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Using video feedback in formative assessments

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Why Change Assessment and Feedback?

Background and context

Assessment and feedback repeatedly feature as areas for improvement in NSS (HEFCE, 2011)

Students feel feedback is too little and too late (Hounsell, McCune, Hounsell & Litjens, 2008)

National Student Forum calls for greater use of technology in assessment and feedback (2009)

Number of students entering HE in last 20 years, and with SpLDs (Richardson & Wydell, 2003)

Legislation places a duty of care on institutions to ensure students are not disadvantaged
e.g. DDA (1995), SENDA, (2001), Equality Act (2010)

Students view assessment tasks as hoops to be jumped through (Gibbs & Simpson, 2004)

Cost-efficiency pressures have made traditional model unsustainable (Bloxham & Boyd, 2007)

... larger class sizes, modularisation, widening participation all contributory factors ...

Why Formative Assessment and Feedback?

Assessment and learning

Traditional model: End-of-year, summative assessment and feedback

Q: How often has feedback you produced been for the benefit of the external examiner?!

Exceptions (Gibbs & Simpson, 2004):

Oxbridge Tutorial Model: immediate, detailed, face-to-face, verbal feedback

Open University: Limited face-to-face, formative feedback on high frequency assessment

The tension in the purpose of assessment (Torrance, 2007):

Assessment *of* learning – institutionally focused, for accreditation and certification

Assessment *for* learning – learner focused, consistent with lifelong learning ethos

Problem: Formative feedback requires more time, and assessment *for* learning

So, is feedback really worthwhile?

A downward spiral?

Students feel unable to use feedback received (Glover & Brown, 2006) **AND**
Academics feel little gained by its production (Hounsell, 2007)

However, students **do** value feedback (e.g. Higgins, Hartley & Skelton, 2002; Sadler, 2010)

Feedback single most significant factor affecting achievement (e.g. Black & William, 1998)

Elevated rates of attrition in UG1 attributed to a failure to provide feedback (Krause, 2001)

Key concern lack of opportunity to make improvements based on feedback (Boud, 2000)

→ A temporal shift in the delivery of feedback required, i.e. assessment *for* learning, consistent with formative assessment and feedback (Nicol & Macfarlane-Dick, 2006)

So, what makes formative feedback worthwhile?

Frequency, dialogue and timeliness

Increased class sizes in post-1992, more time marking assignments than teaching (Gibbs, 2006)

Benefits of Oxbridge Tutorial system and Open University model (Gibbs & Simpson, 2004)

Dialogue a feature of education since Socrates, but also stressed by e.g. Dewey (1944), and more recently within the *Conversational Framework* (Laurillard, 2002)

While attrition attributed to lack of feedback, retention, satisfaction and engagement where feedback is perceived as timely (Galusha, 1998, Stannard, 2007)

Is text the best way to provide feedback?

Research exploring alternatives to text-based feedback focused on audio e.g. *ASEL, Sounds Good*

Students found audio-based feedback beneficial (e.g. Rotherham, 2009; Stewart, 2009)

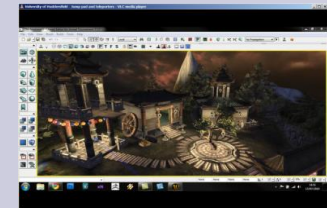
Technological considerations, e.g. bandwidth, file size, left video overlooked or infeasible

Video-based assessment and feedback

Video Enhanced Learning Opportunities in Computing and Information Technology (VELOCITY)

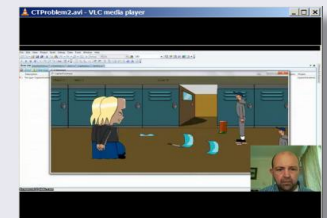
UoHTube

Fostering the development of a learning community around a repository of instructional tutorial videos embedded in an e-portfolio system.



