Online Teaching Handbook

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CONSTANCE HARRIS, JOSHUA KOLLIN, OLIVIA POLLARD, AND CATHLEEN O'NEAL

Contents

The Purpose of this Handbook

Workspace for Online Teaching, CC BY 2.0.

The CELTT team is very pleased to present the first edition of *The Online Teaching Handbook*. This handbook is designed to serve as a primer for instructors new to online teaching and those who have been teaching online for a long time.

Instructors can learn more about topics related to planning the online course, teaching the course online, and access resources by selecting topics found in the handbook's contents area. The information presented in the content's area complements in-depth online teaching and learning information found in the University of Baltimore's (UBalt) Faculty Hub located in Sakai, UBalt's learning management system (LMS).

Special Note

We know that this handbook cannot capture all that you need to know about online teaching and learning, so we strongly encourage you to contact the CELTT team at celtt@ubalt.edu with questions or concerns.

The CELTT Team
Partners with you, Committed to your success
Damon Baker
Dontae Davis
Cathleen O'Neal
Josh Kollin
Olivia Pollard
Clarisse Wells
Dr. Constance Harris, Director of Online Learning
John Chapin, Executive Director

Introduction

Image provided by [Pxfuel](#).

Setting up your digital classroom

A classroom is a powerful educational tool. It gives us focus: It contains a learning community and it signals a common purpose. We know when we're in class, and we know that everyone in the room is there for the same reason.

When teaching online, we lose the signifiers of the physical classroom. Because some of us are new to the online teaching environment and because those online environments are not as standardized as physical classrooms, we have an obligation to teach our students about the structure and processes of our online learning environment. *In other words, for our students to learn effectively, they must also learn what your classroom looks like and how it operates.*

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https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=122#h5p-8

Image provided by the University of Baltimore.

Share your ideas, successes, and questions with your colleagues

As we develop greater capacity to teach online, we will all benefit from the support of our colleagues. Take advantage of the Faculty-to-Faculty Sharing site to find out who would benefit from what you learned teaching your class; seek out ways to spread what you have learned outside of your program, department, and school.

Definitions

For the purposes of this document:

- an **asynchronous course** has no synchronous elements. All work is self-directed and is due by regular deadlines (frequently weekly) clearly stated on the syllabus and in regular class announcements.
- a **synchronous** course has some scheduled online meetings.

Drafted by Dr. Aaron Wachhaus, John Chapin, and the Online Learning Subgroup

PART I
PLANNING THE ONLINE COURSE

1. Community of Inquiry Framework

Online teaching and learning differs from in-person teaching and learning in some key ways. The community of inquiry framework offers a helpful perspective for considering these differences and for creating an enriching online educational experience.

What Is a Community of Inquiry?

A community of inquiry (COI) is a theoretical framework for online learning research and instructional design that was originally described by D. R. Garrison in the early 1990s. Based on John Dewey's community of inquiry and Mathew Lipman's concept of critical thinking (1991), COI has been successfully applied and validated in online and blended K–12, undergraduate, graduate, and professional educational settings.

The COI model consists of three separate but integrated elements: social, teaching, and cognitive presence.

- **Social presence** is a cooperative effort between the instructors and the students, rather than solely a function of time. It evolves in a safe environment for expression; through group cohesion or identity; and through affective expressions (such as the use of emoticons or humor).
- **Teaching presence** refers to a combination of creative, administrative, and behavioral processes that occur as part of course design and implementation. It is constructed through well-structured learning activities; proactive and explicit instructions and feedback; and the inclusion of discussion summaries, corrections of misconceptions, and confirmations

of learner understanding.

- **Cognitive presence** is the extent to which learners construct and confirm meaning through sustained reflection and discourse.

(Garrison et al, 2000)

Why Teaching and Social Presence?

