Audio Setup

Test Your Audio
Click the microphone/gears icon
or
Go to: Tools > Audio > Audio Setup Wizard

This audio set-up wizard will walk you through how to set up your speakers and test your voice, volume, etc.

The session will start at 2:00 pm Eastern
Why can they print??
A discussion about online testing
21 April, 2016
Today’s Moderators

Matt Davis
Sr. Director, Client Success Advocate
Blackboard

Betsy McIntyre
Sr. Manager, Retention Programs
Blackboard
Corrie Bergeron M.Ed.

- Lakeland Community College
- Instructional Designer and Blackboard Systems Administrator
- Nearly 30 years’ experience designing and developing interactive learning experiences that work. Extensive experience with online learning, web 2.0, and interactive simulations and case studies.
Kevin Lowey B.Sc. B.Ed.

- University of Saskatchewan Information and Communications Technology
- Blackboard administrator and service Manager
- Started in user support and training in 1985. Became campus webmaster in 1995, and LMS service manager (for WebCT then Blackboard) in 2000
- Evolved the campus LMS from an isolated system for few courses to a mission critical integrated system used by 22,000 students in all courses
The legend of the Talking Moose

Or: How Kevin learned to solve what people need, not what they ask for
Session format

Have you heard this before?
*Common questions course builders ask about exams*

Talking Moose solutions
*Might fix some symptoms, but not the real problem*

The real problem
*What are we really trying to solve?*

Get beyond the symptoms
*Good practices to address the real issue*
Question: How to stop students from printing tests?

Need to stop students from saving questions to give to others

- Need to prevent printing
- Need to prevent copy and paste
- Need to prevent screen shots
- Need to prevent taking pictures of the screen
“Talking Moose” solutions to prevent printing of tests

- Add Javascript code to the exam to disable printing and copy/paste (can be disabled, doesn’t work in all browsers, may not apply to mobile apps)
- Use a custom web browser like Respondus Lockdown Browser or Examsoft (extra cost, doesn’t prevent other means of copying)
Real problem: Future students can see test questions

Technical solutions won’t work

• We cannot expect students to brilliantly remember test answers, but immediately forget test questions

• If they can remember the questions, they can write them down and share them

• There is nothing we can do with technology to solve that
Better solutions to future students seeing questions

Good practice:
Stop reusing questions

• Create new questions every test
• Change a percentage of the questions every time the exam is given
• Pick random questions from large question pools so probability of seeing a specific question is less
Question: How to prevent looking up answers?

How can we stop students from looking up the answers during an exam?

• How to stop opening browser windows?
• How to stop running other programs?
• How to stop accessing printed materials?
• How to stop using multiple devices, one for test, one to look up answers?
• How do we stop them from looking at other’s screens?
“Talking Moose” solutions to prevent looking up stuff

- Use a secured browser to prevent doing anything but the test on that computer (Doesn’t prevent using a different computer or cell phone)
- Use a proctoring service to watch the students (expensive, students need cameras and audio, have to watch for off camera help)
- Use so many questions students don’t have time to look up answers (doesn’t account for varying student needs and learning styles)
Real problem: We only test ability to recall facts

Why is looking up facts bad?

• In the real world, people will be able to look up facts.

• Students can look up facts, but need critical thinking skills to know if those facts are relevant or not.

• How well students understand and apply the facts they find is more important than the facts themselves.
Better solutions than recalling facts

Good practice:
Make exams open-book

• Do more than just ask students to recall facts (higher order Bloom’s Taxonomy)
• Ask questions that relate to a student’s previous assignments so answers are unique to the student
• Set a time limit on exams to prevent over-reliance on the open book, but not to prevent open-book use
• Ask questions that apply knowledge, not just re-state facts.
We need to test on facts!

- The nature of the class needs students to know the facts without looking them up (like diving exams)
- This is basic knowledge they need to internalize (such as health and safety procedures)
- These exams prepare students for certification exams that use the same multiple choice format
“Talking Moose” solutions for testing facts

• Use traditional multiple-choice questions that focus on recalling facts (tests fact recall but not the ability to apply those facts to problem solving)

• Use high-stakes closed book exams to test the student’s ability to recall the facts (This may simulate similar certification exams, but high stakes means higher incentive to cheat. Low stakes is better).
Real problem: Facts are used to solve problems

Test the problems, not the facts:

• Drivers are at a four-way stop and need to know the rules in order to safely proceed.

• A surgeon needs to correct a medical condition. She might review the material before the operation, but better know it during the operation.

• An emergency happens in a chemistry lab, what is the correct response?