VERiFy (Video Enhanced Response in Feedback Loops)

Developing a video feedback loop system, using a dialogic approach to encourage learners to engage with and respond to feedback using video



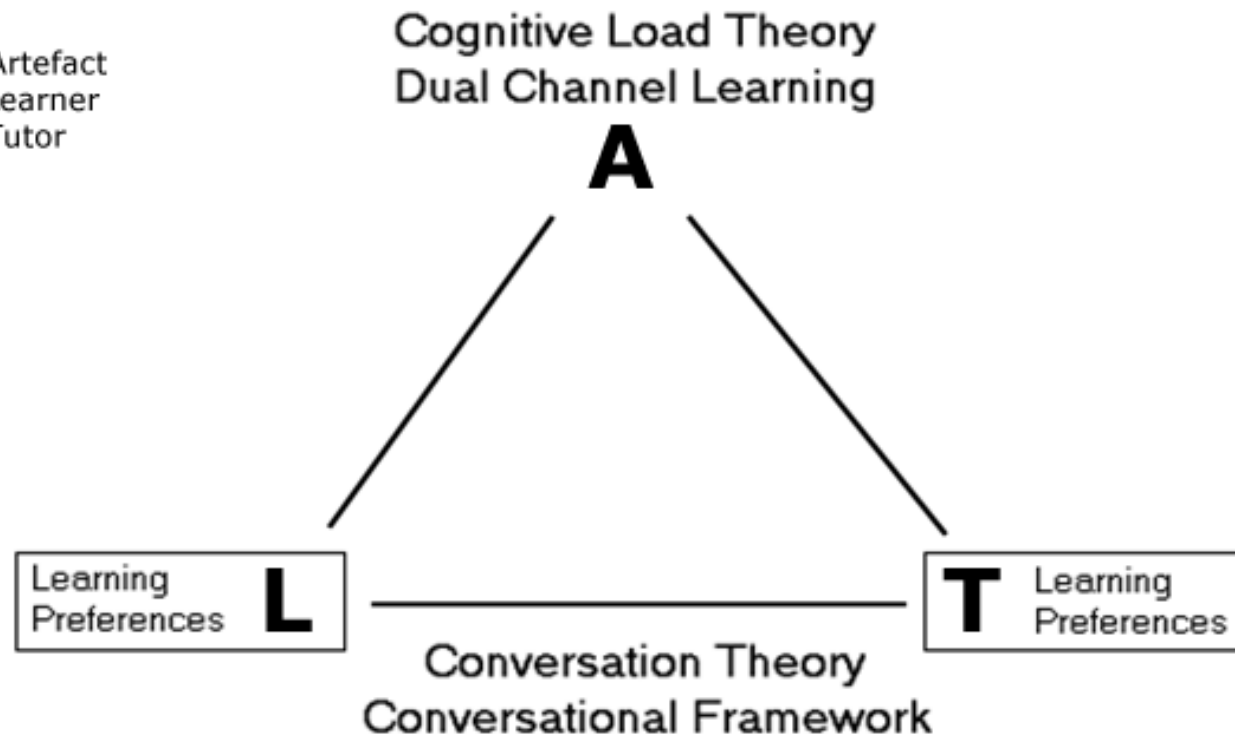
Vineyard

Facilitating the development of learner generated video-vignettes to promote reflective self-assessment within an e-portfolio system



Theories Underpinning VELOCITY

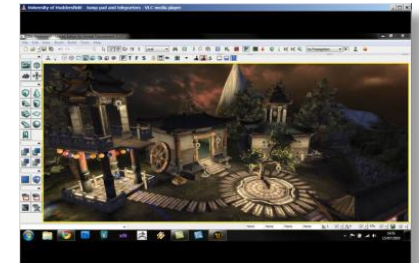
Key:
A - Artefact
L - Learner
T - Tutor



VELOCITY's Strands: UoHTube

UoHTube

Fostering the development of a learning community around a repository of instructional tutorial videos embedded in an e-portfolio system



"Using the videos helped me gain a quick understanding of the editor's environment and to produce what I wanted ... It really helps to see somebody doing it rather than reading it."

(Participant 1BG)



... learning by doing ...

... show me, don't tell me ...

"It was good, because if you forgot how to do something you could just re watch the video." (Participant 1AB)



... Cognitive Theory of Multimedia Learning ...

"I find using video tutorials a very preferable tool for learning as you can see what the person is doing on the screen at the same time as them explaining what they are actually doing. I feel this helps to avoid any confusion between instructions given and what is actually being done, a problem I often have with picture/text tutorials ..." (Participant 1CT)



... threshold concepts ...

