

ASSESSING TECHNOLOGY

Using the
SECTIONS
model

WHAT IS SECTIONS?

Students
Ease of Use
Costs
Teaching & Learning
Interactivity
Organizational Issues
Novelty
Speed

The **SECTIONS** model is a framework for selecting and using technology developed by Bates and Poole and described in the book *Effective Teaching With Technology in Higher Education*. The questions defined in the original model were fairly broad and designed to “facilitate decisions with regard to choice of technology at both the strategic and the tactical level, and also to help decide within a particular technology the most appropriate balance between different media.”*

We attempted to drill down within each of the broad areas defined by SECTIONS (students, ease of use, costs, teaching and learning, interactivity, organizational issues, novelty and speed) to develop some questions around the kinds of considerations that seem important to the people we work with. This is a draft tool and we’ll refine as we work with it in various contexts over the coming months. Please send any feedback to cindy.underhill@ubc.ca.
We want to know how this works for you!

Planning Framework

The intent of this framework is to provide instructors and others who are integrating technology into their learning projects, with a framework for planning that will allow you assess the fit between:

- technology selected
- Your goals
- Support requirements

The framework encourages the consideration of questions in 8 areas of the SECTIONS model*:

1. Students
2. Ease of Use
3. Costs
4. Teaching and learning
5. Interactivity
6. Organizational issues
7. Novelty
8. Speed



*Reference

Bates, A.W.; and Poole, G. (2003)
Effective Teaching With Technology in Higher Education: Foundations For Success. San Francisco: Jossey-Bass Publishers. 79-80

Using the Framework

We hope the framework questions will help you to achieve clarity about the match between the technology you have chosen, your goals, and the expected support requirements that the technology will require – both for you and your learners.

There are 4 parts to the process:

1. **Define**
2. **Assess**
3. **Implement**
4. **Refine**

PART 1: Define

Defining what you are trying to accomplish is important in establishing some direction for your efforts. We've offered a few beginning idea fragments to assist in your planning. See [example](#) below.

Example

I really want students to learn...

to collaborate effectively on assembling research and writing an article in an authentic peer reviewed environment.

I think I could be more effective in facilitating this learning if...

i used a platform that is already familiar to a student and that they should know more about.

The learning activity that I've chosen to address these objectives is...

collaborative research on wild food sources n British Columbia.

The technology I'm thinking of using to support this learning activity...

Wiki

this is the technology you will want to assess in Part 2



PART 1:
Define

To assist in your thinking/planning, complete the sentences below.

I really want students to learn...

I think I could be more effective in facilitating this learning if...

The learning activity that I've chosen to address these objectives is...

The technology I'm thinking of using to support this learning activity...

PART 2: Assess

Use the checklist to evaluate the technology that you have chosen to use or investigate. Assessing the potential fit between the technology you want to use, your goals, and the anticipated support requirements can lead you to a decision that will match what you want to do with the resources available.

The questions encourage you to consider the features that are important to you and the considerations that you may want to note along the way – perhaps to come back to later.

You can use the checklist in consultation with your instructional designer, technology support person or other resource person familiar with the learning technology you are looking at. See example below.

Response Key

Each question can be responded to in the following way:

Y (yes)

N (no)

N/A (not applicable to my context)

Importance: Indicate the level of importance this item holds for you: high, med, low). This is useful as it defines the “deal breakers”.

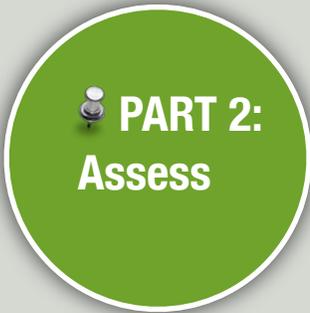
I need to consider: Make your notes for things that you may need to follow up with.

Example

The tool/platform I am assessing: *Wiki/ Mediawiki*

Date: *31/08/11*

	Questions to Ask...	Y	N	N/A	Importance (high,med,low)	I need to consider...
S	Students					
	<ul style="list-style-type: none"> Are transferrable skills being developed? Does the technology allow for an appropriate degree of openness to the community beyond registered course participants? Can students show their work via web link (url)? 	X			High	<i>Issues related to FOIPOP if I require students to sign up to use a service hosted outside UBC. Need orientation resources: public writing and editing.</i> <i>Need to be able to see evidence of participation in one place.</i>
		X			High	
		X			High	



PART 2: Assess

Complete the assessment below for each tool you identified in Part 1.

