Designing Better Assignments

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Workshop Preview

1. Assignment design principles and strategies: Backwards design, alignment, scaffolding, feedback, and transparency
2. Applying a principle or strategy to improve an assignment.
3. Developing and using rubrics.
4. Helping students with assignments.
5. Joining an assignment design community: *Assignments Across Disciplines*

Quick Introductions

The Facilitators: Meet the Andreas

In the chat share

1. Something you learned last year about assignments that you'd like to apply to this year.
2. Something you'd like to get from today's workshop about assignments.

Assignments are building blocks of learning

Assignments are a Key Teaching Tool

"Students fail assignments and sometimes assignments fail students." (p. 95)

"if student work is the engine of a course, then the assignments are the creative centre of our teaching practice" (p. 110)

William Germano & Kit Nicholls, *Syllabus: The remarkable, unremarkable document that changes everything*

Lessons from Covid-19: Too Much of a Good thing

"When instructional faculty were suddenly forced to explore the contemporary online learning toolkit, they produced a substantial volume of assignments that seemingly provided little value for student learning." p. 80

Motz, B.A., Quick, J.D., Wernert, J.A., & Miles, T.A. (2021). A pandemic of busywork: Increased online coursework following the transition to remote instruction is associated with reduced academic achievement. Online Learning, 25(1), 70-85. https://doi.org/10.24059/olj.v25i1.2475

Making the most of assignments with Backward Design

Conventional

- Instructor-focused
- Content-focused
- Focused exclusively on evaluation and summative feedback

Backward

- Student-focused
- Driven by learning objectives that include skills as well as knowledge
- Includes formative feedback

Wiggins & McTighe, 1998/99

Backwards Design Reframes Teaching and Learning

TEACHING GOALS:

What you want to teach

LEARNING OBJECTIVES:

The *knowledge, skills, and/or values* **students will get** from an activity, assignment, class, course, program, and/or degree

Adapted from CTSI's Course Design Institute, 2016

Learning Objectives or Outcomes and Assessment

Types of outcomes:

- Cognitive
- Affective
- Kinesthetic

Assessment asks:

"To what degree did the student meet the outcomes?"

Good Learning Objectives

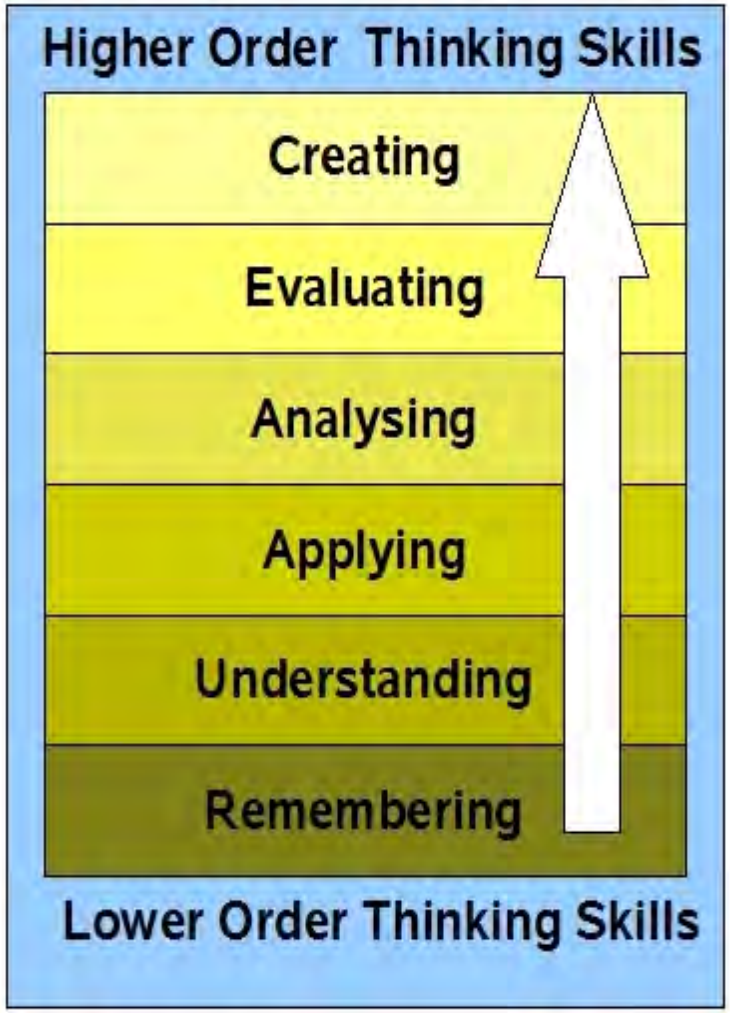
1. Focus on students applying and integrating both knowledge and skills.
2. Use specific, active, and concrete language.
3. Make evaluation criteria explicit through rubrics or scoring guides.
4. Help both teachers and students focus their efforts.

