SPRING 2018 ePortfolio Development Community
Folio Thinking: Effectively Integrating ePortfolios into Your Curriculum

INSTRUCTIONAL STRATEGIES AND RESOURCES (Revised Dates)

These materials are adapted from Simon Fraser University's Rethinking Teaching workshop, building on work done at McGill University and detailed in Alenoush Saroyan and Cheryl Amundsen's 2004 book *Rethinking Teaching in Higher Education: From Course Design Workshop to a Framework for Faculty Development*.

Preparation for March 7

1. Building on our February 21 session where we focused on portfolio-oriented assignments, we will share and talk through the shifts in course delivery and instructional strategies that we anticipate needing to adopt in relation to our redesigned courses.

2. Is there a unit or assignment that is proving particularly tricky to think through in terms of delivery/instructional strategies? Share with the development community for feedback/suggestions.

3. With the course (re)design process almost complete, come ready to brainstorm resource requests (student and/or faculty-oriented) that you would (ideally) like to have in place for the 2017/2018 academic year.

4. Readings – required:

   a. Instructional Strategies section (below) of the Development Community resource binder or website.

   b. Sections from *Documenting Learning with ePortfolios* specifically focused on learning activities, especially Ch 3 – Designing Effective ePortfolio Learning Activities and Ch 4 – Engaging Today's Learners: Students and ePortfolios.

   c. Eynon, B., & Gambino, L. (2017). Ch 3 – Integrative ePortfolio Pedagogy, including contribution from Randy Bass. *High-Impact* ePortfolio *Practice*. Stylus. [Tool to assist in reflecting on any further tweaks to the redesigned course and exploring what this might mean in relation to changes in delivery/instructional strategies.]

   d. University of Waterloo – Course Design Fundamentals (Instructional Strategies Slides 36-42)

Objectives for March 7

1. Assist community members with any instructional strategies/delivery "trouble spots" that they have identified in preparing for today's session.

SUGGESTED STEPS TO CREATE A PLAN LINKING OUTCOMES AND STRATEGIES

The following provides a structure for the task of ensuring that strategies support the outcomes and that sufficient attention is directed to a) practice (an essential component of learning), and b) effective use of out-of-class time.

It builds on the idea that informing includes providing information about a) subject matter and b) learning tasks for the course. Informing can occur both inside and outside of class (e.g. lecture, handouts, readings), and we can often shift many informing tasks to out-of-class time. This makes more time available for supported practice in class. Referring to the table on the next page:

1. Put the "outcome" for the course in the first column.
2. For each outcome, fill in columns 2-7.
   a. Decide on the type of "informing" and "practice" strategies that will support it.
   b. Distribute these strategies between "in-class" and "out-of-class" time.
   c. Estimate the total "amount of time" for learning.
3. When the table is completed, review the estimated amount of time. Consider whether the distribution of time:
   a. Accurately represents the relative importance of the outcomes for the course.
   b. Accurately represents the percentage that you will be assigning to that outcome in the final grace (columns 4 and/or 7).

SUGGESTED CRITERIA FOR EVALUATING THE STRATEGIES YOU HAVE CHOSEN

Once you have made your decisions, ask yourself these questions before you get feedback from a colleague about your choices.

1. Do the strategies support and provide practice in achieving the outcomes?
2. Are they helping students to understand the concepts and relationships on your course concept map?
3. Have you ensured the best distribution of "informing" between in-class and out-of-class activities?
4. Are there opportunities for feedback from peers and you?
5. Given the context and resources, are the strategies the better/best choices?
6. Does the distribution of time accurately reflect:
   a. The relative importance of the outcomes of the course?
   b. The percentage you will be assigning to the outcomes in the final grade?

Instructional Strategies

Learning Outcome	In-class instructional strategies		Amount of time	Out-of-class instructional strategies		Amount of time
	Informing or task description	*Practice*		*Informing or task description*	*Practice*	

Instructional Strategies

Learning Outcome	Formative Assessment: Method + instructional strategies	Summative Assessment: Method + instructional strategies	% of Final Mark

Instructional Strategies = Learning Activities

What are we designing for?

- Focus on *learning time* NOT teaching time, so design for . . .
  - 120-135 *hours* NOT 39 hours (in North America)
  - *out-of-class* as well as in-class learning

What do students need?

- Successful experience of the expected outcomes before summative assessment/grading

What is our responsibility?

- Balance informing and providing opportunities for successful practice in and out of class
- Informing = providing information about the subject matter *and learning tasks*
- Practice = providing structured activities with feedback (with feedback reduced over time)

Strategies should be an intentional combination of different activities.

Designing learning as well as teaching: A research-based model for instruction that emphasizes learner practice

The model: Designing Instruction for Learning

Excerpt from McAlpine (2004)

The four phases in the model [engagement, informing, practice, and summative grading] can be used for designing instruction at multiple levels: a class, a unit, a course. The process of four phases begins when the learning experiences are being planned. Central to the model are the following:

- practice, as an important component of learning, often overlooked in higher education, and
- structuring class time to better support out-of-class learning

Engagement: The goal of engagement is to help students be focused and engaged, not distracted by external factors as their learning starts. Motivation will tend to increase if students understand why they are doing what they are doing. This is particularly important since students have full lives outside of the university; they are also likely engaged in learning for a number of courses and it may not be easy for them to understand how the intended learning in all the courses can be integrated in pertinent ways into a personally relevant coherent whole. So, when they come to class or when they undertake learning out-of-class, they need to be re-situated in the learning they are engaged in for the course.

