Blended Teaching in Higher Education

A Guide for Instructors and Course Designers

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1

Introduction

Welcome! This resource walks you through a blueprint for the successful construction of a blended course in a higher education setting. The chapters and their corresponding activities will help you design, develop, implement, facilitate, and evaluate your blended course. Whether you are a university instructor or an instructional designer, this resource will help you carefully think through important elements of your blended course.

Textbook Learning Outcomes

As you complete the readings and activities in this textbook, you will be able to:

- Describe blended models in terms of media, modality, and method.
- Design digital assessments and learning activities that align with course outcomes.
- Apply sound strategies to facilitate synchronous and asynchronous online interactions.
- Evaluate the pedagogy and design of blended courses.

1.0 Introduction

This chapter provides an overview of the textbook's framework, structure, and design principles. As you complete the blueprint or facilitation challenges in each chapter, you will progress toward a complete plan for the design and facilitation of your blended course.

Chapter 1 Learning Outcome: I can understand how to create my blended course.

Sub-section outcomes:

- I can explain blended learning design, development, and implementation. (Section 1.1)
- I can understand the framework I will follow in this book. (Section 1.2)
- I can conduct formative evaluation of my work at each stage of development and facilitation. (Section 1.3)
- I can evaluate my strengths and weaknesses as I begin this project. (Section 1.4)
- I can understand how I will use this resource to help design and facilitate my blended course. (Section 1.5)

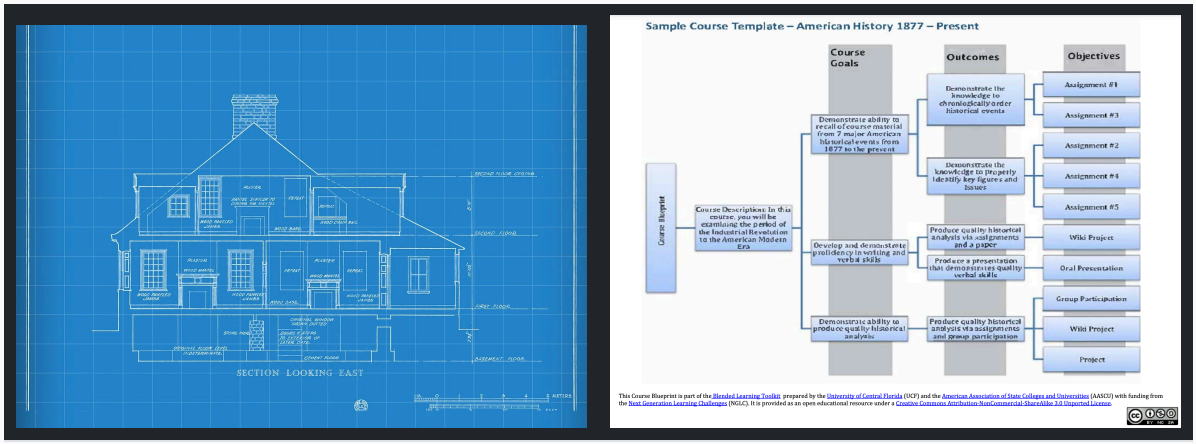
1.1 Blended Learning Design, Development, and Implementation

Section 1.1 Learning Outcome: I can explain blended learning design, development, and implementation.

Designing a course is distinct from **developing** or **implementing** a course. Design comes first and allows you to envision your course and some of its elements before the building process even begins.

Design. Before a home is built, a builder designs the house and specifies the elements of the design in a blueprint. The blueprint specifies the different layers and elements of the house and how they work together (for example, the framing, plumbing, and electricity). Instructors also design (or plan) important elements of their course. A course blueprint shows how the elements of the course work together (for example, lesson content and activities, assessment, and student interactions with classmates). Figure 1-1 compares house blueprints and course blueprints.

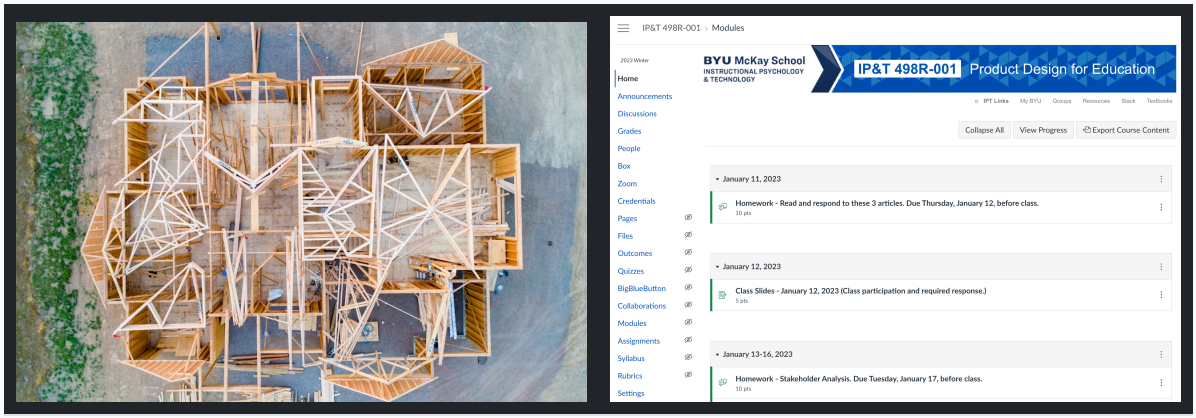
Figure 1-1. Design



House Blueprint figure by [Michael_Hiraeth](#) (Pixabay License). Course blueprint by UCF, CC-BY NC SA.

Development. Using the blueprint as a guide, a construction crew uses physical materials to create what was previously designed on paper. They frame the rooms and install pipes, wiring, and appliances. Similarly, materials and resources are also developed as part of a course, such as worksheets, videos, group projects, and quizzes. Figure 1-2 compares house construction and course development using a learning management system (LMS).

Figure 1-2. Development



Construction photo by [Avel Chuklanov](#) (Unsplash License). LMS screenshot by Alison McMurry CC BY.

Implementation. Later a family moves into the house and actually uses its features. If the house is well-designed and well-built, the family will comfortably benefit from the many features. Similarly, after a course is designed and developed, teachers and students then implement the course as they participate in learning activities and assessments aligned with its proposed outcomes. If the course is well-designed and well-built, the class will benefit academically from the features of the course. Figure 1-3 compares the home and the class.

Figure 1-3. Implementation

Family picture by NCI (Unsplash License). Four students by Mimi Thian (Unsplash License).

1.2 Our Framework

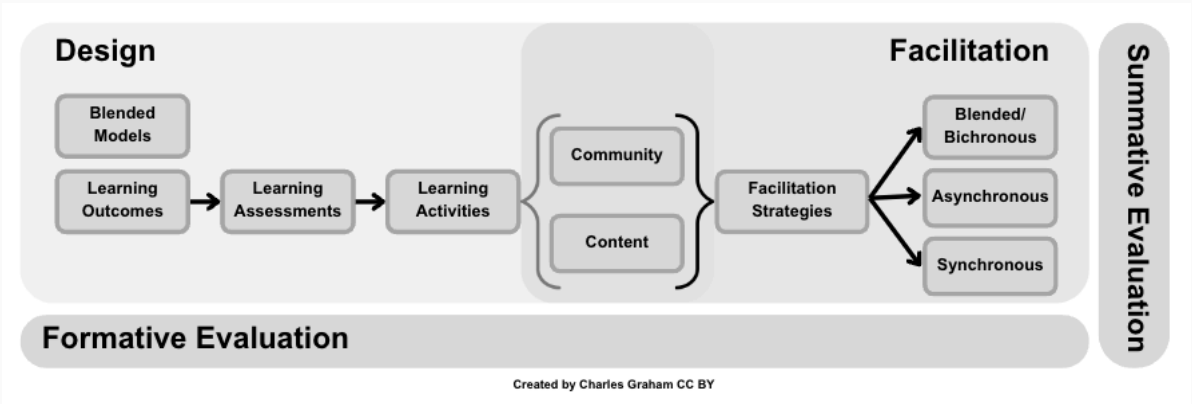
Section 1.2 Learning Outcome: I can understand the framework I will follow in this book.

This resource will walk you through a backward design framework to create a blended learning course. Backward design is a common educational approach in which the designer plans the learning outcomes first, then corresponding assessments, and then appropriate learning activities. This section of Chapter 1 gives a brief overview of our framework and Figure 1-4 illustrates our framework.

The essence of this approach to design, development, and facilitation will be addressed in the textbook chapters as follows:

1. You purposefully choose a blended design model (Chapter 2)
2. You determine the learning outcomes you hope students will achieve in your course (Chapter 3).
3. You design your learning assessments to align with those outcomes (Chapter 4).
4. You design learning activities that will help students achieve the desired outcomes (Chapters 5 and 6).
5. You consider facilitation methods applicable to your activities (Chapters 7 and 8), and design facilitation plans (Chapters 9, 10, and 11).
6. You conduct a summative evaluation of your blended course (Chapter 12).

Figure 1-4. Backward Design Framework



This book focuses on the skills related to blended course design and facilitation, and therefore, does not address the skills required for course development and implementation. Each chapter focuses on specific blended course competencies that are articulated in “I can” statements. You will practice these competencies in each chapter by completing blueprint or facilitation challenges which together create the plan for your blended course. Table 1-1 outlines the "I can" statements and the challenges included in each chapter.

Table 1-1. Outline

Chapter	Topic	*I Can* Statement	Challenge
1	Introduction and *Formative* Course	I can understand how to create my blended	Course Checklist

Chapter	Topic	*I Can* Statement	Challenge
	Evaluations	course.	
Design Unit			
2	Blended Learning Models	I can select a blended learning model for my blended course.	Blended Learning Model
3	Learning Outcomes	I can create learning outcomes that define expectations for learner achievement in my blended course.	Learning Outcome Map
4	Assessment Plans	I can develop an assessment plan that aligns with my learning outcomes.	Digital Assessment Plan
5	Learner-Community Activities	I can plan community-based activities for my blended course.	Community Activities
6	Learner-Content Activities	I can plan content-based activities for my blended course.	Content Activities
Facilitation Unit			
7	Introduction to Facilitation	I can explain how instructor facilitation influences student learning.	Reflection 1
8	Facilitation Frameworks	I can use terminology from various frameworks to	Reflection 2

Chapter	Topic	*I Can* Statement	Challenge
		describe my online facilitation strategies.	
9	Blended/Bichronous Facilitation	I can plan and practice a blended or bichronous learning activity.	Blended or Bichronous Facilitation Plan
10	Asynchronous Facilitation	I can plan and practice an asynchronous learning activity.	Asynchronous Facilitation Plan
11	Synchronous Facilitation	I can plan and practice a synchronous learning activity.	Synchronous Facilitation Plan
Evaluation Unit			
12	Conclusion and *Summative* Course Evaluation	I can evaluate my blended course.	Evaluation Report

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1.3 Evaluation v. Assessment

Section 1.3 Learning Outcome: I can conduct formative evaluation of my work at each stage of development and facilitation.

Evaluation is the process of identifying and explaining the value of a product, program, or personal performance. It is similar to assessment, which is discussed in chapter 4, but there are some key differences. Table 1-2 compares evaluation and assessment.

Table 1-2. Definitions of Evaluation and Assessment

	Evaluation	Assessment
Aim	Identifying and qualifying the degree of value	Identifying and quantifying the level
Target	of a product, program, or person	of proficiency, performance, or competency
Purpose	to show fulfillment of requirements, or degree of eligibility, or satisfaction of relevant conditions.	to show growth over time.
Output	A description of the degree of value.	A score, grade, or rating.

Sometimes assessment scores are used to inform an evaluation. For example, a student's GPA is an assessment. Meeting all the requirements for graduation is an evaluation. One of the requirements is a GPA above a minimum required level. The assessment informs the evaluation, but it is only one piece of information that is considered.

Both evaluation and assessment can be **formative** or **summative**. Formative evaluation and assessment are focused on the process of learning or doing and are intended to give feedback to improve performance or quality. Summative evaluation and assessment are focused on the result of learning or doing and are intended to label the outcome of a program or performance. Table 1-3 shows examples.

Table 1-3. Examples of formative and summative evaluation and assessment.

	Evaluation	Assessment
Formative	Mid-course self-evaluation. A student identifies the degree to which a project fulfills or does not fulfill requirements. The project is given a value that describes its quality, which can help the student understand what to improve in the future.	Competency self-assessment. A student identifies the level their performance compared with the ideal. This level is expressed as a quantifiable score. The student understands what to improve in the future.
Summative	Graduating from a university and earning a degree. The person has fulfilled requirements and satisfied conditions for graduation. The	Taking unit tests in a class. Each test shows a level of competency. Progress or growth can be tracked over time. Grades can be assigned

	Evaluation	Assessment
	person's academic value is described as Associate, Bachelor, Master, or Doctor.	to each test and a total grade can be calculated at the end of the course.

Chapter 4 will address the role of assessment in more detail, including how to use formative and summative assessments in your blended course design.

Chapter 12 will address the role of summative evaluation in more detail, including how to perform summative evaluation of your course design and lesson facilitation.

But for now, focus on formative evaluation. There are various ways to conduct formative evaluation, and in this resource we rely on reflective self-evaluation. As you work through the activities in this book, you will be asked to evaluate your progress and performance. We hope this helps you identify your strengths and weaknesses as you improve your blended course design and facilitation. Mentors and colleagues can also provide additional formative feedback throughout your planning process, so we encourage you to supplement your self-evaluation with helpful collaboration. The course checklist (below) will help you review your own understanding and skills, and reflect on where you might need improvement, at the end of each chapter.

1.4 Get started!

Section 1.4 Learning Outcome: I can evaluate my strengths and weaknesses as I begin this project.

Let's get started!

Step 1: Welcome to the Course Checklist. This will help you track your progress through the chapters' challenges.

👷 Course Checklist

You will use the skills presented in this resource to design, facilitate, and evaluate a blended course.

Open the Course Checklist Template and save a copy. Label the copy using this format: Your Name Course Checklist. (Example: Hyun Joo Course Checklist.)

Each chapter of this resource guides you to complete a part of your Course Checklist.

Step 2: One type of assessment is called value-added assessment. It measures student growth from the beginning of the course until the end, usually by completing pre-tests and post-tests. We have two self-assessments, one in design and the other in facilitation, which will establish a benchmark you can use to measure your progress at the end of the design and facilitation units.

Click on the link below to take the Design Competency Self-Assessment. You will receive a score out of 20 points, which will indicate your current level of competency. Since this is a pre-test, you might score between 0 and 10 on this design competency self-evaluation. This is to be expected if you have limited experience with blended teaching. Even if you score higher in some areas, the textbook chapters will supplement your skills with additional strategies for your consideration and provide opportunities for growth in areas where you lack experience.

Design Competency Self-Assessment

A score of 0 =	No Design Competency
1-5 points =	Novice Level
6-10 points =	Intermediate Level
11-15 points =	Advanced Level
16-19 points =	Superior Level
20 points =	Expert Level

👷 Course Checklist Part 1: Design

Step 1: Self Evaluation

Open your Course Checklist document. Read the directions for Step 1 Self-Assessment. Then complete the assignment with your score and reflection. Check the completion box.

1.5 How to Use this Resource

Section 1.5 Learning Outcome: I can understand how I will use this resource to help design and facilitate my blended course.

The framework of this textbook prepares you to create a design blueprint and a facilitation plan for your blended course. The sequence of chapters follows a backward design model and can help you move systematically through the design and facilitation processes.

We recommend you proceed through the textbook as follows:

1. Begin your Course Checklist (from section 1.4 above).
    - Download and save your Course Checklist.
    - Complete the Design Competency Self-Assessment. Consider your current strengths and weaknesses.
    - Check **Step 1–Self-Evaluation** off your Course Checklist.
2. Read Chapters 2–6 sequentially.
    - In each chapter, complete the blueprint challenge. Check each chapter's blueprint challenge item off your Course Checklist and do the formative self-evaluation.

