College Teaching Seminar Series

Course Design Considerations

Syllabus, Backward Design, Assessment

December 12th, 2018

Kimberly Bell, PhD
Center for Excellence in Learning & Teaching (CELT)

Adapted from original presentation by Radha Ganesan
Learning Objectives

1. Defend the importance of “Backward Design” for course/syllabus design.

1. Compare and contrast a subset of assessment strategies.

1. Identify the essential elements you want your syllabus to include and/or the role it will play.
What do you think is the “typical” or “traditional” first step when designing a syllabus?

Where would you start/have you started?
Ok, once I get some content from you I can start on the design.

How about you start designing first and then I’ll fill it in with content.

But I can’t create a design until I have some content.

No, I can’t write content until I see a design.

Uh oh, they are stuck in this loop again...
1. WHO are my students?

2. WHAT do I want my students to be able to do?

3. HOW will I measure student progress & success?
Who are the students?
Are your students new to the university? Are they new to the topic of the course or the department? What are students’ motivations for taking the course?

What do I want students to be able to do?
For example, it can be more challenging to measure students abilities based on what they may know or understand as opposed to measuring their abilities to perform tasks such as identify, differentiate, apply or produce. This process will help you solidify your course goals.

How will I measure students’ abilities?
Designing your course around activities that are most likely to lead students towards the goals you have defined will help them acquire and retain skills longer. Some goals can be achieved through listening to lecture or reading assigned texts. Others may require more active experimentation, practice or discussion. For example, writing, discussions, field work, service learning, problem solving or small group collaboration.

Assessment is an important aspect of student learning. Make sure to think carefully when pairing assessments with learning objectives. For more on assessment design see this Assessing student learning page.
Think with the end in mind, start with assessment

Differs from traditional approaches to designing curriculum. Instead of planning activities or tasks first, you begin with how and what will be assessed.

*Backward design may be thought of as purposeful task analysis: Given a task to be accomplished, how do we get there? Or one might call it planned coaching: What kinds of lessons and practices are needed to master key performances?*

- Grant Wiggins and Jay McTighe,
  *Understanding by Design*
STAGE I
Identify desired results.
What do I want my students to learn?
(learning objectives)

STAGE II
Determine acceptable evidence.
How will I know they learned?
(assessments)

STAGE III
Plan learning experiences and instruction.
What learning activities will help them learn it?
(course delivery)

Stage I: Identify Desired Results

Elements of the Design

Stage I

**Goal**: enduring-retention, what do we want the students to come away with, anchors unit, student engagement high, student centered instruction, think design & critique as student activities.
Your Turn: Why We Teach, What We Teach

Consider one course you’re teaching now, will teach, or want to teach.

Take a minute to write down responses to the following questions:

• What excites or interests you about this course?
• Why do you think it’s important for students?
• What do you want them to learn?
- **Evaluate** Science Communication in a variety of contexts.
- **Practice** effective Science Communication through blogging, formal writing, & presenting.
Learning Objectives: Strategies

● Shift from content covered to student performance.
● Learning objectives must be measurable:
  ○ Use concrete and specific verbs to identify what you want students to be able to do.
● Align LOs with assessments:
  ○ Consider how in-class activities or out-of-class assignments can model or reinforce LOs.
● Students will know...
● Students will be able to...
Think about different ways to represent your learning objectives and other syllabus components
Your Turn: *Learning Objectives*

- For the course you identified, write 2 learning objectives:
  - Share with your neighbor
  - Debrief on any challenges or difficulties.
Stage II: Determine Acceptable Evidence

Essence of backward design & alignment

- **Traditional quizzes and tests**
  - paper/pencil
    - selected response
    - constructed response

- **Performance tasks and projects**
  - open-ended
  - complex
  - authentic

**Important to know & do**

**Enduring understanding**

**Worth being familiar with**

**Student can self-assess**
Student leads the assessment

Instructor leads the assessment

Student leads assessment...

Active Learning!
Some Classroom Assessment Techniques (CATs)
From: Classroom Assessment Techniques: A Handbook for College Teachers
Thomas A. Angelo and K. Patricia Cross, 1993

We want “formative” assessment...

- Misconception/preconception check
- Defining features matrix
- One-sentence summary
- Student-generated test questions
- Group & individual self-assessment
- Pro and con grid
- Reflection
- Muddiest point
- Concept map
- One-minute paper
What are the defining characteristics of formative and summative assessment?