Teaching and social presence are intrinsically linked and, together, lead to cognitive presence and student success in online learning. Consider the following research findings:

- High levels of instructor teaching and social presence correlate with high levels of student social presence (Rovai, 2002; Shea et al., 2010).
- Social presence tends to precede cognitive presence (Rovai, 2002; Shea et al., 2010).
- A majority (70%) of variance in cognitive presence relates to positive perceptions of teaching presence and the ability to establish social presence (Shea & Bidjerano, 2009).
- Effective teaching presence may be the most important factor in establishing high levels of cognitive presence (de Leng et al., 2009; Shea & Bidjerano, 2009).

Explore the hot spot graphic below to learn more.

> *An interactive H5P element has been excluded from this version of the text. You can view it online here:*

Image by Matbury, used under CC BY-SA 3.0.

2. Course Mapping

Course mapping is an important part of designing your course. Read on to learn how to create a course map to ensure your course is well structured and will equip students to meet learning goals.

Backward Design

The use of backward design has been on the rise in recent years. Traditionally, course design and development starts at the beginning of the course content and progresses to the end. With backward design, the final assessment is considered first. Learning objectives are written and, in many cases, the assessment is created before any content or activities are added to the plan. In this way, students are more likely to successfully meet the goal of the course, as long as everything aligns with the objectives (Carnegie Mellon University, 2019). For more information, watch the video below which introduces backward design and alignment and explains how both can enhance the effectiveness of the learning experience.

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https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=28#h5p-6

Course Mapping

The practice of backward design involves the use of a course map, which is a visualization that demonstrates how course components relate to each other. A course map can be as simple as a concept map or table. Taking time to map out your course *before* you start building it helps ensure that all the elements are aligned to the objectives.

Course map templates and examples can be found [here.](#) [Link restricted to University of Baltimore users].

Writing Aligned Learning Objectives

Learning objectives or outcomes are statements that define the knowledge, skills, or attitudes that students should achieve through participation in a learning experience. Well-written objectives capture observable, measurable behaviors that students are able to demonstrate after completing the activity or experience.

Understanding Terminology

Sometimes conversations about learning outcomes can become confusing because of different terminology. For example, what's the difference between a competency and an objective? Are learning outcomes the same as learning goals? Goals, outcomes, and competencies are different, but they all help us identify the purpose of a course or program and provide a framework for aligning our instructional goals, activities, and assessments. Here are some definitions to get you started.

- **Goal.** A broadly stated mission or vision statement for a course

or program. Not intended to be measurable or assessable, it's meant to serve as a guidepost. Example: This course is designed to help first-year students develop project management skills.

- **Competency.** A statement that describes skills that a student will learn by the end of a course or program so that they can successfully perform in professional or societal contexts. It focuses on application beyond the academic setting. Example: You will be able to plan, organize, and manage a project so that objectives are met while scope, timeline, and budget are maintained.
- **Outcomes or Objectives.** Statements that describe the measurable and assessable knowledge, skills, or behaviors that a student will learn by the end of a course or program. While some institutions differentiate between outcomes and objectives (assigning one a more granular role than the other), this use case is inconsistent. Therefore, we will treat them as synonyms. Example: You will be able to compare and contrast project management methodologies, including Agile, Scrum, Kanban, and Six Sigma methodologies.

(Northwestern University, n.d.)

Bloom's taxonomy is one of the most widely known classification systems used to describe different kinds of human cognition. Its reliance on action verbs makes it ideal for the development of student learning objectives. First developed in the 1950s and revised in 2001, the taxonomy identifies the following cognitive process dimensions:

- **Remember.** Retrieve relevant knowledge
- **Understand.** Describe or discuss retrieved knowledge in a meaningful way
- **Apply.** Use the knowledge to solve a problem or perform an action
- **Analyze.** Break knowledge into components and determine

how the components contribute to the overall structure
- **Evaluate.** Make judgments based on criteria or standards
- **Create.** Remix information in new ways to create an original product or performance