Transforming Teaching Goals to Learning Outcomes

Vague teaching goal:	Specific learning objective:
"By the end of this course, students will understand the research process."	"By the end of this course, students will be able to:
	• Describe the research process in social interventions
	• Evaluate critically the quality of research by others
	• Formulate research questions designed to test, refine, and build theories
	• Identify and demonstrate facility in research design and data collection and analysis strategies

OTA course designed by Prof. Susan McCahan, "Fundamentals of University Teaching"

Taxonomy of Progressive Cognitive Learning Outcomes



Images of Bloom's taxonomy taken from Educational Origami, http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy

Bloom, Benjamin S. (1974). *Taxonomy of educational objectives: Classification of educational goals*. New York: D. McKay.

Does the assignment fit the learning outcome?

Learning Outcome		Assignment
Apply economic concepts and models to a real-world problem	→	Write a policy memo
Critique a variety of methodological approaches to the study of history	→	Write a historiography
Learn scientific methods and processes	→	Write a lab report
Apply evolutionary theory to an organism.	→	Write a research proposal that identifies a trait that is the result of evolutionary adaptation for a given organism.

Disciplinary examples of progressive learning outcomes

Sociology

1. Summarize Durkheim's theory of society
2. Apply Durkheim's theory to the nation's drug problem
3. Based on current data, what predictions can you make about the drug problem in the near future?
4. Write an analysis and critique of the current drug problem, in the context of Durkheim's theory and explain whether or not the problem can be solved.

Integrative Physiology

1. Define viscoelasticity
2. Construct a model that demonstrates the properties of viscoelasticity
3. What predictions could you make if the patellar tendon were replaced with a non-yielding Kevlar band? Elastic band?
4. Compare and contrast several materials that could be used to replace a torn ACL. Show that one would be best and explain why.

Source: Border, Laura. (2005). *The University of Colorado at Boulder Lead Graduate Teacher Manual*, UC Boulder

Assignments gone wrong: Perpetuating the "The Hidden Curriculum"

- Unclear purpose and learning objectives
- Unstated expectations (genre, intended reader, amount of research, topic scope, etc.)
- Complex skills with minimal guidance or support
- Intimidates students unfamiliar with academic culture or discipline (e.g., English language learners, international students, first generation, etc.)

From Hidden Curriculum to Transparent Design

"Transparency means letting students in on what they're being asked to do and why they're being asked to do it—in other words, what they can expect to learn from doing it."

James Rhem, The National Teaching and Learning Forum

(Preface ix)

Transparent Design in Higher Education, Teaching, and Leadership

Transparent Assignments require instructors to

1. Articulate learning outcomes and share these with students (and TAs if applicable).
2. Align assignments with significant course learning outcomes.
3. Scaffold major assignments.
4. Build in formative feedback and opportunities for revision.
5. Make evaluation criteria explicit (e.g., rubrics) with students and TAs.

Exercise 1: Decode the Assignment

Humanities or Social Sciences Example

Mateo is a first-year student with little experience researching and writing essays. He has just received the following assignment.

Prepare an annotated bibliography on the implications of a milestone event from the first half of the 20th century. The items you choose for your annotated bibliography will be used for your next assignment, the research paper. Your bibliography should include 5 recent items including two scholarly journal articles not from the course reading list. **Websites are not acceptable and be sure to follow correct citation practices.**

Science Example

Sangeet is one of over a thousand students in a second-year life sciences class held in Convocation Hall. She has no research experience and her TA has just given her the following assignment.

Choose a topic of interest in the life sciences. Using an online database, find citation information, including the abstract, for five recent peer reviewed articles on your topic. Choose one and analyze the first page and the bibliography. Write a paragraph explaining its relevance to your topic. Your paper must be error free and be sure not to plagiarize.