3. Take the Design Competency Self-Assessment again and compare your score with the first time you took it (Step 1). Reflect on your progress in the Course Checklist.
4. Recruit a peer or mentor to evaluate your blended course blueprint. Ask for feedback. Make adjustments based on their feedback.
5. If you are ready to implement your course, begin the process of developing the instructional materials and finalizing your syllabus and course calendar. You are now ready to learn more about facilitation as you prepare to implement your course.
6. In chapter 7, complete the Facilitation Competency Self-Assessment. Consider your current strengths and weaknesses.
7. Read Chapters 7–11 sequentially.
    - In each chapter, complete the chapter's challenge activity. In some chapters these are called "Reflection Challenges" and others are called "Facilitation Challenges."
    - Check each chapter’s challenge item off your Course Checklist and do the formative evaluation.
8. Take the Facilitation Competency Self-Assessment again and compare your score with the first time you took it (Step 6). Reflect on your progress in the Course Checklist.
9. Read Chapter 12. Complete the summative evaluation and reflect on your progress in the Course Checklist.

Congratulations! You completed Chapter 1, and you are ready to build your blended course!

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Access it online or download it at https://edtechbooks.org/he_blended/chapter_1_overview.

Design Unit

Blended Models

Learning Outcomes

Assessment Plan

Learner-Community Activities

Learner-Content Activities

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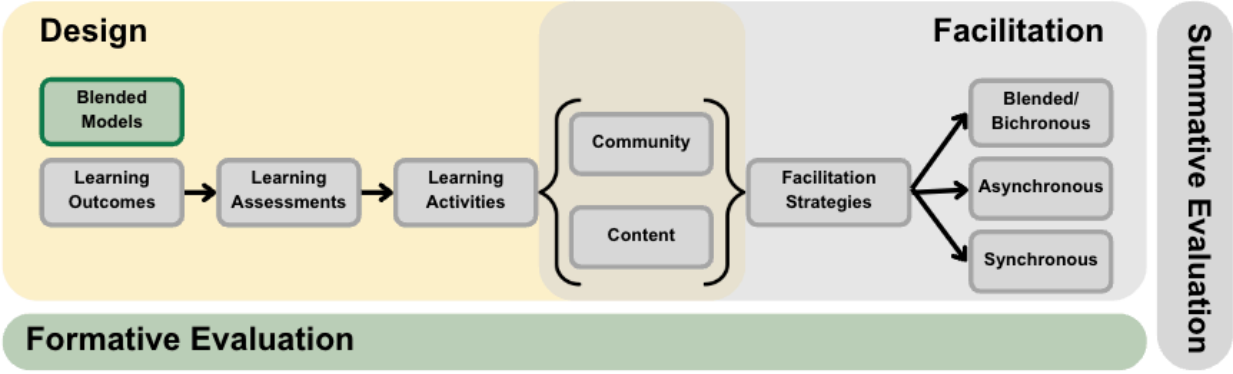
2

Blended Models

The first step in our framework is to select a blended model. Different models will be discussed and you will select what you think will be best for your blended course. As always, formative evaluation will be conducted to help you thoroughly think through your design decisions.



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Chapter Learning Outcome: I can choose a model for my blended course.

Sub-section outcomes:

- I can identify my reasons for creating a blended course. (Section 2.1)
- I can identify the affordances of my digital learning environment. (Section 2.2)
- I can select a blended model appropriate for my learners' learning needs. (Section 2.3)
- I can clearly describe the model and rhythm of my blend to learners. (Section 2.4)

✏️ Chapter 2 Blueprint Challenge

You will use the skills presented in this chapter to outline a model for your blended course.

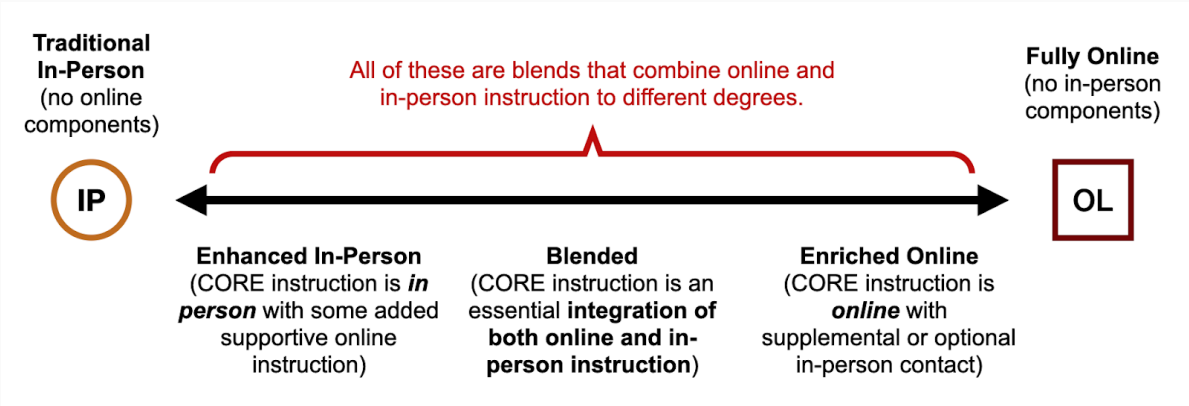
Open the Chapter 2 Mastery Challenge: Blended Model Template and save a copy. Label the copy using this format: Your Name Blended Model. (Example: Hyun Joo Blended Model.)

Each section in this chapter will guide you through the process of choosing and outlining the model you will use for your blended course.

2.0 Introduction

The definition of blended learning emphasizes **modality,** or the physical time and place dimensions of a learning environment. Blended learning occurs when learning in the **online** and **in-person** modalities are strategically combined. In our digital age, this blending of modalities is becoming the norm, though it is not always designed strategically. Figure 2-1 below shows a range of blends that fill the gap between fully online and fully in-person learning.

Figure 2-1. Range of Instructional Blends



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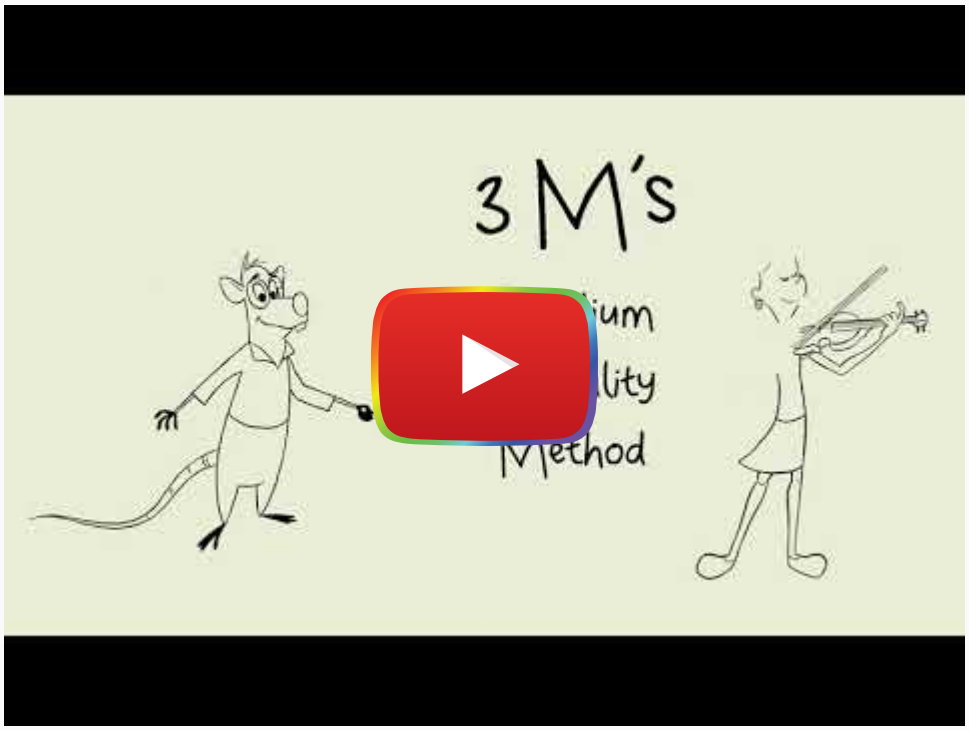
- On the left of the spectrum, we have blends in which instruction primarily happens **in-person with online elements** added as support.
- On the right of the spectrum, we have blends that look mostly like **online courses with supplemental or optional in-person** support.
- In the middle, we have blends where the **integration of online and in-person** modalities is essential to the core instruction.

Each institution of higher education might define blended learning in a slightly different way. Often an institution will specify a rough percentage of instructional time that is online or in-person in order to institutionally categorize courses as online, on-campus, or blended. However, not all blends are created equal! This is because the **modality** does not have the greatest impact on learning. Student learning is most influenced by the teaching **methods** that are used.

Video 2-1 below shows a brief explanation of how **modality**, **method**, and **media** interact in a learning experience.

Video 2-1. The 3 Ms: Media, Method, and Modality (5:31)



Watch on YouTube

What to Look For: Which of the 3Ms has the most direct impact on student learning?

The blended model that you use will involve choices of all three M's. Keep in mind that the methods you use are the most significant, and be aware of how media and modality can enhance your methods. Table 2-1 gives examples of how these three important characteristics influence the design of the learning experience.

Table 2-1. The 3 Ms

3 Ms	Description	Examples	
Modality	The physical time and place dimensions of a learning environment.	**Place**: online vs. in-person. **Time**: synchronous vs. asynchronous.	**Blended**: combining online and in-person modalities. **Bichronous**: combining synchronous and asynchronous modalities.
Media	Tools or technology used to deliver or mediate learning.	**Digital:** computer, LMS, cell phone.	**Non-Digital:** textbooks, paper and pencil, lab equipment.
Method	Teaching strategies.	**General:** lecture, group work, discussion, debates, demonstrations, case studies.	**Content Specific:** STEM labs, writing circles, design critiques, primary source research.

As you begin to choose a blended model for your course, which means choosing the modality, base your decision on methods and media appropriate for your course.

2.1 Identifying Your Purposes for Blending

There are many reasons why instructors and institutions choose to combine both online and in-person instruction in their courses. The most common reasons are (1) to improve

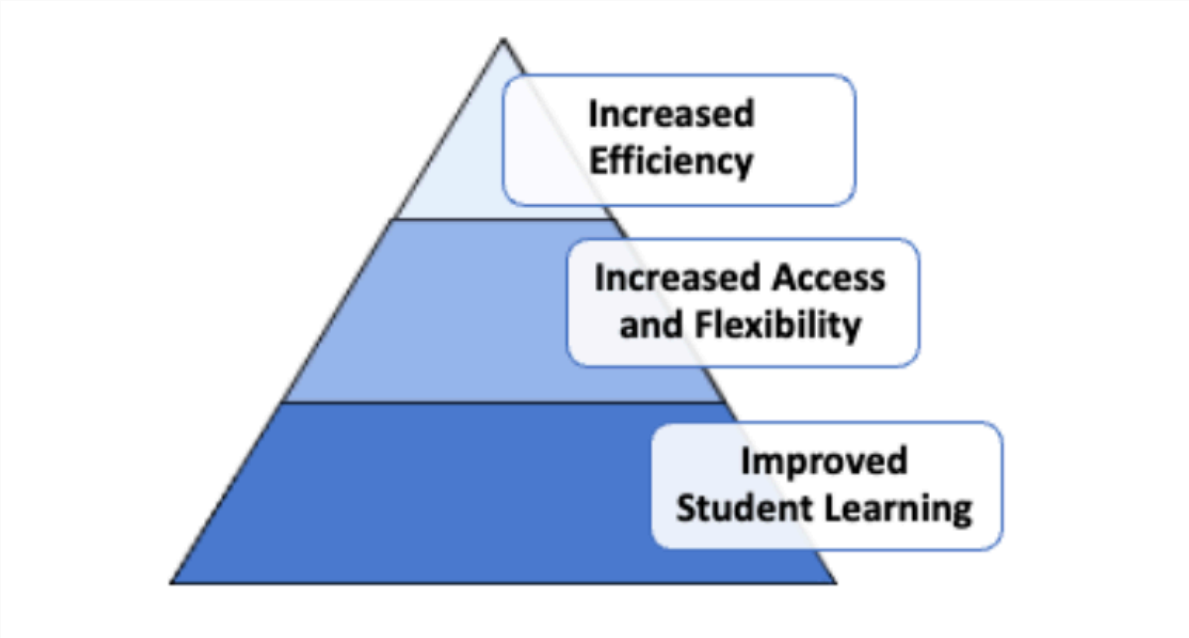
student learning, (2) to increase access and flexibility, and (3) to improve efficiency and/or reduce costs.

Learning Outcome: I can identify my reasons for creating a blended course.

Assessment: Chapter 2 Mastery Challenge Blended Model Part 1.

Figure 2-2 places these purposes in a hierarchy pyramid with student learning at the base. This is because improved student learning should be foundational to any course blend that instructors design.

Figure 2-2. Hierarchy of Purposes for Blending a Course



Blended courses often allow for increased access, flexibility, and efficiency without compromising student learning. We do not want to provide high levels of access to low-quality learning experiences. We want to provide increased access to learning experiences that are as good or better than what is available without technology.

It is important for instructors to design and plan with a purpose in mind. Table 2-2 includes some common reasons that instructors have chosen to create blended learning experiences.

Table 2-2. Example Reasons for Choosing a Blend

Increased Efficiency	An instructor: • moves some science labs online, creating less need for expensive equipment in the classroom. • uses online books to lower costs (and to have more than a classroom set for learners). • uses the online space to publish assignments, instructor and learner examples, writings, explanations, and questions, reducing the need for copies. • creates videos to expand instructor presence in the class, thus multiplying her effectiveness and productivity.
Increased Access and Flexibility	An instructor: • uses the online space to incorporate into the classroom materials and information, targeted instruction, and activities that are not otherwise available. • uses technology to give learners choices in learning activities. • consults with learners to set learning goals.
Improved Student Learning	An instructor:

	• uses the blend to give learners small group instruction or one-on-one time with learners to address specific learning needs. • uses data obtained from online tracking systems to constantly monitor learning and to make adjustments to instruction. • uses self-made videos to give instructions that learners can slow down, speed up, pause, or repeat to understand the material or an assignment. • offers choice in assignments to increase learner engagement and ownership in their learning.

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Each instructor needs to decide their reasons for blending. This is important because determining one's purpose for blending provides a vision for how to select appropriate blended models and strategies to achieve those purposes.

One of the best ways to get started is to identify and focus on a problem or challenge in your course that you believe blended teaching could help you solve. These are sometimes called Problems of Practice. The following Problems of Practice pathways could help you identify some of your reasons for creating a blended course.

1. The 6 C's of Deep Learning: character, citizenship, collaboration, communication, creativity, and critical thinking.
2. The 7 P's of Quality Blended Teaching: participation, pacing, personalization, place, personal interaction, preparation, and practice with feedback.
3. Subject-Specific Teaching Strategies.
4. Problems with Learner Access.

Table 2-3 places these Problems of Practice pathways into the framework of the Hierarchy of Purposes for Blending a Course. As you examine the table, consider why you are creating a blended course.

Table 2-3. Problems of Practice and the Hierarchy of Purposes

	Increased Efficiency	**Increased Access and Flexibility**	**Improved Student Learning**

The 6 C's of Deep Learning	I want to increase my learners' ability to communicate effectively about their learning. I want to help my learners practice appropriate digital citizenship.	I want to allow my learners to demonstrate their learning in creative ways.	I want to help my learners develop better collaboration skills. I want learners to think critically about current world events. I want my learners to develop good character as they prepare to enter the real world.
The 7 P's of Quality Blended Teaching	I want to increase learners' out-of-class preparation before classroom activities. I want my learners to receive timely, effective feedback on their practice.	I want to enable 100% participation in class discussions. I want my learners to pace themselves to learn as quickly as they are able or as slowly as they need to. I want my learners to personalize their learning by selecting learning activities that will help them the most. I want to open up learning experiences that	I want to create additional opportunities for learners to personally interact with me and with one another.

		take place outside of my classroom.	
Subject-Specific Teaching Strategies	Science Class: I want to create opportunities for my learners to use technology to analyze and interpret data and then create a scientific argument from this evidence.	Math Class: I want to increase the quality of mathematical discourse in my classroom.	Writing Class: I want to find more effective ways to engage my learners in collaborative writing.
Problems with Learner Access	I want to make it easy for learners who miss class due to illness or extracurricular activities to stay caught up.	I want to make it possible for learners who are single parents with significant childcare responsibilities to be able to participate flexibly in the class.	I want learners to have low-cost access to the educational materials used as part of our learning in class.