For more information, read [Using Bloom's Taxonomy to Write Effective Learning Objectives](), which provides a brief overview of Bloom's taxonomy and explains how it is used to write appropriate learning objectives.
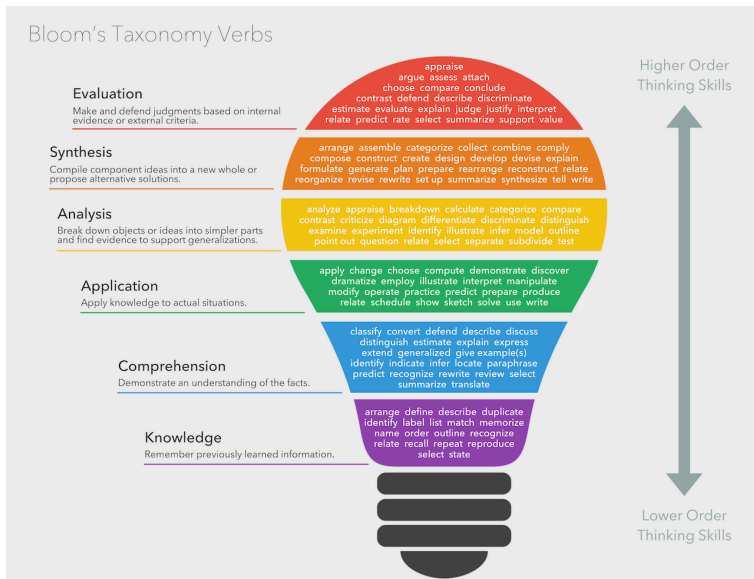
Bloom's Taxonomy. Image licensed under the Creative Commons Attribution-Share Alike 4.0 International license.

3. Student Engagement

Students in a classroom seated at long tables. Image provided by University of Baltimore.

As we learned in the previous section, a community of inquiry is constructed through three interdependent presences: teaching, social, and cognitive. Ensuring that students stay engaged throughout an online or remote course can be challenging, but it's possible with some planning and strategic action. Read on for strategies you can use to create and sustain engagement in your online course.

How can I create and sustain engagement in my course?

Consider how you will foster each type of presence in your course to maintain student engagement. It's vital to success, especially for online and remote courses. As you'll see, many of these strategies

overlap and support multiple presences, leading to stronger engagement. View the accordion below for instructor strategies.

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> *https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=33#h5p-10*

Interaction is a central tenet of teaching and learning. When instruction moves online, the manner in which students and instructors interact changes. Moore (1989) defined three types of interactions necessary to keep students engaged in an online course: learner-to-instructor, learner-to-learner, and learner-to-content. View the accordion below for different types of student interaction.

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> *https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=33#h5p-13*

As shown above, creating and sustaining social presence in an online course requires careful planning and ongoing action. Because you and your students will not meet in person, it's important to be strategic about social opportunities in the course. Recall that many strategies for social presence will also support teaching and cognitive presence. Click through the timeline below for more

information about sustaining social presence and engagement throughout the course.

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https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=33#h5p-11

How can I tell if students are engaged?

There are several ways you can observe and measure student engagement in your online course. Click the hotspots (plus signs) in the image below to learn more.

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https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=33#h5p-12

Image provided by Gerd Altmann.

If you'd like to assess your own facilitation, check out this facilitation checklist.

Using Technology for Engagement

Technology can be a great way to engage students in an online course, but it's important to make sure course technologies support learning outcomes. Select technologies strategically and limit their use to about three main tools that will be used throughout the course, rather than just for a single assignment. If using a new technology, an ungraded or low-stakes assignment can help introduce students to the tool.

4. Inclusive Teaching

Students collaborate at the RLB Library. Image provided by the University of Baltimore.

Fostering a diverse, equitable, and inclusive campus requires ongoing commitment and work. When students feel valued and respected, their educational experience is more enriching and they are more likely to meet their learning goals. Read on for some brief tips, but remember, this is only a starting place.

