part of the pedagogical content knowledge of science teaching. Such explanations occur in complex contexts, and have been difficult to address from a practical research perspective because of the difficulty of 'capturing' explanations as they are actually given to students. This session will focus on the ways in which the video technology has allowed research in this area to proceed, and will include demonstrations of classroom video and software called vPrism.

## Harding Tuesday 15.30-16.00 E1-32

Using Web-based Video Simulations to Deliver Inter-professional Education to Health Care Students. Brent Cunningham & Ian Harding (Kings College London, UK)

The UK National Health Service launched a project leading to the creation of a Simulated Web-based Inter-professional Education site. The site is designed to support the classroom work around patient communication and assessment. It allows students to engage with a virtual family. Students select a family member and interact with the character using statements from menu options. This leads to responses in embedded video format. Patient actors play the roles of family members and were filmed using digital video.



## Theme D: Video Online

## Gatti Monday 16.20-16.50 E1-36

Interactive Television for the Italian Ministry of Infrastructures and Transportation. Walter Gatti (University of Florence, Italy)

A course involving the 12,000 employees of the Italian Ministry of Infrastructures and Transportation used a didactic system built by K Communication, based on a platform which combines the use of a satellite television technology with the live interaction via the Internet. This session will show the evaluation results of this large-scale project.

## Privman Monday 16.55-17.25 E1-36

Digital Video Study-Materials: Enhancing Engagement, Feeling of Freedom, Control, and Ownership (Edna Yaffe, Meira Privman, Boaz Mermelshtein, Gaby Hayoun Shoham - Center for Technologies in Distance Education, The Open University of Israel)

The Digital Video Project at the Open University of Israel (OUI) aims to harness the power of digital video technology to improve distance teaching and learning. This presentation will showcase navigation aids and other learning-support tools that were integrated into our device for playing streaming digital video contents, and discuss their possible contribution to active learning and to the learner?s sense of ownership.

## Odonohue (2) Tuesday 10.05-10.35 Auditorium

Mindful video. Michael O'Donoghue & Julie-Ann Sime (Lancaster University, UK) The connection between and the design of video materials and theories of learning can often be overlooked when creating video and multimedia resources.

This presentation shows how the themes of Mindful Learning as described by Ellen Langer formed the basis of video material design for trainee radiopharmacists learning through a virtual radiopharmacy environment. The presentation will outline the basic ideas in Langer?s work and will show how these were interpreted into a visual form and related online multimedia system, build as part of the EU project VirRAD.

## Odonohue (1) Tuesday 14.10-14.40 Auditorium

Tutor reflection and video formats for interactive lecturing. Michael O'Donoghue (Lancaster University, UK)

In preparing lectures for distribution across the Internet, the extent to which the skills and practices required for traditional face-to-face lecture delivery are transferable is unclear. This study shows the experiences of teachers involved in the production and presentation of web-based lectures. Their views and reactions on the production and presentational aspects of video material production are examined, and their responses to comments received from evaluation offer points for professional reflection on the pedagogic practices they currently make use of.

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# Theme E: Video-Conferencing

## **Buckingham Tuesday 13.35-14.05 E1-36**

Experiences in the Transition from ISDN to IP-based Video-conferencing. Sheila Buckingham & Adrian Vranch (University of Plymouth, UK)

The University of Plymouth is dispersed across the south west region of England and has been using videoconferencing for several years. This paper describes experiences in addressing the issues surrounding the transition from ISDN to IP based videoconferencing systems and, from the feedback data, examines some of the factors that contributed to the provision of effective services to meet the diverse needs of professionals in a modern university with worldwide links.

#### Rasaratnam Tuesday 14.10-14.40 E1-36

Video-conference Technologies as a Strategic Service within a Multi-campus University. Mallika Devi Rasaratnam (University of Ulster, N. Ireland)

## Baggaley Tuesday 14.55-15.25 E1-36

Video-conferencing from the Basement and the Suitcase. Jon Baggaley (Athabasca University, Canada)

The session will also demonstrate how truly 'placeless' modern distant education has become. During his Asian tour, the presenter maintained his daily commitments to AU, his students and colleagues, using a variety of dial-up, broadband, and wireless connections. His experience indicates that 'm-learning' techniques will evolve as distance educators acquire 'm-teaching' skills.

### Hakala Tuesday 15.30-16.00 E1-36

Video-conferencing Practices and Methods for Delivering Lecture Materials. Ismo Hakala & Pentti Impi" (University of Jyv"skyl", Chydenius Institute, Kokkola, Finland)

This presentation deals with the authors? experiences in developing and using distance learning technologies in an electrical engineering and a computer science education programs provided by the Universities of Oulu and Jyv"skyl" during the last five years. By using these technologies and tailoring course schedules, the studying is made possible to students who do not have an opportunity to participate in the education otherwise.



#### Theme F: Video in Teacher Education

# Griffin Monday 16.20-16.50 E1-29

Delivering teacher training by streamed media and video conferencing technologies (Oliver Griffin, University of Cambridge International Examinations, UK)

The University of Cambridge International Examinations (providing examinations in over 170 countries) piloted two new training delivery methods video conferencing and streamed video over the internet. Both were live events and both proved successful in achieving effective and value-for-money training. The streamed video pilot showed the potential for ?broadcast? type training, especially where individual participation is not required.

## Wortel Monday 16.55-17.25 E1-29

Developing presentation skills and peer-assessment (Kitty Wortel, Hogeschool Inholland, The Netherlands)

This session will highlight how students of Dutch as a second language develop presentation skills by the use of modern media and how they apply peer-assessment during the process of learning these skills. Or in other words, the transformation of classroom learning into time and place independent learning will be demonstrated during this session.

#### Geelan2 Tuesday 10.50-11.20 E1-29

Professional Development of Teachers for Video-conference Pedagogy. David R. Geelan & Karen M. Fiege (University of Alberta, Canada)

The Rural Advanced Community of Learners project uses Virtual Presence Learning Environments to bring secondary education to students in remote schools in northern Alberta, Canada. This presentation, by the project?s professional development team, describes the approaches taken, and raises questions and issues related to what forms of professional development and support are appropriate for aiding teachers in this and similar contexts of videoconference learning.

## **Deinum Tuesday 15.30-16.00 E1-29**

Video Cases in Teacher Education. Jan Folkert Deinum (University of Groningen, The Netherlands)

In teacher education it is quite common to use video of classroom situations, because normally it is not possible to walk into the classroom with student teachers to observe what is going on. However, working with analog video is not very flexible. The Noordelijke Hogeschool Leeuwarden and Groningen University started to develop digital video cases for teacher training. These recordings can be used in many ways.



## Roberts-Young Tuesday 11.25-11.55 E1-29

Tutorials by Video-conference: connecting with trainee teachers in remote rural schools. Dilwyn Roberts-Young & Geoff Constable (University of Wales, Aberystwyth)

The University of Wales uses the Welsh Video Network for video conferencing. The paper reports on a Higher Education Funding Council for Wales project in which a cohort of trainee teachers engaged in remote dialogue with their college tutors, whilst on school experience, through the use of videophones and the studios of the Welsh Video Network. Interviews were conducted via e-mail and videoconference with end of project questionnaires completed by all participants.

## Brinkman-Jager Tuesday 12.00-12.30 E1-29

Video streaming as an input for electronic discussions and value statements about societal and personal responsibilities. (Fred Brinkman, and Thomas Jager, School of Communication, Media and Art, INHOLLAND University, Netherlands)

Value development, drama and e-learning come together in this communication approach in which a training course is developed and implemented for lecturers and professors in INHOLLAND university. A stepwise discussion and decision scheme on values, has been integrated into an e-learning environment.



## Theme G: Broadcast and Archival Video

### Kukk Tuesday 10.05-10.35 E1-32

Video at the University: to whom and why? Peeter Kukk and Toomas Petersell (University of Tartu, Estonia)

At the University of Tartu, video is used as a public relation tool. We broadcast different ceremonies held at the university into the internet. The events to be broadcasted are advertised in the main newspapers of Estonia a week in advance. The video broadcasting as a community service function of the university is essential for the most active computer users, children, to offer them some alternative to commercial TV channels.

## Richards Tuesday 10.50-11.20 E1-32

'BBCi Hull': the social revolution has been televised'. James Richards & George Auckland (BBC iF&L, UK)

The presentation will outline the background of social, economic and environmental issues endemic in the city of Kingston upon Hull, and will examine the approach to and impact of the BBC?s involvement in delivering interactive learning video applications to a local audience, via the Kingston digital subscriber line (DSL) interactive video-on-demand platform.

### Olesen Tuesday 11.25-11.55 E1-32

Denmark's Movie-and TV Commercial Archive. Henning Olesen (The State and University Library, Denmark)

The The State and University Library recently launched a large digitisation project. By spring 2006 all movie-commercials shown in Denmark from the beginning of the fifties until 1995 and all tv-commercials broadcasted since 1988 through the semi-commercial Danish tv-channel "TV2", will be available online for educational purposes

#### Aasman Tuesday 12.00-12.30 E1-32

Davideon as Best Practice: streaming video and the uses of archives in higher education. Susan Aasman (University of Groningen, The Netherlands)& Pim Slot (Netherlands Institute for Sound and Vision)

Audiovisual collections provide a wealth of information that can be excellent research and teaching material. The Davideon-project has been working on developing a didactical framework for integrating streaming technology in an educational context. In our panel session we would like to use the Davideon-project as a showcase for exploring the difficulties and the solutions that arise when streaming technology is introduced in higher educations.



# **Theme H: European Cooperation**

#### Bijnens Tuesday 10.50-11.20 Auditorium

eStream: Increasing the use of Streaming Media in the Classroom (Helena Bijnens ATiT- Audiovisual Technologies, Informatics and Telecommunications. Belgium)

The eStream project, funded by the European Commission within the SOCRATES MINERVA programme from October 2003 until October 2006., was established to promote the exchange of experiences and to share good practice on the use of streaming media in classroom practise in Europe, taking into account pedagogical, organisational, economical and technical aspects and actively involving the end users.

#### Lubberding Tuesday 11.25-12.30 Auditorium

Reaching the Teachers (Natascha Lubberding, Vrije Universiteit Amsterdam, the Netherlands. Clive Young, Glasgow Caledonian University, United Kingdom. Mireia Asensio, Lancaster University, United Kingdom) (1 HOUR WORKSHOP)

The EU-wide VideoAktiv initiative aims at building a community for educators and to collect good practices in a European context. This session will address issues such as: How to support individuals who share an enthusiasm for providing a media-rich form of learning experience to the students? What problems or barriers do they come across? How can we best reach those individuals? And how do we go beyond the enthusiasts to reach the wider community of educators?