<table>
<thead>
<tr>
<th>Feature</th>
<th>Concept A</th>
<th>Concept B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feature 1</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Feature 2</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Feature ..</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Feature ..</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

**Formative**
- Monitor student learning
- Low stakes
- Helps you and students identify gaps or misconceptions
- Frequent
- Non-graded

**Summative**
- Evaluate student learning
- High stakes
- Graded (exams, quizzes)
- Infrequent
- Often too late for students to improve
<table>
<thead>
<tr>
<th></th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lecturing</strong></td>
<td>● Lots of content</td>
<td>● Lots of content</td>
</tr>
<tr>
<td></td>
<td>● Traditional</td>
<td>● Passive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Instructor centered</td>
</tr>
<tr>
<td><strong>Active Learning</strong></td>
<td>● Evidence based increases in learning</td>
<td>● Some students may be resistant</td>
</tr>
<tr>
<td></td>
<td>● Less work over time</td>
<td>● Takes time to incorporate</td>
</tr>
</tbody>
</table>

**Pro/Con Grid**
Your Turn: *Assessment*

- For identified outcomes, jot down 2-3 assessment strategies:
  - Share with your neighbor
  - Debrief on any challenges or difficulties.
Stage III: Plan Learning Experiences and Instruction

Learning experiences and instruction that will enable students to achieve the desired results

A focus on engaging and effective learning:

- What learning experiences and instruction will promote the desired understanding, knowledge and skill?
- How will you best promote the deepening of insight and interest?
- How will you prepare students for the performance(s)?
- What resources will you need?
- How much time might be required for learning?
**W.H.E.R.E.T.O.**

| W | Where are we going? What is expected? - help students know *where* the unit is going |
| H | How will we hook the students? - *hook* all students and *hold* their interest |
| E | How will we equip students for expected performances? - *equip* students, *explore* the issues, and *experience* the ideas |
| R | How will we rethink or revise? - provide opportunities to *rethink* and *revise* |
| E | How will students self-evaluate and reflect their learning? - allow students to *exhibit* their understanding and *evaluate* their work |
| T | How will we tailor learning to varied needs, interests, and learning styles - be *tailored* to the different needs, interests, and abilities of learners |
| O | How will we organize the sequence of learning? - be *organized* to maximize initial and sustained engagement as well as effective learning |

Summing up Backward Design...

• Begin with what you want your students to understand at the end of the unit.
  • Clarify results and evidence of them before designing lessons.

• Thinking like an assessor, not only an activity designer, is key to effective design.
  • Align learning outcomes and assessments

• Consider breadth & depth of course content
  • Students will see activities as busy work unless focused on questions and big ideas; encourage critical thinking and student led instruction
Other considerations for Course Design

Face to face:
- What space will you teach in?
- Can technology help?
- Will you have TAs?
- What other resources do you need?

Online:
- Start early
- Be articulate and organized
- Think about how you would teach face to face and revamp
- Use modules according to each week
- Clear and consistent communication is essential
- Technology requirements
- Will you have TAs?
IT'S IN THE SYLLABUS

This message brought to you by every instructor that ever lived.

www.phdcomics.com
Purposes of a Syllabus

• Offer students a clear and concise statement of what your course is about
• Tell them how you are going to teach the material to them and why
• Provide all the logistical information they need to engage you and the course materials easily
• Explain to them exactly what is required of them, when and why
• Lay out for them the essential elements of the social contract that you and they are entering into
Functions of Your Syllabus

• **Motivation:**
  - a warm tone and inclusive, accessible writing motivate students to engage with the course
  - positivity expressed about students starts them on a path of positive self-fulfilling prophecy

• **Evidence:**
  - in case of disputes regarding the course, the syllabus is often used by administrators or mediators to resolve them
  - in tenure and promotion cycles, syllabi are important documents as evidence of innovation and mastery of course material
  - students need well-designed syllabi to facilitate transfer of credits between departments or institutions

What information do you look for in a syllabus?
Your Turn: Sample Syllabi Review

In pairs, review the sample syllabus given to you:

• Can you find the information you are looking for?
• What else could be included?
• What are the strengths and weaknesses of each?
What are the elements of an effective/comprehensive syllabus?
Syllabus as a Contract
Clear and accurate course calendar
Grading policies: components and weights
Attendance policy
Late assignment policy
Make-up exam policy
Policies on incompletes and revisions
Academic dishonesty policy
Academic freedom policy
Accommodation of disabilities policy

Syllabus as a Permanent Record
Title and date(s) of course
Department offering the course
Credit hours earned
Title and rank of instructor(s)
Pre- or co-requisites
Required texts and other materials
Course objectives, linked to professional standards
Description of course content
Description of assessment procedures

Syllabus as a Learning Tool
Planning and self-management skills
Time to spend outside of class
Tips on how to do well on assessments
Common misconceptions or mistakes
Specific study strategies
Availability of instructor(s) and teacher assistants
Campus resources for assistance
Offices that aid students with disabilities
Relevance and importance of the course to students
A model of high-quality work

In theaters this summer: The Syllabus!

https://www.youtube.com/watch?v=NQxgju6HD3g&feature=youtu.be
What are your student’s concerns?

