

Introducing Electronic Voting System technology across a Higher Education Institution: reflections on some critical success factors

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Introduction

- Researching EVS technology use
- Critical success factors for technology adoption
- Other factors influencing successful institutional deployment
- EVS impact on teaching, satisfaction, workload
- Selected References

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Researching EVS technology use

JISC

A major institutional initiative supported by JISC to invest in EVS with 3,845 handsets delivered across 8 disciplines

Evaluated through:

- Qualitative research with students using reflective blogs and personal webcams
- Student survey
- Staff interviews and reports
- Staff survey

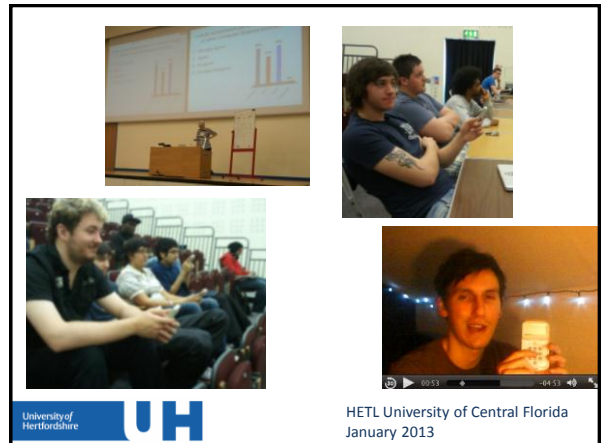
<http://jiscdesignstudio.pbworks.com/w/page/48734953/EEVS%20Project>



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Moving from a local to an institutional level of EVS adoption

Evaluation Aims:

- To research student and staff experiences of using EVS and what makes for successful use of the technology, within a large-scale project and across multiple disciplines.
- To identify, from evaluating the staff and student experiences, a set of critical success factors for introducing and maintaining the use of EVS to enhance assessment and feedback.

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Critical success factors

- A top-down initiative supported throughout at local level –senior management and grass roots.
- The software and hardware should be facilitated in all teaching rooms
- Sufficient initial and on-going staff development must be provided
- Support should be provided for developing a changing pedagogy
- Build variety into the use of technology for learning
- Responsibility for learning rests with the student

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Both senior management's and grass roots' support

- A top-down initiative which is then supported throughout at local level will help ensure the technology is adopted throughout the organisation
- Senior management support is essential for resourcing and alignment with strategic direction
- Local buy-in to support a change in pedagogy and accept technology changes
- Seek out the local gatekeepers and bring them onside

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The software and hardware should be facilitated in teaching rooms

- This allows academics to concentrate on what they teach and their pedagogical approach
- Technology ready classrooms so that academics can 'turn up and turn on' in a lecture theatre
- Facilitating conditions also include reliable software/hardware and 24/7 IT support

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Provide extensive staff development

- Sufficient staff development should be provided :
 - for understanding and managing the technology
 - from start up and for several years afterwards
- Local Champions have been very effective
- Enable a staff self-support group
- Not seen as a quick fix but an on-going pedagogic requirement

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Developing a learner-centred pedagogy

- Technology that supports student learning and assessment differs from a teacher-centric pedagogy
 - Support should be provided for developing a changing pedagogy which is learner-centred
 - Encouraging discussion and a constructivist approach
 - Blending online and face-to-face learning
- Through
- Local Champions
 - Continuing professional development
 - Action research

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Build variety into the use of technology for learning

- Some variety in the use of EVS in class is required to benefit most from their use and avoid too much 'technology fatigue'
- Encourage a variety of technology uses in class and online and in assessment – see e.g. the ESCAPE project
 - <http://www.jisc.ac.uk/whatwedo/programmes/elearning/curriculumdelivery/escape.aspx>

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Responsibility for learning rests with the student

- All students should have access to the necessary technology e.g. handset, PC.
- Students should retain responsibility for their handsets
- Staff access to the central database eases any issues with ownership of handsets

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Other factors influencing successful institutional deployment

- Technical competence of tutors and tutors' experience with writing MCQ questions
 - On-going staff development sessions including support for developing and changing their pedagogy
- Efficient handset distribution and adequate replacement cost
 - Consistent implementation (e.g. centralized operational procedures, related to cost, ownership and distribution)
- Continuous availability of technical support
 - Availability of local support via drop-in and help sessions

EVS impact on teaching, satisfaction, workload

EVS led to positive changes in teaching practice

- EVS made them think more about the interactions in lecture (60% staff)
- The lecturer addressed relevant topics/issues identified by student responses (62% students)

Moderate agreement that EVS led to higher job satisfaction

- I enjoy using EVS in my teaching (43%)
- *"It's so quick, I could come back from a lecture, it's immediately exportable to excel and it just goes up on StudyNet and the students can know their marks."* (Lecturer)

No positive impact yet on the staff workload, understanding that the adoption is a 'Long March' (Kanter) process

- **My workload pattern has changed (in a positive way) as a result of using EVS (7.7%)**
- *"Once it's embedded, then the workload for staff should be greatly reduced in terms of marking, writing assignments"* (Lecturer)

Conclusions

- Patterns of previous technology adoption at UH are mirrored :
 - The example of the MLE saw early student enthusiasm but academics took more time to feel fully at ease with the change in practice and pedagogy.

'Everybody who's used it and got it to work comes back and say it's great and they're going to use it again, it's getting over that initial hurdle and that means that the technology has got to be easy so that people can get in the swing of it' (Biosciences leader)

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