## **Conference Sessions**

- Panel session, 30 minutes -

# **Davideon as best practice**

Streaming Video and the uses of archives in higher education

Susan Aasman, University of Groningen, The Netherlands Pim Slot, Netherlands Institute for Sound and Vision

#### Summary

Audiovisual collections provide a wealth of information that can be excellent research and teaching material for students working in the field of History, Journalism and Media Studies. However, both teachers and students were always confronted with technical and legal limitations that caused many problems as to accessibility of the archive footage and usefulness in class. Streaming seems to be a most promising technique to take away these thresholds. Given the availability of a proper network and the right machinery, the question is now twofold: how can useful material be selected, processed, digitised and given on line access to, and in which ways it can be integrated in the regular courses that practice film and media studies.

For almost two years the Davideon-project has been working on developing a didactical framework for integrating streaming technology in an educational context. The main objective of the Davideon-project is the (re)design of courses that teach competencies aimed at using audiovisual material. Because such a redesign implicates knowledge that goes beyond the specialization of the media teachers, Davideon aimed at a collaboration of educationalists, teachers and software engineers in setting up a framework for developing courses.

An important role is played by the Netherlands Institute for Sound and Vision. This institute provides from its archives (which includes television and radio programs from Dutch public broadcast radio and television) approximately 1100 hours of material to be used.

In our panel session we would like to use the Davideon-project as a showcase for exploring the difficulties and the solutions that arise when streaming technology is introduced in higher educations. With a diverse panel consisting of representatives from similar projects, archives and higher education we would like to put in our experiences that has made clear that streaming video has a tremendous impact compared to the more traditional use of media like the VHS-tape.

**Susan Aasman**: historian, project management Davideon, s.i.aasman@let.rug.nl Pim Slot: historian, account manager HE, Netherlands Institute for Sound & Vision, pslot@beeldengeluid.nl URL: http://www.davideon.nl 30 minutes paper



# Video-conferencing from the basement and the suitcase

Jon Baggaley, Ph.D., C.Psychol. Centre for Distance Education, Athabasca University, Canada

### **Summary**

After 25 years of teaching educational media on the traditional university campus, the presenter moved into distance education (DE). Although appreciating the opportunity to teach via the media on a daily basis, he rapidly regretted the lack of direct contact with students and the computer console's claustrophobic solitude. In the late '90s, he added online audio-conferencing elements to his courses, and more recently interactive video elements. Using a network of old 486 PCs, he developed a basement 'studio' at his home, with chromakey and graphic special effects which allow him to discuss visual presentations with his students around the world, using online conferencing freeware. In 2004, he has packed these methods into a notebook computer in order to be able to maintain his DE work from an 'outside broadcast' suitcase.

An opportunity to practise the 'mobile teaching' approach arose between December/2003 and May/2004, when the presenter visited 10 Asian nations (Bhutan, Indonesia, Laos, Nepal, India, Pakistan, Philippines, Thailand, Mongolia, and Vietnam) to conduct a review of current DE methods. The presentation will indicate the contrasting ways in which tele-conferencing is currently being used in Asia, and how the skills and specialities of different regions can be combined to create a 21st-century, transnational DE approach.

The session will also demonstrate how truly 'placeless' modern DE has become. During his Asian tour, the presenter maintained his daily commitments to AU, his students and colleagues, using a variety of dial-up, broadband, and wireless connections – via e-mail, instant messaging, video-conferencing, web-casting, and internet 'phone. He supervised course projects and theses from hotels, airports and internet cafés, and took part in the usual routine of university staff and committee meetings, all at little or no cost. His experience indicates that 'm-learning' techniques will evolve as distance educators acquire 'm-teaching' skills.

#### **Outcomes**

Via video and slide presentations, the audience will receive an up-to-date account of 'm-learning' and 'm-teaching' approaches, and of conferencing methods currently used in Asian distance education.

#### **Timings**

Intro (5 mins); presentation w/videos (15 mins); discussion (10 mins).

#### **Presenter**

Dr. Jon Baggaley is Professor of Educational Technology at Canada's Open University, Athabasca, Alberta. He has taught at universities in the UK and Canada, and is former Chair of Education at Concordia University, Montreal. Baggaley has written/edited 10 books and over 200 articles on educational communications. His 2003-04 Asian tour was sponsored by the International Development Research Centre (IDRC).

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# **Pedagogic Evaluation of a Telepresence Environment**

- Paper, 30 min -

P. Balaouras, C. Mouzakis, I. Koubouri, I. Roussakis, D. Mathaiou University of Athens, Greece

#### Summary

A state-of-the art telepresence environment, with the purpose of supporting the teaching process, has been designed and implemented among three major universities in the Athens metropolitan area. Each university has deployed a telepresence classroom equipped with H.323/H.320 videoconferencing systems and audio-visual equipment, such as dual large screens, Pan-Tilt-Zoom camcoders. All three classrooms were capable of participating in a multi-party videoconferencing session via an H.323 Multipoint Control Unit, and exchanging slides in real time via T.120 applications over a high-speed network, enabling a synchronous and interactive telepresence session.

The aforementioned environment has been assessed from both the technological and the pedagogic point of view. For the pedagogic assessment, results obtained from a series of trials involving 120 students are presented. The major conclusion is that student satisfaction is related not only to the quality of the technical factors, e.g., video and audio transmission, but also to the pedagogic and direction factors. Some of the pedagogic factors, with positive influence to student satisfaction are: (a) clearly defined instructional goals; (b) well-designed and systematically carried-out instruction process (preparation, planning, visual support material, lecture structure); (c) high interaction between the instructor and the remote students. Direction factors, that positively influence the outcome are: (a) mastered direction that follows instructor's movement, and focuses on his/her gestures and expressions; (b) the use of two large screens, one for the remote participants (instructor or students) and the other for the presentation material; (c) periodic (interchangeable) display of the remote participants' video views in the case of multi-party sessions.

The presented results provide valuable input both to the technical design of telepresence environment and the pedagogic design of lectures suitable for such a environment. The results indicate the need for deploying pedagogic methods, practices, and techniques in telepresence environments, in order to maximize educational benefits and overcome the limitations of technology. The evaluation process, based both on quantitative and qualitative methods, is also presented.

#### **Outcomes**

The participants will appreciate the significance of certain pedagogic and direction factors on student satisfaction in a telepresence environment, and how such factors should be taken into account in the design of the environment and the lecture. The presentation includes: introduction (5 mins), presentation of the results (15-20 mins), and discussion (5-10 mins).

Pantelis Balaouras (P.Balaouras@noc.uoa.gr) is a staff member of the Network Operations Center of the Univ. of Athens, responsible for the design and provision of multimedia based services. He has been involved in a number of european and national networking projects. Also, he is technical co-ordinator of the Greek Universities Network (GUnet) initiative for synchronous teleteaching, and a member of the technical committee of the Greek Research and Technology Network (GRnet), responsible for Video on Demand and Streaming services.



# Production & provision of video-based content for e-learning

- Paper: 30 min -

P. Balaouras, L.Merakos Greek Universities Media Center, University of Athens, Greece

#### **Summary**

The explosion of the digital world and the available products have reduced the cost of video recording equipment, and have offered a variety of ways for producing, processing and providing video-based content for learning. The question that arises is "what is the proper production line so that the video recorded courses could be effectively post-processed and flexibly provided to the students in a variety of means, i.e., DVDs, CDs, or over Internet via Video on Demand (VoD) servers and e-learning platforms?".

The overall "production line" used in the Greek Universities Media Center, a facility established by the Greek Universities Network for promoting e-learning in the Greek educational community, is presented here. Specifically, the following processes are discussed:

#### Video recording

Video capturing and encoding in real time: producing video files for archiving in MPEG-1 @3Mbps format.

#### Video editing

Transcoding the archived video files from MPEG-1 format to other video formats: MPEG-2 for producing DVDs; MPEG-1 for CDs; mpeg-4, realvideo9, QT movie for providing content through VoD servers.

Synchronizing video and slides by producing SMIL files suitable for the Darwin Streaming and Helix VoD servers.

Making the courses available over the Internet using eClass, an open source asynchronous e-learning platform.

The equipment and software used in the above processes, the required human resources and the overall production cost are analyzed. The presented results should be valuable to the management and technical staff involved in the design of such services.

#### **Outcomes**

The participants will be become familiar with issues regarding the production and provision video-based content for e-learning. The presentation includes: introduction (1-2 mins), presentation with video examples (20 mins), and discussion (8-10 mins).

**Pantelis Balaouras** (P.Balaouras@noc.uoa.gr) is a staff member of the Network Operations Center of the Univ. of Athens, responsible for the design and provision of multimedia based services. He has been involved in a number of european and national networking projects. Also, he is technical co-ordinator of the Greek Universities Network (GUnet) initiative for synchronous teleteaching, and a member of the technical committee of the Greek Research and Technology Network (GRnet), responsible for Video on Demand and Streaming services.



# eStream: Increasing the use of Streaming Media in the Classroom

- Presentation, 30 minutes -

Helena Bijnens, ATiT Audiovisual Technologies, Informatics and Telecommunications Belgium

#### Summary

Video and sound can support basic education in Europe in a significant way as they appeal to learning modalities other than the purely textual linguistic ones usually offered in traditional learning environments. Their use can, in turn, lead to increased visual literacy. Although video and sound have been used for educational purposes since television was invented, they have never had the impact that was expected. This is probably due to the many challenges that exist to making effective use of them, including the expensive and complex delivery process, lack of integration with other media and a lack of awareness on the side of the educator as to the didactical opportunities offered by video and sound.

Fortunately, streaming technologies now allow these media to be delivered online via IP, making seamless integration with other media possible and resulting in a rich learning environment capable of supporting texts, slides, self assessment exercises etc.

The eStream project, funded by the European Commission within the SOCRATES – MINERVA programme from October 2003 until October 2006., was established to promote the exchange of experiences and to share good practice on the use of streaming media in classroom practise in Europe, taking into account pedagogical, organisational, economical and technical aspects and actively involving the end users. One of the first significant activities of this project has been an extensive review into the present use of and the opportunities offered by streaming technologies in meeting educational needs in Europe, resulting in a book called "Streaming Media in Classroom"1. This book contains case studies from higher and compulsory education and practical, hands-on information for everyone interested in planning a streaming activity and is freely available to all educational practitioners. It is aimed at teachers and ICT support staff within schools and school networks, decision-makers at various levels, content developers and distributors.