... dyslexia ...

... Asperger's Syndrome ...

VELOCITY's Strands: The VERiFy Project

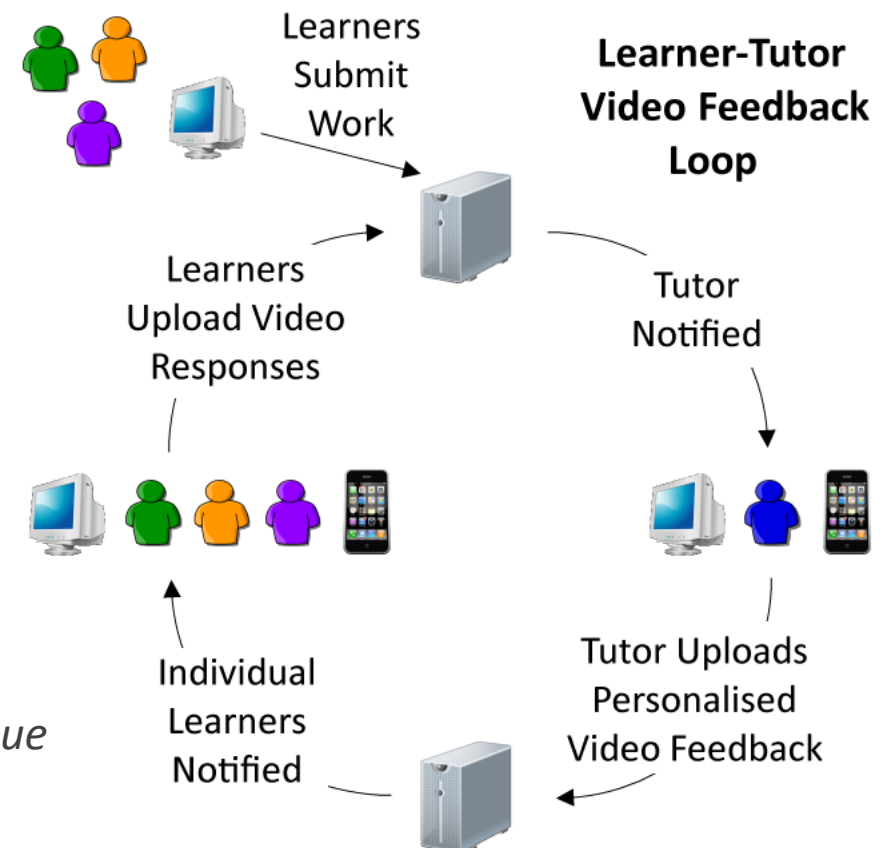
VERiFy: Video Enhanced Response in Feedback Loops

VERiFy aimed to:

“... deliver an innovative approach to the provision of feedback to learners in video form, accessed through personal computers and mobile telecommunications devices, and encourage learners to engage in a conversational framework by responding to feedback using video ...”

Keywords:

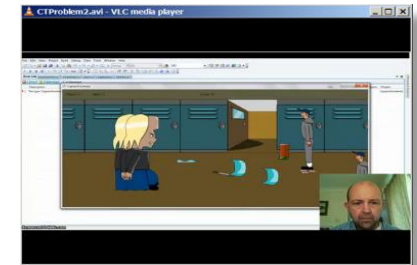
asynchronous video, mobile devices, feedback, dialogue



VERiFy: Learner Evaluation

VERiFy

Development of a video feedback loop system, using a dialogic approach to encourage learners to engage with and respond to feedback using video



"...seeing my tutor as the 'talking head' in the video giving me that feedback on my XNA game was really great ..." (Participant 1AC)



.... Conversational Framework ...

.... engaging in dialogue on formative feedback ...

"... putting the feedback video inside our group's Mahara area was a really good idea – having it right there alongside our blogs and shared discussions meant we could go back and watch it again to check we'd picked up on everything ..." (Participant 2M)



"It's been very encouraging to see [Participant 2P] playing a much more active role in the group than I might have expected ... using video to assist in solving problems which are essentially visual is making a real difference for him." (Tutor E)

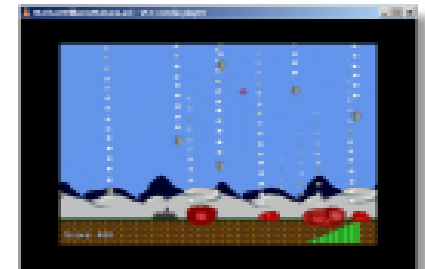
.... feed-forward ...

