Trade-offs, benefits and costs

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Administrative convenience v. pedagogical affordances
## Different Objectives

<table>
<thead>
<tr>
<th>Administrators</th>
<th>Students and Academics</th>
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<tbody>
<tr>
<td>Reduce Costs</td>
<td>Improve Learning</td>
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Making a Business and Academic Case for e-Exams
Administrative Convenience

Idealised Business Case Scenario

- [Real-time tracking of exam question paper preparation]
- No printing of exam papers
- No physical transporting of question papers or blank answer booklets
- Candidates supply all the computer equipment
- Electronic Candidate Identity verification
- No venue booking or hire!!
- Digital reticulation of marked scripts and marks
- Marking is automated or sped up (print easier to read than handwriting)
- Automated acquittal of candidate attendance
- No need to recruit, hire, train & pay examination supervisors
Pedagogic affordances

- Students are happier when using computers for high stakes assessment
- The curriculum catches up with professional computer-based environment
- Students demonstrate learning achievement at higher cognitive levels
- Better alignment between learning and assessment environments
- Faster educational response to scientific & cultural innovations (e.g. Einsteinian Physics) – curriculum transformation
- Every candidate has the identical resources and operating computer environment (controlled by the institution)
- Computer assessment environment is as rich as possible (maximising affordances whilst remaining fair)
- Candidates cannot cheat – maintains strong academic integrity
Win- win??
The technology MATTERS

Which institutional LCMS?  What student laptop platforms?
Think carefully

Some risk areas …
Reliance on networks during an exam.
Bigger isn’t better.
Ethical conduct.
Don’t forget the pedagogy!

Wake Forest law grad sues ExamSoft over bar exam debacle

By: David Donovan  August 18, 2014

When ExamSoft crashed during July’s bar exam, leaving hordes of angry bar-exam takers across the country unable to upload their essays, people joked online that the company could not possibly have ticked off a more litigious crowd. It was no joke. A Wake Forest law graduate is now suing the company.

Company behind botched medical exam has track record of failure

21 February 2018

The multinational education-testing company behind a botched exam that left 1,300 Minnesota doctors struggling to meet a Monday deadline has a well-documented history of stuff-ups.

Parnell Media has also been the registrar for the Royal Australian College of Physicians, whose exam could be compromised months before they sat the botched test.

Pearson, which was involved in marking the paper-based NAPLAN tests, has been heavily criticized for its poor track record in the US.

A Washington Post article published in August 2014 cited a total of 63 examples of software issues, from test-score delivery delays to transcription and interface errors, mistranslations and security issues.

NAPLAN focusses on low-level skills

In his report, commissioned for the NSW Teachers Federation, Dr Perelman compared NAPLAN’s writing tests with others around the world.

He described NAPLAN as “severely defective both in its design and its execution”.

Royal Australian College of Physicians

Up to 1,300 doctors are deeply distressed by the Royal Australian College of Physicians’ handling of an IT meltdown that wiped out a crucial, high-stakes examination on Monday.

Senior physicians have raised serious concerns for the mental health and wellbeing of the registrars now forced to retake the test after months of gruelling study regimens, hospital rounds and personal vacations.

215 Minnesota — Statewide testing suspended due to Pearson computerized administration system collapse

2015 Florida — State end-of-course testing suspended due to PearsonAccess log-in problems

2015 Virginia — State testing interrupted three times because of Pearson testing system problems

2015 Indiana — Cyber-attack on Pearson computerized exams raises security concerns

2015 New York — State ditches controversial test-maker

2015 Texas — Pearson loses half of state testing contract after repeated problems

2015 Minnesota — Pearson pays $5.7 million in fines and services for testing foul-ups

2016 New York — Missing and unlabeled pages in English exam cause confusion

2016 New Jersey — Statewide testing cancelled due to computer problems
Three dimensions - Assessment

Authenticity
- Valid and identity verified
- Relevant and rigorous

Integrity

Scalability
- Doable and cost effective

Pick two? ....
We need to strive for all three.
Three dimensions - Which e-Assessment Approach?

Authentic 21C Assessment, scalable, robust, secure?

Available now?

Quick

Good

Cheap

Administratively efficient, low cost?

Pick two? ....

Authentic e-assessment is not readily available off-the shelf. Investment and time required.
Transform assessment to transform curriculum

**e-Exam**
Every candidate uses the same operating system and applications

**Online testing**
Candidates connect to the institutional LCMS through a web-browser
How to make

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