Designing Effective and Efficient Assessment

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Why is this important?

- Improve the learning of your students
- Increase the transparency of assignments and marking criteria
- Better alignment of learning outcomes and learning activities
- Increase the efficiency of marking and feedback
- Decrease the incidence of student “misunderstandings” and complaints
Session Learning Outcomes

• When asked, participants will explain how effective and efficient assessment depends on complete specification of student learning outcomes.

• When presented with written learning outcomes, participants will recognize the presence/absence of performance, conditions and criteria components of learning outcome statements.

• Working alone or with a partner, participants will write at least one complete learning outcome statement for a module of a target course.

• When asked, participants will describe three or more ways that statements of performance, conditions and criteria can facilitate the development of formative and summative assessments.

• Face to face, participants will provide supportive and constructive formative feedback to colleagues.
Learning Outcomes
“Levels” of Learning Outcomes

- Institution-Level
- Program-Level
- Course-Level
- Module-Level
“Levels” of Learning Outcomes

- **Institution-Level**
  University of Victoria
- **Program-Level**
  B.Sc. Psychology
- **Course-Level**
  Psychology 311B – Conditioning and Learning
- **Module-Level**
  Unit 6: Operants – Selection by Consequences
Learning Outcomes and Learning

• Learning outcomes are **not** a new idea.
  • Instructional Objectives
  • Learning Objectives
  • Learning Goals
  • Behavioural Objectives
  • Performance Objectives, etc.

• The specification of learning outcomes derives from what we know about learning.

• Learning occurs when a **performance** receives feedback related to **criteria** under a given set of **conditions**.

  or  Mager, Robert (1962) Preparing instructional objectives,
Mager’s Objectives

Robert Mager: The ideal learning objective provides a clear description of three key components: performance, conditions and criteria.

**Performance**: What the learner does. (behaviour)

**Conditions**: When/where the learner does it.

**Criteria**: How much/how well the learner does it – the criteria for feedback.
1) Performance

- Examples
  Thinking, Talking, Problem-solving, Writing, Evaluating, Imagining, Creating, Discriminating, Analyzing, Touching, Explaining, Organizing, Critiquing, Constructing, Coding, Computing, Adjusting, Measuring, Listening, Smelling, Feeling, Twisting, Turning, Selecting, etc.
Performance Domains

Categories of performances can be helpful to ensure adequate coverage

- Cognitive Domain (Bloom, 1956; Krathwohl, 2002)
- Affective Domain (Krathwohl, 1969)
- Psychomotor Domain (Simpson, 1972)
Some Cognitive Performance Words
(*a la* Bloom)

- **Evaluation/Evaluating:** Judge, Appraise, Evaluate, Rate, Rank, Compare, Value, Revise, Score, Select, Choose, Assess, Estimate, Measure, Review
- **Synthesis/Creating:** Compose, Plan, Propose, Design, Formulate, Arrange, Assemble, Collect, Construct, Create, Set Up, Organize, Manage, Prepare, Make
- **Analysis/Analyzing:** Distinguish, Analyze, Differentiate, Calculate, Compare, Contrast, Diagram, Inspect, Inventory, Relate, Examine, Categorize, Parse
- **Application/Applying:** Interpret, Apply, Employ, Use, Demonstrate, Dramatize, Practice, Illustrate, Operate, Solve, Sketch
- **Comprehension/Understanding:** Translate, Restate, Discuss, Describe, Recognize, Explain, Express, Report
- **Knowledge/Remembering:** Define, List, Recall, Name, Identify, Label, Recognize
2) Conditions

- **Context**
  - The “tools” learners will have at their disposal
    - Information (texts, objects, drawings, lectures, videos, tweets, data, images, instructions, body language, etc.)
    - Questions/Problems/Prompts
    - Presence/absence of distractions
  - **Examples**: with an open book; using a standard calculator; given a novel poem; when working alone; when asked x;

- **Domain**
  - The scope of a fair assessment
    - The range of “coverage”
  - **Examples**: including all Prime Ministers in the 20th Century; with Spanish sentences in the past and present tenses; limited to visual artists who were covered in lectures; with positive integers
3) Criteria (or Degree)

**Quantitative aspects**
- How much or how many
- How quickly or frequently
- How accurately or precisely
- Etc...

**Qualitative aspects**
- How completely
- How well
- How clearly
- Etc...
“Levels” of Learning Outcomes and Critical Components

- **Institution-Level**: Performance
- **Program-Level**: Performance and Criteria
- **Course-Level**: Performance, Conditions and Criteria
- **Module-Level**: Performance, Conditions and Criteria
Silly Warm-up Exercise:
Let’s try writing a simple learning outcome

- Imagine you have just brought home a new puppy. (Cat lovers may substitute “kitten.”)