.... problem-solving...

VELOCITY's Strands: The Vineyard Project

Vineyard

Facilitating the development of learner generated video-vignettes to promote reflective self-assessment within an e-portfolio system



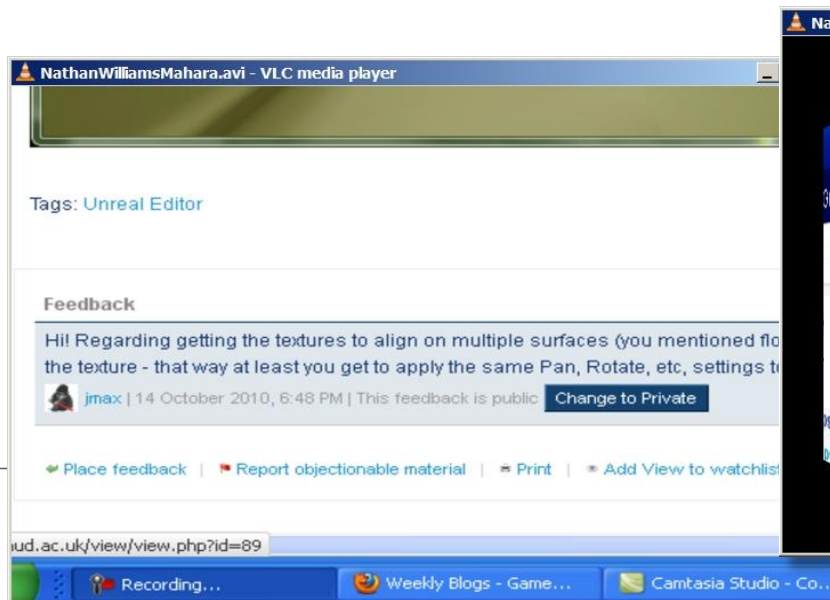
... consolidation of learning ...

... learner-generated content ...

... moderation made simpler ...

... Asperger's Syndrome ...

... dyslexia ...



VELOCITY: The Early Benefits ...

Since first introducing video-enhanced assessment and feedback ...

- Retention rates were turned around ...
 - From 15% completion to 85% retention of Year 1 intake ...
- Progression to award improved dramatically ...
 - Five awards with Distinction and seventeen with Merit in two years ...
 - FdSc learners won the School Prize for Best Academic Performance in 2010 and 2011 ...
- Greater inclusivity has been achieved ...
 - SpLD learners have shown particularly strong engagement with VELOCITY ...
 - Learners with Asperger's Syndrome have achieved Merit and Distinction ...
 - Enhancement has been achieved both educationally and socially ...
- Design-stream learners with dyslexia are becoming proficient in programming ...



Evolution of the VELOCITY strategy

Weekly Video Blogs

Learners now routinely using video to report on their progress, to reflect on the development of their work, and to highlight problems ...