Exercise 1: Improve one of the assignments by

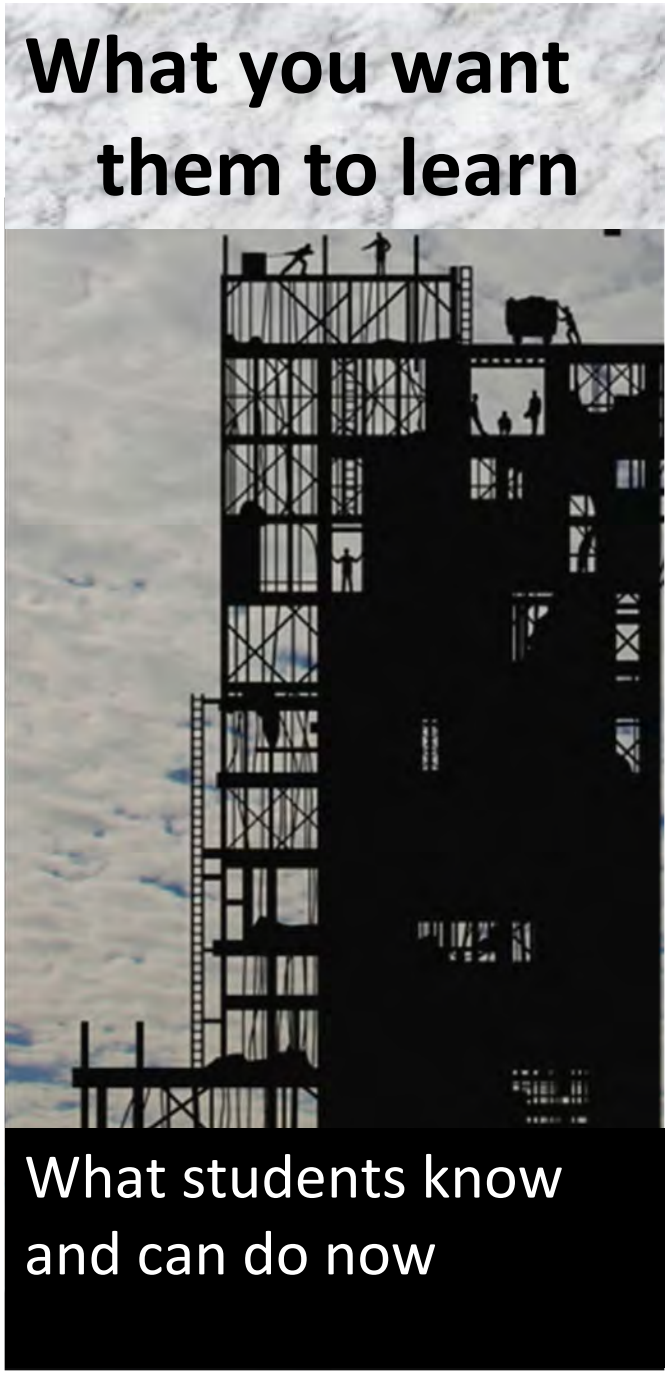
1. Making some of the hidden skills or knowledge explicit by creating learning outcomes or objectives.
2. Devising an activity that gives students practice with required skills.
3. Clarifying the instructions.
4. Directing students to university resources where they can get help.

Consider your improvements (solo 5 minutes) and then share in your small group (7 minutes).

BREAK

Scaffolding

Breaks learning outcomes into manageable steps to give students the support they need to develop their skills and build their knowledge.



Examples of Scaffolded Assignments

Humanities/Social Sciences paper:

1. Paper Proposal 5%
2. Annotated Bibliography 5%
3. Draft Paper 10%
4. Revised Paper 20%

Feedback at each stage

Sciences: A lab report

1. Write each of the following sections separately and get feedback on them: hypothesis, methods, results, discussion).
2. Revise and combine into a complete lab report.

Build in formative feedback

Summative Assessment

- Backward-looking
- Assesses mastery to date
- Evaluative/graded

Formative Feedback

- Forward-looking
- Constructive: focused on how student can improve
- Needn't include a grade

"A 'C' paper is an 'A' paper turned in too soon."
John C. Bean

Ease your feedback workload through

- Guided peer review
- Encouraging students to consult a learning strategist or to take work-in-progress to a Writing Centre.

Suggestions for Revising an Assignment

1. Remember that small changes lead to big improvements.
2. Ask your peers (both from your discipline and outside your field) for feedback.
3. Engage your students in seeking the purposes, tasks, and criteria, for their academic work.

Exercise 2
Improve one of your assignments

1. Choose one or more change such as
   - Drafting a couple of learning outcomes (see link in chat)
   - scaffolding and building in formative feedback
   - clarifying instructions regarding tasks
   - directing students to resources
   - showing annotated examples of past student work

2. Write out your change so you can update your assignment after the workshop. (10 minutes)

Clarifying expectations with Rubrics

A rubric articulates the expectations for an assignment by listing the criteria--what counts--and describing levels of quality from excellent to poor.

Instructional rubrics can teach as well as evaluate.