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Reflect on the Hierarchy of Purposes for Blending a Course as you identify your reasons for creating your blended course.

✏️ Chapter 2 Blueprint Challenge Part 1

Blended Model Part 1 Reasons for Blending.

Open your Blended Model document. Read the directions for Part 1 Reasons for Creating My Blended Course. Review the example. Then fill in the table with your ideas.

2.2 Understanding your Digital Learning Environment

The affordances of a learning environment are the features that enable or inhibit different kinds of interactions. For example, a chemistry lab has affordances such as bunsen burners, beakers and flasks, test tubes, that allow scientific activities that wouldn't be possible without them. Just like your physical classroom environment has affordances that enable certain learning interactions, your digital environment will enable and limit the kinds of learning interactions possible.

Learning Outcome: I can identify the affordances of my digital learning environment.

Assessment: Chapter 2 Mastery Challenge Blended Model Part 2.

Learning Management Systems (LMSs) are software tools specifically designed to support teaching. These tools have many affordances that can make teaching easier as well as constrain some of the activities you might envision. Some common features of a learning management system are related to:

- Assessment and grading
- Peer interaction and discussion
- Instructor interaction and communication
- Content interaction

Table 2-4 provides a few broad examples of common affordances in many learning management systems.

Table 2-4. Examples of affordances in many learning management systems (LMSs) or online learning environments

Category	Affordances

Assessment and Grading	• Question Types—the variety of types of questions that are possible to include in an assessment (e.g., multiple choice, essay, fill-in-the-blank, etc). • Feedback Mechanisms—the different ways that feedback can be provided both automatically and manually. • Gradebooks—the features tracking learner submission of assignments and communicating scores and grades (this could also include mastery-based gradebooks that show learners reaching mastery thresholds).
Peer Interaction and Discussion	• Asynchronous Discussion Boards—the ability to enable different types of discussion. • Synchronous Video Communication—the ability to enable real-time video communication between peers. • Collaborative Team Spaces—spaces that allow for learner teams or groups to communicate around shared documents and resources. • Peer Feedback—mechanisms for enabling peers to provide feedback to each other on their work.
Instructor Interaction and Communication	• Announcements—the ability to provide text and video-based announcements. • Learning Analytics—access to analytics related to learner interaction in the LMS and the ability to take supportive actions based on the data. • Communication Features—the ability to quickly message learners and answer questions in multiple modalities.

Content Interaction	• Static Content—the ability to provide content for learners to access and download (e.g., text-based and video content). • Dynamic Content—the ability to create and integrate dynamic content such as simulations, educational apps, and adaptive learning software.

From Graham, et al., 2019. CC BY-SA.

It is important for you to know what LMS and other digital tools you have available to you in your learning environment because the tools will enable and limit the kinds of interactions that you can build into your blended course. For example, if your digital learning environment only allows for multiple choice assessment questions or doesn't allow synchronous video-based communication, your blended design options will be constrained by the limited affordances.

✏️ Chapter 2 Blueprint Challenge Part 2

Blended Model Part 2 Affordances of My Digital Environment.

Open your Blended Model document. Read the directions for Part 2 Affordances of My Digital Environment. Review the example. Then fill out the table with your ideas.

2.3 Choosing a Blended Model

There is a wide range of blended models. For every blended model there are two important design layers to consider: the physical layer and the pedagogical layer.

- The physical layer has to do with the **media** and **modalities** chosen for the blend. This directly impacts access and cost, which influences the methods that are possible for the instructor to use.
- The pedagogical layer has to do with the teaching **methods** that you will use within the blend. This directly impacts student learning.

Most of the blended models specify details about the physical dimension of the blend. However, many do not provide specifications for the pedagogical layer involved in the blend, which is what will have the greatest influence on student learning. You must keep

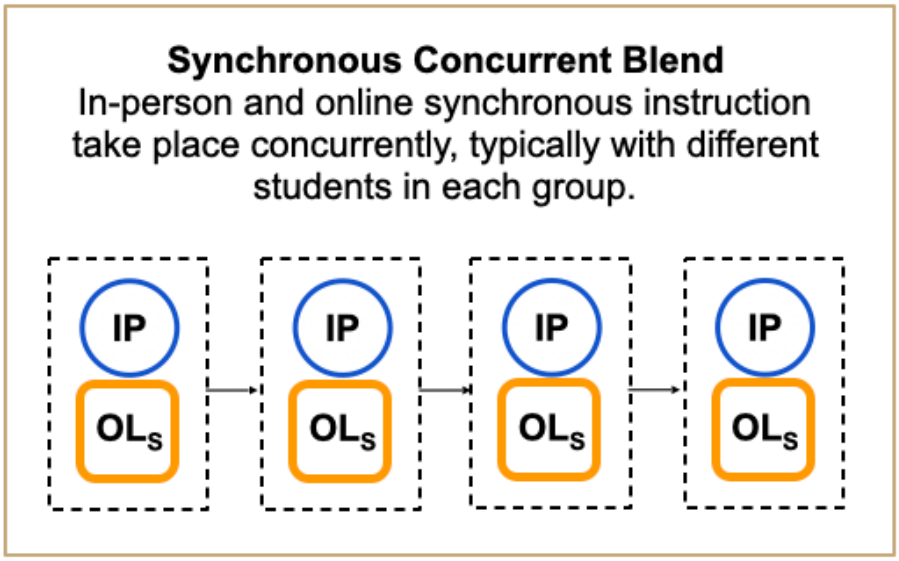
the pedagogical layer, that is the teaching methods, in mind as you evaluate and choose a blended model.

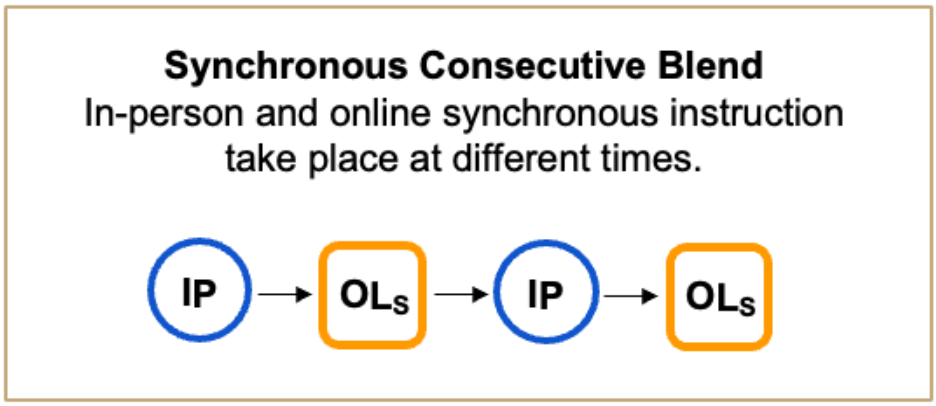
Learning Outcome: I can select a blended model appropriate for my learners' learning needs.

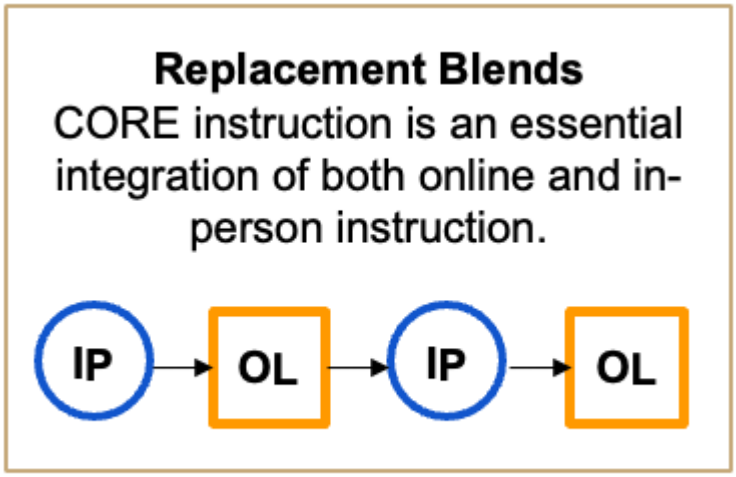
Assessment: Chapter 2 Mastery Challenge Blended Model Part 3

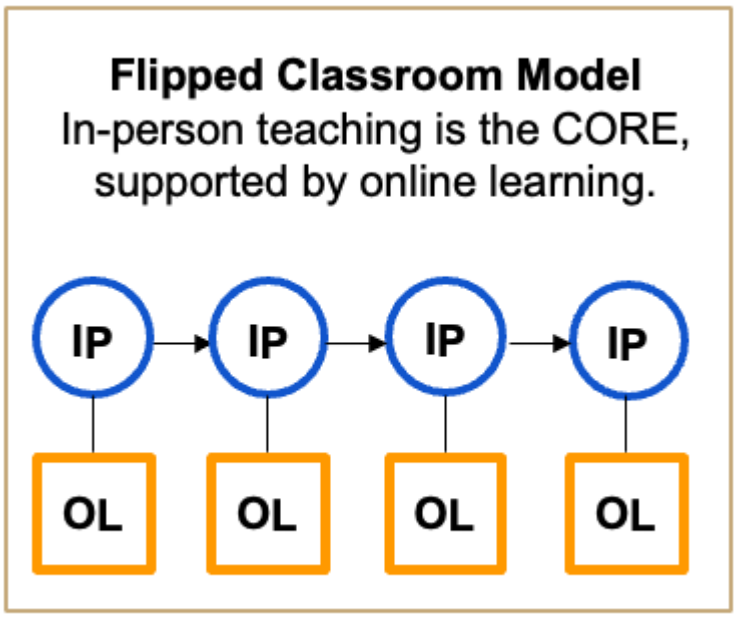
There are many blended learning models. They have similar strengths, but each one has a specific rhythm. For each model in Table 2-5 below, we summarize the main ideas, compare the rhythms of the models, and consider how the model can be applied in a course.

Table 2-5. Comparison Matrix

Model	Information
Synchronous Concurrent Blend	Synchronous online and in-person instruction are taking place at the **same** time. Example: An instructor is interacting with learners in the in-person classroom as well as learners participating via video at the same time. Theoretically, learners are experiencing the same teaching methods and the same media while some are present in-person and others are present online.  Created by Charles Graham, CC BY 3.0 However, it is difficult to teach to two audiences because the instructor's attention is divided. Often the online participants are

	overlooked during discussions. When the instructor remembers to check the online chat, those learners can participate fully, but most of the time it is easy to forget they are present. This can be mitigated by assigning the TA or one learner to stay on the chat and present the online participants' comments and questions in their behalf.
Synchronous Consecutive Blend	Synchronous online and in-person instruction are taking place at **different** times. Example: Learners attend Monday's class in the physical classroom and Wednesday's class online using video conferencing.  Created by Charles Graham, CC BY 3.0 This is a very commonly used blended model. **Often the online days are for lecture or instruction, while the in-person days are for labs (suchs as TA labs, writing labs, science labs, etc.).**
Replacement Blends	Replacement models are the most common in higher education. They replace some scheduled in-person class sessions with online learning. For example instead of meeting M-W-F in-person each week, the class might meet in person only on M-W with Friday activities being done online.

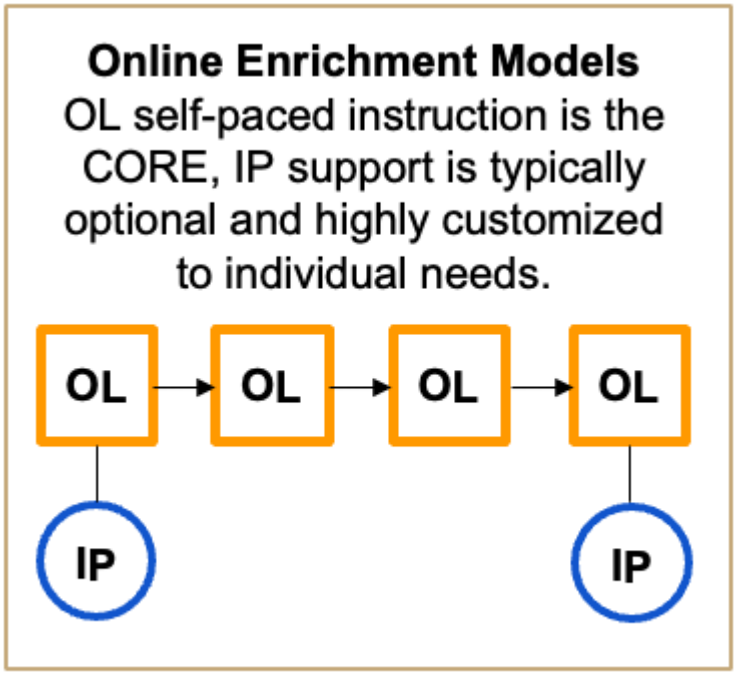
	 Created by Charles Graham, CC BY 3.0 The pattern looks the same as the synchronous consecutive blend model, but the difference is that the online instruction in a replacement blend can be asynchronous. **Often the in-person days are for lecture or instruction, while the online days are for synchronous or asynchronous discussions, peer reviews, or group projects**.
Flipped Classroom Model	The flipped classroom model is one of the most common blended models used in higher education. The flipped model moves direct instruction outside of the classroom to online learning, and reserves in-person hours for interactive group guided practice activities.

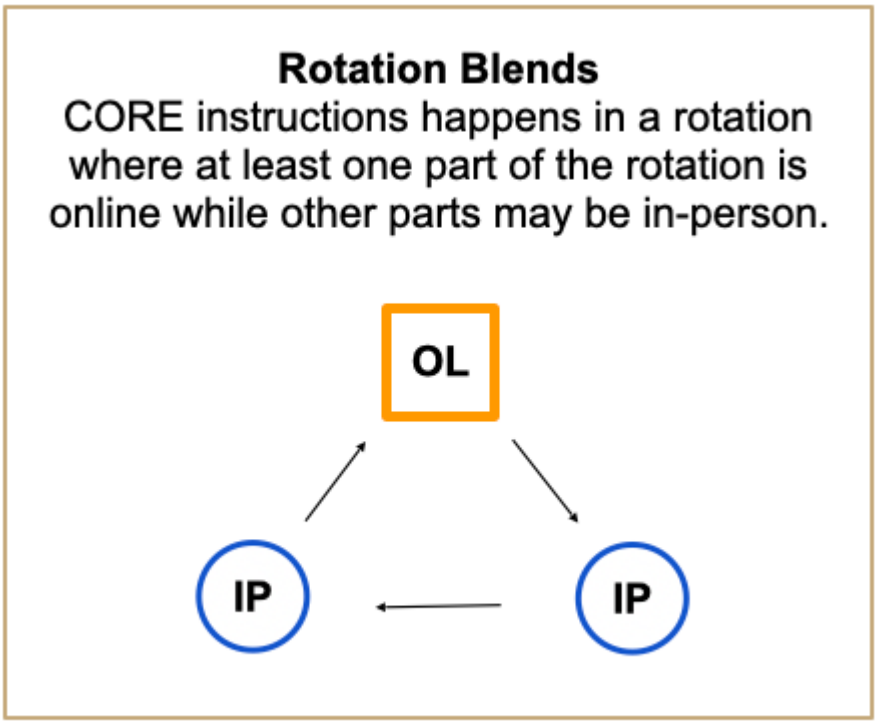


Created by Charles Graham, CC BY 3.0

It is common for direct instruction online to include instructional videos recorded by the instructor as well as reading from a textbook and a reading quiz. The learners are expected to know the material before attending class. This can be very beneficial for courses with complex material, such as statistics or chemistry. The learners can work through the direct instruction alone or they can contact the instructor or TA for help. Then the learners come together in person to work through story problems or exercises. They can learn from each other as they work together, and the instructor/TA can identify what topics need to be reviewed.