- On the worksheet, write a learning outcome for your new pet that includes all three of Mager’s components: (performance, conditions, criteria)
  - Suggestion: Focus on what you want the pet to do rather than what you want the pet not to do. Be creative!
Give feedback to your partner

- Performances?
- Conditions?
  - Context
  - Domain
- Criteria?
  - Quantitative
  - Qualitative
Course: Introduction to Behaviour Analysis

This course introduces students to understanding behaviour from a distinctly behavioural perspective. In particular, students are expected to learn about behaviour principles (e.g., operant and respondent conditioning, reinforcement, discrimination, generalization, shaping, fading), and to analyze behaviour and possible determining conditions in terms of functions rather than forms.
General Learning Outcome Statement:

Learners will be able to identify the function(s) of behavioural events occurring in an interaction between two people.

This is a “Module-Level” learning outcome.
General Learning Outcome Statement:

Learners will be able to identify the function(s) of behavioural events occurring in an interaction between two people.

Conditions

a) When presented with a written description of a social interaction between two people...

b) When presented with a video of a social interaction between two people...
General Learning Outcome Statement:

Learners will be able to identify the function(s) of behavioural events occurring in an interaction between two people.

Conditions and Performances

a. When presented with a written description of a social interaction between two people, the learner will identify (write/say) the stimulus functions played by each person’s behaviour for the other person.

b. When presented with a video of a social interaction between two people, the learner will identify (write/say) the stimulus functions played by each person’s behaviour for the other person.
General Learning Outcome Statement:

Learners will be able to identify the function(s) of behavioural events occurring in an interaction between two people.

Conditions, Performances and Criteria

a. When presented with a written description of a social interaction between two people, the learner will accurately identify (write/say) the stimulus functions played by each person’s behaviour for the other person, providing justification for each identification.

b. When presented with a video of a social interaction between two people, the learner will accurately identify (write/say) the stimulus functions played by each person’s behaviour for the other person, providing justification for each identification.
General Learning Outcome Statement:

Learners will be able to identify the function(s) of behavioural events occurring in an interaction between two people.

Conditions, Performances and Criteria

a. When presented with a written description of a social interaction between two people, the learner will accurately identify (write/say) the stimulus functions played by each person’s behaviour for the other person, providing justification for each identification.

b. When presented with a video of a social interaction between two people, the learner will accurately identify (write/say) the stimulus functions played by each person’s behaviour for the other person, providing justification for each identification.
Rosa and her 3-year-old daughter, Juanita, are in the mercado. Juanita sees candy near the checkout area and Juanita points at the candy. Rosa doesn’t respond. Juanita cries and stomps her feet. Rosa selects a candy and puts it into the shopping basket. Juanita stops crying and smiles.

(In the future, we observe that Juanita is more likely to tantrum in similar situations. When tantrums occur, Rosa is more likely to give in. Rosa also is less likely to take Juanita to the mercado).

Analyze this episode in terms of the function(s) played by the behaviours of the two people, justifying your analysis.
Incorporating Mager’s key features of instructional objectives, write a complete learning outcome relevant to your course.

**Suggestion:** Work on an important “module-level” learning outcome. For the next part of this workshop, please write a learning outcome for which an assignment would be relevant. You will be using this learning outcome in Part II and Part III of the workshop.
Write a course-relevant learning outcome (2 of 2)

Define one essential learning outcome for your target course.

- Start with a general statement of the learning outcome. Then,
  - Specify the Performance (what behaviour(s) the learner would do)
  - Specify the Conditions (when/where/with the learner would do it)
  - Specify the Criteria (how much and/or how well the learner would do it)
Give your partner feedback

- Performances?
- Conditions?
  - Context
  - Domain
- Criteria?
  - Quantitative
  - Qualitative
Usually, learners will require mastery of foundational learning outcomes before they can master your ultimate learning outcomes. Learning is progressive.