• An ambulance driver needs to evaluate the situation and act appropriately.
Better ways to test facts

Good practice:
Use low-stakes formative assessments

- Use self-tests for teaching, not assessment
- Short pre-tests on material to help prepare for discussion in class
- Include feedback on right and wrong answers to aid study
- Allow multiple attempts
- A great use for publisher text banks, because it doesn’t matter if they get the answers from the textbook or a cheating site, they still learn the facts
Question: How can I evaluate 500 students?

We need the computer to grade for us:

• We have large classrooms with hundreds of students. There is no time to grade all those papers by hand
• We teach many of these classes so the time available to grade each student is even less
• We have to hire many teaching assistants and graders to help grading, but that leads to inconsistency in the grading between markers.
“Talking Moose” solutions for many students

- Only use question types on exams that can be automatically graded like multiple choice. (Usually people default to just testing facts and not higher-order learning)
- Minimize the number of question types you need to grade manually like Essays (implies higher-order evaluation cannot be automated)
Real Problem: Must balance time and authenticity

We must balance the use of authentic assessments with the time to grade them:

- There is a limited amount of time you can spend per student in large classes.
- There are problems with consistency when you have multiple people evaluating students.
- There is a cost to hiring additional graders.
- We need to minimize this overhead to provide authentic evaluation in an efficient manner.
Better ways to handle large classes

Good practice: Balance efficiency with authenticity

- Use higher-order multiple-choice questions that go beyond recalling facts.
- Use rubrics to grade questions. Simplifies grading, standardizes among different markers, clarifies evaluation.
- Use delegated grading to spread out the work among multiple graders.
- Try formal or informal peer review of student work, portfolios, discussions, etc.
Summary of good practices

1. Stop Reusing Questions
2. Make exams open-book
3. Test factual knowledge using low-stakes formative assessments
4. Balance efficiency and authenticity in assessments
Questions?
Thank you!

Thanks so much for joining us! If you have further questions, please let one of us know:

Corrie Bergeron: cbergeron@lakelandcc.edu
Kevin Lowey: kevin.lowey@usask.ca
Matt Davis: matthew.davis@blackboard.com
Betsy McIntyre: betsy.mcintyre@blackboard.com

View the recording on our Community site:

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Resources
More about the Talking Moose

- Web Site: http://talkingmoose.ca/loved-original-talking-moose
- Youtube Video: https://youtu.be/1X_Uui4wLvI
- Kevin’s Story: http://words.usask.ca/anykey/2013/11/04/lessons-learned-from-a-talking-moose/

And yes, the creator was from Saskatoon!
Bloom’s Taxonomy:
https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/

