Questions to Ask Before Adopting a New Digital Learning Tool for Your Classroom
Agenda

- Introduction
- Pedagogical/Value Added Considerations
- Digital Tool Logistics
- Data Ownership, Privacy & Security
- Integration with Canvas
- Learning Analytics
- Accessibility Considerations
- What Next
Introduction/Overview (Kevin)

Digital Tools constantly changing

Tool integration Committee formed to facilitate how tools are considered/adopted, particularly for use with Canvas.

Questions to consider when adopting a tool for your class

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<tr>
<th>Pedagogical</th>
<th>Technical</th>
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<td>Financial</td>
<td>Privacy, Security</td>
</tr>
<tr>
<td>Data Ownership</td>
<td>Accessibility</td>
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</tbody>
</table>
Examples of external tools in Canvas

- McGraw Hill Connect
- Pearson MyLab
- ALEKS
- ereserve
- iClicker
- Piazza
- Proctoring software
- Course Design Tools
- YouSeeU
Unless the mass of workers are to be blind cogs and pinions in the apparatus they employ, they must have some understanding of the physical and social facts behind and ahead of the material and appliances with which they are dealing.

John Dewey, 1915
Teachers who espouse critical approaches, then, are generally interested in preparing students to be social critics rather than indoctrinated consumers of material culture. However, many teachers themselves have not been adequately prepared to think critically about computers.

Stuart Selber, 2004
Critical Pedagogy (Tim)

How do the tools and practices brought into a classroom reflect that an educator has invested more or less critical attention to the aim of designing an equitable and empowering learning environment?

How do specific tools support distinct forms of learning or learners?

How might tools alienate or marginalize learners, reduce learner autonomy, or perpetuate systemic inequality?
Critical Pedagogy (Tim)

No pedagogies are value neutral; all work from certain ideological assumptions about the world.
Digital Tool Logistics (Kevin)

- Who Makes the tool?
- How is the tool maintained/supported?
- Costs associated with using the tool?
- Timeline – when would like tool available for use?
  - 4 – 6 weeks to evaluate.
  - May take longer if contract is involved.
Data Ownership (Tim, Kevin)

- Who owns the tool’s data?
  - CSU looks for, at the least, joint ownership.
  - CSU would like access for learning analytics.

- Will the data be sold to a third party?

- Is the data stored securely?

- Who should make those decisions?
  Administration, faculty, students, tool designers?

- Vanderhye, ProQuest/Amazon, ProQuest/Turnitin
Privacy (Tim, Kevin)

- What information is passed between CSU and the tool maker?
  - Most LTI tools share directory information such as name and email address.
  - Does the tool abide by FERPA and CSU privacy policies?
Privacy, Ownership, & Accessibility

Eli Review, a gold standard, for ethics in design of learning technology with respect to its terms of use.

http://elireview.com/support/privacy/

http://elireview.com/support/tech/vpat/
Tool Integration with Canvas (Matt)

- What is an LTI?
  - Web application that conforms to a standard
  - Specification provided by IMS Global

- What does it do?
  - Authentication
  - Common standard for data transfer
Learning Analytics Considerations (Matt)

- Transfers analytics data in a standard format
  - SCORM
  - xAPI
  - Calipre
Accessibility Considerations (LiShan)

- Big picture - navigation friendly
  - Eye tracking technology
  - Structure consistency
  - Site map
  - Search
  - Responsive design for different devices (Mac, PC, tablet, smartphone, Touchscreens)

- Accessible for all
  - Color blind (text vs. background)
  - Age (AAA)
  - Blind and vision-impaired (sound recognition, Screen Readers)
  - Deaf (captions or transcript for videos)
  - Slow computer (image alt text)

- Current “Launch Design Tools” on Canvas/ check accessibility
  - Header font size
  - Alt text
Accessibility Check Tools

- Markup Validation Tools Currently Free
  - EvalAccess 2.0 [http://sipt07.si.ehu.es/evalaccess2/]
  - MAUVE [http://hiis.isti.cnr.it:8080/MauveWeb/]
  - PowerMapper [http://www.powermapper.com/products/sortsite/ads/accessibility-testing/]
  - TAW (very slow) [http://www.tawdis.net/ingles.html]
  - Nu Html Checker [https://validator.w3.org/nu/]
  - Juicy Studio [http://juicystudio.com/services.php]
  - Contrast-A [http://dasplankton.de/ContrastA/]
  - Color Contrast Checker [http://webaim.org/resources/contrastchecker/]
  - Check my Colours [http://www.checkmycolours.com/]
  - Contrast checker [http://contrastchecker.com/]
  - Firefox WCAG Contrast checker add-ons [https://addons.mozilla.org/en-us/firefox/addon/wcag-contrast-checker/]
  - Contrast-ratio [http://leaverou.github.io/contrast-ratio/]

- Screen Readers
  - ChromeVox  Browser add on for Chrome
  - Fire Vox plugin for Firefox

- Future Accessibility validator on Canvas
Students who might need services would need to start at [http://rds.colostate.edu/](http://rds.colostate.edu/).