Good Rubrics

1. Are ideally communicated to students early.
2. Show instructors (and TAs) what to teach.
3. Save time and enable more detailed and timely feedback to students.
4. Increase consistency and fairness.
5. Are tailored specifically to the assignment
6. Are descriptive and evaluative.
7. Are developed collaboratively with TAs.

Exercise 3

Skim one or two of the sample rubrics for inspiration, then consider one of your assignments and

1. Turn one or two of your learning objectives into part of a rubric. (10 mins)
2. Share and discuss your draft rubric in your group. (10 mins)

The Student Perspective

Students benefit from:

- Transparency, clarity, tangibility and specificity
- Annotated examples of past student work
- Scaffolding or task breakdown, and building blocks
- Prerequisite skills and thinking prompts
- Having time to reflect and ask questions about the assignment
- Advice on where to start

Resources for Students

- Libraries – research skills and resources

  https://onesearch.library.utoronto.ca/research

  - Workshops
  - Consultations

- English Language Learning (ELL) – academic English

  http://www.artsci.utoronto.ca/current/advising/ell

  - Speaking, reading, writing programs
  - Peer mentor program

- Academic Success Centre – learning skills

  https://www.studentlife.utoronto.ca/asc

  - Individual appointments at 214 College St. and Arts and Science Colleges
  - Workshops, programs

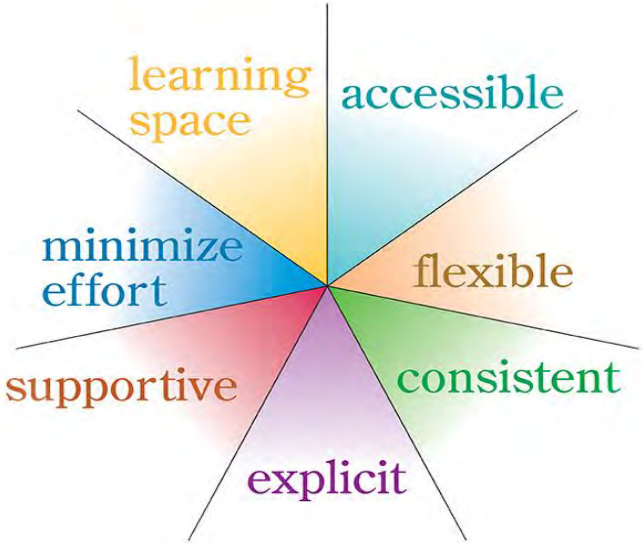
- Writing Centres - writing skills

  http://www.writing.utoronto.ca/

  - Individual appointments at Colleges, Faculties and SGS
  - Writing Plus workshops, resources

Universal Instructional Design (IUD)

7 principles to help design accessible teaching and learning activities, environments and materials, and create learning experiences that respect and value diversity.



At the core of UID is the concept of inclusiveness and equity.

The content on this slide is from the University of Guelph's site. Open Learning and Educational Support, 2016. University of Guelph. https://opened.uoguelph.ca/student-resources/Universal-Instructional-Design

Universal Instructional Design

7 Principles

https://madaniinteriors.com/universal-design/

Instructional matters and activities should:

1. Be **accessible** and fair
2. Be straightforward and **consistent**
3. Provide **flexibility** in use, participation and presentation
4. Be **explicitly** presented and readily perceived
5. Provide a **supportive** learning environment
6. **Minimize unnecessary** physical effort of requirements
7. Ensure a **learning space** the accommodates both students and instructional methods

Open Learning and Educational Support, 2016. University of Guelph.
https://opened.uoguelph.ca/student-resources/Universal-Instructional-Design

Universal Instructional Design - Resources

University of Toronto
CTSI
https://tatp.utoronto.ca/teaching-toolkit/effective-strategies/accessible-learning/

University of Guelph
Open Ed
https://opened.uoguelph.ca/instructor-resources/resources/uid-implimentation-guide-v13.pdf

Ryerson University
Learning and Teaching Office
https://www.ryerson.ca/content/dam/lt/resources/handouts/UDL_handout.pdf

Assignments Across Disciplines

Building a community of practice around assessment

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AAD Objectives

Build and sustain a multidisciplinary community of practice around assessment that

1. Supports instructors by providing access to assignment exemplars.
2. Increases the visibility and value of assessments and the instructors who create and adapt them.
3. Provides a way to document teaching excellence.