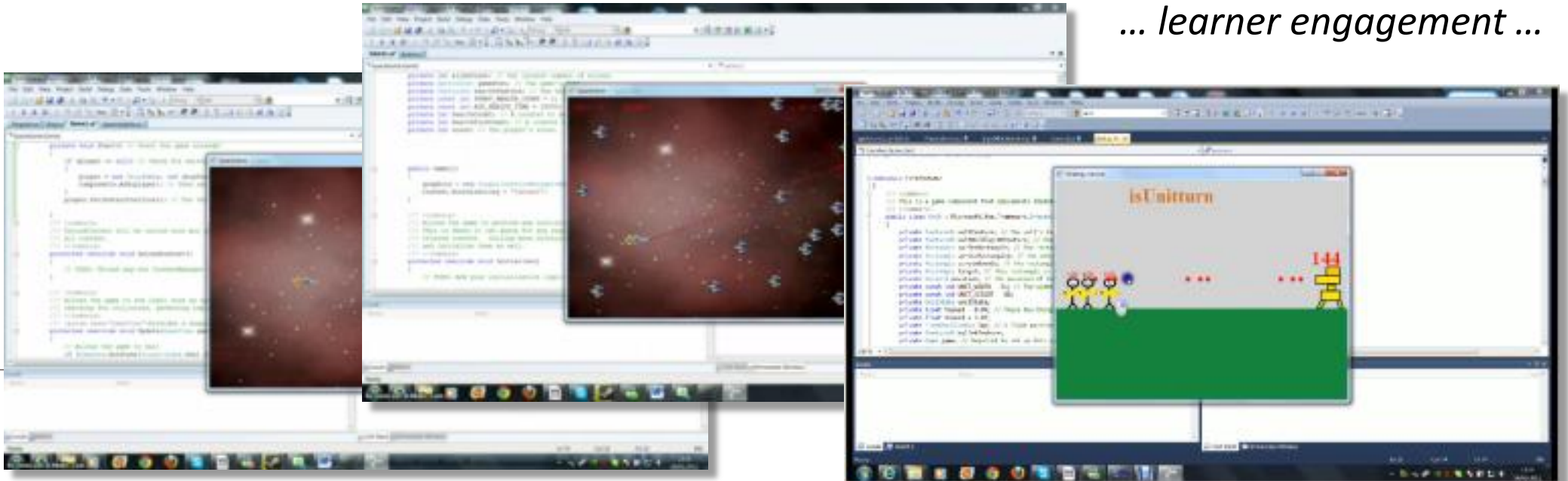
... embedded within the e-portfolio system ...

... audit trails ...

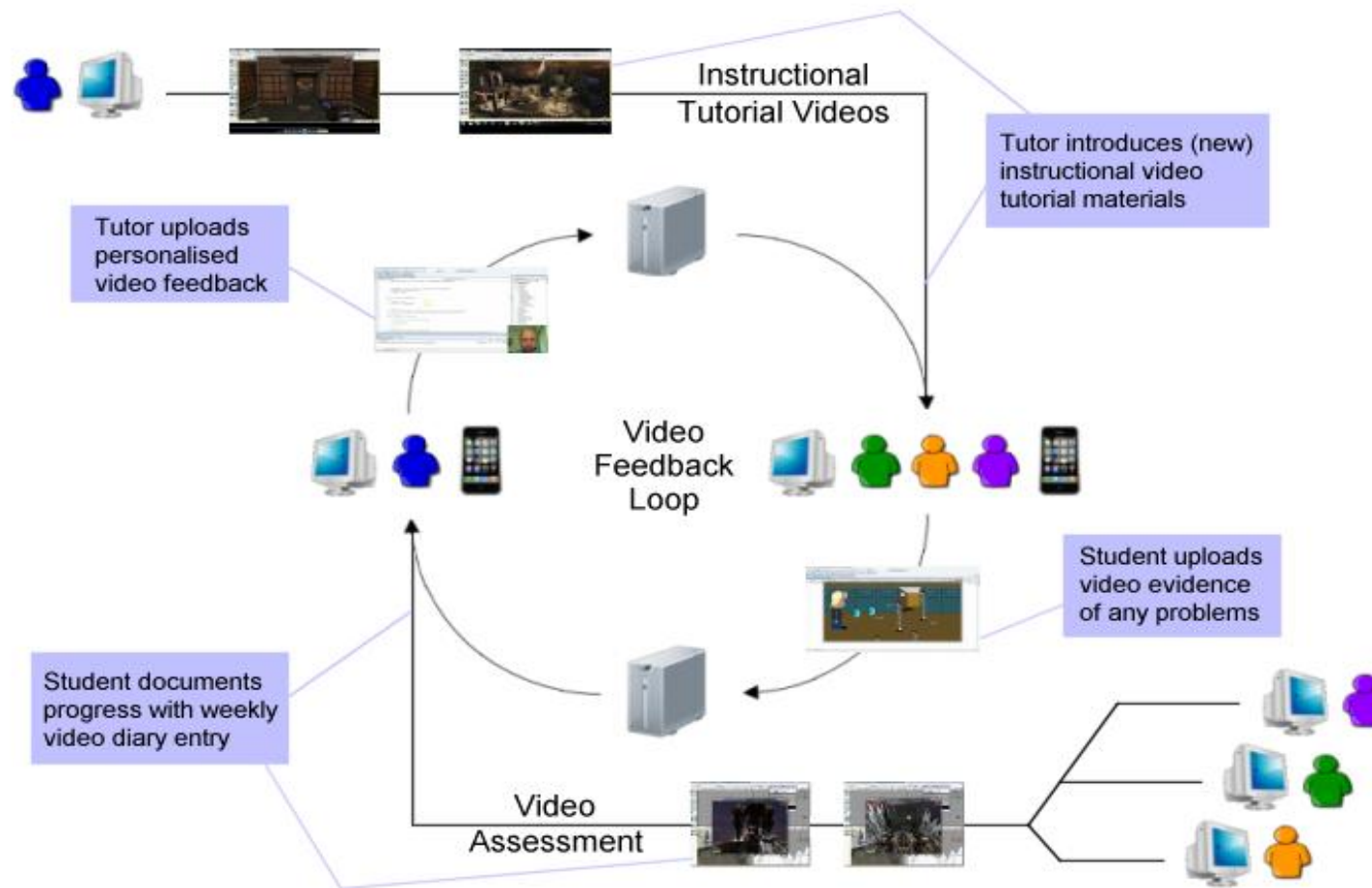
... plagiarism non-existent ...