For accessibility support, instructors should list [http://accessibility.colostate.edu](http://accessibility.colostate.edu) on the syllabus.

Allison Kidd, Accessibility Specialist
[Allison.Kidd@colostate.edu](mailto:Allison.Kidd@colostate.edu) 970.491.0625
Develop Evaluation Rubric for Vetting LTIs

- Criterias
  - Tool Provider
  - Cost
  - Timeframe
  - Data Ownership
  - Data Security
  - Data Access
  - Accessibility Implication

What’s Next (Elaine & Stan)

Colorado State University’s LTI Tools (External Apps) Rubric for Canvas LMS

<table>
<thead>
<tr>
<th>Tool Name: __________________________</th>
<th>Evaluator: __________________________</th>
<th>Date: __________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SECURITY</strong></td>
<td><strong>Excellent</strong></td>
<td><strong>Acceptable</strong></td>
</tr>
<tr>
<td>Technical security</td>
<td>□</td>
<td>□ Provides required security measures and standards to protect systems.</td>
</tr>
<tr>
<td><strong>PRIVACY</strong></td>
<td><strong>Excellent</strong></td>
<td>□ Collects student identifiable data for functional purposes only. Complies with FERPA</td>
</tr>
<tr>
<td>How might using this tool compromise the privacy needed to construct trustful relationships in learning environments.</td>
<td>□ Makes no claims of ownership of data and acknowledges that CSU retains exclusive ownership and access. Caliper compliant.</td>
<td>□ Acknowledges that CSU retains ownership of data. Caliper compliant or has roadmap for compliance.</td>
</tr>
<tr>
<td><strong>DATA SHARING, OWNERSHIP, AND MANAGEMENT</strong></td>
<td><strong>Excellent</strong></td>
<td>□ Evidence of full compliance</td>
</tr>
<tr>
<td><strong>ECONOMIC</strong></td>
<td><strong>Excellent</strong></td>
<td>□ Cost is fair, reasonable and includes relevant services.</td>
</tr>
<tr>
<td>Is this tool affordable? What are the costs? What types of purchase options are available (institutional v. individual).</td>
<td>□ Free</td>
<td>□ Cost is high and reasonable</td>
</tr>
<tr>
<td><strong>COMPLIANCE WITH FEDERAL AND STATE LAWS</strong></td>
<td>□ Evidence of full compliance</td>
<td>□ Compliance with no evidence to the contrary.</td>
</tr>
<tr>
<td><strong>PEDAGOGICAL IMPACTS</strong></td>
<td>□ Demonstrates sound pedagogical principles and enhances student engagement and/or learning.</td>
<td>□ Supplements or supports educational processes</td>
</tr>
<tr>
<td><strong>ETHICAL IMPACTS</strong></td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td><strong>TECHNOLOGICAL AND TECHNICAL CONSIDERATIONS</strong></td>
<td>□ Fully functional with minimal resources and administration</td>
<td>□ LTI requires reasonable resources and has process for fixing bugs or issues that may surface.</td>
</tr>
<tr>
<td>Network limitations; ANCS policy; Interoperability; Challenges to integration with existing/other tools. Book store. How do students purchase access?</td>
<td>□ Accessibility is provided by default.</td>
<td>□ Can be made accessible when reasonable accommodations are requested</td>
</tr>
<tr>
<td><strong>ACCESSIBILITY</strong></td>
<td>□ Development and support teams in place to provide assistance and timely improvements and updates</td>
<td>□ Current LTI is functional and updates are provided as needed.</td>
</tr>
<tr>
<td><strong>OTHER CONSIDERATIONS</strong></td>
<td>□</td>
<td>□</td>
</tr>
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Items to Consider

- What value will the tool add to the class?
- Impact = # instructors / students
- Who maintains the tool?
  - More than one person
- Cost – if any, who will pay?
When is the tool needed?
- 4 – 6 weeks to evaluate
- Can take longer if contract involved.

Data ownership
- Comply with FERPA, CSU policies
- CSU access for Learning Analytics
- Vendor does not sell student information.
Request External Tool for Canvas

- Committee reviewing request form.
- Provide assistance filling out form.
- Channel to communicate which tools are in Canvas and how to request new tools.

http://info.canvas.colostate.edu/external-tools-request.aspx