Foundational learning outcomes may vary from ultimate outcomes in terms of:

- **Conditions** (more “tools,” more obvious, simpler, easier, hints, prompts, following similar examples, limited domain)

- **Performances** (concept names, concept definitions, rules, guidelines, Bloom’s “knowledge” or “remembering”)

- **Criteria** (relaxed standards, explicit criteria, rubrics)
Performance (e.g., complexity, completeness)

Criteria (e.g., quantity or quality)

Conditions (e.g., tools, promptings)

Conditions (e.g., generality, domain)
Rosa and her 3-year-old daughter, Juanita, are in the mercado. Juanita sees candy near the checkout area and Juanita points at the candy. Rosa doesn’t respond. Juanita cries and stomps her feet. Rosa selects a candy and puts it into the shopping basket. Juanita stops crying and smiles.

Identify behaviours by circling the verbs and colouring them for each person.
Rosa and her 3-year-old daughter, Juanita, are in the mercado. Juanita sees candy near the checkout area and Juanita points at the candy. Rosa doesn’t respond. Juanita cries and stomps her feet. Rosa selects a candy and puts it into the shopping basket. Juanita stops crying and smiles.

Identify behaviours by circling the verbs and colouring them for each person.
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Next, for each behaviour of Juanita, identify the antecedent and the consequent events. Use a table.
Rosa and her 3-year-old daughter, Juanita, are in the mercado. Juanita sees candy near the checkout area and Juanita points at the candy. Rosa doesn’t respond. Juanita cries and stomps her feet. Rosa selects a candy and puts it into the shopping basket. Juanita stops crying and smiles.

Next, for each behaviour of **Juanita**, identify the antecedent and the consequent events. Use a table.

<table>
<thead>
<tr>
<th>Antecedent Event</th>
<th>Behaviour</th>
<th>Consequent Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candy</td>
<td>Juanita points</td>
<td>(no consequence)</td>
</tr>
<tr>
<td>Non-response of Rosa</td>
<td>Juanita tantrums</td>
<td>Rosa selects candy</td>
</tr>
<tr>
<td>Candy in basket</td>
<td>Juanita stops crying</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and smiles</td>
<td></td>
</tr>
</tbody>
</table>
Rosa and her 3-year-old daughter, Juanita, are in the mercado. Juanita sees candy near the checkout area and Juanita points at the candy. Rosa doesn't respond. Juanita cries and stomps her feet. Rosa selects a candy and puts it into the shopping basket. Juanita stops crying and smiles.

Next, for each behaviour of Rosa, identify the antecedent and the consequent event.
Rosa and her 3-year-old daughter, Juanita, are in the mercado. Juanita sees candy near the checkout area and Juanita points at the candy. Rosa doesn’t respond. Juanita cries and stomps her feet. Rosa selects a candy and puts it into the shopping basket. Juanita stops crying and smiles.

Next, for each behaviour of **Rosa**, identify the antecedent and the consequent event.

<table>
<thead>
<tr>
<th>Antecedent Event</th>
<th>Behaviour</th>
<th>Consequent Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juanita points</td>
<td>Rosa doesn’t respond</td>
<td>Juanita tantrums</td>
</tr>
<tr>
<td>Juanita tantrums</td>
<td>Rosa select candy and puts in basket</td>
<td>Juanita stops tantrum and smiles</td>
</tr>
</tbody>
</table>
Making your learning outcome “progressive.”

- Work with your partner.
- How might you provide progressive practice and formative feedback to move your learners toward your learning outcome?
  - Practice and formative feedback with progressive changes in performance ...
  - Practice and formative feedback with progressive changes in conditions ...
  - Practice and formative feedback with progressive changes in criteria ...
Joe’s Summary

• Learning involves practice performing under certain conditions and receiving feedback based on criteria.

• The first step in designing effective and efficient assessment is to define the learning outcome in terms of performances, conditions and criteria.

• Once the performances, conditions and criteria are specified, summative assessments arrange for the conditions and apply the criteria to the resulting performances.

• Teaching often will involve progressive changes in performances, conditions and criteria applied to practice and formative assessment.
Designing Effective and Efficient Assessment

Part II: Assignment and Assessment Design

Dr. Helen Raptis
Associate Director (Student Academic Success),
Learning & Teaching Centre
-presenting adapted material designed
by Dr. Laurie Waye

September 1, 2016
Session Learning Outcomes

- When presented with a written learning outcome, participants will imagine an appropriate assignment and assessment.
- Participants will consider a few ways to design assignments and assessments.
- Participants may redesign an assignment based on the information in the presentation.
- Face to face, participants will provide supportive and constructive formative feedback to colleagues.
- When asked, participants will explain why effective and efficient assessment must be designed alongside the assignment.
Presentation Outline