#### **Outcomes**

The purpose of the presentation is to familiarise attendees with the aims and activities of the eStream project and to provide them with an overview of the most common use of streaming media in education and what their educational benefit might be. Furthermore, exchange of experiences and information will be encouraged in order to establish a European wide community of educational practitioners in this field. The presenter

Helena Bijnens was trained as a linguist in roman languages (French and Italian) and specialised in Media and Information Sciences at the K.U. Leuven. In 1999 she began work in ATiT as a researcher and project manager. Her research topics include the general use of ICT in the educational sector and more specifically the set-up of interactive classrooms over the Internet in remote and isolated areas of the European Union. Her project management skills include administration, marketing and coordination of Minerva/Socrates projects.

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# **E-communication for Value Development in Tertiary Education**

Video streaming as an input for electronic discussions and value statements about societal and personal responsibilities.

Fred Brinkman, Centre on Communication for Sustainability School of Communication, Media and Art, INHOLLAND University

Thomas Jager, Centre on Second Language Education. School of Communication, Media and Art, INHOLLAND University

#### **Abstract**

Value development, drama and e-learning come together in this communication approach in which an inservice training course is developed and implemented for lecturers and professors in INHOLLAND university.

A stepwise discussion and decision scheme on values, comparable to the DOLM (Dilemma Oriented Learning Model, Boschhuizen & Brinkman, 2002) has been integrated into an e-learning environment (Blackboard).

Participants in the course are invited to take position into a moral dilemma after studying drama scenes about plant cloning and xenotransplantation into humans. The scenes are available via videostreaming in the e-environment. Discussions between the participants are held before taking position via the discussion board in Blackboard. In the RDC meeting we will show some outcomes of the course .

The course will be demonstrated in the e-learning environment by active participation in the meeting.

#### Introduction

In teacher training nowadays it becomes more and more important to introduce value learning in the curriculum. Modern techniques can be very useful in developing courses for that purpose. Hogeschool INHOLLAND in Diemen and VU Amsterdam developed a model for value learning and implanted it in Blackboard portal 5.8. In the last college year we practiced the method in different contexts. On the conference we will show a good practice of value learning and E-learning, .

#### **Introducing Blackboards new features**

One of the main advantages of E-learning is that interaction with students can take place at times appropriate to the user and at places outside the traditional classroom. without any physical contact is Blackboard is a very easy to handle e-learning tool in which it is possible to link content like HTML-links are allowed by using streaming techniques, like streaming video and audio, combined with a virtual cutting machine. Logging in in Blackboard is an administrator's job. Once the group has been made local admins and assistants can be assigned to content management. An online manual helps inexperienced users to find there way. For most students working with Blackboard is no problem at all.

By implementing the Windows Media Player in the course and loading the codec for using streaming media, users can watch digitalised media like digitalised video materials or self-made videotapes. Along with this Blackboard features comes the Video Poort (Video Portal). With the help of the Video Poort students can digitise their own audio and video products. These are loaded on a streaming server and the student receives an URL which can be admitted as a link in a Blackboard Course The material can be used as a course announcement advantages of E-learning



In training bilingual teachers Blackboard has proved its value. At EFA (Educational University Amsterdam) in Amsterdam we train bilingual teacher assistants in becoming a teacher. They combine teacher training with actual working as a teacher assistant. During one and a half day they visit the university. They work two and a half days a week. The education is based upon two main streams. One is to upgrade the language skills in Dutch to the level necessary for teaching in Dutch and getting acquainted to the Dutch educational situation. The other stream is upgrading their skills to the subject they are going to teach.

Student work together in accomplishing tasks in LABS (Laboratory and learn activity and profession) Every LAB is an assignment to get acquainted with sources and follow writing training. Students work in a group and report to each other using e-mail within the e-learn environment. Every LAB is an assignment to report on a case. The cases are true situations that happen every day in a classroom. The first report is send to the group members, they comments upon the product and give feedback. Than it is returned to the sender and the student sends his definitive product to the instructor after it has been controlled upon spelling and grammar.

Every group of participants and every participant can work in their own time. For instance on the school they are working or at home. Every participant can work in temp they choose themselves. There is no aim like working out with four labs. The result is important not the number of Labs. This way student work together and still can work at the time they prefer and in the place they want. It is always possible to contact the instructor for questions on the cases.

#### References

Boschhuizen, Rob & Brinkman, Fred G. (2002) 'Feelings and Facts in Balance. Two good? practices for developing students' responsibility and moral values'. Paper presented at the 27th ATEE conference 25 - 28 August 2002, Warsaw, Poland.

Brinkman, Fred & Jager, Thomas (2002) Report of the meetings of Research and Development Centre 8 on Language Education in Bilingual and Multicultural Classrooms. Report 27th ATEE conference 25 – 28 August 2002, Warsaw, Poland



# Experiences in the transition from ISDN to IP based videoconferencing at the University of Plymouth

- Paper, 30 minutes -Sheila Buckingham and Adrian Vranch Information and Learning Services, University of Plymouth, UK Summary

The University of Plymouth is dispersed across the south west region of England and has been using videoconferencing for several years to support teaching, research and administrative functions between its distributed campuses, to businesses, to its regional or national partner institutions and beyond to other countries. With its strong focus and experience in satellite broadcasts and regional network development, the university has developed an integrated approach to videoconferencing, first with public network ISDN, then with ISDN running over ATM educational networks and now, using IP technology over SuperJanet. This IP videoconferencing service is now supporting 500 sessions per annum.

During the last 4 years, user logs and feedback have been recorded for videoconferencing sessions at the university, including the period of transition from ISDN to IP systems. Activities covered in the monitoring period comprise meetings, interviews and teaching sessions for groups and individuals, including both multipoint and point-to-point sessions. Analysis of feedback forms has identified the anticipated significant savings in staff travel costs and time. However, in the transfer from ISDN to IP connections, unexpected issues of technical development and practicalities of support have emerged. For example, problems arose with connectivity to some institutions due to restricted access across firewalls and lack of sufficient bandwidth.

This paper describes experiences in addressing the issues surrounding the transition from ISDN to IP based videoconferencing systems and, from the feedback data, examines some of the factors that contributed to the provision of effective services to meet the diverse needs of professionals in a modern university with worldwide links. An indication of likely future developments is also included, with accompanying issues that may arise. Further integration is expected with satellite broadcasts and the new regional telematics lecture room network infrastructure for medical/health education, supported by an enhanced e-mail booking and logging system.

#### **Outcomes**

Participants attending the session will be expected to gain from: An overview of how videoconferencing facilities have been developed to meet the changing needs of a large, multi-site university (i.e. Plymouth);

An understanding of how videoconferencing systems integrate with network infrastructure development and with other video services (e.g. satellite broadcasts), illustrated by examples;

An insight into the practical issues that had to be overcome for effective implementation of services to meet a variety of user needs;

An indication of the specific problems that have arisen in the transition from ISDN to IP based systems, illustrated by outcomes from analysis of user logs and feedback; An opportunity to consider ideas for potential development of services.

#### **Sheila Buckingham** (sheila.buckingham@plymouth.ac.uk)

Shella is Video Conferencing Manager with responsibility for developing and running the service at University of Plymouth. Her current objective is to make IP video conferencing more widely available and acceptable to the dispersed university community and to extend the use of international links. She works with local and regional network and support agencies to resolve the technical and practical issues that arise.

#### **Dr Adrian Vranch** (adrian.vranch@plymouth.ac.uk)

As Academic Developments Manager, Adrian has a responsibility for the development of telematics technologies within the University of Plymouth. He has a particular interest in the integrated use of technologies, especially including satellite, videoconferencing and the Internet. He has completed research contracts in several telematics-related projects, including some funded by the European Union and the European Space Agency.



# **Using Virtual Reality models to teach Theatre Studies**

- Presentation, 30 minutes -

Mark Childs, University of Warwick, UK

The ARCHES (Antiquity-Related Collections Harnessed in Educational Scenarios) project at the University of Warwick is funded by JISC within its Exchange for Learning Project.

#### Its aims are to:

develop a means by which digital resources can be re-purposed for different learning and teaching activities,

develop learning and teaching activities that draw upon various digital resources, evaluate these developments,

produce guidelines to good practice in re-purposing and using resources in learning and teaching.

Amongst the digital resources upon which the project draws are virtual reality models of ancient Roman and Greek theatres. These were created within the THEATRON project under the Esprit programme by a consortium that included the University of Warwick, and the Universiteit van Amsterdam.

The ARCHES project provided an opportunity to use these resources with groups of students and evaluate their effectiveness within resource and problem-based learning activities. The presentation will provide participants with:

Example case studies of uses of virtual reality models within learning activities An awareness of some of the advantages and disadvantages of using virtual reality models within learning and teaching

Guidelines for reducing the difficulties faced by students in using digital resources within the classroom

Guidelines for evaluating the use of resource-based learning within the classroom.

10 mins: Description of the ARCHES project and a demonstration of the digital resources

10 mins: Presentation of the findings of the project

10 mins: Discussion of the use of virtual reality models in learning and teaching.

**Mark Childs** is an educational developer at the University of Warwick. Since 1996 he has worked on a series of e-learning projects at Warwick and previously at the University of Wolverhampton. He has presented at the first three DIVERSE conferences on the DIVERSE and the ANNIE projects.



# **Access for All: Making Streaming Media Accessible**

- Workshop, 60 minutes -

Ross Little, Glasgow Caledonian University, Scotland Mary Cuttle, Glasgow Caledonian University, Scotland

# **Summary of Workshop**

After participant introductions and a brief introduction to the Click and Go: Access for All project, there will be a presentation giving an overview of accessibility & streaming media in the e-learning context and exploring the available technical solutions. The presentation will be illustrated with examples of both accessible and non accessible media.

Participants will then apply this knowledge by working in small groups to develop an accessibility strategy for an example scenario. For the task they will be provided with supporting materials: details of the case-study itself, an accessibility planning grid and guidelines developed as part of the Access for All project.

Participants will come together to feed-back their accessibility strategies and to discuss the issues raised from the group work.

#### **Outcomes**

The participants will be introduced to the issues of accessibility and streaming media in the e-learning context, see examples of accessible video and audio materials, and develop an accessibility strategy for an example scenario.

