



Typed versus  
handwritten  
exams:  
*student  
perceptions and  
institutional  
considerations*

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# Aims

- To explore students' perceptions of typing versus handwriting exams.
- To test out online exam software.
- To examine the requirements for online examinations: security, regulations and facilities, training and support for all stakeholders.

NB. All three pilots were for formative assignments which provided feedback for final



# Three pilots of digital examinations

Two timed, take-home formative mock exams using **ExamSoft**

118 Law students typed an essay within 2 hours,

Timed, on-campus, invigilated formative mock exam using **Exam4** with students' own devices (BYOD).

30 Government students typed answers for 4 essay questions (from a choice of 16) within 3 hours.



# Law pilots: findings

Evaluation via focus groups and online surveys

Logistical issues around suitable location.

Adequate provision of technical support for students during assessment periods, particularly out of office hours.

Training - opportunity to test the technology used should be made available prior to any formal examination.

Student feedback, technical advice, and pedagogical insight may point to providing students with an opportunity to choose between handwriting and typing exams.



# Government pilot findings

## Evaluation via surveys

- Students displayed a general willingness to engage with typed exams but views were mixed:
- Some felt that handwriting invoked a more critical thought-process and led to a more clarified focus on analysis.
- Logistical issues around Wi-Fi and power socket access for BYOD
- Needed provision for students who cannot use their own device
- Staff and students required adequate support and training



# Writing speed and editing process

“It allowed me to edit my exams answers easily and was not as time consuming as handwriting”

“Main advantage: I was not penalised by my terrible handwriting.  
Main disadvantage: I was penalised by my slowness at typing”

“Typing tended to be quicker and allowed for neater edits and changes compared to crossing out and leaving footnotes. As a cost, mistypes were harder to spot, and telling when a paragraph needed to be stopped was more difficult.”

“It made it much easier to edit... ... what I wrote down that I dislike can easily be deleted and also more can be written in less time.”



# Timing and familiarization with software

"Also after 3 hours my eyes started to hurt and my hands were cramping from having them in the "claw" position for so long. After the exam I got a really bad headache and felt a bit disoriented - although this may not have been wholly the online exam's fault, I think having to strain your eyes at the screen for 3 hours straight definitely contributed."

"2 hours was good for me because it was a new approach; you have a bit of time to muck around and get to know the software"

"2 hours is longer than we would have in an exam but it's good because some people are slow typers."



# Expectations and marking

“...it made me anxious as I wondered whether this meant examiners will then be entitled to expect better quality essays even though it is still done in exam conditions.”

“I think we would need lots of practice and feedback in typing essays in timed conditions and be very clear about the difference in quality that would be expected of us compared to a handwritten examination.”

“In general I felt that typing my exam made me produce essays of a lesser quality not necessarily in terms of content but more in terms of grammar/sentence structure/following through with the essay plan.”







## Space and access to devices

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“Did not like the fact that it was at home; it did not have the same kind of pressure,”

Issues with finding a suitable quiet space

# Institutional implications

- If on-campus invigilated exams are to be scaled, logistical issues around location and WiFi must be considered.
- When employing a Bring Your Own Device (BYOD) method, one power socket per student is critical.
- Security and data protection proves to be of significant importance to all parties involved and must be an area well explored prior to the implementation of e-assessment practice.
- Regulations may need substantial overhaul to facilitate various modes of assessment particularly if using the BYOD model of assessment.
- Provision in case students cannot use their own device must be accounted for prior to implementation.
- Adequate student support and training prior to any summative assessment.

## Next steps

LSE Law department currently trialling small scale pilot of exam using **DigiExam** with ipads and keyboards - providing devices for students who have opted in to take part.

Assessment diversification agenda has led to increase in number of take home online assessments and a move away from traditional exams.



# References

Mogey, N and Hartley, J (2015) 'To write or to type? The effects of handwriting and word-processing on the written style of examination essays' *Innovations in Education and Teaching International*, 2013 Vol. 50, No. 1, pp. 85–93.

Mogey N., Paterson J., Burk J., Purcell M. (2010). Typing compared with handwriting for essay examinations at university: letting the students choose. *Research in Learning Technology*, Vol. 18, Issue 1, pp. 29-46.

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