Self Reflection

Inclusive teaching starts with self-examination. Take time to reflect on your own culture and educational background and consider how it affects your work with students. What biases (conscious or unconscious) might be impacting your relationships?

Use Diverse Content, Materials, and Ideas

- Include language, examples, socio-cultural contexts, and images that reflect the breadth of human diversity.
- Model openness to the new ideas and questions your students bring into the course.
- Be aware of how your professional training and background may have shaped the selection of content and materials in your course.
- Allow students to have a say in course content.

Create an Inclusive Environment

- Communicate clearly about what you expect to happen in the classroom, including your expectations for respectful and inclusive interactions.
- Involve students in the development of classroom norms.
- Include a Diversity, Equity and Inclusion statement in your syllabus and uphold it.
- Set and enforce ground rules for respectful interaction in the classroom.
- Get to know your students and the individual perspectives, skills, experiences, and ideas that they bring into your course.
- Ask students for their preferred names and pronouns. Use them.
- Communicate high standards for student learning and achievement in your course and express confidence that every student can achieve these standards.
- Show respect for all questions and comments.
- Encourage students to "think out loud," to ask questions, and to actively consider perspectives that are different from their own.

Encourage a Growth Mindset

- Foster a "growth mindset" by conveying the idea that intelligence is not a reflection of fixed abilities, but can change and grow over time.
- Help students develop a growth mindset by speaking with them about the extent to which experiences of academic faltering can provide opportunities to grow and improve.
- Create an environment in the classroom in which it is okay to make mistakes.
- Be open to the possibility that what seems to be an incorrect answer initially may lead to a shared understanding of an alternative way to answer the question.

Strive for Equity of Access to Instruction and Assistance

- Help your students learn about academic and non-academic assistance and resources that are available.
- Promote fairness and transparency by sharing the criteria you will use to evaluate their work with students.
- Ensure that assistance provided outside of class is equally available and accessible to everyone.
- When students approach you to let you know that they are in need of a disability-related accommodation, help the student get in touch with Disability and Access Services (DAS).

Gather and Use Feedback to Refine and Improve

- Ask a colleague or CELTT staff member to observe your

teaching.

- Consider suggestions about how to encourage increased participation and inclusion of diverse contributions.
- Don't rely solely on formal course evaluations for feedback! Provide opportunities for students to reflect on the course and to give you feedback on the methods and strategies you are using.

Information on this page was adapted from New America and Greer (2020). See reference page for full citations.

5. Accessibility

Ensuring courses and online materials are fully accessible to all students is vital. It not only provides an equitable learning experience; it's also legally required. Read on to learn more about ADA requirements and how to create accessible materials.

Complying With the ADA

Accessibility is a measure of how well any person can access, engage with, and benefit from the learning materials and activities found in a course. The term is most frequently associated with making sure that students with mental or physical differences can fully participate. Several pieces of federal legislation, including the Americans with Disabilities Act (ADA) and the Individuals with Disabilities Education Act (IDEA), prohibit discrimination against these students and require equal access to technology in educational settings. Therefore, failure to design accessible courses not only results in poor learning experiences but may also constitute noncompliance with policies and potentially result in legal action against the institution (Thompson & Ford, 2018).

Creating Accessible Content

All course content should be accessible to all students. Instead of waiting to create or reformat accessible content until you have a student with a documented need for it, create accessible content from the onset.

Watch the video below to learn a few quick tips for creating accessible content.

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https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=37#h5p-3

Click on the titles below to learn more about creating accessible content in different programs.