... software version issues resolved ...

... learner engagement ...



Integrating VEF practices



Integrated Model: Outcomes and Evaluation

The Outcomes


A group of 20 learners ... one 'abstained'

14 learners achieved their highest module mark ...
Averaged 11% higher than other modules ...

241 videos were produced by learners ...


5 learners affected by Asperger's Syndrome and/or dyslexia produced 36% of the videos ...

The total duration of the videos produced was 08:39:29 ...




*"Video feedback feels more like a conversation.
Makes you engage with entire course more."*

*"... by far the most productive manner of
receiving feedback and assistance from tutors,
would have otherwise meant waiting until the
next session in order to physically show them
the problem ..."*



*"... If I had to write up my progress, I'd spend a week
writing what I'd done the previous week. Pointless.
Using video is a massive improvement ..."*



*"... producing video blogs as opposed to
documenting progress through large
blocks of text meant that any videos that
were uploaded only needed small
amounts of text, while the majority of
explanation was done in a much more
practical manner via audio."*

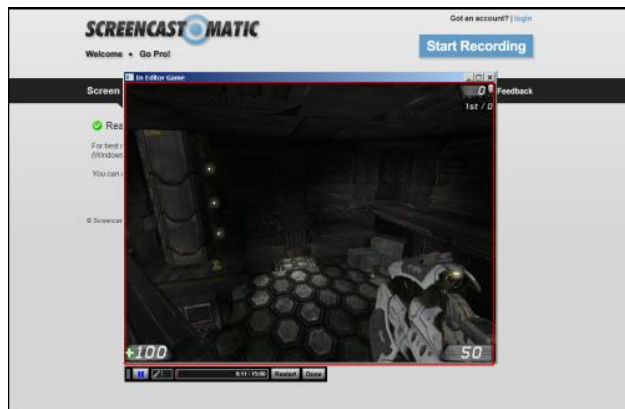
Inspiring tomorrow's professionals

... BUT, what about scalability and transfer?!

