Foundations for Academic Success (FAS): Innovative Mobile Learning to Enhance Academic Integrity

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Research and Innovation Grant

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Research will support the development, administration, and assessment of the Foundations for Academic Success (FAS), an academic integrity mobile learning tool that explores best strategies, from a student user perspective, for accessing, delivering, assessing, and learning academic integrity with mobile technology.
Foundations for Academic Success Project (FAS)

Objectives: develop strategies to enhance student academic integrity (AI) knowledge and understanding by employing mobile technology with an innovative pedagogical approach.

FAS will be an open access mobile application that can be adopted and used across many post-secondary colleges and universities.
Project Rationale

- Academic integrity (AI) is essential in post-secondary education, yet insufficient time is spent teaching and practicing its concepts.

- Talks at orientation, lectures in the first class, and notations in the course syllabus have been traditionally used to assist first year students with the academic transition to university.

- BUT these have not been very effective at increasing students’ level of academic integrity.
Academic Integrity

“refers to a set of conventions that scholars follow in their work, and which generates credibility, trust, and respect within the academic community”

(http://www.yorku.ca/spark/academic_integrity/index.html)
Moving Forward

- Institutional approaches to academic integrity have shifted from being punitive or rules-focused to being educative (i.e., teachable moments) and values-based (Bertram Gallant, 2008, 2011; Cole & Kiss, 2000)

- Students need to have scholarship and integrity role modeled and nurtured within an educational institution (Batane, 2010; Glendinning, 2014; Rolfe, 2011; Stappenberg & Rowles, 2009)
Recognized Values

The International Center for Academic Integrity defines academic integrity as a commitment, even in the face of adversity, to six fundamental values: honesty, trust, fairness, respect, responsibility, and courage.

From these values flow principles of behavior that enable academic communities to translate ideals to action.

Fundamental Values Project, (2013) International Center for Academic Integrity (ICAI)
http://www.academicintegrity.org/icai/resources-2.php
Modelling values

- be HONEST
- have and give RESPECT
- take RESPONSIBILITY for your actions
- be FAIR
- build TRUST
- have COURAGE

Fundamental Values Project, (2013) International Center for Academic Integrity (ICAI)
http://www.academicintegrity.org/ica/resource-2.php
**Why use a mobile device?**

**Learners**
- Already have mobile devices
- Access anytime and anywhere (with WiFi)
- Not limited to Learning Management System (LMS)
- Engage using multimedia & interactive features
- Learner-centered, requires no teacher presence

**Faculty**
- Effective way to reach more students
- Efficient way to share knowledge
- Frees up time to teach discipline specific scholarship
FAS Tool

Login

Languages

Apple IOS

Android APPS

UNIVERSITY OF WATERLOO
Student Life

High school

Student Residence

Library

Classroom

Co-op work term, experiential learning, volunteering

Study Abroad

Graduation

Athletics
Modules

• Values based decision-making scenarios

• Illustrate situations students may find themselves in over their academic career (e.g., from living in residence to co-op work terms/volunteering/experiential learning and BEYOND graduation). Integrity is a life-long core value

• Each module will take 4-6 minutes to complete

• The entire application will take approximately 36 minutes to finish and can be completed over time, on either a mobile learning device and/or desktop, at the convenience of the student
Pedagogical Design

Lesson 8: Academic Integrity

What is integrity?

According to the Oxford English Dictionary, integrity, in a moral sense, is:
Soundness of moral principle; the character of uncorrupted virtue, especially in relation to truth and fair dealing; uprightness, honesty, sincerity.

Lesson 9: Copyrights for Students

Copyright is:
The right to produce or reproduce a work, or substantial part of a work, in any format, or to publish a work if it is unpublished.

Welcome to the Copyright Module.

In this module you’ll learn more about copyright, why it matters to you as a student, and where you can get more help.

As defined by the Copyright Act, Copyright is the right to produce or reproduce a work, or substantial part of a work, in any format, or to publish a work if it is unpublished.

Works are anything from sound recordings, to photographs to literature.
Interactive Questions

Which of the following is NOT one of the fundamental values of academic integrity?