Online Enrichment Models	There are many models where the core instruction is online but there is in-person support for learners who need it. Sometimes there are also a limited number of required in-person class sessions or instructor-learner check-ins at various points during the semester.

	 Created by Charles Graham, CC BY 3.0 This could be used for a course where the learners can work through material independently, and then there is an in-person review before the unit test or midterm or final exam. This is very similar to a completely asynchronous course.
Rotation Blends	Rotation blends are the most common blended model in K-12 environments but are less common in higher education. Rotation blends usually occur within a brick and mortar setting and involve rotation between in-person activities and online activities.

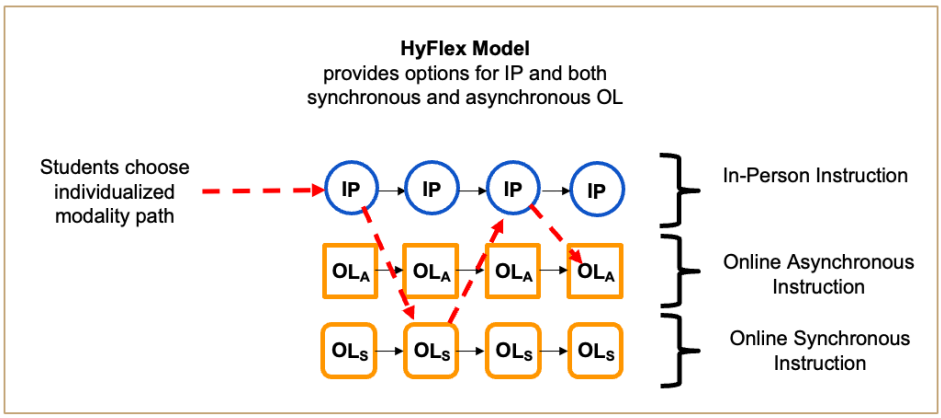


Created by Charles Graham, CC BY 3.0

- **Station Rotation**—learners rotate through stations on a fixed schedule with at least one of the stations involving online learning.
- **Individual Rotation**—learners rotate to a number of stations on individualized schedules with at least one of the stations involving online learning.
- **Lab Rotation**—learners rotate between classrooms on a fixed schedule with one of the classrooms being a computer lab where online learning occurs.

Rotation blends are less common in the higher education context because there is no supervisory requirement for adult learners.

HyFlex Model	The instructor creates equivalent opportunities for learning with synchronous in-person activities, synchronous online activities, and asynchronous activities. Learners choose each week if they are going to attend class in person, participate via video at a distance, or watch the class recording asynchronously and participate in other asynchronous events.



Created by Charles Graham, CC BY 3.0

This is a very complex model. It can be very difficult to create equivalent options in the various modalities. It is also challenging that learners can opt in or out of modalities each week. This model needs the super-tracking power of a robust LMS.

Sometimes you can combine models to create the type of blend that works best for your course. Table 2-6 shows an example of how to create your blended model.

Table 2-6. Example of a weekly schedule including modality, medium, and method

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Modality	Asynchronous online	In-person classroom	Asynchronous online	Asynchronous OR Synchronous online	In-persc comput lab
Medium	Textbook, video	Powerpoint, video, worksheets, Jamboard	Google Docs, Turnitin	LMS discussion boards, Google Docs for collaboration and peer review, Zoom.	Powerpo Google Docs, Turnitir

Method	Direct instruction.	Mini lecture and guided practice-writing workshops.	Independent practice-drafting.	Group discussions, peer review, group meetings.	Mini lectu and writi conferenc

✏️ Chapter 2 Blueprint Challenge Part 3

Blended Model Part 3 Choosing a Blended Model.

Open your Blended Model document. Read the directions for Part 3 Choosing a Blended Model. Review the example. Then complete the assignment with your ideas.

2.4 Communicating the Class Rhythm to Learners

Now that you have figured out what blended model works for your class, you need to communicate this clearly and simply to your learners. You need to include this information in your course syllabus.

Learning Outcome: I can clearly describe the model and rhythm of my blend to learners.

Assessment: Chapter 2 Mastery Challenge Blended Model Part 4

A syllabus is a document that explains the objectives and content of your course and what learners need to accomplish to meet the objectives. The syllabus is an opportunity to communicate your course blended model to your learners. It outlines assignments, calendar, grading scheme, and university policies. It is like a contract between instructor and learners. It says what the instructor will provide to facilitate student learning and success. It says what the learners need to provide to earn a good grade.

If you don't already have a syllabus, now is a good time to start one. If you already have a syllabus, now is the time to update it.

A syllabus may include the following:

- the university abbreviation for the course
- the name of the course
- the instructor's name and contact information
- TA's name(s) and contact information
- the instructor's office hours
- the TA(s) lab hours
- your class schedule—This refers to your rhythm of in-person, synchronous online, and asynchronous online days. You can include the information from your Blueprint Challenge Part 3. You should also include a rationale outlining the benefits of a blended course.

✏️ Chapter 2 Blueprint Challenge Part 4

Blended Model Part 4 Communicating My Blended Plan

Open your Blended Model document. Read the directions for Part 4 Communicating My Blended Plan. Review the example. Then complete the assignment with your ideas.

Conclusion

This chapter has helped you understand what blended learning is, why it is beneficial, the strengths of a LMS, and different blended models. It has also helped you choose a blended model for your course and communicate that model to your learners in your syllabus.

👷 Course Checklist Part 1: Design

Step 2: Select a Blended Model

Open your course checklist. Read the directions for Step 2 Select a Blended Model. Then complete the assignment with your ideas. Check the completion box.

This content is provided to you freely by EdTech Books.

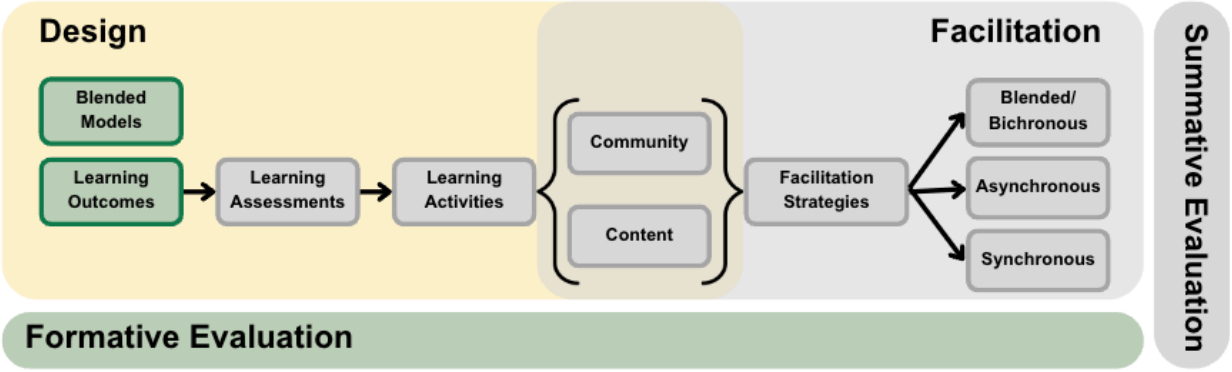
Access it online or download it at
https://edtechbooks.org/he_blended/chapter_2_blended_models.

3

Learning Outcomes

Scaffolding | learning outcomes | bloom's taxonomy | course goals | learner analysis

The next step in our framework is to write learning outcomes. Course level outcomes, supporting outcomes, and sequencing outcomes will be discussed. As always, formative evaluation will be conducted to help you thoroughly think through your design decisions.



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Chapter Learning Outcome: I can create learning outcomes that define expectations for learner achievement in my blended course.

Sub-section outcomes:

- I can articulate one or two broad goals for learner achievement in my blended course. These are course-level outcomes. (Section 3.1)
- I can write unit, chapter, and/or lesson-level outcomes for my blended course. (Section 3.2)
- I can sequence the outcomes in a logical order to support student learning. (Section 3.3)

✏️ Chapter 3 Blueprint Challenge Learning Outcome Map

You will use the skills presented in this chapter to develop a learning outcomes map for your blended course.

Open the Chapter 3 Blueprint Challenge: Learning Outcomes Map Template and save a copy. Label the copy using this format: Your Name Outcomes Map. (Example: Hyun Joo Outcomes Map.)

Each section of this chapter guides you to complete a part of your learning outcomes map. You will finish your outcomes map at the end of Chapter 3.

3.0 Introduction

This chapter will introduce you to learning outcomes as the foundation of blended course design. By incorporating learning outcomes into course design, educators can create a purposeful and coherent learning experience that supports learner success. Ideally, the learning outcomes should significantly influence course design as they:

- define the objectives of the course, outlining the specific knowledge, skills, or competencies that learners are expected to acquire.
- guide the selection and sequencing of course content, ensuring that what is taught directly contributes to the intended learning goals.
- inform the choice of instructional strategies and methods, helping educators determine the most effective approaches to facilitate student learning and engagement.
- provide a framework for comprehensive evaluation of learner achievement, playing a crucial role in designing assessments that align with the desired outcomes (see Chapter 4).

Pay attention to the creation and organization of different outcome levels as you build a course structure that both meets your learning goals and guides your assessment plan. You will consider outcomes at three levels: the course level, the supporting level (units and lessons), and the activity level.

3.1 Course-Level Outcomes

Course-level outcomes refer to the broad and overarching learning goals that define what learners should achieve at the end of a course or program. These are the macro-level goals, the big picture, the overarching themes. To create those outcomes, consider the learners' prior knowledge and abilities as well as the core knowledge, skills, or competencies that learners are expected to acquire as a result of completing the course.

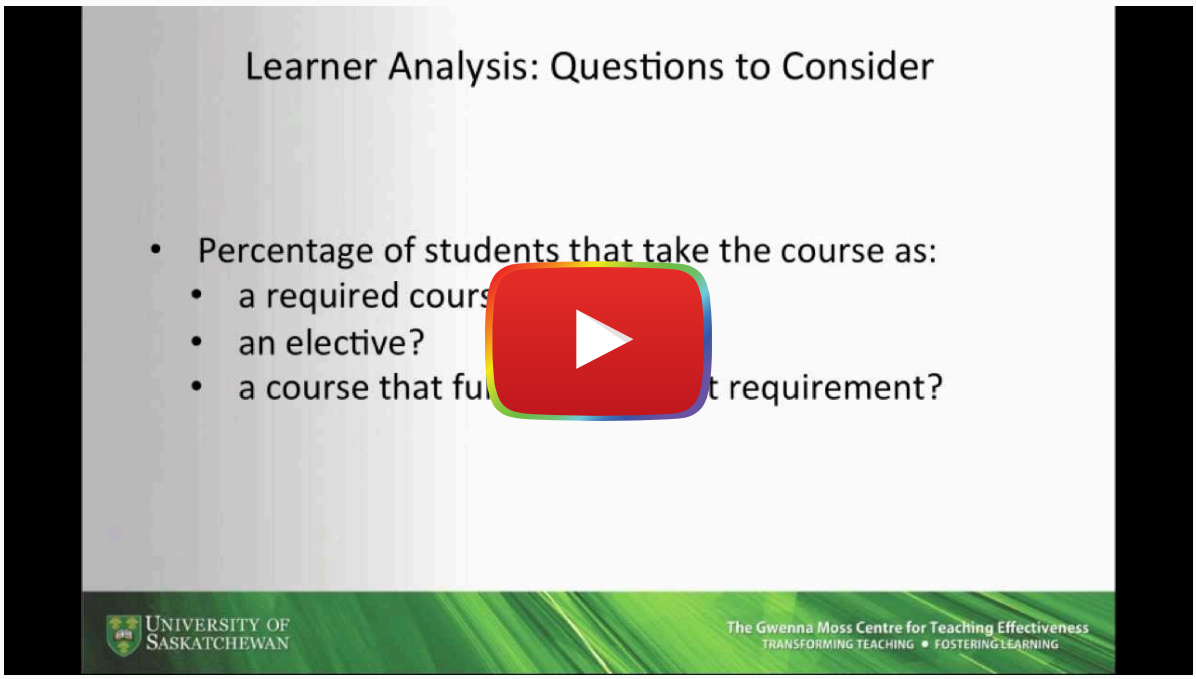
Learning Outcome: I can identify one or two broad goals for learner achievement in my blended course, and write them as clear, concise course-level outcomes.

Assessment: Learning Outcome Map Part 1.

3.1.1 Learner Analysis

Any design process should begin with an understanding of the learners' and their needs. In this section, you will learn about conducting a learner analysis, which will help you identify the broad goals to address in your course. Video 3-1 will introduce the topic of this section.

Video 3-1. Learner Analysis (4:41)



Watch on YouTube

As you work through a learner analysis, consider the following:

- The main type of learner you will teach, i.e. the average learner.
- The range of learners you will teach—including outliers such as the advanced learners or below-average learners.
- The learners' prior knowledge and experience.
- The learners' strengths, weaknesses, and interests.
- The knowledge and experience learners will need for future coursework or careers.
- The support systems learners will need to succeed in your course.

Starting with a clear idea about your learners will help you meet their needs appropriately in your course.

✏️ Chapter 3 Blueprint Challenge

Blueprint Challenge Part 1A Learner Analysis.

Open your Learning Outcomes Map document. Read the directions for Part 1A Learner Analysis.

Review the example. Then fill out the highlighted columns with your learner analysis.

3.1.2 Course Goals

Using the learner analysis as a foundation, begin identifying and defining the broad learning goals of the course that provide a high-level overview of what learners are expected to achieve. Ask yourself: "How do I get the learners from where they are at the beginning of the course to where they need to be at the end?"

The number of course-level goals can vary depending on factors such as the scope and complexity of the course and institutional or program requirements. Since they provide a high-level view of the desired learning outcomes, they are stated in broad terms and the number chosen should be both comprehensive and manageable. A general recommendation is 4-7 course outcomes. See the guidelines provided by the University of Kansas and Northeastern University as examples. Table 3-1 shows an example of some broad course goals for a Psychology Research Methods course.

Table 3-1. Broad Course Goals for a Psychology Research Course

Broad Course Goals	• learn principles and goals of research. • carry out a study. • write an APA report.

Notice that these goals are very general; they describe big-picture aims for the course. Each of these broad goals will eventually be chunked into smaller, achievable supporting outcomes, but for now, it is best to start with broad themes or categories that outline the main ideas of your course.

✏️ Chapter 3 Blueprint Challenge

Blueprint Challenge Part 1B Broad Learning Goals.

Open your Learning Outcomes Map document. Read the directions for Part 1B Broad Learning Goals.

Review the example. Then fill in the highlighted column with one to three broad learning goals for your blended course.

3.1.3 Using Bloom's Taxonomy to Articulate Learning Outcomes

Now that some course goals have been identified, they can be restated as formal learning outcomes. It is important that learning outcomes are well written because they serve as the primary reference point for designing the curriculum, assessments, and instructional strategies for the course. They need to be easy to understand and each should only describe a single outcome.

Each written outcome should have four parts:

1. A **verb** that describes the action learners will perform. Many educators use verbs relating to the levels in Bloom's Taxonomy to identify the cognitive complexity of the tasks. Doing so helps align the outcomes, activities, and assessments in the course.
2. The **subject** or topic the learners will learn about.
3. Any necessary **explanatory information** that clarifies what the learners need to do, but without overcomplicating the focus on the outcome.
4. A label that identifies which **cognitive domain** is being addressed. The label is for intentional course development and is not usually included in your syllabus.