A. Assignment Design Considerations
B. Assessment Design Considerations
C. Feedback Design Considerations
D. Summary
E. Application
A. Assignment Design

Task

- By yourself, design an assignment for your course based on the learning outcome you developed with Joe.
- Share with a partner.
A.1. Assignment Design Considerations

- Learning outcomes
  - Which ones are important to you/ the profession? e.g. Students will compare, analyze, and critique early (1840s to 1870s) and recent developments (since 2010) in trades/ technical education.
  - How? (Essay, test, debate, poster fair?)
- Flexibility/ Personalization (by program type, year, individual needs, etc.)
A.1. Assignment Design Considerations (continued)

- Short, frequent assignments best for skill development (Zamel, 1995b; Robertson et al., 2000; Straub, 2000)
  - Multi-staged assignments
    e.g. – a research proposal
    (1. Topic & short description/ rationale; 2. literature searched; 3. methods & timeline; 4. final proposal)

- Explicit instructions and annotated modeling work best for most students (Pardue & Haas, 2003; Ramanathan & Kaplan, 1996; Rose & McClafferty, 2001)

- Be explicit/ transparent –
  Format, content, mechanics/ accuracy
B. Assessment Design

- Should link to/ reflect objectives
- Should reflect what has been taught (either in class, through readings, online tests/ activities, etc.)

See Uvic calendar: Evaluation of Student Achievement

- Any practices that assign a predetermined percentage of students a specific grade—that is, a certain percentage get A, another percentage get B and so on—without regard to individual achievement are prohibited.
B.1. Assessment Design Considerations

What are you evaluating?
- Learning outcomes/ student competencies?
  or Things you didn’t teach or explain?

Why are you evaluating?
- Marked or completed? Professional competency?
- Reason for feedback?
  Summative or formative?

What about alternate forms of knowledge display/practice?
- See *Universal Instructional Design* (Dawson & Keenan)
### B.1. Assessment Design Considerations (cont.)

1. Traditional rubrics useful for multiple markers, summative assessment, or large classes/ range of abilities

<table>
<thead>
<tr>
<th>Content:</th>
<th>Poor (1-4)</th>
<th>Satisfactory (5-7)</th>
<th>Excellent (8-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Topic ( /5)</td>
<td>Absent</td>
<td>Hard to find</td>
<td>Explicit/ Elaborated</td>
</tr>
<tr>
<td>2. Underlying philosophy/ proponents ( /10)</td>
<td>Absent/ Inaccurate</td>
<td>Hard to find/ Mainly accurate</td>
<td>Explicit/ Elaborated/ Completely Accurate</td>
</tr>
<tr>
<td>3. Origins/ Description ( /10)</td>
<td>Absent/ Inaccurate</td>
<td>Hard to find/ Mainly accurate</td>
<td>Explicit/ Elaborated/ Completely Accurate</td>
</tr>
<tr>
<td>4. Synthesis: Pros/ Cons &amp; example(s) ( /10)</td>
<td>Absent</td>
<td>Hard to find</td>
<td>Explicit/ Elaborated</td>
</tr>
<tr>
<td>5. Individual reflections ( /5 each)</td>
<td>Absent</td>
<td>Hard to find</td>
<td>Explicit/ Elaborated</td>
</tr>
<tr>
<td>6. Other ( /5)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Format:**

| 7. Lay-out/ colour ( /5)              | Cluttered             | Some white space         | Balanced: white space (30%) with text/ visuals (70%) |
| 8. Organization/ flow ( /5)           | Unclear               | Clear                    | Explicit             |
| 9. Text/ visuals ( /5)                | Hard to see           | Visible at ½ meter       | Visible at 1 meter   |
| 10. Verbal summary ( /10)             | Unconnected to poster | Partly linked to poster  | Fully linked to poster |

Timing OK but erratic                  Timing precise with flow |
B.1. Assessment Design Considerations (cont.)
- Single-point rubrics focus on what you expect to see, at time when that information is relevant -

**Breakfast in Bed: Single-Point Rubric**

<table>
<thead>
<tr>
<th>Concerns Areas that Need Work</th>
<th>Criteria Standards for This Performance</th>
<th>Advanced Evidence of Exceeding Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food:</td>
<td>All food is at the correct temperature, adequately seasoned, and cooked to the eater’s preference.</td>
<td></td>
</tr>
<tr>
<td>Presentation:</td>
<td>Food is served on a clean tray, with napkin and silverware. Some decorative additions may be present.</td>
<td></td>
</tr>
<tr>
<td>Comfort:</td>
<td>Recipient is woken gently, assisted in seat adjustment, and given reasonable time and space to eat.</td>
<td></td>
</tr>
</tbody>
</table>
C. Feedback Design - Findings