A. Kindness  
B. Responsibility  
C. Honesty  
D. Fairness  
E. Trust

A student publicly posts on Piazza a two line snippet of their assignment code because they can't understand the syntax error it produces.

A. True  
B. False

Which of the following are fundamental values of academic integrity? Check all that apply (6)

A. Trust  
B. Happiness  
C. Honesty  
D. Tutoring  
E. Cheating  
F. Intelligence  
G. Respect  
H. Responsibility  
I. Good Taste
Assessment of Learning

A summative quiz at the end of the six modules will evaluate the students understanding of each value and how it applies to academic integrity.
Student Feedback

Your Score

Student ID# 2445677
Score 17 / 17 Points (100%)
Correct Answers 4
Incorrect Answers 0
Email Av@renison.uwaterloo.ca
Passing Grade 70%
Time Taken 01 mins 46 secs

Correct
1) An instructor has specified that you must work independently on a take-home test. A group of students get together to share ideas. Each student fills in the answers separately, but work together to create the responses. Does this scenario represent a violation of integrity?

A. Yes, because the students worked together when told to work alone, this is inappropriate collaboration, and violates the trust your instructor places in you to do independent work.
B. No, this collaboration is fine. Each student wrote their own answers. ✓ (Your Answer)

Feedback Collaboration is good practice. Just be careful you do not copy answers directly.

Correct
2) You make sure to organize your time so that you get enough sleep, eat well, and plan time to do your assignment. Which fundamental value of integrity are you upholding?

A. Trust
B. Fairness
C. Responsibility ✓ (Your Answer)
D. Respect
E. Honesty
E-Certificate & Open Badges

Certificate Of Achievement

John Doe

got a score of
61/100 (61%)
on
Academic Integrity

Apr 1, 2017

E-Certificate (PDF)

Open Badges (Credly)

Example: Certification
Research Methodology

• Mixed-method, non-experimental approach

Qualitative

• Focus groups for feedback on content
• FAS tool testing with feedback from users
• Testing of French and Mandarin translations
• Student questionnaires on effectiveness

Quantitative

• Comparison of pre and post quiz results for the pilot group (with AI lessons) and control group (no AI lessons)
• Tracking user data with learning analytics
User Statistics

Quiz Attempts
220

Average Time
2m 10s

Average Score
75%

Question Stats

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Question</th>
<th>% Correct</th>
<th>Correct</th>
<th>Incorrect / Unanswered</th>
<th>Responses</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>How does copyright apply to you?</td>
<td>80%</td>
<td>175</td>
<td>45</td>
<td>220</td>
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<tr>
<td>2</td>
<td>A student posts copies of lecture and test material on a note sharing...</td>
<td>92%</td>
<td>233</td>
<td>17</td>
<td>220</td>
</tr>
<tr>
<td>3</td>
<td>What can you do if you want to use copyright protected content?</td>
<td>57%</td>
<td>147</td>
<td>73</td>
<td>220</td>
</tr>
<tr>
<td>4</td>
<td>Based on the lesson, where are some good places to go for more help...</td>
<td>58%</td>
<td>128</td>
<td>92</td>
<td>220</td>
</tr>
</tbody>
</table>

Average time taken per question

<table>
<thead>
<tr>
<th>Question</th>
<th>Average Question Time(secs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does copyright apply to you?</td>
<td>18 secs</td>
</tr>
<tr>
<td>A student posts copies of lecture and test material on a note sharing...</td>
<td>15 secs</td>
</tr>
<tr>
<td>What can you do if you want to use copyright protected content?</td>
<td>38 secs</td>
</tr>
<tr>
<td>Based on the lesson, where are some good places to go for more help...</td>
<td>42 secs</td>
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Sample Demonstration

Mobile Information Literacy Project: http://renmil.ca/

Mobile Information Literacy app: http://bit.ly/milmodules
Recommendations

• Academic Integrity education should become better integrated into academic studies

• The FAS tool can provide learners a way to study AI in an engaging and relevant format:
  
  including more images than text to convey meaning, incorporating games to immerse students, providing meaningful and immediate feedback, and opportunities to apply and practice learning

  (East, J., in T. Bretag (ed.), Handbook of Academic Integrity, 2016)
QUESTIONS

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