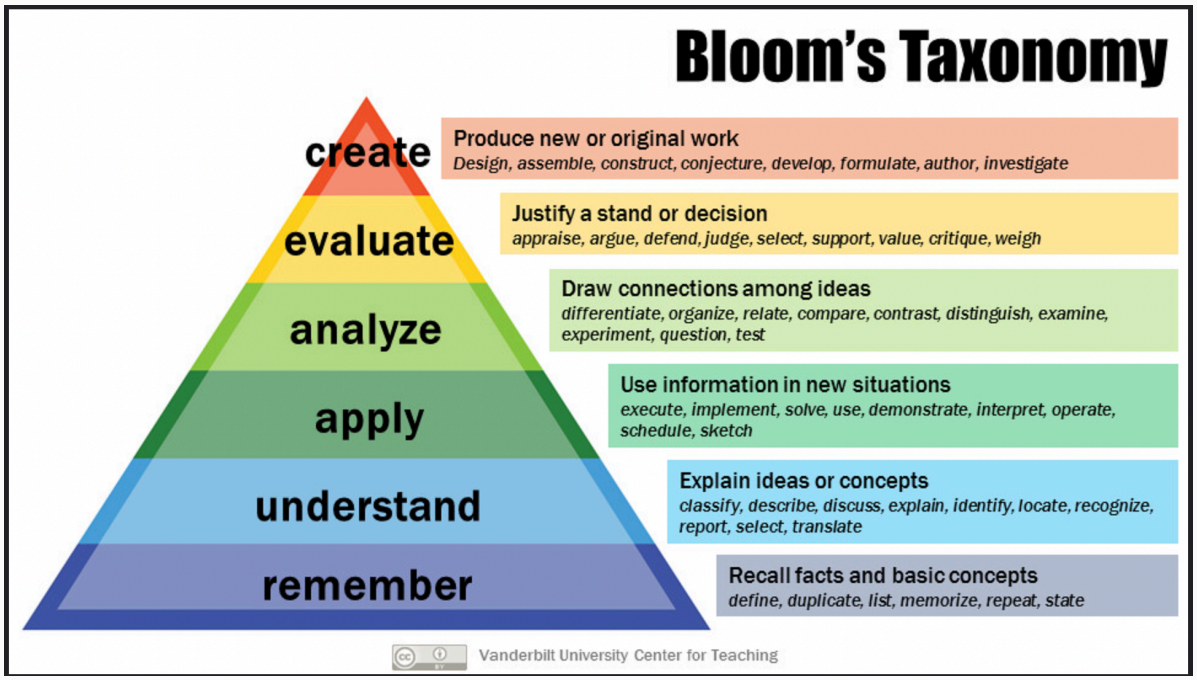
For example:

Learners will be able to + [**verb**][1] + [**subject**][2] + [**explanatory information**][3] + [*cognitive domain*][4].

Learners will be able to [**analyze**][1] [**data**][2] [**using statistical software**.][3] [*Bloom's Level—Analyze.*][4]

Figure 3-1 below shows a version of Bloom's Taxonomy and some commonly used verbs for each cognitive level.

Figure 3-1. Bloom's Taxonomy



Note: Learning outcomes should measure one competency at a time. Be careful not to stack a learning outcome with multiple goals. For example: *"Collect and analyze data to write a report about its implications*" is NOT a good learning outcome because it addresses three competencies. However, these three learning outcomes are appropriate:

- *Collect data with a qualitative method, such as surveys or interviews.*
- *Analyze data using statistical software.*
- *Report on the predictive implications of collected data.*

A singular focus will help ensure that the outcomes are clear, concise, and measurable. Table 3-2 shows an example of course-level outcomes for a Psychology Research

Methods course.

Table 3-2. Course-Level Outcomes for a Psychology Research Course

Course Level Outcomes **Learners will be able to:**	• Understand the fundamental principles and goals of scientific research in psychology. *Bloom's Level—Understand.* • Design a psychological research study. *Bloom's Level—Create.* • Communicate research findings effectively in written reports following APA style guidelines. *Bloom's Level—Create.*

Adapted from Jhangiani, et al., 2013, CC BY-NC-SA.

Notice how the course level outcomes above compare to the broad goals from Table 3-1. Each general idea has been written as a formal course-level outcome. These communicate the standards for learner achievement more precisely. In Chapter 2, we began the process of writing your syllabus. Course-level outcomes should be included in your syllabus. For example:

Course Outcomes — By the end of this course, learners will be able to:

- Understand the fundamental principles and goals of scientific research in psychology.
- Design a psychological research study.
- Communicate research findings effectively in written reports following APA style guidelines.

✏️ Chapter 3 Blueprint Challenge

Blueprint Challenge Part 1C Writing Clear Learning Outcomes.

Open your Learning Outcomes Map document. Read the directions for Part 1C Writing Clear Learning Outcomes.

Review the example. Then write your course-level learning outcomes.

3.2 Supporting Outcomes

Each of the course-level outcomes is very broad. Remember they are macro-level concerns. A learner beginning your course might feel like the outcomes are unattainable. It is like asking them to eat a whole meal in one bite. Instead, each outcome needs to be chunked into manageable pieces that can be processed before taking on more. Video 3-2 explains and provides examples of how chunking works. Outcomes that are chunked into manageable pieces are called supporting outcomes.

Supporting outcomes are specific learning outcomes that contribute to the achievement of the course outcomes. They break down the course-level outcomes into smaller, more focused components, often at the unit and lesson levels. Supporting outcomes provide more detailed expectations for what learners should achieve within a particular topic, theme, or skill area. They help guide the selection and organization of content, as well as the design of assessments and instructional activities within the course. Supporting outcomes provide a focused roadmap that helps educators and learners understand the specific milestones or learning objectives to be accomplished along the way.

Learning Outcome: I can write unit, chapter, and/or lesson-level outcomes for my blended course.

Assessment: Learning Outcome Map Part 2

Video 3-2. Chunking (3:32)

Watch on YouTube

3.2.1 Unit Outcomes

Broad course-level outcomes need to be chunked into smaller learning units. A unit represents days or weeks of learning in your course. These are the supporting-level goals to facilitate the achievement of the course goals. Table 3-3 shows some examples of unit-level outcomes for the psychology research course.

Table 3-3. Course and Unit-Level Outcomes for a Psychology Research Course

Course-Level Outcome	Understand the fundamental principles and goals of scientific research in psychology. *Bloom's Level—Understand.*

Unit-Level Outcomes	• Understand the scientific method and its relationship to developing research questions, hypotheses, and study designs. *Bloom's Level—Understand.* • Demonstrate knowledge of research designs, including experimental, non-experimental, quasi-experimental, single-subject, and correlational designs. *Bloom's Level—Apply.* • Demonstrate knowledge of ethical considerations. *Bloom's Level—Apply.* • Explain the reliability and validity of psychological measurement techniques. *Bloom's Level—Understand.* • Understand appropriate statistical methods for analysis and interpreting research data. *Bloom's Level—Understand.*
Course-Level Outcome	Design a psychological research study. *Bloom's Level—Create.*
Unit-Level Outcomes	• Apply the scientific method to develop research questions, hypotheses, and study designs. *Bloom's Level—Apply.* • Apply ethical guidelines in psychological research. *Bloom's Level—Apply.* • Apply appropriate statistical methods for the analysis and interpretation of research data. *Bloom's Level—Apply.*
Course-Level Outcome	Communicate research findings effectively in written reports following APA style guidelines. *Bloom's Level—Create.*
Unit-Level Outcomes	• Write the Methods section. *Bloom's Level—Create.* • Write the Results section. *Bloom's Level—Create.* • Create and include tables, charts, and/or graphs. *Bloom's Level—Create.*

Adapted from Jhangiani, et al., 2013, CC BY-NC-SA.

Notice that these unit-level outcomes are still too big to be easily processed without additional skills and practice. We need even smaller supporting chunks that will be lesson-level outcomes.

3.2.2 Lesson Outcomes

The unit-level outcomes need to be chunked into individual lessons. A lesson represents one instance of instruction in your course. These are micro-level steps that are within the learners' capacity. Table 3-4 shows some examples of lesson-level outcomes for the psychology research course.

Table 3-4. Lesson-Level Outcomes for a Psychology Research Course

Course-Level Outcome	Understand the fundamental principles and goals of scientific research in psychology. *Bloom's Level—Understand.*
Unit-Level Outcomes	Understand the scientific method and its relationship to developing research questions, hypotheses, and study designs. *Bloom's Level—Understand.*
Lesson-Level Outcomes	• Define the scientific method. *Bloom's Level—Remember.* • Define what makes a good research question. *Bloom's Level—Remember.* • Explain why hypotheses are important in a study. *Bloom's Level—Understand.* • Define what a psychological research study is. *Bloom's Level—Remember.* • Explain each of the following five research designs: experimental, non-experimental, quasi-experimental, single-subject, and correlational designs. *Bloom's Level—Understand.*
Unit-Level Outcome	Demonstrate knowledge of research designs, including experimental, non-experimental, quasi-experimental, single-subject,

	and correlational designs. *Bloom's Level—Apply.*
Lesson-Level Outcomes	• Compare and contrast the five research designs, highlighting the strengths and uses of each. *Bloom's Level—Analyze.* • Read case studies to identify which design was used. *Bloom's Level—Analyze.* • Analyze open-ended case studies to determine which design should be used. *Bloom's Level—Analyze.*
Unit-Level Outcome	Demonstrate knowledge of ethical considerations. *Bloom's Level—Apply.*
Lesson-Level Outcomes	• List the topics of the ten ethical standards discussed in the APA Code of Ethics. *Bloom's Level—Remember.* • Summarize the main idea of each of the ten ethical standards. *Bloom's Level—Understand.* • Read case studies and identify which of the ethical standards is being challenged/addressed. *Bloom's Level—Apply.* • Discuss scenarios and determine how to uphold the ethical standard in question. *Bloom's Level—Analyze.*

Adapted from Jhangiani, et al., 2013, CC BY-NC-SA.

These lesson-level outcomes are more manageable. They will guide planning for instruction, selecting teaching materials, and developing assessments. For example, to help learners accomplish the outcome *Define the scientific method,* an instructor might choose to show a video about the scientific method, then lead an activity where learners practice the steps of the scientific method, and then administer a quiz asking learners to define the scientific method in their own words.

However, some lesson objectives may need to be chunked into even smaller segments of instruction; for example, *Explain each of the following five research designs: experimental, non-experimental, quasi-experimental, single-subject, and correlational designs*. If learners are capable of processing all these approaches as one chunk, the five research designs could be covered in one lesson. However, if learners have no prior

knowledge about research designs, it might be better to teach each design separately and cover this material in five lessons. Instructors should be attuned to the learners' needs, abilities, and cognitive capacity.

Keep in mind that proper alignment of learning objectives at all course levels is imperative. Awareness of desired outcomes will ensure that the instructors' and learners' time and effort are dedicated to the intended purposes of the course. Lesson objectives should support unit objectives, and unit objectives should support course-level objectives. Individual learning activities and assessments will have their specific learning objectives, but those outcomes should align seamlessly with other supporting-level and course outcomes.

✏️ **Chapter 3 Blueprint Challenge**

Blueprint Challenge Part 2 Supporting Outcomes.

Open your Learning Outcomes Map document.

Read the directions for Part 2 Supporting Outcomes. Review the example. Then fill in the table with your ideas.

3.3 Sequencing Outcomes

Course-level and supporting outcomes should be organized in a coherent, hierarchical manner that reflects the progression of learning within the course. Two learning theory frameworks are particularly helpful for this process: Bloom's Taxonomy and Vygotsky's zone of proximal development (ZPD).

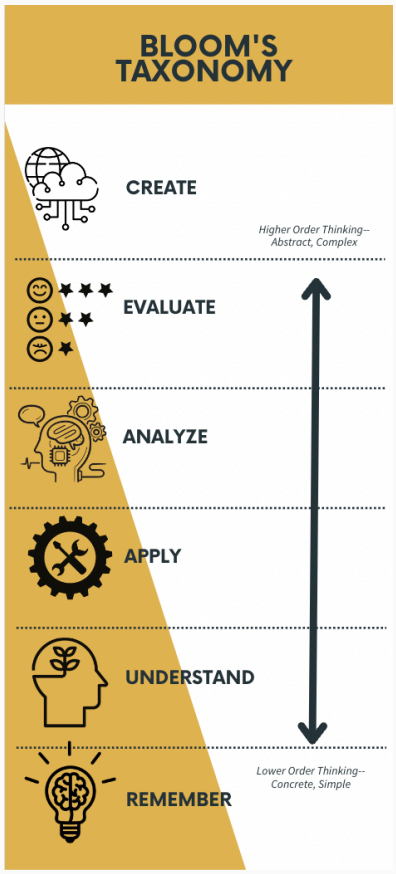
Learning Outcome: I can sequence the outcomes in a logical order to support student learning.

Assessment: Learning Outcome Map Part 3

3.3.1 Bloom's Taxonomy: Higher-Order and Lower-Order Thinking

Bloom's Taxonomy is a great way to sequence the course-level, supporting-level, and activity-level outcomes. Starting at the bottom, the taxonomy levels are arranged from lower-order to higher-order thinking skills, as depicted in Figure 3-2.

Figure 3-2. Lower to Higher Order Thinking



Created by Alison McMurry CC BY 2023

Higher-order thinking skills are considered more complex, even sometimes abstract, and they require deeper cognitive processing, including critical thinking, creativity, and problem-solving. In contrast, lower-order thinking skills are more concrete and simple, and they involve more straightforward cognitive processes, such as rote memorization and basic understanding. Lower-order recall and understanding provide a solid foundation for learning. We could never expect learners to excel at creating balanced algebra equations if they have never memorized their multiplication tables. However, wherever possible and appropriate, we should strive to move learners beyond lower-order thinking to higher-order thinking for maximum learning potential.

The course-level planning should build from lower to higher thinking. Consider the course-level outcomes from Table 3-2. It makes sense to sequence those outcomes in the order of Bloom's Taxonomy, as shown in Table 3-5 below.

Table 3-5. Sequencing the Course-Level Outcomes for a Psychology Research Course

Course Level Outcomes	1. Understand the fundamental principles and goals of scientific research in psychology. *Bloom's Level—Understand.* 2. Design a psychological research study. *Bloom's Level—Create.* 3. Communicate research findings effectively in written reports following APA style guidelines. *Bloom's Level—Create.*

Adapted from Jhangiani, et al., 2013, CC BY-NC-SA.

The supporting-level planning for the course units of instruction should also build from lower to higher thinking. Remember Table 3-3 with the unit-level outcomes. It makes sense to sequence those outcomes in the order of Bloom's Taxonomy, as shown in Table 3-6 below.