AAD Values

- Accessibility and inclusion through transparency (inspired by TILT framework)
- Collaboration (e.g., through the database itself, feedback and communities of practice)
- Sharing through OER (open educational resource)
- Innovation (e.g., multimodal and “alternative” assessments)
- Inviting students’ perspectives on assessment

AAD Purpose, Process and Platform

- Create a peer-reviewed online database of assessments and related pedagogical materials, e.g., rubrics, syllabi
- Make open-access but contributors choose their preferred type of creative commons licensing (default: CC BY-SA)
- Use TSpace

Assignments Across Disciplines Collection

Assignments Across Disciplines

Assignments Across Disciplines is on track to become one of the largest and most comprehensive collections of peer-reviewed post-secondary assignments in Canada. The aim of this project is to create a Community of Practice (CoP) focused on assignment design that will build and sustain an open-access educational online resource to support student writing across the disciplines. Collaboration, enthusiasm, and innovation have been central to the successful implementation of this project. In order to help you best navigate this online database, please consider the following points: 1. The assignments are searchable, as are several data fields. Most educators will find the following fields most useful for searches: Title, Abstract, Course Code, Keywords, Discipline, Type of Assignment and Year. 2. For each assignment there is a short description regarding the scope and content of the material, and instructor commentary. This outline describes the basic organization of the collection using broad subject descriptions (such as essay, report, and review). 3. Each assignment and its accompanying materials (grading rubric, syllabi, etc.) are available in full text (PDF) format and can be downloaded for free. Copyright to these materials belongs to their author(s) under a default CC BY-NC license, though authors may release their materials under an individually specified CC license. Even if an author has selected an open license, a best practice for using or adapting these materials is to cite the specific TSpace entry. If you have questions about Assignments Across Disciplines, please write to assignments@utoronto.ca. Visit our website: https://sites.google.com/view/assignmentsacrossdisciplines/.

Browse items in this collection by the following

Date | Author | Title | Subject

Author

Diamond, Miriam	4
Oliveira de Lima, Suzi	4
Cohen, Avi J.	2
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Boyes, Don	1
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Murray, Sarah	1
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Computer Mobile

Assignments Across Disciplines

Assignments Across Disciplines Database: Assignment Submission Form

Instructions:

Please complete this form (this will take you about 15 minutes) by first submitting your course syllabus and pedagogical materials (e.g., assignment instructions, evaluation criteria, and/or rubric, if you have one) under Question 1, below. Next, please respond to some additional short questions related to your assignment activities. Required questions are marked with an *.

When you are finished, click "submit". Thank you! Your contribution to Assignments Across Disciplines will inspire instructors to create meaningful learning activities for their students.

Hi Erin, when you submit this form, the owner will be able to see your name and email address.

1

Please upload your documents: syllabus, assignments, rubric, etc. here.
(Non-anonymous question ⓘ)

Upload file

File number limit: 10 Single file size limit: 10MB Allowed file types: Word, Excel, PPT, PDF, Image, Video, Audio

sites.google.com/view/assignmentsacrossdisciplines/

AAD Assignments Across Disciplines

What is AAD?

AAD is an open-access educational resource (OER) of peer reviwed assignments and a related communuity of practice created by Professor Andrea Williams of the University of Toronto and her team. AAD is a searchable database of exemplary assignments and related teaching materials (syllabi, rubrics, and teaching activities) from across the disciplines.

Project Rationale

Because assignments play a key role in student learning, AAD aims to inspire and support instructors in creating effective assignments by providing exemplars that they can use or adapt in their courses. AAD recognizes the work that goes into designing assignments, so contributions are credited to instructor-authors willing to share their assignments. To ensure that the databse includes high quality assignments and to build a commnuity of practice around assignment design, contributions are peer-reviewed: instructors have a

How can you contribute?

Students: *please nominate assignments from any university or college courses you've taken.*
Instructors and librarians: *please recommend assignments from colleagues.*

Nominate

Instructors and librarians, including graduate students, please submit one or more of your assignments that you think would be a worthwhile contribution.

Submit

All current and former University of Toronto course instructors and librarians, including graduate students, are welcome to serve as reviewers.

How you can engage with AAD

1. Contribute your assignments and
    - Receive formative feedback
    - “Publish” and publicize your teaching materials and story.
2. Recommend your colleagues’ assignments
3. Serve as a reviewer
4. Encourage your students to nominate assignments

Wrap-Up: Your Next Step(s)

In the chat, please share something you learned or found inspiring from today's workshop. . .

Thank you!

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References and Resources

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Winklelmes, M. (2019) *How to Use the Transparency Framework. Transparent Design in Higher Education, Teaching and Leadership*. Eds. M. Wilkelmes, A. Boye, and S. Tapp. Sterling, VA: Stylus.