Research indicates that the pressing concerns for students beginning a course are:

- Will I be able to do the work?
- Will I like the professor?
- Will the subject matter interest me? Is it relevant to what I want to do?
- Do I have the prerequisite skills and knowledge to succeed?
- Can I handle the workload?
- Is it possible for me to get a good grade?
- What sorts of policies does this instructor have regarding attendance, late work, participation, etc.?
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Effective</th>
<th>Emerging</th>
<th>Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visual Appeal</strong></td>
<td>Visually appealing. Text and visual content supplement and reflect one another. Draws students' attention to key areas of the syllabus.</td>
<td>Uses images that relate to course content, outcomes, or goals.</td>
<td>Clearly laid out with identifiable sections and headers.</td>
</tr>
<tr>
<td><strong>Course Overview</strong></td>
<td>Explains in accessible language how the course fits with students' other educational efforts and also explains the course's usefulness and relevance.</td>
<td>Includes discussion of course goals, but provides little sense of course's larger connections to curriculum or to students' long-term interests.</td>
<td>Repeats description from e-curriculum <a href="https://webapps.uc.edu/ecurriculum/Admin/Login.aspx">https://webapps.uc.edu/ecurriculum/Admin/Login.aspx</a>.</td>
</tr>
<tr>
<td><strong>Student Learning Outcomes</strong></td>
<td>Syllabus contains student learning outcomes expressed as specific actions/skills and indicates what is expected of students in measurable terms. Outcomes are clearly connected to Gen Ed Core Competencies <a href="http://www.uc.edu/gened/competencies.html">http://www.uc.edu/gened/competencies.html</a> when applicable, and clearly connected to one another. Relevant skills and knowledge are specified, and assignments, assessments, and key course activities are aligned with outcomes.</td>
<td>Syllabus contains student learning outcomes, expressed as specific actions/skills and indicates what is expected of students in measurable terms. Some outcomes are implicitly related to one another and are in alignment with assignments and course policies. In general education courses, some outcomes are clearly connected to the Gen Ed Course Competencies.</td>
<td>Syllabus contains a category for student learning outcomes that broadly indicates what successful students will be able to do by the end of the term. Outcomes may not be measurable, clearly related to one another, or in alignment with assignments and policies.</td>
</tr>
<tr>
<td><strong>Course Resources</strong></td>
<td>Identifies necessary and optional texts and/or resources. Clearly and accessibly explains why these particular texts and resources were selected and how students can use them.</td>
<td>Provides overview or brief rationale of necessary and optional texts and/or resources.</td>
<td>Necessary and optional texts clearly listed by title and author.</td>
</tr>
<tr>
<td><strong>Pre-Req/Co-Req/BoK Areas</strong></td>
<td>Indicates what skills and content from previous classes will be used in the course. Describes how the course content builds upon previous courses. Indicates how course material fulfills BoK areas, if applicable.</td>
<td>Describes how the course content builds on previous courses. Indicates how course material fulfills BoK areas, if applicable.</td>
<td>Lists course names and numbers for all pre-requisite and co-requisite courses. Identifies which BoK areas the course fulfills, if applicable.</td>
</tr>
<tr>
<td><strong>Electronic Communications Policy</strong></td>
<td>Explains how particular devices will be used during in-class and out-of-class activities. Details what is considered inappropriate usage and consequences. Explains how Blackboard site will be used, how often course site is maintained, and how to get help at UC. Provides information for students who need special accommodations or who don't have required access.</td>
<td>Defines when certain electronic devices are acceptable in class. Identifies consequences for using electronic devices inappropriately. Indicates how Blackboard will be used. Provides links and contact information for UC Help Desk.</td>
<td>Simple statement of acceptance or prohibition. Indicates whether Blackboard is used.</td>
</tr>
</tbody>
</table>
But...students don’t read the syllabus

Quiz!
KEEP CALM
IT'S ON
THE SYLLABUS