Table 3-6. Sequencing the Unit-Level Outcomes for a Psychology Research Course

Course-Level Outcome	Understand the fundamental principles and goals of scientific research in psychology. *Bloom's Level-Understand.*
Unit-Level Outcomes	1. Understand the scientific method and its relationship to developing research questions, hypotheses, and study designs. *Bloom's Level-Understand.* 2. Demonstrate knowledge of ethical considerations. *Bloom's Level-Apply.* 3. Demonstrate knowledge of research designs, including experimental, non-experimental, quasi-experimental, single-subject, and correlational designs. *Bloom's Level-Apply.*

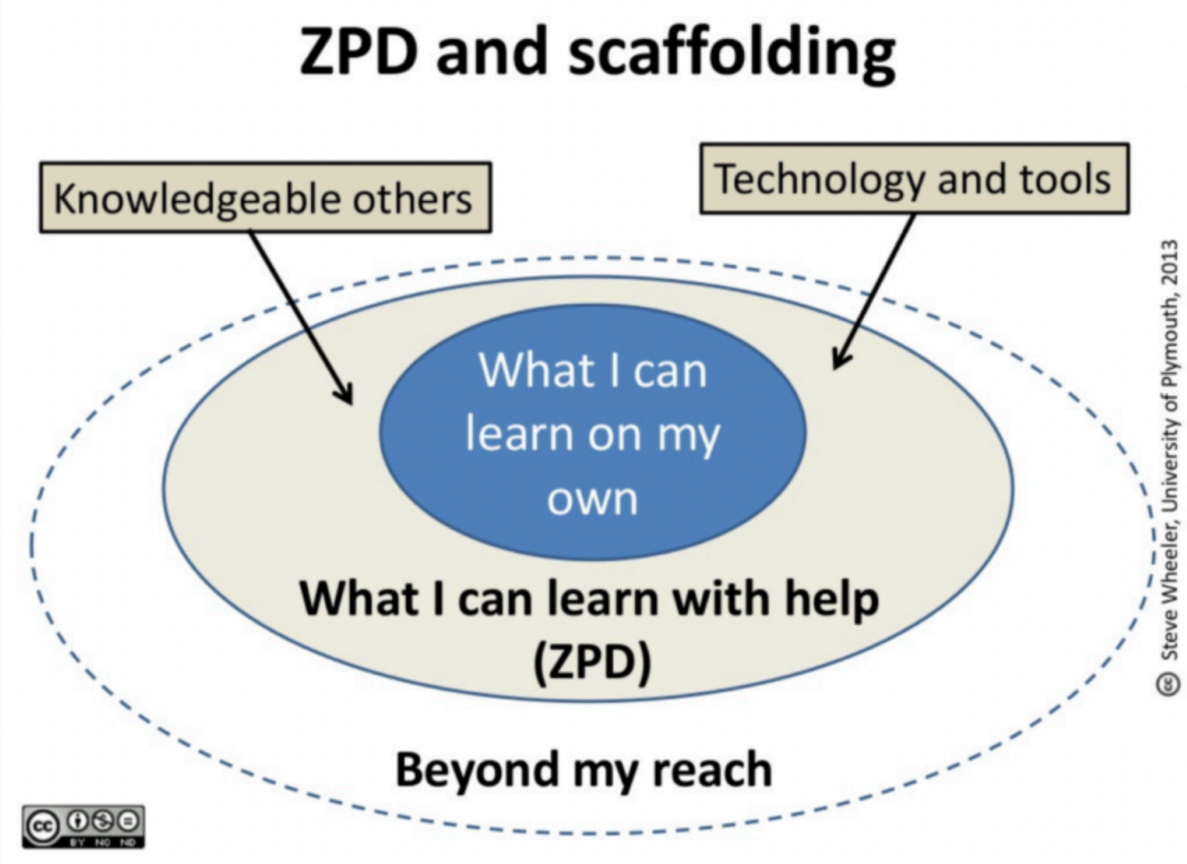
Adapted from Jhangiani, et al., 2013, CC BY-NC-SA.

Lesson-level and activity-level planning needs to be sequenced in the same way, so consider sequencing your learning objectives in a logical progression as you continue your course design. (Activity-level design will be discussed in Chapters 5 and 6.) Let's consider how the zone of proximal development applies to learning potential.

3.3.2 Vygotsky and the Zone of Proximal Development

Vygotsky's theory of the zone of proximal development (ZPD) refers to the range of tasks that a learner cannot yet perform independently, but can perform with help. Learners can get help from technology and tools, but the most important source of help is what Vygotsky called a "more knowledgeable other" (see Figure 3-3 below). This mentor plays a crucial role in the learning process by providing **scaffolding**, which involves tailoring support to the learners' individual needs.

Figure 3-3. Zone of Proximal Development



Scaffolding is the support structure built on construction sites that allows the workers to access and work on taller projects. Scaffolding can be multiple stories tall for work on skyscrapers but still provides safety and support at every level. Notice in Figure 3-4 below that the scaffolding allows construction workers access to each level of the building.

Figure 3-4. Scaffolding

Photo by Darya Sannikova on Pexels, 2023.

Similarly, scaffolding in education allows learners to access and work on higher-level concepts, sometimes involving multiple steps to address highly complex issues. Scaffolding provides learners with safety and support. Safety in education might be a new concept for some, but it is imperative that learners feel safe enough to take risks, ask questions, and tolerate failure. The learning process asks learners to navigate many unknowns, but a well-designed course and attentive instructor can help learners progress in ways that feel supported.

Scaffolding includes breaking down complex tasks into manageable chunks, which was discussed in section 3.2, and arranging those chunks into a logical sequence of progression. The logical progression needs to guide the learners through the zone of proximal development, like stepping stones across a lake. Each small step feels manageable, and each step is progress toward the end goal

Figure 3-5. Stepping Stones

Photo by Robert Linder on Unsplash, 2021.

Through scaffolding, learners can expand their cognitive abilities, learn new skills, and achieve higher levels of understanding and problem-solving. As they receive guidance and gradually internalize the knowledge and skills provided by the mentor, they move from dependency to independent mastery, fostering their overall development.

The activity-level planning for the lesson-level outcomes should build from lower to higher thinking in Bloom's Taxonomy and guide learners step-by-step through the ZPD. Remember Table 3-4 with the lesson-level outcomes. One way to sequence those outcomes is shown in Table 3-7.

Table 3-7. Sequencing and Scaffolding the Lesson-Level Outcomes for a Psychology Research Course

Course-Level Outcome	**Understand the fundamental principles and goals of scientific research in psychology. *Bloom's Level—Understand.***
Unit-Level Outcome	Understand the scientific method and its relationship to developing research questions, hypotheses, and study designs. *Bloom's Level—Understand.*
Lesson-Level Outcomes	1. Define the scientific method. *Bloom's Level—Remember.* 2. Define what a psychological research study is. *Bloom's Level—Remember.* 3. Define what makes a good research question. *Bloom's Level—Remember.* 4. Explain why hypotheses are important in a study. *Bloom's Level—Understand.* 5. Explain each of the following five research designs: experimental, non-experimental, quasi-experimental, single-subject, and correlational designs. *Bloom's Level—Understand.*
Unit-Level Outcome	Demonstrate knowledge of ethical considerations. *Bloom's Level—Apply.*
Lesson-Level Outcomes	1. List the topics of the ten ethical standards discussed in the APA Code of Ethics. *Bloom's Level—Remember.* 2. Summarize the main idea of each of the ten ethical standards. *Bloom's Level—Understand.* 3. Read case studies and identify which of the ethical standards is being challenged/addressed. *Bloom's Level—Apply.* 4. Discuss scenarios and determine how to uphold the ethical standard in question. *Bloom's Level—Analyze.*

Unit-Level Outcome	Demonstrate knowledge of research designs, including experimental, non-experimental, quasi-experimental, single-subject, and correlational designs. *Bloom's Level—Apply.*
Lesson-Level Outcomes	1. Compare and contrast the five research designs, highlighting the strengths and uses of each. *Bloom's Level—Analyze.* 2. Read case studies to identify which design was used. *Bloom's Level—Analyze.* 3. Analyze open-ended case studies to determine which design should be used. *Bloom's Level—Analyze.*

Adapted from Jhangiani, et al., 2013, CC BY-NC-SA.

Consider the natural progression of learning and complexity within your course. Arrange supporting outcomes in a logical order that reflects the sequence in which they will be addressed. Remember, organizing course-level and supporting outcomes is a dynamic process that may require revisions and adjustments based on feedback, curriculum changes, or the evolving needs of learners. Regular review and refinement of the outcomes can help maintain their relevance and effectiveness within the course.

✏️ Chapter 3 Blueprint Challenge

Blueprint Challenge Part 3 Sequencing Outcomes.

Open your Learning Outcomes Map document.

Read the directions for Part 3 Sequencing Outcomes. Review the example. Then fill in the table with your ideas.

Conclusion

This chapter has prepared you to create your learning outcomes map. The learning outcomes map takes all of these ideas —course-level outcomes, supporting outcomes,

and the logical teaching sequence to guide learners from lower-level thinking at the beginning of the ZPD to higher-level thinking at the end of the ZPD— and creates a first draft of a road map for the course. You will brainstorm and list simple ideas in your outcomes map that you will fully develop later in this course. For now, just open your mind to ideas.

✏️ Chapter 3 Blueprint Challenge

Open your Learning Outcomes Map document.

Read the directions for Part 4 Learning Outcomes Map.

Review the example. Then fill in the table with your ideas.

And finally:

👷 Course Checklist Part 1: Design

Step 3: Create a Learning Outcomes Map

Open your course checklist. Read the directions for Step 3 Create a Learning Outcomes Map. Then complete the assignment with your ideas. Check the completion box.

dksjdklasjdlkas

This content is provided to you freely by EdTech Books.

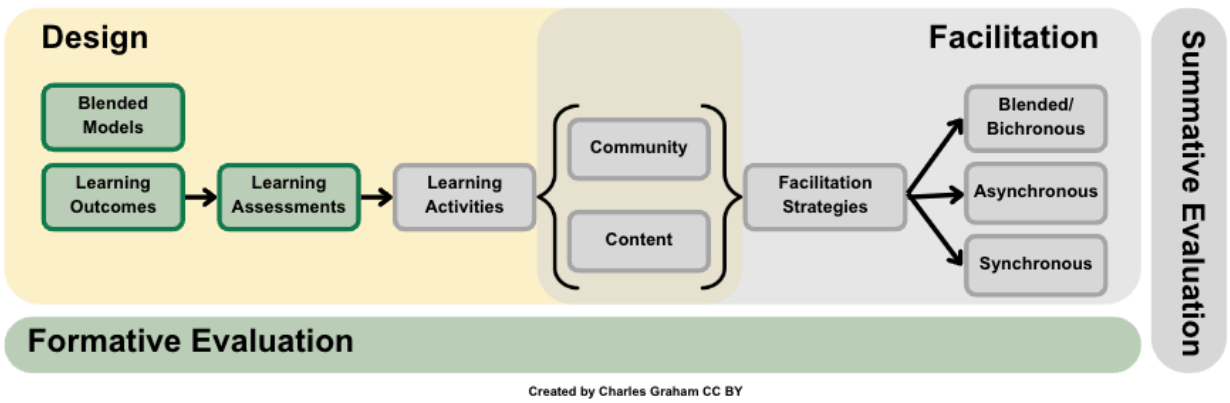
Access it online or download it at
https://edtechbooks.org/he_blended/chapter_3_learning_outcomes.

4

Assessment Plan

Authentic assessment | assessments | summative assessments | formative assessments | rubrics | Renewable assessment | exam proctoring | plagiarism detector

The next step in our framework is to plan your learning assessments. In this chapter, we will discuss the alignment of assessments with course outcomes, different types of assessments, and strengths and weaknesses of assessments. As always, a formative evaluation will be conducted to help you thoroughly think through your design decisions.



Chapter Learning Outcome: I can develop an assessment plan that aligns with my learning outcomes.

Sub-section outcomes:

- I can plan assessments that align with my course learning outcomes. (Section 4.1)
- I can identify a variety of assessments for use in my course. (Section 4.2)
- I can evaluate the strengths and limitations of my digital assessments. (Section 4.3)
- I can develop an assessment strategy that addresses academic integrity. (Section 4.4)

✏️ Chapter 4 Blueprint Challenge

You will use the skills presented in this chapter to develop a digital assessment plan for your blended course.

Open the Digital Assessment Plan Template and save a copy. Label the copy Your Name Assessment Plan. (Example: Hyun Joo Assessment Plan.)

Each section in this chapter guides you through elements of your digital assessment plan and progress toward a completed plan for your course.

4.0 Introduction

This chapter discusses the third part of the course design framework: Learning Assessments. We will introduce you to some of the big ideas around digital learning assessment and help you get started designing a digital assessment plan for your blended course. Use the resources listed at the end of each lesson to dive deeper into any of the assessment topics you are interested in.

4.1 Aligning Assessments with Outcomes

In this section, you will begin to address alignment. The best assessments are those that align directly with the learning outcomes that you are trying to achieve. The need for alignment between outcomes and assessments may seem obvious, but it is not uncommon in courses for the assessments and outcomes to get out of alignment—especially over multiple iterations of a course. Video 4-1 below serves as an introduction to this topic.

Learning Outcome: I can plan assessments that are aligned with my course learning outcomes.

Assessment: Blueprint Challenge Part 2 Alignment Table.

Video 4-1. Alignment and Backward Design (2:53)

What to look for: Why alignment is important and one way to ensure alignment.

Watch on YouTube

As you align assessments with your learning outcomes, consider Bloom's Taxonomy to help guide your choices. Keep in mind that higher-order outcomes require assessments that measure higher-order skills. Figure 4-1 shows some examples of coordinating Bloom's higher-order outcomes and different assessments. However, this does not show all possibilities, so use your own creativity and judgment as you build your assessment plan.

Figure 4-1. Assessment and Bloom's Taxonomy

Created by Alison McMurry, CC BY

You can use an alignment table to articulate the relationship between your desired learning outcomes and the assessments you are choosing. Table 4-1 displays learning outcomes from various disciplines and examples of assessments aligned or misaligned with those outcomes.

Table 4-1. Example of alignment table for possible assessments for various learning outcomes

Learning Outcome *Include Bloom's Taxonomy*	**Aligned Assessments**	**Misaligned Assessments**

Art Learning Objective: Students will be able to create a pencil drawing of a still life using shading techniques. *Bloom's Taxonomy—Create.*	• In class, students will make a still life pencil drawing based on a subject presented in the classroom, focusing on using shading techniques to capture the essence of the still life. • Students will independently choose their own still life subject and create a pencil drawing of the still life using appropriate shading techniques.	• Students will analyze the technique and effectiveness of a classic still life pencil drawing. • Students will plan a lesson on how to shade with a pencil. *(Neither of these assessments evaluate the students' ability to create and shade their own still life drawing.)*
History Learning Objective: Students will be able to analyze and compare the causes leading to the American Revolutionary War with causes leading to civil unrest in our day, with an emphasis on outcomes. *Bloom's Taxonomy—Analyze.*	• Students will write a paper on the similarities and differences of the various causes and their effects on the events of the American Revolutionary War and current civil unrest. • In class, students will debate the similarities and differences in outcomes between the causes of the American Revolutionary War and modern civil unrest.	• Students will create two tables, one with American Revolutionary War causes and their outcomes and one with current causes of civil unrest and their outcomes. • Students will take a quiz, matching causes with their outcomes. *(These assessments do not require the student to analyze or compare the causes.)*

Physical Health Learning Objective: Students will be able to plan a balanced exercise plan based on their unique needs. *Bloom's Taxonomy—Evaluate, Create.*	• Students will create a personalized fitness plan for several areas in which they could improve their physical health. • Students will define a goal they want to work on for a month and will create a fitness plan to help them achieve their goal.	• Students will prepare a presentation demonstrating how to do one physical fitness activity. • Students will run for 15 minutes/day and keep track of how far they went each day. *(Knowing how to do a specific activity and being assigned to do it are not the same as creating a personalized plan to improve physical health.)*
Chemistry Learning Objective: Students will be able to balance chemical equations. *Bloom's Taxonomy—Apply.*	• Students will complete a worksheet with 10 chemical equations to balance. • Students will create their own multiple-choice test on balancing chemical equations and include an answer key.	• Students will teach a friend the steps to balance a chemical equation. • Students will complete a crossword puzzle on chemistry terminology and element names. *(Knowing the steps in a process and knowing chemistry terminology are not the same as being able to balance chemical equations.)*

✏️ **Chapter 4 Blueprint Challenge**

Blueprint Challenge Part 2 Alignment Table.

Open your assessment plan document.

Read the directions for Part 2 Alignment Table. Review the example. Then fill in the table with your ideas.

4.2 Learning Assessments

In this section, you will learn about a variety of learning assessments you may use in your blended course. You will first review the distinctions between formative and summative assessments. Then you will see examples of authentic and renewable assessments, which are particularly relevant in a digital context. Finally, you will have a chance to explore what variety of assessments makes sense for your blended course.

Learning Outcome: I can identify a variety of assessments for use in my course.

Assessment: Design Challenge Part 1 Assessment Brainstorming Table—First Column.