#### **Outline of Session**

Introductions: 5 mins

Presentation: Overview 20 mins

Group Work: Developing an accessibility strategy 20 mins

Feedback and Discussion: 15 mins

**Ross Little** joined Glasgow Caledonian University in July 2003 as Project Officer for the JISC Project - Click and Go Access for All, a follow-up project to Click and Go Video Project. He is now working on another JISC project: VideoActive (Click and Go Further). Email: r.little@gcal.ac.uk

**Mary Cuttle** has been at Glasgow Caledonian University for 5 years and runs the University's e-Learning Innovation Support Unit. Email: m.cuttle@gcal.ac.uk
Paper, 30 minutes



## Video cases in teacher education

- presentation 30 min-

Jan Folkert Deinum, University of Groningen, The Netherlands

#### **Summary**

In teacher education it is quite common to use video of classroom situations, because normally it is not possible to walk into the classroom with student teachers to observe what is going on. However, working with analog video is not very flexible. Therefore the Noordelijke Hogeschool Leeuwarden en the University of Groningen started in 2001, with a grant of SURF, to develop digital video cases for teacher training.

In a case, an in-service student teacher tells his or her case, mostly a problem that happens in the classroom. The classroom situation is also filmed, just like interviews with pupils about the situation. Sometimes a case also contains a video fragment of an experienced teacher in the same situation or an interview with an expert about the situation. We made about forty of this kind of cases and put them in Blackboard.

In teacher education these cases are used in different ways. A teacher trainer can decide to show a case to his students and discuss the case. Another possibility is when one student teacher has a specific problem; the teacher trainer then asks the student to study a case and do some assignments. The cases are also used to train senior teachers in supervising student teachers.

#### **Outcomes**

Participant may learn how video cases can be used in different kind of situations and what pedagogy can be used with video cases.

**Jan Folkert Deinum** is a teacher trainer and ICT consultant for staff members of the University of Groningen.

E-mail: j.f.deinum@eccoo.rug.nl



# Streaming Media Service at the University of Amsterdam

- Presentation, 30 minutes -

Jaap Tuyp, Audiovisual Centre, University of Amsterdam, The Netherlands Mariken Ederveen Information Technology Centre, University of Amsterdam, The Netherlands

In March 2004 the University of Amsterdam has decided upon 2 new services to be delivered by the Information Technology Centre. These will be taken into effect in May 2004.

The goal is to support the initiatives on streaming media at the University of Amsterdam. Support will be aimed at technology, production and educational development.

#### The services include:

A mobile recording set (to record for example a lecture)[O1] A website with information on streaming media [O2] including a site where employees can upload audio and video files on the streaming server of the University of Amsterdam. This is an automatic process in which raw digital material is encoded and converted to streaming material

# **During the session:**

the uploading process (through the form on the streaming media website) will be discussed[O3] (10 min)

The contents of the streaming media website will be discussed[O4] (5 min) A few examples of the use of streaming video in education at the University of Amsterdam will be presented (5 min).

An introduction[O5] to the mobile recording set will be given (5 min)

During the development of the Streaming Media Service, **Jaap Tuyp** (J.A.J.Tuyp@uva.nl ) participated in the technical development team and **Mariken Ederveen** (m.j.ederveen@uva.nl) participated in the team on educational development.



# **New Dynamics in Streaming Media**

- Presentation, 30 minutes -

William Garrison, University of Portsmouth, UK Nipan Maniar, University of Portsmouth, UK

#### **Summary**

This session examines the potential to create dynamic video where each viewer has a uniquely tailored experience. This can be achieved through a combination of streaming media, relational databases, and Digital Rights Management (DRM).

The session begins with a demonstration of the Lifesign Project (www.lifesign.ac.uk) where users can dynamically restructure video resources to support online learning. The author will then explore database design and examine implications for supporting learning with video in dynamic delivery systems. Dynamic media has the potential to enhance all forms of learning with personal profiles and ongoing assessment used to modify and enhance learning in real time.

#### **Outcomes**

Participants at this session will:
Examine obstacles to the integration of streaming media in online learning.
Structure content using interactivity
Structure video using rules engines
Examine challenges for teachers and producers when designing for dynamic media.

**William Garrison** is an award winning Producer of interactive media at the University of Portsmouth where he continues to develop innovative applications for streaming media. He managed the technical implementation of the JISC-Funded Lifesign Project. Email: william.garrison@port.ac.uk

**Nipan Maniar** is the software developer for the Lifesign Project and other database driven web applications. He also lectures in creative technologies at the University of Portsmouth. Email: nipan.maniar@port.ac.uk



# Interactive television for the Italian Ministry of Infrastructures and Transportation

- Paper, 30 minutes -

Walter Gatti, University of Florence

#### Summary

It is illustrated a course involving the 12,000 workers of the "Italian Ministry of Infrastructures and Transportation" ("Ministero delle Infrastrutture e dei Trasporti") using the didactic system of K Communication (member of EDEN NETWORK), based on a platform which combines the use of a satellite television technology with the live interaction via the Internet.

The starting point is the description of the characteristics of the K Communication system, going on with the analysis of the course entitled "Safety and the 626/94 law – general information", taking into consideration:

Analysis of the specific needs;

Identification of the contents to be transfered;

Identification of the teachers of excellence to be involved in the educational plan; Identification of the employees to be trained;

Identification of the territorial impact of the Project;

Presentation of both K Communication technical editorial Committee and the technical Committee of the Ministry;

General considerations, starting from the experience K Communication achieved in the organisation of high quality training courses. Discussion about the quality of the editorial production with reference to both e-learning and the multi-media character.

#### **Outcomes**

What kind of knowledge have the participants acquired and what kind of experience have they achieved?

By attending the course organized by both K Communication and the Italian Ministry of Infrastructures and Transportation, the participants fulfilled the obligations of the Italian law, which requires the knowledge of safety workplace themes; and, in so doing, the Ministry itself fulfilled the Italian law prescriptions.

Synthesis of the duration and the activities carried out

#### **Walter Gatti**

He was born in Lodi (Italy) on 27.02.1959; journalist, editing director of K Communication, professor for Teoria delle Comunicazioni at the University of Florence. He worked for some of the main Italian newspapers (i.e. Corriere della Sera, Giornale, Panorama, Class), as well as for media web and broadcasting companies (RadioRai).

e-mail: walter.gatti@k-communication.net



# **Video Analysis of Physics Teachers' Classroom Explanations**

- Paper, 30 minutes -

David R. Geelan - University of Alberta, Canada

## **Summary**

The ways in which science teachers explain scientific ideas to their students are a crucial part of the pedagogical content knowledge of science teaching. Such explanations occur in complex contexts, and have been difficult to address from a practical research perspective (although there is a significant theoretical literature around science explanations and science teaching explanations) because of the difficulty of 'capturing' explanations as they are actually given to students. Two weeks of Physics 20 classes (with students aged 15-17) were videorecorded in the classrooms of teachers in 6 Canadian high schools (nteachers=13). The recorded lessons, along with videotaped interviews with students, and focus group discussions with students, were transcribed and analysed using vPrism® software, and coded for particular features of explanation. This session will focus on the ways in which the video technology has allowed research in this area to proceed, and will include demonstrations of classroom video, vPrism and coding, as well as time for discussion.

#### **Outcomes**

Session participants will be introduced to some approaches for using video analysis to attend closely to important aspects of classroom teaching practice.

**David Geelan** is an Australian science teacher and teacher educator, now living in Canada, who has been involved in distance education since the mid-1990s. His current major research project involves the video analysis of Canadian physics teachers' classroom explanations.

E-mail: david.geelan@ualberta.ca



# Professional Development of Teachers for Videoconference Pedagogy in the Rural Advanced Community of Learners Project

- Paper, 30 minutes -

David R. Geelan - University of Alberta, Canada Karen M. Fiege - University of Alberta, Canada

#### **Summary**

The Rural Advanced Community of Learners (RACOL) project uses Virtual Presence Learning Environments (VPLEs) to bring secondary education to students in remote schools in northern Alberta, Canada. The VPLEs include multicast broadband MPEG2 video-conferencing as well as a suite of complementary technologies to support high quality constructivist-based teaching and learning at a distance. Experienced, professional classroom teachers are being supported with professional development (PD) activities in adapting their pedagogical knowledge and skills to this new teaching environment. This presentation, by the project's professional development team, describes the approaches taken, and raises questions and issues related to what forms of professional development and support are appropriate for aiding teachers in this and similar contexts of videoconference learning.

#### **Outcomes**

Session participants will be introduced to some approaches for supporting practicing classroom teachers in the introduction of videoconferencing and 'virtual presence' teaching and learning environments into their practice. They will have opportunities to share their own experiences and discuss issues that arise in such professional development and support.

**David Geelan** is an Australian science teacher and teacher educator, now living in Canada, who has been involved in distance education since the mid-1990s. He is coordinating the PD facet of the RACOL multi-point video-conferenced distance education project.

E-mail: david.geelan@ualberta.ca

**Karen Fiege** is a graduate student in the University of Alberta's Instructional Technology program. Karen is assisting Dr. David Geelan in the professional development aspect of the RACOL project, and conducting research on the PD program as part of her graduate studies.

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# Delivering teacher training by streamed media and video conferencing technologies

- Paper, 30 minutes -

Oliver Griffin, University of Cambridge International Examinations, UK

University of Cambridge International Examinations (CIE) provides examinations in over 170 countries worldwide, from Singapore to Sub-Saharan Africa. Candidate performance in examinations can be improved by increasing the skill and knowledge of subject teachers in those schools taking its examinations, and CIE is committed to supporting teachers through publications, online resources and training.

Training is traditionally delivered face-to-face by consultants in-country but CIE has identified opportunities to broaden its training provision by using new technologies, and has begun to use parallel methods of delivering training across its global market.

In the summer of 2003, CIE piloted two new training delivery methods – video conferencing and streamed video over the internet. Both were live events and both proved successful in achieving effective and value-for-money training.

Video conferencing came closest to replicating face-to-face training but was more time consuming and expensive than the video streaming pilot. A limited number of delegates were addressed at once but a personalised programme was delivered. The event was supplemented by the use of online discussion groups for follow-up debate.

The streamed video pilot showed the potential for 'broadcast' type training, especially where individual participation is not required. The hour-long event consisted of a biology teacher working through a practical (the effect of pH on enzymes) with a group of students. Live interaction with the audience consisted of the teacher talking through emailed questions to-camera.