- Students responses to feedback (Silva et al., 1997; Zamel, 1985; Leki 1990; Robb et. Al, 1986)
  - Don’t read it
  - Read it to understand the grade
  - End of the semester has little impact
  - Can’t prioritize it

Worse:
- Too much error correction dissuades students from taking linguistic, rhetorical, and intellectual risks with their writing and doesn’t allow for developmental errors (Elbow, 1998; Holt 1997)
C.1. Feedback Design Considerations

- Focus on 2-3 areas of feedback per paper
  - e.g., grammar/proofreading; organization; content issues
- Should match the learning outcomes
- Planned and applicable
- Avoid the feedback blizzard (restrain/retrain yourself!)
- Some instructors have used audio files for feedback: one for general feedback and one for specific feedback
Consider asking learners what additional feedback they want

Consider using structured peer review for drafts

Put some responsibility on student
i.e. don’t correct errors, just point them out; direct student to support
The best feedback is:

1. Planned – what is it for?
2. Applicable – what will Ss be able to do?
3. Early – don’t wait til midterm
4. Ongoing – try informal assessments too
D.1. In summary: Evaluation Trinity: Assignment, Assessment, & Feedback

What is the assignment for? What will they know/ do?

How am I assessing it (means), and why? (formative/ summative)

How much and what kind of feedback will help the student most?
D.2. Summary (Recap)

- Linking assessments to objectives
- Context: Students’ backgrounds/personalization
- Frequency & multi-staged assignments
- Transparency (assignment details & rubrics)
- Structured peer review
- Alternate forms of knowledge display/practice
- Focus on 2-3 areas of feedback (avoid blizzard)
E. Application

- Revisit the assignment you designed based on the learning outcome you wrote with Joe.
- Is the assignment an effective vehicle for assessing the learning outcome? If not, how might you change it and why?
- Share your thoughts with a partner.
Designing Effective and Efficient Assessment

Part III: Technology Enhanced Assessment

Dr. Mariel Miller
Educational Design Specialist
Technology Integrated Learning

September 1,, 2016
Session Learning Outcomes

• **Expect-to-see:** When asked, participants will explain some of the benefits and pitfalls of using technology in assessment

• **Expect-to-see:** When presented with common assignments and assessments, participants will imagine what technologies might be used and why

• **Like-to-see:** Working alone or with a partner, participants will select at least one tool or technology to use as part of assessment in a target course

• **Like-to-see:** Working alone or with a partner, participants will evaluate whether or not the choice of tool(s) should be revised using the information in the presentation

• **Love-to-see:** Face to face, participants will provide supportive and constructive formative feedback to colleagues.
Technology Everywhere...

- There is an increasing number of technologies/tools that can enrich the quality and range of student assignments, assessment & feedback.
Range of Attitudes

Wow! I bet this new tool would be fantastic for my students’ ePortfolio projects. I’m so excited to try it out this term!

I already get pretty good student ratings for my classes and I’m busy enough with my

Activity 1
At your table, jot down some of the **pros and cons** of using technology for assessment and feedback.
Technology & Assessment

Purposeful Part of Assessment and Feedback Design

- What is the assignment for?
- How am I assessing it, and why?
- How much and what kind of feedback will help the student most?

What tool or technology might help do this well?
5 Common Examples
### Learning Outcome
When provided with a problem example, participants will revise the communication to meet all necessary guidelines.

### Assessment Idea
**Closed book exam (Scenario)**

### Tool Option:
**Moodle Quiz**

### Why (Features)

<table>
<thead>
<tr>
<th>Range of question types</th>
<th>Full or Semi-automatic Grading</th>
<th>Customizable feedback</th>
</tr>
</thead>
</table>

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**Image source:** https://it.umn.edu/creating-engaging-scenarios-moodle-quiz
Biology 150 Course

Learning Outcome
When asked during class time, participants will correctly define foundational terms needed for lab

Assessment Idea
Structured worksheet?