4.2.1 Formative and Summative Assessment

Learning Assessments allow you to measure what a learner has learned from instruction and learning activities. Learning assessments can be formative or summative.

- **Summative** assessments typically take place *after* the learning process and have the primary goal of providing an evaluative summary of student learning outcomes.
- On the other hand, **formative** assessments typically take place *during* a learning process and have the primary goal of providing actionable feedback to both learners and instructors.

As you consider potential assessments for your blended course, you may want to consider both formative and summative assessment options as described in Table 4-3.

Table 4-3. Comparing Summative and Formative Assessments

	Summative *Assessment OF Learning*	**Formative** *Assessment FOR Learning*

Purpose	To evaluate learner's overall knowledge and performance.	To monitor learners' progress and identify areas for improvement.
Focus	A finished product or completed unit of study, showing evidence of competency (at least 80% proficiency).	The learning process, showing evidence of thinking and understanding.
Uses	Gives a grade, score, or ranking that represents learner's competency. Sometimes used to determine if an instructor needs to reteach a unit to the entire class, or if a learner needs additional tutoring in one content area.	Can guide the instructor's methods, processes, and pacing. Can inform learners' management of self-regulated learning.
Timing	At the end of a unit or course.	Should happen throughout the learning process.
Feedback	Feedback is often limited as the primary purpose in a summary evaluation of learner performance.	Provides timely and specific feedback to learners that helps them make improvements to their learning.
Examples	Unit tests, final exams, standardized tests. Projects, performances, and portfolios.	Class discussions, quizzes, homework assignments, parts of a larger project.

NOTE: Assessments can occasionally overlap, such as if a unit test shows a summative assessment of the unit AND a formative assessment of the course.

4.2.2 Examples of Assessments

Many different digital learning assessments can be used in a blended course. Table 4-4 lists some examples that you might consider beyond traditional quizzes, exams, essays,

and research papers. Using a variety of assessments can enhance the engagement and motivation of your learners. Additionally, providing a variety of ways to demonstrate learning can cater to and strengthen learners with different learning preferences, abilities, and cultural perspectives.

Table 4-4. Examples of Various Types of Assessments

Type of Assessment	Description
Quizzes and Exams	• Learners show understanding by responding to question prompts and selecting or writing answers. • Quizzes are usually shorter in length than Exams.
Essays and Essay Tests	• Learners show critical thinking and written communication skills by writing longer-form essays on specific topics. • Essays are usually written over time, with multiple drafts, and show more depth of thought on a topic. • Essay tests are usually done in person, with a time limit, only one draft, and show the ability to think and respond quickly to a topic.
Short Answer Questions	• This is a combination of a quiz and an essay test. Learners provide concise written responses to short questions. There is no expectation of essay formatting (such as paragraphs). The entire quiz might include several short answer questions.
Research Papers	• Learners research a particular topic and write an academic paper presenting their findings.
Presentations	• Learners demonstrate oral communication skills in individual or group presentations, either in person or through video recordings.

Demonstrations	• Learners perform hands-on demonstrations of a particular skill or concept to showcase their understanding and application.
Projects	• Learners work on individual or collaborative projects to complete a task or solve a problem. Projects could be turned in as stand-alone assignments, or could be combined with a presentation, portfolio, or choice board.
Discussions	• Learners participate by contributing to online discussion forums or platforms.
Simulations	• Learners apply knowledge and skills in realistic, interactive scenarios.
Labs	• Learners apply theoretical knowledge to practical, realistic situations in a laboratory setting where they can make decisions and observe results.
Case Studies	• Learners analyze real or hypothetical scenarios, apply concepts, and propose solutions or recommendations.
Portfolios	• Learners compile a portfolio of their work, including assignments, projects, and reflections. Portfolios can showcase their learning progress over time, highlight their best work, or offer representative samples from specific categories or outcomes. These are often used to assess process-based learning, such as writing or art.
Surveys or Self-Assessments	• Learners use online surveys to share feedback about their preferences, learning experiences, dispositions, etc.

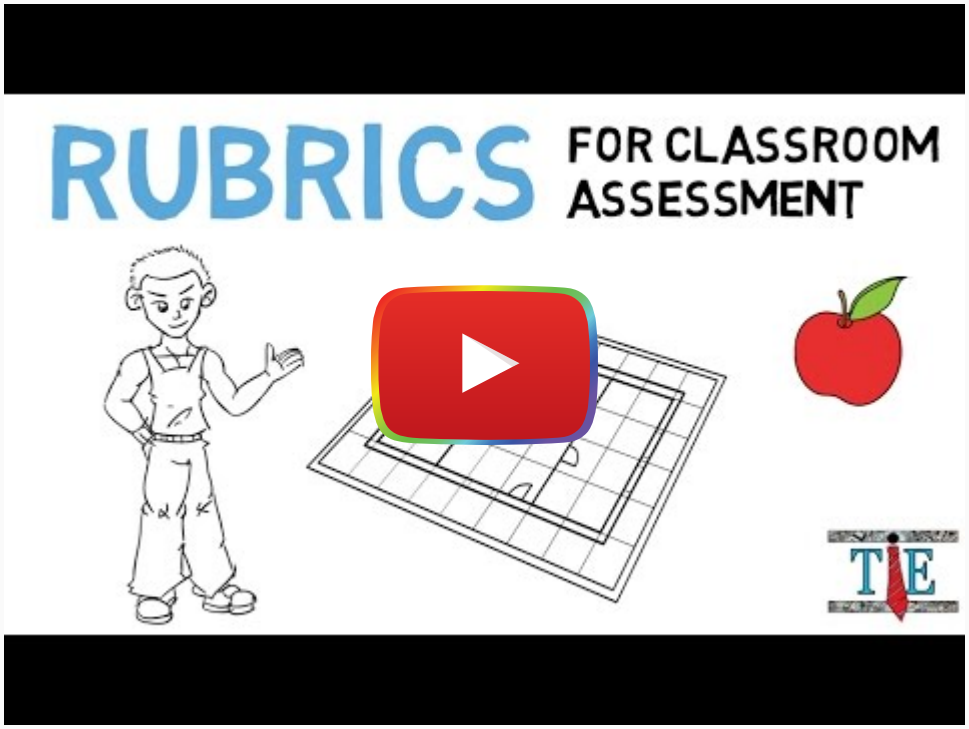
Peer Reviews	• Learners provide constructive feedback on each other's work, such as assignments or projects.
Performance Tasks	• Learners demonstrate skills in a real or simulated context.
Concept Maps/Graphic Organizers	• Learners visually represent relationships between concepts using diagrams or charts.
Reflective Journals	• Learners maintain reflective journals or blogs where they can document their learning experiences, insights, and personal reflections.
Playlists or Choice Boards	• Learners select assessment options from a playlist or choice board “menu” to meet required learning objectives. The choice board might include a variety of the activities listed in this table.

4.2.3 Incorporating Rubrics

Grading traditional assessments is quite straightforward. Fill-in-the blank, multiple-choice, and matching questions typically found in quizzes and exams can be graded automatically and objectively. To implement any of the *alternate assessments* listed above, the use of rubrics makes them assessable. Rubrics are tools we use to measure learner performance on an assessment. A rubric identifies and outlines specific criteria that are important. This allows the instructor (or TA, learner, or peer) to give specific, helpful feedback on projects, essays, presentations, and other types of assessment that are not automatically graded. See Video 4-2 below for a brief description of the benefits of using good rubrics. Many LMSs and other digital assessment tools often have ways to easily create rubrics.

Video 4-2. Rubrics (3:04)

What to look for: The benefits of using good rubrics.



Watch on YouTube

The two most common types of rubrics are **holistic** and **analytic**. They give different levels of feedback at different points of the learning process. There are sometimes different names and labels used for these rubrics, and some may have hybrid elements, but most rubrics are derivatives of either holistic or analytic. Table 4-5 explains some of the characteristics of these types of rubrics.

Table 4-5. Characteristics of Holistic and Analytic Rubrics

Holistic	Analytic
Focuses on the product.	Focuses on the process.
Grades based on the overall quality.	Grades based on individual characteristics that are scored separately and then added together for the total.

Gives general feedback.	Gives specific feedback.

Let's imagine, for example, that you taught a unit on using rhetorical writing to persuade an audience. The learners were assigned to write a short opinion article on a topic related to the university. For a draft of the opinion article, you could use an analytic rubric, which gives feedback the learners can use to revise their writing. For the finished opinion article, you could use a holistic rubric. Table 4-6 shows an example of an analytic rubric, and Table 4-7 shows an example of a holistic rubric. Notice how they address the same characteristics, but in different ways.

Table 4-6. An example of an analytic rubric for a first draft of an opinion article

	Meets or exceeds requirements. Good work. **(1 point each)**	**Below requirements. Needs some revision. I suggest you talk with me.** **(0.5 point each)**	**Far below requirements. Needs substantial revision. You must talk with me.** **(0 point each)**
Topic	The topic is appropriate in scope for the assignment.	The topic's scope is too big or too small for the assignment.	The topic is unclear and/or confusing.
Thesis Statement	The thesis statement clearly communicates the writer's opinion/evaluation of the topic of the paper.	The thesis statement vaguely communicates the author's opinion or evaluation of the topic.	There is no thesis statement.
Topic Sentences	The topic sentences clearly state the main idea or purpose of each body paragraph.	The topic sentences somewhat communicate the main ideas of the body paragraphs.	There are no topic sentences.
Organization	The paragraphs are organized in a sensible	The organization links some of the ideas together but	There is no organization.

	progression through the main argument.	lacks the progression of ideas.	
Content and use of rhetoric - Ethos	There is one powerful or relevant real-world example of Ethos in the supporting details (with documentation).	There is one real-world example of Ethos, but it is weak or lacking documentation.	There is no example of Ethos.
Content and use of rhetoric - Logos	There is one powerful or relevant real-world example of Logos in the supporting details (with documentation).	**There is one real-world example of Logos, but it is weak or lacking documentation.**	There is no example of Logos.
Content and use of rhetoric - Pathos	There is one powerful or relevant real-world example of Pathos in the supporting details (with documentation).	There is one real-world example of Pathos, but it is weak or lacking documentation.	There is no example of Pathos.
	_____ points	_____ points	_____ + _____ = _____ out of 7

First, notice that this rubric does not include anything about grammar, spelling, punctuation, or vocabulary. This is a rubric for a first draft and focuses on higher-order concerns, such as topic, content, strength of argument, and organization. A rubric for a third or fourth draft might focus on lower-order concerns, such as grammar, punctuation, and vocabulary.

Second, notice that this rubric focuses on giving feedback to the learners, so they know what to revise and if they need to talk with the instructor for help.

Third, consider the **strengths of this rubric:** This rubric assesses if the learners used rhetoric in their writing. It provides specific, useful feedback so the learners can make improvements to their writing. The instructor receives insight about what the learners understand and what topics need to be reviewed in class.

The instructor can choose to either give a completion score in the gradebook for submitting a draft or give points for each criterion and add the points together for a total score. Both are acceptable ways of recording learner performance on the assessment.

Table 4-7. An example of a holistic rubric for a finished opinion article

Grade	Description
A	• The topic is appropriate for the assignment and the thesis statement clearly communicates the topic to the reader. • The topic sentences state the main idea of each body paragraph, connecting each paragraph to the thesis statement. • The paragraphs are organized to guide the reader through the main argument. • The writer used one rhetorical example for each of ethos, logos, and pathos. • The article is well-written and persuasive. • You are done with this paper! Excellent work!

B	• The topic is too broad or narrow for the assignment and the thesis statement only vaguely communicates the topic to the reader. • The topic sentences state the main idea of each body paragraph, but do not connect each paragraph to the thesis statement. • The paragraphs are not organized to guide the reader through the main argument. • The writer used some rhetorical examples, but not one each of ethos, logos, and pathos. • The article is somewhat well-written but lacks persuasive power. In general, this represents good work. • You have one week to revise this paper (if you choose) to change your grade.
C	• There is more than one topic being addressed and there is no thesis statement. • There are no topic sentences, the organization is vague, and the reader is left in confusion. • The writer either didn't use any rhetorical examples or used them poorly. • The article is poorly written. • You have one week to revise this paper (if you choose) to change your grade.
F	• No paper was submitted. • You have one week to turn in a paper to change your grade.

First, notice that this rubric gives similar feedback to the analytic rubric, but it is less helpful for making revisions. The product is evaluated as a whole, and the most accurate overall score is selected. A learner may have a great thesis statement, but poor topic sentences and poor use of rhetoric and would thus receive the intermediate score of a B (or whatever value the instructor chooses to give that level).

Second, notice the instructor's rubric offers any learner with a score below A one week to revise the paper and improve the grade if they choose. This rubric is for a writing class

and focuses on the process of learning to write, allowing students to learn from mistakes. The rubric gives learners a clearer understanding of how to use rhetoric to persuade. The formative feedback students receive from the rubric allows them to learn the writing process rather than focus solely on the final product.

Third, consider the **strengths of this rubric:** This rubric assesses how well the learners used rhetoric in their writing. It provides general feedback so each learner can understand their grade. The instructor can evaluate what the learner knows and award an appropriate grade along with guidance for potential improvement.

To create your rubrics

You need to decide what you want to communicate to the learner.

If the assessment is **formative**:

- Do you want to give general or specific feedback?
- What changes would you expect a learner to make after receiving your feedback?
- How does your feedback help the learner understand *the learning process* better?

If the assessment is **summative**:

- Are you only explaining the reasons for the grade the learner earned, or are you also allowing learners another chance to make changes?
- If they can make changes, what changes would you expect a learner to make after receiving your feedback?
- How does your feedback help the learner understand *their product* better?

The answers to these questions will help you decide which type of rubric might be best, what criteria to use to evaluate the learner's work, and what to include in the rubric.

Within the categories of formative and summative rubrics, there are many ways to structure the rubrics. For more information about rubrics see the resources section of this chapter.

✏️ Chapter 4 Blueprint Challenge

Blueprint Challenge Part 1 Assessment Brainstorming Table - First Column.

Open your assessment plan document. Read the directions for Part 1 Assessment Brainstorming Table.

Review the example in the first column. Then fill in the first column with your assessment ideas.

4.3 Strengths and Limitations of Digital Assessments

In this section, you will learn how to evaluate the strengths and limitations of digital assessments. You will also be introduced to how different types of digital rubrics can help with the assessment strategy for your blended course.

Learning Outcome: I can evaluate the strengths and limitations of my digital assessments.

Assessment: Blueprint Challenge Part 1 Assessment Brainstorming Table - Second Column.

4.3.1 Strengths of Digital Assessments

Technology makes it possible to enhance the assessment of student learning. Figure 4-2 below highlights some of the ways in which learning assessment is evolving in a digital world.

Figure 4-2. The Future of Assessment

Source https://tech.ed.gov/netp/assessment/

When deciding whether to use digital assessments or more traditional offline assessments, it is important to consider the strengths and limitations of your different options. Table 4-8 shares examples of how digital assessments can benefit student learning, access, flexibility, and efficiency.