CIE is following up on the success of these events with similar projects using both technologies with some refinement to make them more cost. The streamed media event is now available on CIE's Teacher Support website and has provided on-demand training to more than 400 schools since the event.

CIE's experiences could provide a model for other international organisations looking to benefit from these technologies. The feedback provided by participating Centres provided information on their technological capability to receive rich media via the internet and the accessibility of video conferencing facilities.

**Oliver Griffin** is New Media Manager for University of Cambridge International Examinations, currently working in a New Projects Group to investigate and accelerate the use of technology. Before joining CIE he was Managing Director of Griffin Brown Digital Publishing Ltd, a consultancy specialising in the application of XML to online academic publishing. He is co-author of Professional XML Schemas (Wrox Press, 2001).



# Videoconferencing practices and methods for delivering lecture materials during videoconferencing

- Paper, 30 minutes -

Ismo Hakala, University of Jyväskylä, Chydenius Institute, Kokkola, Finland Pentti Impiö, University of Jyväskylä, Chydenius Institute, Kokkola, Finland

#### **Summary**

The Chydenius Institute is an independent University-level teaching and research unit that is affiliated to the University of Jyväskylä and that operates under the auspices of the Universities of Oulu and Vaasa. Most of the students in the Chydenius Institute are adult students who combine work and studies. This presentation deals with the authors' experiences in developing and using distance learning technologies in an electrical engineering and a computer science education programs provided by the Universities of Oulu and Jyväskylä during the last five years. By using these technologies and tailoring course schedules, the studying is made possible to students who do not have an opportunity to participate in the education otherwise.

Particularly distance learning technologies are used in the electrical engineering program where most of the lectures are physically held at the University of Oulu but the students are geographically based in five cities of northern Finland. Videoconferencing with a separate applications sharing program is the primary technology used to deliver the distance lectures. Since a videoconferencing situation with many technical tools is inconvenient for lecturers, it is important to develop videoconferencing practices that improve usability.

#### **Outcomes**

During the presentation developing and using videoconferencing technologies in two education programs will be discussed. In our case the developing has been concentrated on videoconferencing practices and different solutions for delivering lecture materials during videoconferencing. The presentation will focus on these matters.

5 mins Introduction

15 mins Presentation with examples

10 mins Discussion

**Ismo Hakala** ( ismo.hakala@chydenius.fi ) is a professor at the University of Jyväskylä, in the Chydenius Institute.

**Pentti Impiö** ( pentti.impio@chydenius.fi ) is a senior project coordinator at the University of Jyväskylä, in the Chydenius Institute



## Using web-based video simulations to deliver inter-professional education to health care students

- Workshop, 60 minutes -

Brent Cunningham: Kings College London, UK

Ian Harding: Kings College London, UK

#### Summary

The UK National Health Service has an agenda to increase inter-professional working as part of the Department of Health's modernisation plans. To meet this agenda universities that run programmes for health care students have been required to create inter-professional courses that equip students with the knowledge, skills and attitudes to work inter-professionally. This seminar will demonstrate an initiative that has taken place at KCL as part of the inter-professional course.

In 2001, money was secured for a project leading to the creation of a Simulated Webbased Inter-professional Education site (SWIPE). The site is designed to support the classroom work around patient communication and assessment. It allows students to engage with a virtual family. Students select a family member and interact with the character using statements from menu options. This leads to responses in embedded video format. Patient actors play the roles of family members and were filmed using digital video. This video was edited using iMovie and rendered in to short video clips playable in Quicktime. The system provides video feedback from the patient's perspective, again utilising video. This seminar will include a demonstration of the site; an explanation of the role video plays in the simulated learning environment; an account of how using video has helped us meet the objectives of the inter-professional course and the lessons learned in making video for web delivery.

#### **Outcomes**

How video can be used to model core skills; How video can be used to reinforce taught theory; Techniques for embedding video within a web-based learning tool; Tips to creating video for web-delivery

#### **Timing**

5 mins - introduction;

15 mins - demonstration of SWIPE site;

20 mins - small group discussion;

20 mins – plenary with group feedback.

Ian Harding is a lecturer in nursing with an interest in e-learning (ian.harding@kcl.ac.uk).

**Brent Cunningham** is a learning technology officer at KCL (brent.Cunningham@kcl.ac.uk).



## Building learning and teaching applications using the Macromedia FlashCom Server

- Paper, 30 minutes -

Sam Kennedy, The London Institute, UK

#### **Summary**

The London Institute's IT Research and Development Unit supports and initiates technology-based research and development projects which focus on learning, teaching and creative practice within Art and Design.

Having developed interactive multimedia using Macromedia Flash for some time, we became inspired in 2002 when we came across the Flash Communication Server: with the server, learning technologists and teachers with intermediate multimedia skills could now experiment with a broader range of learning and teaching tools, such as synchronous videoconferencing and browser-based audio and video recording. This presentation considers two projects where the ITRDU was able to apply this technology to problems facing colleagues and students at our Institution.

The first task was to support the research of colleagues from Chelsea College of Art and Design, who wanted to connect groups of young people - between 15 and 22 years of age - in Liverpool, UK, with their counterparts in Gdansk, Poland. Our role in this public art project was to identify and configure a flexible videoconferencing interface, provide support and monitor use over a 5 day pilot event.

The second task was to ease the burden on staff teaching at the London Institute's Language Centre, who travel regularly between the Institute's college sites to provide English Language support to its international students. This project involved configuring a central, web-based audio presentation board, to which students can contribute from a number of IT access areas in each college.

#### **Outcomes**

Via a live demonstration of both systems, participants should gain an insight into some of the rewards and constraints of Flash-based videoconferencing and sampling for learning, teaching and collaboration.

**Sam Kennedy** has been designing and co-ordinating projects at the London Institute's ITRDU since 1999. He has a particular interest in learning technologies and digital tools for art and design practice. s.kennedy@linst.ac.uk



#### Video at the university – to whom and why?

- Paper, 30 minutes -

Peeter Kukk and Toomas Petersell Mutlimedia Centre, University of Tartu, Estonia

#### **Summary**

The using of a video increases the attractiveness of everyday lectures and the storing of lectures gives them a new additional value: on the one side stored video lectures are always available as an additional study aids for full- and part-time (open university) students and on the other side they serve as a feedback for lecturers about their lecturing skills, their behaviour in front of students, speech peculiarities, using of visual aids, etc. The employment of a video in the teaching and learning process is useful for both students and lecturers and this is the main driving force leading to a more extensive use of a video at schools on different levels.

At the University of Tartu we use video also as a public relation project. We broadcast different ceremonies held at the university into the internet (live videostreams 256 kbps). The events to be broadcasted are advertised in the main newspapers of Estonia a week in advance.

The video broadcasting as a community service function of the university is essential for the most active computer users, children, to offer them some alternative to commercial TV channels.

Videofiles in media server of the university are structured in three main directions: password-protected study materials for students (separate files or embedded in WebCT), study materials for all people interested and materials for promoting education and science (http://video.ut.ee).

#### **Outcomes**

We would like to share experience about producing video based study materials and how streaming video can be used for promoting education and science

Introduction 2 mins
Presentation with video examples 18 mins
Discussion 10 mins

Peeter Kukk. Ph.D., (Peeter.Kukk@ut.ee) is the head of Multimedia Centre, University of Tartu, Estonia

**Toomas Petersell** (Toomas.Petersell@ut.ee ), is project manager of visual media in the same Centre. They are responsible for involving and promoting ICT based learning environments in the university.



### **Reaching the Teachers**

- Workshop, 60 minutes -

Natascha Lubberding, Vrije Universiteit Amsterdam, the Netherlands Clive Young, Glasgow Caledonian University, United Kingdom Mireia Asensio, Lancaster University, United Kingdom

#### Summary

The technological aspects of streaming media have been well examined in recent years and projects in the Netherlands and the UK have now begun to explore pedagogical issues. The Dutch Videoportal provides information on content, techniques and pedagogic pedagogy for experts and novices alike through it's website, and organises workshops for all kinds of users of streaming media. In the UK, Click and Go Video Further has developed a series of workshops programme for teaching and support staff in Higher Education and Further Education. Recently, the Dutch SURF foundation and the UK-based JISC have jointly initiated a kick-off of a UK-NL community of experts on digital video, to exchange expertise and to collect case studies, eventually resulting in a better support for the practitioners in both the UK and the Netherlands. In parallel, Dutch and British experts are involved in a transnational initiative, VideoAktiv, aiming to build a community for educators and collect good practices in a European context.

All these initiatives aim at promoting the potential and opportunities offered by using video and audio technologies. This however raises a few questions: How can we support those individuals who share an enthusiasm for providing a media-rich form of learning experience to the students? What problems or barriers do they come across? And how can we best reach those individuals? And how do we go beyond the enthusiasts to reach the wider community of educators?

#### **Outcomes**

In this workshop we will address these issues within group discussions and together we will come up with a top five things experts can do for reaching the teachers. We are looking for ideas for new projects, and we are looking for partners to run these projects with.

5 mins: Introductions

15 mins: Presentation and examples

20 mins: Small group discussions of the issues and problems

15 mins: Plenary session with feedback from groups

5 mins: Conclusions

**Natascha Lubberding** is an instructional designer at the Vrije Universiteit and works on several streaming video projects. For WEBstroom, she is also editor of the Dutch Videoportal. N.Lubberding@ond.vu.nl

**Clive Young** was manager of Click and Go Video, now directs Click and Go Video Further and was the originator of VideoAktiv. Clive.Young@gcal.ac.uk

**Mireia Asensio** is an educational researcher; she has worked on the learning and pedagogic design aspects of Click and Go Video and Click and Go Video Further. m.asensio@lancaster.ac.uk

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## Analysing the pedagogical value of video treatment and text in a digital media application in HE

Effective use of video and text in a digital media application for postgraduate learning

- Paper/Presentation, 30 minutes -

Richard McCarter, Sheffield Hallam University, UK

#### **Summary**

The term video treatment applies to television programmes in order to explain its contents and structure. The term video format is applied to the style of video used. The focus of this presentation is on the use of video treatment and video format in a digital media application to support postgraduate learning. An evaluative case study of a postgraduate induction programme offers an insight into the pedagogical value of video and the synergy between video treatment and text.