Use the Response Key (previous page) as a guide.

The tool/platform I am assessing: _____

Date: _____

	Questions to Ask...	Y	N	N/A	Importance (high,med,low)	I need to consider...
S	Students <ul style="list-style-type: none"> Are transferrable skills being developed? Does the technology allow for an appropriate degree of openness to the community beyond registered course participants? Can students show their work via web link (url)? 					
E	Ease of Use <ul style="list-style-type: none"> Will students need to make a major investment in time to learn how to use the technology? Will I need to make a major investment in time to learn this technology? Am I comfortable enough with the technology to guide students? 					
C	Costs <ul style="list-style-type: none"> Are the time costs relatively low to design a learning environment using this technology (or at least cost/benefit ratio is favorable)? Will students incur additional costs as a result of incorporating this new technology/approach? Are there licensing costs associated with the hosting/archiving of materials beyond the life of the course? 					
T	Teaching and Learning <ul style="list-style-type: none"> Does this technology support the learning goals that I have identified? Will students be engaged in authentic, real-world learning as a result of implementing this technology? Does this technology support peer/self assessment as well as instructor assessment? 					

continued on the next page...

PART 2:
Assess
[con't]

	Questions to Ask...	Y	N	N/A	Importance (high,med,low)	I need to consider...
I	Interactivity					
	<ul style="list-style-type: none"> Does this technology support interactions with peers, instructors and others associated or contributing to the learning tasks? Does this technology allow for sharing/collaboration with learning communities beyond registered course participants? Can people easily interact with the products/resources developed in the course? 					
O	Organizational Issues					
	<ul style="list-style-type: none"> Are the support structures in place to maintain and update this technology? Is there help available for me or my students if we need it? Is there a way for me to retrieve my material if this technology fails or is replaced? Does this technology work with the SIS? Will students need to manage their own accounts? Will I need to add students manually into the online environment? 					
N	Novelty					
	<ul style="list-style-type: none"> Will this represent a new approach to teaching for me? Will this provide a new and (novel) learning experience for students? Are there examples of use in an educational context? 					
S	Speed					
	<ul style="list-style-type: none"> Can I make changes to content and learning activities on the fly? Is this a new (beta) technology or "tried and true"? Can I (ultimately) be independent in my development with the use of this technology? 					

PART 3: Implement

Implementing a new approach or technology for the first time is an experiment. Engage your students in helping you to assess it. Gathering some impressions during implementation will help you to make decisions about whether the experiment is worth continuing and what additional considerations you may need to make in order to improve the learning experience.

See **example** below.

Example

In observing the students engaging with this activity, I notice...

that students are producing high quality written work - they are improving on each other's writing.

The technology I have chosen is enabling the learning because...

it is making it easy for students to work together and get feedback from other (experts) outside the course.

The technology I have chosen is a barrier to learning because...

students had to get set up with an account and orient themselves to the wiki environment - this took more time than I thought.

Feedback from students about this technology is...



PART 3:
Implement

Consider your responses to the following while you are in the implementation phase.

In observing the students engaging with this activity, I notice...

The technology I have chosen is enabling the learning because...

The technology I have chosen is a barrier to learning because...

Feedback from students about this technology is...

PART 4: Refine

Refining your approach requires some reflection on the activity. Create a plan to make any changes or refinements.

See **example** below.

Example

What worked?

collaboration
improved quality of writing
platform allowed for creative presentation (additional media)
students felt they learned something useful about a platform they use everyday
(wikipedia)

What didn't work and why?

students needed a lot of help and guidance about how to do things on the wiki (add media - simple editing) - some were resourceful in finding resources - others not so much.

not enough orientation/support material related to requirements of the project. Need to search out what is available and link directly to learning activity requirements.

I need to change....

link wiki support resources to course and specifically to learning activity requirements.

My plan to make this change is...

consult with OLT (CTLT) to determine which resources might be most useful and link them to the course over the summer - prior to next offering.
before end of term, discuss tech problem solving with student - how do you locate resources? is this a waste of your time or learning opportunity? Where should support resources be located in the course?



PART 4:
Refine

Reflect on the following and use the information you gathered from your own and students' feedback during implementation.

What worked?

What didn't work and why?

I need to change....

My plan to make this change is...