Examples of activities that can facilitate engagement in- and out-of-class include:

- explicitly describing the learning outcome that is the focus of the learning, orally at the beginning of the class and in writing on assignments, course outlines, etc. that are used out-of-class
- asking students to prepare out-of-class a question about the previous class, readings, etc.; they know that, if called on, they are expected to be able to present their question coherently in class.

Note that engagement is a small part of the model; it should not be time-consuming.

Informing: Instruction usually involves some informing, both oral and written. Written information provides students with reference materials for later use, and oral presentation provides students with opportunities to clarify expectations, misconceptions, etc. This element of instruction can involve *subject matter*, for instance, introducing the main ideas in a paper in class. It may also include advising on a *learning task*, for instance, providing information on an assignment in a written form, distributing it in class, and then answering questions that arise as the students work through the assignment sheet. Informing plays an important role but is not as heavy a time investment as practice.

Practice: All too often students are provided with an introduction to a topic (informing) and left to achieve the learning on their own with minimal structure and frequently no formative feedback. I can recall, for instance, telling students that the bulk of their grade would be a paper to be handed in at the end of the term. Since minimal structure was provided, students were left to figure out by themselves and perhaps with their peers what the expectations were (although they could seek out information

during office hours or in class). As well, the students didn't receive formative feedback during the process of development the assignment to allow them to modify their paper prior to final submission.

It was their hard work and savvy that enabled them to succeed rather than any careful design on my part! The focus on practice is intended to address this serious omission in supported learning.

We often hear lecturers commenting on "covering the content." With the focus on the student, the perspective is that of the students "using the content" – practicing the ways of thinking that are related to achieving the learning – e.g. a particular kind of problem solving, a critique of a theory, the application of a model in multiple contexts. This practice is essential if students are going to be able later to successfully apply their learning from a course independently. Teachers, after they have modeled their thinking, need to intentionally provide students with the opportunity to practice the learning that is expected in a structured way.

In the model, practice is represented as a much longer process than any other aspect of the model. It is when students have the opportunity to assess the extent to which they are achieving the expected learning before the summative grading takes place. In general, practice is largely but not solely an activity that takes place in out-of-class time – e.g. on the students' own time, or in tutorials and different kinds of labs, and this may be an aspect of learning that teachers have not intentionally planned for or structured. The model is a reminder to use in-class time to prepare students to use their out-of-class practice time effectively (just as in-class time spent on informing – lecturing – may be designed to follow-up on or prepare students for out-of-class informing – reading).

Instructional responsibility in relation to practice is to provide a learning environment with initial high structure and formative feedback that decrease over time [. . .]. When students are beginning to learn something new, more structure and feedback are required. As students gradually acquire an understanding of a particular learning outcome as well as the overall course and as their own understanding of the expected learning becomes more sophisticated, the teacher has less responsibility for these aspects of learning. The practice phase is effectively leading students to act independently, to provide their own internal structure and feedback in order to be prepared for summative grading.

Summative grading: The gradual reduction of external structure and feedback during practice means that students have already experienced a comparable environment to summative assessment (e.g. exam, final paper, etc.) so the formal assessment should hold no surprises, and be perceived as less threatening than is often the case.

Essential to this approach, of course, is ensuring that the activities experienced during the practice phase accurately represent what will be assessed summatively. There needs to be good alignment between the practice and assessment phases. Particularly in the case of final exams with heavy weighting, this alignment can be made clear to students through, for instance, making available to them previous exams with information about the types of answers expected, and also notifying them of the types of problems that are important and likely to be on the exam.

Reference
McAlpine, L., (2004). Designing learning rather than designing teaching: A model of instruction for higher education that emphasizes learner practice. *Active Learning in Higher Education, 5(20*), 119-134.

Note the full version of the article is available to interested readers in our Session #6 resource block.

Matching Domain and Level of Learning to Appropriate Instructional Strategies/Methods

Domain and Level	Strategy/Method
Cognitive Domain	
Remember	Lecture, drill & practice
Understand	Lecture, self-study (read, modular units)
Apply	Discussion, simulation, CAI (computer-assisted instruction), field experience, laboratory
Analyze	Discussion, independent/group projects, simulations, field experience, role-playing, laboratory, case studies
Evaluate	Independent/group projects, case studies, field experience, laboratory
Affective Domain	
Receiving	Lecture, discussion, field experience
Responding	Discussion, simulations, role-playing, field experience
Valuing	Discussion, independent/group projects, simulations, role-playing, field experiences
Organization	Discussion, independent/group projects, field experience
Characterized by a value complex	Independent projects, field experience
Psychomotor Domain	
Perception	Demonstration (lecture), drill & practice
Set	Demonstration (lecture), drill & practice
Guided Response	Peer teaching, games, role-playing, field experience
Mechanism	Games, role-playing, field experience, drill & practice
Complex Overt Response	Games, field experience
Adaptation	Independent projects, games, field experience
Origination	Independent projects, games, field experience

Adapted from
Krothwohl, D.R. (2002). A revision of Bloom's Taxonomy: An overview. *Theory into Practice*, *41(4)*, 212-218.
Weston, C., & Cranton, P.A. (1986). Selecting instructional strategies. *Journal of Higher Education, 57(3),* 259-288.