The application was evaluated formatively using two different cohorts of learners in order to investigate the value of digital video in the application. The design and planning of the application placed a great deal of emphasis on using video treatment and video format to create the notion of a journey of learning. The design also involved limited amounts of interactivity and the integration of video and text which partly reflects the work done by JISC/DNER Click and Go Video Decision Tool, (Thornhill, Asensio and Young 2002) and The Three 'I' framework.

This paper discusses some related media theory on the use of video and also the impact video had on learners with reference to their learning experiences. It also describes the evaluation methods used in order to collect quantitative and qualitative data on learners' perceptions about the pedagogical value of video. The data also highlights the relationship between different formats of video and text and learners' motivation to learn from multimedia and the mix of emotional experiences gained. The examples given in the presentation will illustrate some of the theoretical underpinning and decisions made about the use of video and how it created a 'journey' of learning.

#### **Outcomes**

It is hoped that the outcomes of the session will help illuminate aspects relating to the pedagogical potential of video in relation to the following: the value of digital video within a particular context the impact of integrating video and text students' perspectives and experiences of this pedagogocial value

**Richard McCarter** has worked in mainly educational TV for 20 years. He completed a PGCE in 2000 and is now currently undertaking an on-line distance learning course in E-learning, Multimedia and Consultancy in the School of Education at Sheffield Hallam University. His research looks at the potential benefits of compressed digital video.

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#### Mindful video

- Paper, 30 minutes -

Michael O'Donoghue, CSALT, Lancaster University, UK Julie-Ann Sime, CSALT, Lancaster University, UK

#### **Summary**

The connection between and the design of video materials and theories of learning – such as constructivism or cognitivism – can often be overlooked when creating video and multimedia resources. Sometimes links are made as an afterthought by producers who seek to explain how their materials may inspire learning or support teaching. Yet many learning theories offer the potential for visualisation; what does it mean to take a learning theory as the basis for the design of video materials?

This presentation shows how the themes of Mindful Learning as described by Ellen Langer formed the basis of video material design for trainee radiopharmacists learning through a virtual radiopharmacy environment. The presentation will outline the basic ideas in Langer's work and will show how these were interpreted into a visual form – Mindful Video - and related online multimedia system. Examples of the video materials produced and of the virtual radiopharmacy learning environment will be used as illustrations throughout and how ideas from projects presented at DIVERSE 2003 influenced design. Initial conclusions on the effectiveness of learning-theory led video design will be presented drawing on user comments.

This project - VirRAD: the virtual radiopharmacy (www.virrad.eu.org) - is still under development and is partly funded by the EU 5th Framework Programme.

#### **Outcomes**

An example of learning theory as the basis for video material design. Illustration of a multimedia and video based learning environment. Practical (low cost) ideas and issues useful in the design of other video and online multimedia materials.

#### Michael O'Donoghue

After working in secondary school education I spent five years working with colleagues in Preston and Plymouth as a presenter and producer for satellite broadcast materials. I've been involved in the development of multimedia course provision since 1995. Though I've focused on online distance education in recent years, I've gravitated back to video and broadcast work, thinking up and researching new formats and interaction between audience and studio.

Email: M.ODonoghue@lancaster.ac.uk WWW: http://csalt.lancs.ac.uk/odonoghue

#### Julie-Ann Sime

I've been carrying out research into the design of training systems in science and engineering, for 17 years, in collaboration with industrial partners. The focus is on investigating the theoretical and practical problems of applying psychological theories of learning to the design of learning materials. User feedback plays a key role in this research.

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### Tutor reflection and video formats for interactive lecturing

- Paper, 30 minutes -

Michael O'Donoghue, CSALT, Lancaster University, UK

#### **Summary**

In preparing lectures for distribution across the Internet – either through a live web-cast or pre-recorded sessions – the extent to which the skills and practices required for traditional face-to-face lecture delivery are transferable is unclear. The pedagogic beliefs held by lecturers may be neither sufficient nor adaptable to deliver lecture materials through technological means.

This presentation relates the experiences of five lecturers who were each involved in the production and presentation of web-based lectures. Their views and reactions on the production and presentational aspects of video material production are examined at strategic points throughout their experience, and their responses to comments received from evaluation offer points for professional reflection on the pedagogic practices they currently make use of.

The presentation draws on video materials and tutor and student comments on different kinds of web-based lecturing materials using video within different online multimedia formats and raises issues on the potential of web-based lecturing as a means to research lecturers' pedagogical beliefs and to explore the ways in which working with the technology required for web-based production and presentation lead to reflective practice. The main finding of the study will be presented and will cover both pedagogical and online video lecture design issues.

This study was funded by the Economic and Social Research Council (ESRC) in the UK

#### **Outcomes**

Examples of different online multimedia and video material design Student and tutor reactions to online multimedia and video design – what they liked, what they didn't what confused them!

Practical (low cost) ideas and issues useful in the design of other video and online multimedia materials.

#### Michael O'Donoghue

After working in secondary school education I spent five years working with colleagues in Preston and Plymouth as a presenter and producer for satellite broadcast materials. I've been involved in the development of multimedia course provision since 1995. Though I've focused on online distance education in recent years, I've gravitated back to video and broadcast work, thinking up and researching new formats and interaction between audience and studio.

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#### Denmark's Movie-and TV-commercial Archive

- Paper, 30 minutes -

Henning Olesen, The State and University Library, Denmark

#### **Abstract**

Movie-and TV-commercials represent unique snap-shots of their own time and make up an excellent source for studies in contemporary marketing conditions, patterns of sex roles, fashion, all kinds of moral, linguistics etc. Additionally, they express film-technical, narrative and aesthetic trends with a seldom clarity, which make them interesting as research-objects for film-researchers and students.

By spring 2006 all movie-commercials shown in Denmark from the beginning of the fifties until 1995 and all tv-commercials broadcasted since 1988 through the semi-commercial danish tv-channel "TV2", will be available online for educational purposes as described above. Additionally, this project will boost the developement of both tools for adding annotations to digital video-material, and tools which can perform batch-analysis of visual characteristics in digital AV-material.

This brief presentation will treat experiences of both technical, legal and logistic nature, captured troughout the project, like e.g. methods for colour-correction, considerations concerning technical standards, the handling of intellectual properties and logistic experiences with the digitization of large amounts of AV-material.

The project is funded by the Danish Research Council for the Humanities, and is performed in close co-operation between The State and University Library and the University of Aarhus.

**Henning Olesen**, IT-project-manager at The State and University Library, Aarhus, Denmark http://www.statsbiblioteket.dk

Master degree in music, bachelor in designing hypermedia systems. Since 1999 occupied at The State and University Library with digitization and propagation of the danish, cultural heritage on the Internet. heno@statsbiblioteket.dk



#### **Digital Video Study-Materials**

Enhancing Engagement, Feeling of Freedom, Control, and Ownership

- Paper, 30 minutes -

Edna Yaffe, Meira Privman, Boaz Mermelshtein, Gaby Hayoun Shoham Center for Technologies in Distance Education, The Open University of Israel

#### **Abstract**

The Digital Video Project at the Open University of Israel (OUI) aims to harness the power of digital video technology to improve distance teaching and learning. Digital video supports instruction with sound, motion, and visuals, and facilitates non-linear and modular modes of learning. The hyperlinked nature of the digital video enables the integration of user friendly tools to increase interactivity, and allow for diverse navigation-modes and variability in content-representation. We believe this new way of presenting study materials will help maintain learners' attention and extend their feeling of ownership toward the topic studied.

Engagements, as well as the feeling of freedom, control and ownership are central to independent learning and self-study. As found in previous research (e.g., Armitage, Wilson & Sharp, 2004), navigation aids affect the students' feeling of freedom and of control, which in turn help them achieve a feeling of ownership when exposed to electronic texts. We argue that a similar effect is achieved when studying with the aid of Digital Video contents, using an interface that was specially devised for that purpose.

In our presentation we will display navigation aids and other learning-support tools that were integrated into our device for playing streaming digital video contents, and discuss their possible contribution to active learning and to the learner's sense of ownership.

We will look at two main ways in which the digital video is used for distance teaching at the OUI:

Captured live lessons that are made accessible a-synchronously - what is captured, what is lost, what may be gained and what can be added to the captured DV lesson in its new phase.

Video Study-Materials that are produced as an alternative to textual material - how do the students perceive, approach and navigate within the video learning materials, and how can we help them adjust to and take full advantage of these materials.

Edna Yaffe: ednaya@openu.ac.il Meira Privman: meirapr@openu.ac.il Boaz Mermelshtein: boazme@openu.ac.il Gaby Hayoun Shoham: gabyha@openu.ac.il



## Videoconference Technologies as a Strategic Service within a Multi-Campus University

Experiences and Future Planning

- Paper presentation, 30 minutes -

Mallika Devi Rasaratnam, University of Ulster, Northern Ireland

#### **Summary**

This paper presents the experiences of providers and users of videoconferencing services, over a period of approximately 20 years, within a multi-campus University setting. Administrative, teaching and learning experiences are outlined.

Current services are IP-based, operating over inter-campus digital networks at bandwidth from 2 to 100Mbps and include conventional studios, roll-a-round facilities and desktop-based systems as well as international outreach through the UK JANET network. Service enhancements include the capability to incorporate PowerPoint slideshows, 35mm slides, document and video clips as part of a video conference experience.

Significant developments are ongoing, to exploit the functionality and infrastructure available through digital networking. Particular focus is on staff training, development of a comprehensive suite of complementary web-based services, provision of on-line calendars for facility availability checks, and a "white pages" directory service. Integration of videoconferencing with conventional teaching space is currently under consideration as a mechanism to accommodate large class teaching within a multi-campus context.

The paper incorporates user experiences; staff and student, and a statement on the strategic direction of videoconference service developments within the institution.

#### **Outcomes**

Participants will acquire a general overview of the videoconference infrastructure, its areas of application and user experiences and expectations. Technical detail will be minimal so as to promote the user benefits available through exploitation of the technology.

Miss **Mallika Devi Rasaratnam** is employed as a Computing Officer (Videoconferencing Services) at University of Ulster in Northern Ireland.

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#### 'BBCi Hull - The social revolution has been televised'

- Presentation - Video and Interactive Learning, 30 minutes -

James Richards, Senior Producer, BBC iF&L, UK George Auckland, Head of Innovation, BBC iF&L, UK

#### **Summary**

The presentation will outline the background of social, economic and environmental issues endemic in the city of Kingston upon Hull, and will examine the approach to and impact of the BBC's involvement in delivering interactive learning video applications to a local audience, via the Kingston digital subscriber line (DSL) interactive video-on-demand platform.