Tool Option:
Classroom response system (i>Clicker)

Why (Features)
| Immediate feedback | Frequent, low stakes | Options for Peer Feedback |

*Similar Tools: Top Hat, Kahoot, Zaption, Poll Everywhere, Twitter
Education 501 Course

Learning Outcome
Recommend a set of evidence based practices for outcomes assessment and curricular review for a chosen context

Assessment Idea
Group Report

Tool Option:
Collaboration Tools (Google Docs/Drive)

Why (Features)
- Individuals & Groups
- Progress, Process & Products

Similar Tools: LMS Wikis & Forums, Slack, Skype, Facebook
Math 100

Learning Outcome

Given a practice problem, be able to solve systems of linear equations in up to three unknowns

Assessment Idea

Graded Problem Sets

Tool Option:

Student screencasts or makes video of problem solving process

Why (Features)

New ways to “show your work”

Focus on process (not just solution)

Similar Tools: Camtasia, ShowMe, Whiteboards, Periscope

Image source: http://www.imore.com/
Sociology 300

Feedback PoodLL

Allow the plugin to use your microphone and click to Record. When done recording, click Stop and Play to play back.

When you are satisfied with your recorded feedback, do not forget to save your feedback.

Save changes  Save and show next  Cancel

Begins to identify some contexts when presenting a position.  More assumptions than one’s own (or vice versa).  Relevance of context when presenting a position.

Learning Outcome
Given an example published research report, assess the methodological strengths and weaknesses

Assessment Idea
Paper (Students choose a study and critically assess it). Submit outline first.

Tool Option:
Outlining Tool (e.g. Popplet)  Online File Submission (Moodle)

Why (Features)
Chance to improve; Peer feedback  Clarify expectations (Rubric)  Multimedia feedback (e.g. audio)

Many, Many Other Options

Significant task redesign & new tasks previously inconceivable

<table>
<thead>
<tr>
<th>Discussion Activities</th>
<th>Learning by interacting; community; Assessing contributions (beyond ‘tallying’ participation); Class backchannel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Forums, Twitter</em></td>
</tr>
<tr>
<td>Peer Review</td>
<td>Evaluation and feedback form others</td>
</tr>
<tr>
<td></td>
<td><em>Workshop; Turnitin PeerMark, iPeer</em></td>
</tr>
<tr>
<td>ePortfolios</td>
<td>Collection of electronic ‘evidence’ built over time; Meaningful &amp; authentic assignment</td>
</tr>
<tr>
<td></td>
<td><em>Mahara; Wordpress</em></td>
</tr>
<tr>
<td>Blogging &amp; Vlogging</td>
<td>Critical reflection; Opportunity for dialogue (comments)</td>
</tr>
<tr>
<td></td>
<td><em>Wordpress, Blogger, Twitter; YouTube</em></td>
</tr>
<tr>
<td>Curation Activities</td>
<td>Selecting, maintaining, annotating collection of digital assets</td>
</tr>
<tr>
<td></td>
<td><em>Delicious, Diigo, Scoopit</em></td>
</tr>
<tr>
<td>Self-Assessment</td>
<td>Monitoring &amp; evaluating own progress and products</td>
</tr>
<tr>
<td></td>
<td><em>Fluid Surveys; Learning analytics platforms, etc.</em></td>
</tr>
</tbody>
</table>
Activity 2 | Pick a Tool

Take a look at the assignment idea you developed with Helen. What tool or technology might you be interested in using? How would it enhance assessment and/or feedback?

Pedagogy Tech Wheel

Other Tools: Top 100 Tools for Learning
Use the worksheet questions to evaluate the technology/tool(s) you selected earlier. Do you need to adjust your decision?

Adapted from Tony Bates SECTIONS model
Mariel’s Summary

- Technology can enhance assessment and feedback, but also has some pitfalls.
- Technology integration is purposeful, strategic, and anchored in pedagogy.
- Selecting among tools is a complex process involving a very wide range of interacting variables.
- The SECTIONS model (or similar) can provide a set of criteria or questions which can help inform your decision about which tools to use.
When asked, participants will explain how effective and efficient assessment depends on complete specification of student learning outcomes.

When presented with written learning outcomes, participants will recognize the presence/absence of performance, conditions and criteria components of learning outcome statements.

When asked, participants will explain why effective and efficient assessment must be designed alongside the assignment.

When presented with written learning outcomes, participants will imagine appropriate assignments and assessments.

When asked, participants will explain some of the benefits and pitfalls of using technology in assessment.

When presented with common assignments and assessments, participants will imagine what technologies might be used and why.