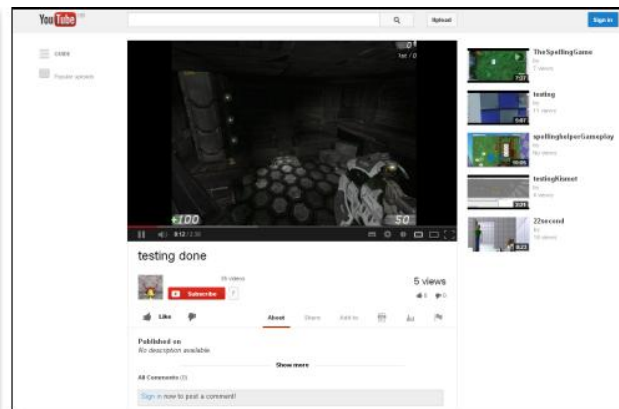
Practical Considerations of using Video

Recording, Storage and Distribution of Video Diaries and Video Feedback

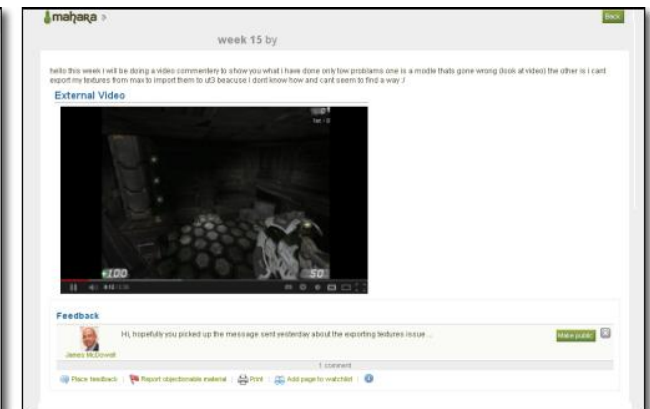
I recorded using Camtasia and uploaded directly to private feedback pages on *Mahara*
Students preferred to combine three free services, embedding videos in *Mahara*



<http://screencast-o-matic.com>



Private YouTube channel



Mahara e-portfolio system

Video Feedback on Written Work

Foundation Degree/Year 0: Statistical Analysis

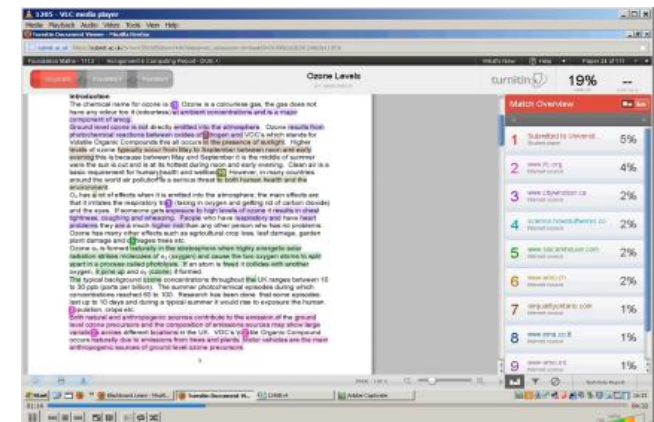
- Assignment: ‘academic paper’ using individual data-set
- 140 students, 4 with dyslexia
- Captivate used with drag ‘n’ drop in GradeMark
- Personalised feedback on key points embedded in VLE

Learner Evaluation

- Pros: liked it, v. happy with personalised feedback, said they used it ...
- Cons: volume, tone of voice, accent, perceptions of negativity ...

“Students needed something to ‘hang’ the audio on to take it on board ... video seems the better way of accommodating this ...”

Inspiring tomorrow’s professionals



Taking video-feedback mobile

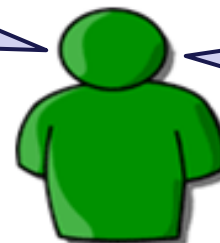
BA Fashion Design with Marketing and Production

Two academics teaching textiles production modules ...

- Studio environment, situated learning/learning by doing ...
- Assignment: design and produce a jacket from mixed fabrics
- Small, discrete groups of learners
- Learners initially hesitant, self-conscious
 - ... *but later embraced the technique* ...
- Distribution of feedback initially an issue ...
 - ... *but embedded in e-portfolio using a free app*



“Video feedback is useful for students in both formative and summative situations ... it helps avoid silly questions and misunderstandings ...”



“... and a great way for the external examiner to see exactly the kind of feedback we’re giving”

The take-away message

- There can be no one-size fits all approach to VEAF
 - Encouraging diverse approaches results in greater innovation
 - Distribution a key issue - mobile + apps can help ...
- A viral strategy can work to encourage take-up, but needs time ...
 - Availability of practitioner-driven case studies is key
 - Academic engagement promoted through peer encouragement
- VEAF best with high-frequency, dialogic, formative feed-forward
 - Implement models of assessment *for* learning, rather than *of* learning
- Greater inclusivity can be achieved using VEAF practices
- Efficiencies achieved in internal moderation, external examination

Any Questions?

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