In Hull high levels of unemployment, poverty and adult illiteracy contribute to a climate of low expectation and high levels of school non-attendance. The BBC is working in partnership with schools on the Bransholme estate, Europe's largest area of social housing, to provide infrastructure and support for young people wanting to make their own video material. The presentation will focus on two particular video learning initiatives, 'CITZN-H and 'SOS Teacher', created under the umbrella of the pan-BBC 'Project Hull'.

The 'CITZN-H' project is concerned with tackling issues affecting young people such as homelessness, conflict, money, voting and body image within a framework of citizenship education. Young film makers respond to professionally made 'stimulus films' with their own video creations. These films are then made available to the public through the BBC's portal on the Kingston video-on-demand (VOD) platform.

A community video producer is available to advise, assist and facilitate the creation of the young people's films, although editorial and creative control is retained by the film makers. Submissions have included animations, video diaries, dramas and documentary films and are often highly moving personal and local responses to the big issues.

The 'SOS Teacher' project provided local GCSE students with live advice from subject specialists in the crucial period running up to their exams. For three weeks students were able to phone, email or SMS last minute revision queries to a panel of subject specialist teachers. The teachers answers were made available live via the interactive platform, and all of the answers subsequently archived for VOD access at any time. For the first time ever, viewers were able to SMS a question direct to a teacher via their set top box, with the unique opportunity of then seeing that question answered on their television. Audience figures for the period when SOS Teacher was running live, show a significant spike, indicating that the super-local video content was widely watched by live and on-demand audiences.

The impact of the project on educational attainment and expectation is still being formally assessed. There is strong anecdotal evidence to suggest that expectations have been raised, and that more young people are choosing to stay in school in order to participate in film making and associated activities and projects. It is certain that young people participating in film making as part of the project feel a level of involvement and empowerment that was previously absent. Many participants feel that the project has given them a platform and a voice.



#### **Tutorials by Videoconference**

Connecting with trainee teachers during school experience in remote, rural schools

-Presentation, 30 minutes -

Dilwyn Roberts-Young, University of Wales, Aberystwyth, Wales. Geoff Constable, University of Wales, Aberystwyth, Wales.

#### **Summary**

The Post-graduate Certificate in Education course at the University of Wales, Aberystwyth's School of Education and Lifelong Learning works in partnership with schools throughout Wales and also in some areas of England. The geographical locations of the schools present a challenge for the college-based tutors which are surmounted by telephone conversation, e-mail correspondence and by physically travelling to the partnership schools. School visits are undertaken in the main to observe lessons taught by the trainee teachers but there are visits which are pastoral in nature aimed at resolving issues which benefit from face to face discussion.

The paper reports on a Higher Education Funding Council for Wales project in which a cohort of trainee teachers engaged in remote dialogue with their college tutors, whilst on school experience, through the use of videophones and the studios of the Welsh Video Network. Interviews were conducted via e-mail and videoconference with end of project questionnaires completed by all participants. Analysis of the data gathered informed the evaluation of the potential this communication technology has to support trainee teachers, to facilitate remote tutorials and to strengthen the relationship between the School of Education and Lifelong Learning and partnership schools.

#### **Outcomes**

Videoconferencing will be seen as an effective tool for maintaining contact with trainee teachers during their school experience and also in strengthening the partnership between the participating schools and the training institution. It will be seen that tutorials benefit from agreed upon agendas in which participants are very clear about what will be achieved in the session.

#### **Structure**

Introduction (5m); Presentation with videoconferencing link (15m); Discussion (10m).

**Dilwyn** is a lecturer in Education at the School of Education and Lifelong Learning, University of Wales, Aberystwyth. He has undertaken research in the impact of Information and Communications Technology on the primary classroom and on Welsh medium education. He is a member of the Welsh Assembly Government's ICT in Education advisory panel.

Dilwyn Roberts-Young (dlr@aber.ac.uk)

**Geoff** has been researching and supporting Internet-based videoconferencing for education since 1995. He is a video support engineer for the Welsh Video Network Support Centre, and also works in network development at UWA; he has recently written a number of reports and fact sheets for the UKERNA Video Technologies Advisory Service.

**Geoff Constable** (ccc@aber.ac.uk)



### Live streaming on no-budget

- Presentation, 30 minutes -

Marijn Tijhuis, Hogeschool van Utrecht, The Netherlands

#### **Summary**

Sending out multiple, simultaneous live streams covering events on your faculty, publish pictures and edited video material at the same time. All of that with no budget? Is that possible? Our experiences prove it can!

Last year, students focused on live streaming video as a part of their education at the Academy for Digital Communications in Utrecht. With the infrastructure and facilities already available, we have covered several live events, broadcasting and documenting them.

This presentation will display what we put together to broadcast live streaming video with no budget. It also will provide examples of how students worked on this project, the reactions to our broadcasts and how it can be implemented in education.

#### **Outcomes**

The audience will get an idea on how produce streaming video with facilities that are already available in a large number of institutions today. Also, they will see how easy it can be to cover a live event and broadcast it, without years of experience, state-of-the-art camera's and streaming units. They will be provided with an example of a hands-on approach to streaming video.

The presenter, **Marijn Tijhuis**, is a student at the Academy for Digital Communications. Currently, he is graduating at SURFnet BV in Utrecht. E-mail: m.tijhuis@student.fcj.hvu.nl.



#### Students learning by making and using video

Using of Digital Video in the Primary Science Classroom

- Paper, 30 minutes -

Yordanka Valkanova & Mike Watts, University of Surrey Roehampton, London, UK

#### **Summary**

The present study looks at creating a computer-based cognitive tool through applying digital video editing techniques that can provoke self-reflection in young children. It has attempted to answer two primary questions:(i) is creating of films about one's own learning activity could be a tool for self-reflection? (ii) And to what extent does the promotion of self-reflection improve children's achievements in science?

The research methodology has employed both quantitative and qualitative methods using pre-test /post-test control group design and video-recorded observation of children's talk. The participants were 30 eight-year-old pupils from a primary public school in South London. The 'treatment' group children created films and presented these to their families, teachers and friends with the purpose of explaining what they learned in their science class. The 'control' group children were engaged in other classroom activities.

The Knowledge Monitoring Assessment (Tobias and Even, 2002) was applied to assess pupils' success in monitoring their own learning. In order to examine to what extent creating of video film about own learning experience encourage self-reflection, children's talk, video recorded during two video editing sessions was analysed both qualitatively by discourse analysis and quantitatively by content analysis.

Data collected over the study indicate that creating digital video films for one's own classroom activity promote gains in self-reflection. Furthermore, the study explains how one's video self-narrative generates self-reflection in young children. The t-test of mains of the scores of Knowledge Monitoring Assessment confirmed assumption of improved performance in science for children of the treatment group.

#### **Outcomes**

The study provides general pointers for further applications of digital video technology in the design of integrative science classroom environments and shows how purposedriven developments may increase the applications of self-reflection and the construction of science knowledge in primary school children.

Prof **Mike Watts** is Dean of Learning Enhancement, Professor of Science Education and Director of Centre for International Research in Science, Technology and Education at University of Surrey Roehampton. He is the author of numerous books in school science.

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Mrs. **Yordanka Valkanova** is Research Assistant at Centre for Art and Design Education at Roehampton, EPPI project. She is the author of books and articles on computer assisted learning, self-reflection and planning.

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#### Looking through Three 'I's: streaming video in practice

- Paper presentation, 30 minutes -

Maaike Van Leijen, Universiteit van Amsterdam, The Netherlands Clive Young, Glasgow Caledonian University, United Kingdom Mireia Asensio, Lancaster University, United Kingdom

#### **Summary**

The Dutch SURF foundation and the UK-based JISC have both supported research and development in the area of streaming video and audio. The JISC Click and Go Video, Click and Go Video Further projects in the UK and parallel in the NL, Webstroom funded and coördinated by SURF, have identified the need to promote the sharing of practice, reflection on practice and critical examination of the experience of using video and audio resources by students and staff. Although there appears to be some sense of community among technical and support staff, teaching staff users are dispersed and there is therefore insufficient sharing of pedagogic research and evaluation. The aim of this paper presentation is therefore to contribute to the community development and growth of practitioners working in this area, particularly for those who wish to share their experience of pedagogic design.

#### **Outcomes**

The paper presentation proposes to describe three different examples based in the NL of streaming video and audio, by examining them through the Three 'I' framework of Image, Interactivity and Integration (Young and Asensio 2002). The Three 'I' framework is a conceptual framework that seeks to provide a practical decision tool to help teaching staff and practitioners with the pedagogic design and development of video streaming resources. The examination of the Three 'I' is intended to enable more informed and researched choices to the practitioner that wishes to start a new journey in the area of visual literacy. An example of this collaboration between Dutch and UK projects and research is the potential to create a database of streaming media cases according to the place they take in the Three 'I's Framework. This could give a clearer view on the knowledge about the (pedagogic) use of streaming video that already exists in higher education, and could indicate the areas that need most research. In addition by looking in-depth at three examples, practitioners will be able to also consider how to make their subject more visually appealing, more fun and engaging.

**Case 1:** In a project for the Graduate School for Teaching and Learning, students formulate their own tasks, according to where they want to reflect on, with use of streaming video. Students are trained in filming themselves while teaching. Special attention is paid to the filming of their own competencies and how to reflect on them. Students give comments to each other.

**Case 2:** In this project a database will be built that helps teachers to find and use streaming materials.

**Case 3:** In this project students capture information while they are at work. They select the parts in the film that illustrates a certain competency, show this to their teacher, to their assessor or to their future employer. They use the technical solutions VideoPoort and the Virtual Cutter.

**Maaike van Leijen** was initiator and coördinator of the Webstroom community website, now works as educational developer. M.J.vanLeijen@uva.nl

**Clive Young** was manager of Click and Go Video, now directs Click and Go Video Further and was the originator of VideoAktiv. Clive.Young@gcal.ac.uk

**Mireia Asensio** is an educational researcher; she has worked on the learning and pedagogic design aspects of Click and Go Video and Click and Go Video Further. m.asensio@lancaster.ac.uk



#### Interactive streaming video tool to train medical protocols

- Presentation of paper, 30 minutes -

Mariëlle van Staalen, Information Technology Centre, UvA, The Netherlands Werner Degger, Audio visual Centre, UvA, The Netherlands

#### **Summary**

In the shock room of the Academic Medical Centre Amsterdam (associated to the University of Amsterdam), emergency patients are taken care of. Crucial to this care is the use of specific protocols in rapid succession. However, practical experience during courses for trainee doctors is limited due to consistent usage of the shock room for its primary function. To improve on this situation a training method has been devised based on a Java web application.