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https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=37#h5p-2

A note on PDFs

You may have heard that PDFs are an accessible document type. While it's true that more users are generally able to open PDFs without issue, creating material as a PDF does not automatically make it accessible to students using screen readers or other assistive technologies. Be sure to follow the guidelines above when creating PDFs to ensure they are fully accessible.
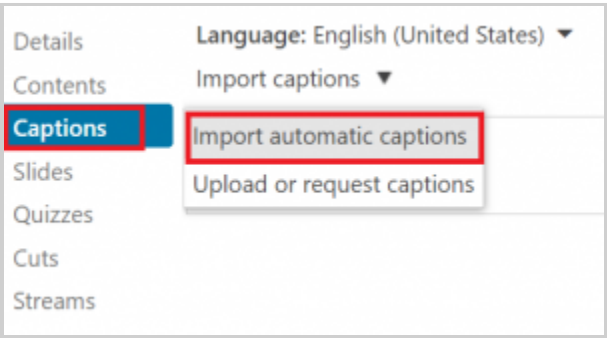
Captioning Videos

If you use Panopto (the UBalt video solution), you can easily add

automatic captions to any video stored in Panopto. Note that the captions are generally about 90% accurate so some editing is required.

Below you'll find screenshots showing the steps to add captions to a Panopto video.
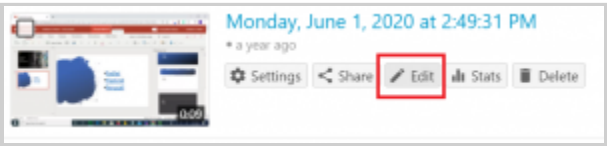
1. *Navigate to the video in Panopto and click the Edit button.*

2. *Click the Captions button then select Import Automatic Captions.*

Language: English (United States) ▼

Import captions ▼

| And I'm Cathleen O'Neal, instructional designer. | 0:06 |

Each of the modules is self-paced. They will be available for you to complete at your convenience. ⋮ 0:12

From now until August 8th, please watch the course toward video below to learn how 0:18

to navigate the course. After you complete the module of your choice, please go to the assignment 0:23

3. Double click caption sections and make edits as needed for accuracy.

Office of Disability and Access Services

If you need further assistance creating supporting students, please contact the [Office of Disability and Access Services](#).

TEACHING THE ONLINE COURSE

6. Instructional Strategies

Image by [Johnhain](#).

Instructional Strategies

When designing a course, instructors must consider WHAT they want the students to learn and HOW they want students to learn it.

Instructional strategies address the WHAT and HOW of learning by encompassing the methods and plans instructors will use to teach students enrolled in their courses. When aligned with course learning outcomes, instructional strategies help students learn, master content or subject knowledge, and provide opportunities and environments that support student reflection, collaboration, and constructive feedback.

Well-defined instructional strategies can help students become

successful strategic learners and meet course learning goals (Akdeniz, 2016; Seechaliao, 2017). Course design greatly influences the student's ability to become a self-directed learner in an online course (Boettcher & Conrad, 2021; Jaggers & Xu, 2016; Martin, Budhrani, Kumar, & Ritzhaupt, 2019).

Instructional strategies in traditional and online courses

In an online course the faculty role shifts from that of "telling" students and controlling the classroom to that of becoming a facilitator who coaches, guides, and mentors students toward solutions (Boettcher et al., 2021; Palloff & Pratt, 2011). Instructor facilitation skills should be implemented so that students learn to interact with their peers, content, and the instructor at a high level. Online facilitation includes implementing a course infrastructure that encompasses *Best Practices for Teaching Online* highlighted below.

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https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=45#h5p-14

Graphic created by [Ron Carranza, Andrew Salcido, and Jessica Cole at Arizona State University](#).

More Information on Instructional Strategies

For more information on instructional strategies, including group work, case studies, project-based learning and more, please visit the [Faculty Hub](#) or [submit a ticket to CELTT](#).

7. Assessment and Feedback

A student works on their online course. Image provided by the University of Baltimore.