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Javascript to stop printing

Add the following to the “Description” or “Instructions” area of your quiz in the HTML view of the editor:

```html
<p>Printing Disabled</p>
<script type="text/javascript">/*<![CDATA[*
document.write ('"<style scoped type=text/css>@media print {BODY {display:none}}</style>"')
/*]]>*/</script>

Also modify the feedback settings so you don’t reveal test questions there.
Randomization of questions

Visit https://wolframalpha.com/

Type “15 choose 10” for the number of unique test combinations when picking 10 questions from a pool of 15:

- 15 choose 10 = 3,003
- 25 choose 20 = 53,000
- 50 choose 25 = 126 trillion
- 150 choose 100 = 2x10^40
Coffee house question

You have just come from the coffee house where you and an old friend, Adam Smith, enjoyed your favorite brews over some good conversation. Well, mostly good conversation. There was that brief interlude when Adam went on one of his economic rants. Just what does he have against mercantilism anyway?

@ see Divine, page 76

a) with the state caring for every aspect of the economy and people's lives, people had no incentive to produce, gradually lowering national productivity and the standard of living for everybody

b) * with every nation selfishly guarding its own access to the world's resources while denying it to others, trade was actually being stifled, and people's standard of living was being kept lower than it ought to be

c) free market economies were good, but they had their flaws -- mercantilist policy offered no oversight or regulatory activity over such an economy

d) the amount of raw materials in the world was finite -- rather than ensure its own nation had access to them, a mercantilist government had to make sure that rival nations were denied access to raw materials
The Colonial Style of Local Government Colonial cities, towns, and plantations, including New Netherlands’ patronum manors, drew upon traditional European governmental practice and received charters from the crown, proprietors, or colonial legislatures that granted the right of local government. These charters were an extraordinary privilege in the seventeenth and eighteenth centuries because local governments regulated virtually all aspects of commercial and manufacturing life. Almost everyone had some government-related task. For example, a partial list of governmental posts in Boston around 1700 included constable, town clerk or recorder, treasurer, assessors, collectors, surveyors of highways, clerks of the market, fence viewers, hog reeves, pound keepers... common drivers... water bailiffs, cow keepers, town drummers and teachers of town drummers, tithingmen, perambulators, ringers and yokers of swine, sealers of weights and measures, keepers of ordinaries, town bellmen, cullers of staves, measurers of corn and of boards, corders of wood and overseers of wood corders, overseers of chimneys and chimney-sweepers, overseers of almshouses, gaugers, viewers, surveyors of casks of tar, fire wards, town criers, informers of offenders against the license laws, sealers of leather, licensors and inspectors of brick makers, cullers of fish, inspectors of hides for transportation, measurers of salt, packers of flesh and fish, inspectors of the killing of deer, deer reeves, school wardens, school teachers, truckmasters, brewers, rebukers of boys, sizers of meadows, warners of town meetings, scavengers, viewers of lands, lot layers, judges of delinquents at town meetings, judges of boundary disputes.

branders of cattle, pinders, jurymen, town cannoniers, commissioners for equalization of assessment, town fishers, town deputies, town doctors, town grubbers, and persons to keep dogs out of church.

And Boston’s population at the time stood at only 6,700.

Most positions required only a small outlay of time, but their sheer number suggests the scope of local government’s commercial and manufacturing involvement. Government owned the docks, markets, counting houses, warehouses, and often the vessels. It required idle persons to work. It regulated who might enter the locality, how long they might remain, and what occupations or trades they could pursue. It set prices for goods and services, fixed wages for workers, and mandated the number of persons allowed to practice each trade.

Local government was a closed commercial corporation, for its powers eliminated economic competition within its jurisdiction. Regulation of wages, prices, and number of workers placed the welfare of the plantation, city, or town above the desires of individuals residing and working there to guarantee that all citizens would share—not necessarily equally—in whatever gain resulted. A local government’s influence typically extended far beyond its legal boundaries. Authority to determine who could participate in commercial endeavors enabled local government to control access to both the largest local market—the city, town, or plantation—and the European trade. Most rural artisans or agriculturists had to seek assistance of those closed commercial corporations. And that meant agreeing to abide by that local government’s stipulations.
Open-book example: test question

Which of the following was NOT a government job in colonial Massachusetts?

a. Baker  
b. Brewer  
c. Collector of Tithes  
d. Person to keep dogs out of church  
e. Rebuker of boys  
f. Admonisher of young ladies
Melinda Johansson’s article


A reprint (with permission) of a mailing list posting by Melinda Johansson of Blackboard on why it is futile to try preventing printing of exams.

“ALL ONLINE TESTS SHOULD BE DESIGNED AS OPEN-BOOK TESTS. Life is open-book. Work is open-book.”
How to study long and hard and still fail ...

https://www.youtube.com/watch?v=RH95h36NChI

A series of videos from Samford University on how to study effectively in college. This is useful for students, but also helps instructors understand different ways students learn and more effective ways of evaluating these students.
Why I don’t do true / false tests

https://www.youtube.com/watch?v=a3rPJnVbawQ&list=PLUnQ8kbGoSLNjGuk9UcaYLWU92jw_yhYm

A story where Corrie explains why he doesn’t do True / False Tests. Random chance will let a significant number of students pass.

This link also displays Corrie’s EDUC2300 course video playlist of other videos
The importance of play

http://words.usask.ca/anykey/2014/04/20/the-importance-of-play/

Kevin’s blog article on the importance of play in life and learning.

Part of the article discusses how Kevin programmed his TRS-80 pocket computer to do analysis of variance calculations, then was allowed to use that in the statistics exam.

The act of writing the program to do the ANOVAs did more to demonstrate mastery of the material than the actual exam did.
Useful google searches

- “How to beat proctoring software”
  Shows many techniques for defeating online proctoring.

- “[Vendor] [Textbook name] test bank”
  Shows how easy it is for students to obtain publisher test banks
Relevant readings:

- Cheating Lessons: Learning from Academic Dishonesty – James M. Lang  

- The Authentic Assessment Toolbox – Jon Mueller  
  [http://jolt.merlot.org/vol1no1/mueller.htm](http://jolt.merlot.org/vol1no1/mueller.htm)

  [http://www.nap.edu/read/10019/chapter/1](http://www.nap.edu/read/10019/chapter/1)

- Writing Objectives using Bloom’s Taxonomy – UNC Charlotte  
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• Other images provided by the presenters