This application allows the exercising of the required protocols that were taught in the course. Through the use of streaming video fragments in combination with metrics associated with the patients such as blood pressure, heartbeat and X-ray photos, a realistic situation can be simulated. With a clear, intuitive and interactive interface a student can walk sequentially through the material until crucial decisions are required, where upon the system delivers multiple choices. Directly after answering, feedback and more relevant information are given. The trainees can thus learn from their mistakes and exercise the protocols.

The controlled application with immediate feedback which can be used independent from time and place has been found to be an innovative and effective training method. The nowadays used method: a combination of video tapes with a workbook with questions isn't that effective. Another significant advantage of the new environment is reusability. The developed material can be used in different contexts and parties: students, assistants in training (plastic surgeons, anaesthetists, neurologists) and ambulance personal.

This learning enhancer was created through a multi disciplinary team: audio visual specialists, web developers, educationalists, doctors and nurses. A director coordinated the process. The development of this application was part of the project "Streaming media at UvA". The umbrella project purpose is the building of knowledge of how to use streaming media effectively in a higher education environment.

#### **Outcomes**

By attending the presentation one will learn:

With which resources, costs and techniques an interactive web application with (streaming) video can be used in an educational environment;

Which problems one has encountered during development and how they have been solved;

By giving a demonstration how the programs works precisely and could be extended; How students experience the use of the developed tool.

Mariëlle van Staalen, Information Technology Centre, UvA, The Netherlands

Werner Degger, Audio visual Centre, UvA, The Netherlands



## How can new technologies and new infrastructures provide new opportunities for video in learning?

- Panel session, 60 minutes -

Adrian Vranch, Information and Learning Services, University of Plymouth, UK

#### **Summary**

Since the first DIVERSE conference took place, there have been many changes and developments that have a potential impact on the role of video in learning. Technologies and devices, media standards and infrastructures have matured rapidly during this period, leading to a raised level of awareness and widened expectations of new opportunities that video may promise for learning.

Digital hardware costs have fallen sharply while processing power, storage capacity and communication infrastructures have continued to accelerate in growth. Adoption of new standards has been rapid, illustrated by how quickly DVD has been embraced, for example. Digital audio distribution and rights management implications have been revolutionised, first by the underground Napster approach, now replaced by the mainstream iTunes Music Store and iPod solutions. Infrastructures have been transformed by the widespread adoption of IP standards in educational networks and by the expansion of a variety of fixed and mobile broadband services to the individual learner.

As an input to the panel session, examples and experiences from the University of Plymouth will be used to illustrate the use of new technologies and infrastructures for video in learning. This includes support of teaching, research and administrative functions to the university's distributed campuses across the south west of England, to businesses, to regional and national partner institutions and beyond to other countries. The university has a strong focus and experience in regional network development for education, video streaming, IP videoconferencing over SuperJanet, IP-based video links between regional lecture rooms and live satellite TV broadcasts from its large TV studio. Examples shown will include clips from medical and health education video sessions.

Most importantly, the session aims to provide a forum for exchange of experiences and lively discussion between delegates and panellists on how new opportunities for video in learning can most effectively meet the expectations and aspirations of the DIVERSE community in future years.

#### **Outcomes**

Participants attending the session will be expected to gain from:

An overview of recent developments in technology that are relevant to using video in learning;

Illustrations, using examples, to show how facilities and infrastructures have been developed to use video in meeting the changing learning needs of a large, multi-site university (i.e. Plymouth);

Recent examples of video in learning from other institutions;

Experiences, advice and recommendations for successful implementation of new video learning applications;

Discussion and exchange of ideas on how example developments shown in the session can benefit delegates' and panellists' institutions;

An opportunity to identify ideas for potential development of new practices for video in learning.

Dr Adrian Vranch (adrian.vranch@plymouth.ac.uk) BSc PhD CEng MBCS

As Academic Developments Manager, Adrian has a responsibility for the development of telematics technologies within the University of Plymouth. He has a particular interest in the integrated use of technologies, especially including satellite, videoconferencing and the Internet. He has completed research contracts in several telematics-related projects, including some funded by the European Union and the European Space Agency.

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#### Developing presentation skills and peer-assessment

- Presentation, 30 minutes -

Kitty Wortel, Hogeschool INHOLLAND, The Netherlands

#### **Summary**

Attendants to this session will experience how students of Dutch as a second language develop presentation skills by the use of modern media and how they apply peer-assessment during the process of learning these skills. Or in other words, the transformation of classroom learning into time and place independent learning will be demonstrated during this session.

As part of their learning program Dutch as a second language students have to develop presentation skills. This used to be a vast time consuming practice during classroom settings. This session will show how students and teacher profit from a combined use of Blackboard and streaming video. The students practice their presentation skills outside the classroom and without the teacher present. On top of this the students learn to assess themselves and each other.

The session starts with a short introduction of the subject, followed by a demonstration of one of the student's video results and an explanation of how the presentation was assessed by the students.

At the end of the session there will be time for discussion.

**Kitty Wortel** teaches Dutch as a second language and is keen developer of e-learning practices. As such she is working on the transformation of classroom language learning into distance language learning.

E-mail: Kitty.Wortel@INHOLLAND.nl



#### **Waag Society / Creative Learning**

- Presentation, 45 minutes -

Henk van Zeijts, Head Creative Learning

Waag Society is a knowledge institute operating on the cutting edge of culture and technology in relation to society, education, government and industry. With its knowledge Waaq Society wishes to make a contribution to the design of the information society. In this it doesn't let itself be lead by technology but instead looks at the possibilities of people, their creativity and culture. The interplay of technology and culture is the driving force of all Waag Society's activities. One of the main research programmes of Waag Society is the Creative Learning programme.

#### **Creative learning**

Waag Society believes that new media can stimulate learning by challenging learners to express themselves creatively. If digital learning environments enable learners to create, produce and publish their own material, and share findings and results with others, they stimulate 'ownership of content' - instead of consumer behaviour. By stimulating 'ownership' we create motivated learning.

#### **Technology oriented youth culture**

New media for learning purposes mixes well with the daily routine of young people. Youth culture today is more and more dominated by (communications) technology and high tech applications - such as mobile phones, games and online chats. For kids, this is not a problem; they recognize the charmes and possibilities of technological innovation instantly and deal with the continuous streams of information and images in their own way. What they like they use, what they use helps them to build their identity. The adult world that should help them cope with these issues - the educational system - is falling behind dramatically.

#### **Expression**

This technology oriented youth culture can, however, be of use to the educational system, as it offers youngsters a modern means of expression and it can help shape their relationship to the outside world. By using new media within or outside the classroom, pupils are not only offered a creative and active way to learn to use digital media, but also learn to be critical about them, and thus creating media literacy.

#### Contextualization of information

In addition, new technologies can be used to create learning environments that offer experiences, e.g. based on narrative structures like games or adventures, which gives information a logical and appealing context for information and thus create stimulating ground for learning.

#### Creative digital learning environment

Concluding, a creative digital learning environment should incorporate youth culture and provide youngsters with a stage to help shape their identity and share their views. Pupils should be able to play, communicate, create, cooperate, experience and learn, in a way that fits them, inside the classroom, out on the street or in cultural institutions like museums.

ScratchWorx, Digital Storytelling, KidsEye, Teylers Museum Adventure, Storytelling Table, Amsterdam Realtime

Contact

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## Postmodernism and the Integration of Video into Teaching and Learning

- Keynote - 45 minutes

Professor Chris O'Hagan

Postmodernism is little understood outside those circles where it is discussed in meaningful terms. One or two of the French postmodern philosophers have hardly helped! But unlike some other perspectives with philosophical foundations, postmodernism can genuinely inform one's day-to-day professional activities. In fact, the pragmatic side of pomo is often thrown back in its face by modernists who cling to the ideas of the grand narratives/theories that leave little space for individualistic thinking, but demand complete obedience to 'authority' and the 'expert'.

A lot of postwar educational thinking has been influenced by postmodern perspectives such as relativism, multiculturalism, knowledge as socially mediated/determined (indeed, the sociology of knowledge has come of age over this period) - educational thinking such as constructivism, experiential learning, workplace learning, the autononous learner, all of which place an emphasis on the uniqueness of the individual student experience and the situatedness of his/her learning. If you are worried that these in turn have been subverted by experts who insist to tell you what it all means (such as obedience to the Kolb cycle, or no lectures at all, for example) and make you feel uncomfortable that you are 'doing it wrong' you are right to be worried. Postmodernism does not throw out the past in the name of a glorious future - there is none of the whiggishness of positivist science. It can still find space for behaviourism, formal lectures, teaching (as opposed to learning) while helping to generate new approaches, such as in the use of technologies.

What matters is that a postmodern educationalist will have a big portfolio of methods/tools (theories and practices) past and present from which to choose in view of the peculiar situatedness of the cohort of students, the unique curriculum, available resources, etc. Of course, the implication of this is that it is very hard to pass on 'excellent' practice, whatever that is, because excellence is created and defined by that unique coming together in the local situation.

It is ironically usually easier to learn from good or 'average' practice. But you will know just how hard it is to learn anyway from the practice of others - there is this kind of 'resistance' sort of 'hanging in the air'. Copying very often leads to a sad, lowest-common-denominator version. You read a case study and wonder how you can use it, what it means! The Centres of Excellence in Teaching and Learning currently being chosen in the UK are almost certainly misguided for this reason, and they will turn into something else, possibly just a more expensive way of doing what most other institutions do without trumpeting, but in different ways.

None of this means that you can't learn from the experience of others, but that you will need to be selective, thoughtful and resourceful, and you will need a certain praxis (readiness to adapt even deeply held views as experience proceeds) because there are rarely grand solutions, easy ways out, or magic wands.

Perhaps all this seems obvious to some and a bit wild to others. We will all react uniquely to what I have just written in terms of our own experience! In my keynote I will try to draw out what this can mean for integrating video into educational practice, and for a conference like DIVERSE, full of 'case study' wares!

What are you meant to do with all that you have learned and experienced over the last three days?



Hope the see you all next year at the first lustrum ...

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