Assessment

Assessment is a systematic process used by instructors to help them understand what students are learning and whether students are meeting course learning goals. *The ultimate goals of assessment are to improve and inform the instructor's teaching practice and student learning.*

According to Suskie (2018), the assessment process includes

- Establishing clear, observable expected goals for student learning;
- Ensuring that students have sufficient opportunities to achieve those goals;
- Systematically gathering, analyzing, and interpreting evidence of how well student learning meets those goals;
- Using the resulting information to understand and improve student learning. (p. 8)

A successful assessment strategy begins with "backward design" (Linder, 2017; Wiggins & McTighe, 1998) in which instructors align course activities, assignments, and assessments with course goals and learning outcomes.

Formative, summative, and "authentic" assessment methods provide opportunities for instructors to gauge student learning during and at the completion of the learning cycle.

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https://ubalt.pressbooks.pub/ onlineteachinghandbook/?p=49#h5p-7

Feedback

Feedback is essential for student learning, but it can be a challenge to provide meaningful feedback that students actually review and use to inform their future work. Effective feedback is goal-oriented, specific, actionable, and timely. Feedback that is unfocused or unclear or that comes too late for a student to implement can be unhelpful and frustrating.

Feedback decreases the "transactional distance" between the instructor and students. It makes students more engaged and learning outcomes improve (Moore, 1991; Ice et al, 2007; Gray and DiLoreto, 2016).

Feedback can take many forms, including written, audio, and video. Consider using audio or video feedback for learners in your online course. These types of feedback are perceived by students to increase their sense of their instructor's presence and caring (Orlando, 2011; Ice et al, 2007).

As you consider how you will provide feedback to students, think about the following:

- What are your students' preferences for feedback?
- Can students readily access the feedback?
- Does the format of the feedback fit the assignment?
- What type of feedback and how much is feasible for you to provide?
- How can you establish routines to help you provide timely feedback?

RESOURCES & REFERENCES

8. Where Do I Get Help?

Below are common questions the CELTT office receives from instructors.

Please click on the appropriate one for helpful guidance.

If you need further assistance, [please submit a ticket to CELTT](#)

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https://ubalt.pressbooks.pub/onlineteachinghandbook/?p=60#h5p-9

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9. Resources

University of Baltimore Teaching Resources

The [Fall 2020 Faculty Teaching Guide](#) [restricted link] **can be found on SharePoint.**
[Faculty Resources](#) provided by the Provost office include information about the faculty senate, as well as links to the [Faculty Handbook](#), [UBalt policies](#) and [University System of Maryland policies](#).
The [Robert L. Bogomolny Library](#) houses a sizable collection of books on teaching learning. Check out the [full list](#).
The [Syllabus Template](#), [Syllabus Addendum](#) and [Syllabus Repository](#) can be found on SharePoint. The Repository contains syllabi organized by college/school and term.

Resources on Pedagogical Excellence

[Universal Design](#) is a framework for teaching and learning. This site provides guidance on how to apply the framework.
This [Writing Learning Outcomes Worksheet](#) guides users through the process of writing learning outcomes.
[Assessing Online Facilitation Instrument](#) can be used as a self-assessment of your facilitation in an online course. Review it before your course begins to keep important managerial, social, pedagogical, and technical tasks in mind.
The Professional and Organizational Development (POD) Network has published a series of eight succinct [Essays on Teaching Excellence](#).

The [Teaching Professor blog](#) features entries on topics such as the scholarship of teaching and learning, classroom policies, active learning, assignment strategies, assessment, and student performance.

Online Teaching

[The Online Course Mapping Guide](#) takes users through an interactive process of course mapping from start to finish. [Eberly Center's Using Group Projects Effectively](#) provides best practices on online group work, including design, group composition, facilitation, and assessment.
This [Effective Education Videos](#) guide from Vanderbilt shares important considerations and tips for videos in online courses. [Teaching Online Pedagogical Repository](#) contains numerous resources for best practices in online teaching and learning.

Equity and Accessibility

[These National Center on Disability and Access to Education cheat sheets](#) provide handy how-to guides for creating accessible content in Microsoft Office and Adobe products. Also included are guides for creating accessible web content.

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