Table 4-8. Some Benefits of Digital Assessments

Benefits of Digital Assessments (DA)	**Examples**

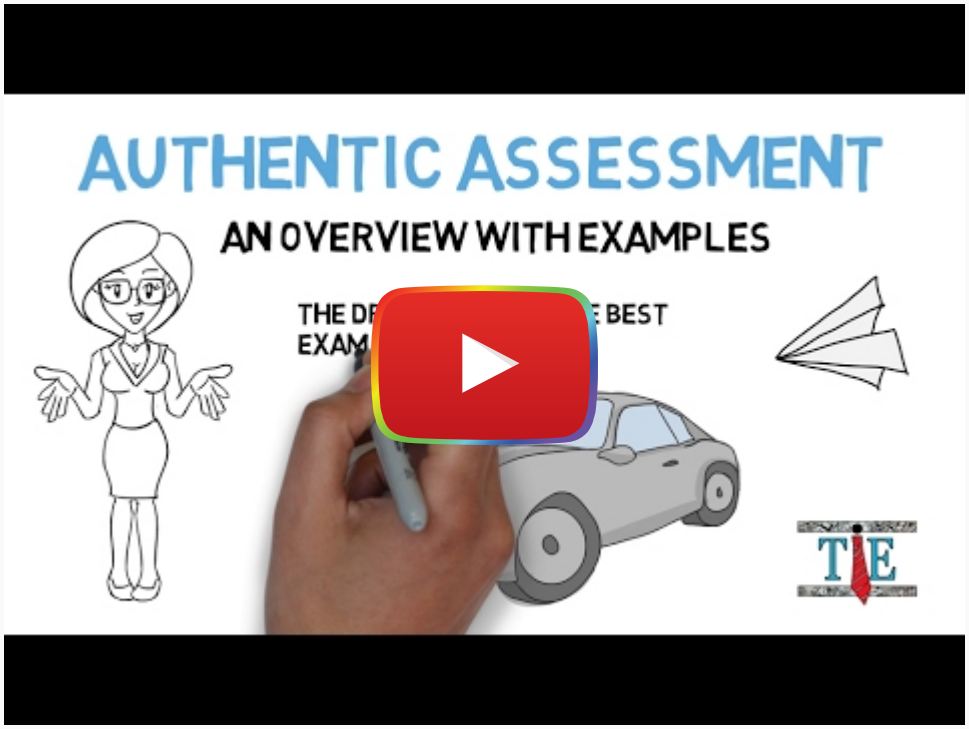
Student Learning	• **Real-time Feedback** — DA provide immediate and specific feedback when learners complete the assessment. • **Multiple Attempts** — DA allow for multiple opportunities for practice. • **Authenticity** — DA can be embedded in real-world learning contexts or enable capture of real-world tasks. • **Adaptive Pathways** — DA items can be customized to the needs of the learner. • **Enhanced Interaction** — DA items can include rich multimedia elements and/or a wider range of learner-content interactions.
Access & Flexibility	• **Time Flexibility** — DA can be taken at a time that is convenient for each learner. • **Location Flexibility** — DA can be taken at a location that is convenient to the needs of each learner.
Efficiency	• **Feedback Automation** — DA's scoring and basic feedback can be automated so the instructor doesn't spend time providing repetitive feedback and students don't have to wait for it. • **Customized Feedback** — digital rubrics can speed up the process and reduce the cost of providing quality and timely individualized feedback to learners. • **Peer Feedback Coordination** — digital tools can make peer feedback and coordination more manageable.

4.3.2 Authentic Assessment

Authentic assessment engages learners in real-world applications and problem-solving tasks, which require learners to apply their knowledge in real-world contexts. This deepens learner engagement with the content and fosters greater connections between theory and practice. It also increases motivation because learners perceive greater relevance to their own experience and transferability to their world outside of school. Video 4-3 below presents a brief introduction to authentic assessments.

Video 4-3. Authentic Assessment (2:45)

What to look for: The analogy of the driving test and how it relates to our educational systems.



Watch on YouTube

Below are some questions adapted from Burton (2011, p. 25) that can be used to evaluate the authenticity of a learning assessment.

1. Is the learner required to mimic a professional in the real world?
2. Is the learner required to complete the assessment task using resources similar to that in the workplace?
3. Does the assessment task produce a valuable artifact or require the performance of a relevant skill?
4. Is higher-order thinking or meta-cognition seamlessly integrated with the assessment task?
5. Does the learner collaborate with other stakeholders (for example, professionals/learners) when completing the assessment task?
6. Does the assessment task produce novel or diverse responses?

One assessment may not incorporate every principle listed above, but implementing any of them will increase its authenticity. Table 4-9 contains some examples of authentic

assessments in different academic domains. Figure 4-3 shows an example from a psychology class.

Table 4-9. Examples of Authentic Assessments

Field	Example of Authentic Assessment
Art	Create an original artwork inspired by a specific art movement or theme.
Business	Develop a comprehensive business plan for a new startup venture.
Education	Design and implement a lesson plan for teaching and assessing student learning.
Engineering	Design and build a functional model or prototype of a complex machine or structure.
Geology	Map and interpret geological formations in the field.
History	Conduct archival research with primary sources and write a historical analysis paper.
Psychology	Design and conduct a psychological experiment to test a hypothesis.

Figure 4-3. Example of an Authentic Assessment — Psychology Class

Here is an example of what an authentic digital assessment might look like in a Psychology Research Methods class:

Learning Objectives:

- Use several methods for finding previous research literature on a particular research idea or question.
- Convert research ideas into empirical research questions.
- Evaluate research questions for interesting or valuable research.

Research Proposal Evaluation:

Instructions — To practice the skills you learned in this module and ready yourself for potential research in an area that interests you, complete the following tasks:

1. Choose a research idea from the list below (or choose one of your own and clear it with your instructor).
2. Convert your topic into an empirical research question that is focused, specific, and testable.
3. Identify five articles in existing research literature related to your research question.
4. Using your preparation from 1-3, create a research proposal evaluation as a slide deck, showing your topic, proposed question, and current literature.

Research Ideas:

- The impact of social media usage on self-esteem in teenagers.
- The relationship between sleep quality and academic performance among college learners.
- The effects of mindfulness/meditation on stress reduction in working professionals.
- The influence of parental involvement on child development outcomes.
- The role of personality traits in job satisfaction among employees in the service industry.
- The effects of music on cognitive performance in older adults.
- The relationship between exercise habits and mental well-being in young adults.
- The impact of video game violence on aggressive behavior in children.
- The effects of color on mood and productivity in office environments.
- The relationship between gender stereotypes and career choices in adolescents.

4.3.3 Renewable Assessment

Renewable Assessments are a type of authentic assessment that has value beyond the scope of the classroom. While most classroom assessments are **disposable** because they have no lasting value beyond the classroom, renewable assessments produce artifacts that have value beyond the classroom and the assessment itself. They are often associated with internships or projects that serve the local community.

By creating authentic artifacts with a sense of permanence, renewable assessments enable learners to demonstrate their understanding, critical thinking, and practical skills in a manner that can have lasting value and relevance in their respective fields. Table 4-10 has some examples of renewable and disposable assessments in various fields.

Table 4-10. Examples of Renewable and Disposable Assessments

Field	Renewable Assessment	Disposable Assessment
Art	Create an art portfolio that can be used to represent your skills to future employers.	Demonstrate your understanding of complementary color pallets and the color wheel.
Business	Develop a comprehensive business plan for a client with	Take an exam on essential elements of a comprehensive

	an idea for a new small business.	business plan.
Education	Design a worksheet or learner assignment that can be used in a mentor instructor's class.	Design a lesson plan for the class that the learner never intends to use.
Engineering	Work with a non-profit organization to create a solution to a real-world challenge.	Solve problems on an exam that demonstrate your understanding of an engineering principle.
Geology	Work with local earth science school instructors to create a podcast answering learner questions about the earth.	Map and interpret geological formations in the field.
History	Conduct archival research with primary sources and update a Wikipedia entry on the topic to share the knowledge with the community.	Do historical research using primary sources and write an essay to share with the class in a final presentation.
Psychology	Work with a local school district to create posters for the schools with accurate information about mental health services in the community.	Conduct research and write a report on the mental health resources available in the local community.

4.3.4 Limitations of Digital Assessments

Digital assessments have some limitations when compared to traditional offline assessments. Below is a list of some of those limitations.

- **Academic integrity** — Cheating is generally considered to be easier to monitor in an in-person environment.
- **Technical challenges** — Internet access, outdated computers and software, and other technical issues can be barriers to a good assessment experience for learners.
- **Human connection** — When a skill necessitates human connection, a digital format can be a hindrance (e.g., class discussions, learning to communicate in a language, negotiation tasks, etc.)
- **Tactile richness** — It may be difficult to evaluate tactile objects (e.g., art projects, physically built engineering projects, etc.)
- **Equity issues** — While some equity issues might be improved in a digital assessment (e.g., the ability to take an assessment at a convenient place and time), there can be significant limitations if success is dependent on internet speed, software compatibility, and other technical requirements.

4.3.5 Compare Strengths of Digital and Offline Assessments

Blended courses allow for assessments in both online and offline modalities. It is important for you as an instructor to consider the strengths and limitations of the assessments that you design for your course. You might consider creating a table like the example in Table 4-11 as you consider whether to use digital or offline assessments for your blended course.

Table 4-11. Example of Comparing the Strengths of Digital and Offline Modalities for Different Types of Assessments

Type of Assessment	Online Assessment Strengths	Offline Assessment Strengths
Quizzes and Exams	• automated scoring and feedback • multiple attempts • randomized questions	• easier to prevent cheating

Live Presentations and Physical Demonstrations	• time and space flexibility • time to provide detailed feedback between presentations • presentations can be rewatched • management of peer review	• sensory richness • spontaneity of questions and responses • fewer technology barriers
Projects & Portfolios	• digital submissions and storing • easy to distribute for peer review • online rubrics for easy grading • automatic gradebook integration	• physical tactile projects can be more easily evaluated
Papers	• digital submission and storing • ability to see versions and progress, not just final product • ability to provide specific and timely feedback with rubrics and comments • ability to check for plagiarism	• fewer technical challenges • doesn't require access to writing software
Discussion Participation	• everyone can participate • quality of contribution can be assessed	• participation (attendance) can easily be tracked, but contribution is more difficult to assess • energy of contribution can be more easily felt

✏️ Chapter 4 Blueprint Challenge

Blueprint Challenge Part 1 Assessment Brainstorming Table - Second Column.

Open your assessment plan document. Read the directions for Part 1 Assessment Brainstorming Table.

Review the example in the second column. Then fill in the second column with your assessment evaluation.

4.4 Ensuring Academic Integrity

Academic Integrity is the ethical and honest pursuit of learning in an academic setting. Instructors have the responsibility to encourage learners to be honest in their academic work as well as to ensure practices that promote academic integrity. This section will address several course design strategies that can help reduce academic dishonesty. We will discuss the following:

- Creating lower-stake, mastery-based assessments.
- Creating authentic, competency-based assessments.
- Incorporating proctoring for high-stakes exams.
- Incorporating originality (or plagiarism) detectors for writing assignments.

Learning Outcome: I can develop an assessment plan that addresses academic integrity.

Assessment: Blueprint Challenge Part 1 Assessment Brainstorming Table — Third Column.

4.4.1 Creating Low-Stakes, Mastery-based Assessments

Many educational situations create or provide unintended incentives to cheat because the consequences of failure are so high. For example, a final exam worth 25% of the course grade could cause students to feel they must succeed at any cost because performing poorly on the exam would have a dramatic impact on their final course grade. High-stakes assessments usually occur at a single point in time, typically at the end of a learning unit. After taking the assessment, learners move on to the next unit even if they have performed poorly and haven't mastered the material. On the other hand, in a mastery-

based approach, learners are given multiple opportunities to demonstrate their knowledge or skills. The mastery assessments are less stressful because they focus on learning. Video 4-4 explains what mastery means and provides examples of it.

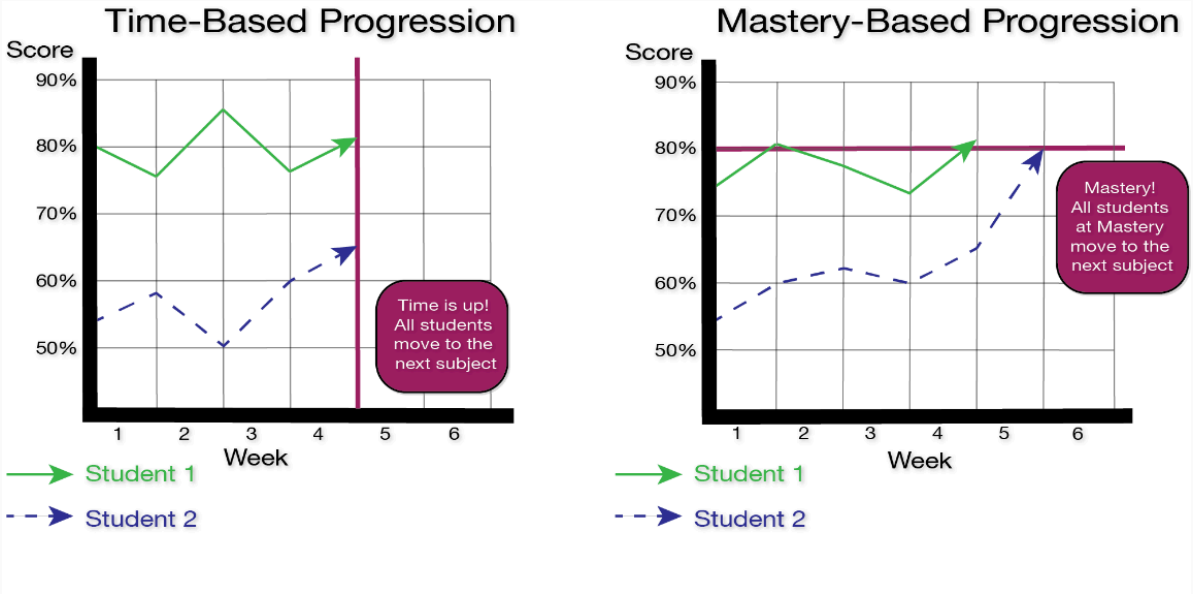
Video 4-4. TED Talk — Let's Teach for Mastery (10:49)

What to look for: The analogy of building a house and how it relates to our education systems.

Watch on YouTube

The assessments are often formative and diagnostic in nature. There is an expected mastery threshold that learners are expected to reach before they can move on. Learners may take a quiz or an exam and get feedback on gaps in their understanding. They can do additional activities to address those gaps and retake the assessment. Figure 4-4 depicts the difference between a traditional approach (time-based progression) and a mastery-based approach.

Figure 4-4. Time-based vs. Mastery-based Progression



Created by Doug Archibald CC SA

Digital assessments can play an important role in making a mastery-based approach possible. For example, Section 4.3 identified the following strengths that can make mastery-based assessments more practical.

Real-time Feedback/Feedback Automation — in a mastery approach, getting quick diagnostic feedback on assessments allows learners to seek remediation immediately while the problems are fresh in their minds.

Multiple Attempts — a mastery approach depends on learners being able to take assessments multiple times. This typically means having a bank of items that measure the same knowledge or skill. Digital tools enable each attempt to draw different questions from the question bank, ensuring that when learners are making another attempt, they aren't just learning the answers to the previous assessment items.

Adaptive Pathways — in some domains, digital software is utilized to give learners adaptive feedback based on their performance on mastery-based assessments. For example, a learner who has missed questions related to Concept A will be directed to different learning activities from a learner who has missed questions related to Concept B.

4.4.2 Creating Authentic, Competency-Based Assessments

Competency-Based Assessments are becoming more common in education. These assessments are like the mastery-based approaches described previously; however, a core idea behind many competency-based approaches is that learners can demonstrate their competency through authentic experiences that they have had outside of the classroom and sometimes before enrolling in the course. Below are a few examples:

- **Computer Science** — a learner can use a software program developed previously for a client to demonstrate specific coding competencies.
- **Nursing** — a learner who was a medic in the military can demonstrate already learned skills based on their military experience and training.

Watch Video 4-5 to understand how competency-based education compares to traditional education.

Video 4-5. Competency-Based vs. Traditional Education (1:54)

What to look for: Three ways competency-based assessment is more equitable than traditional assessments.

Watch on YouTube

Relying more heavily on authentic, competency-based assessments as part of your course grading is another way to strengthen learning and simultaneously deter cheating.

While it is not impossible for learners to cheat in authentic assessments, the design and nature of these assessments make it significantly more difficult to do so. Below are some ways that authentic assessments promote academic honesty.

Contextual relevance: Authentic assessments are designed to reflect real-world scenarios and challenges. The questions and tasks presented in these assessments require learners to apply their knowledge and skills in practical ways often in a unique real-world context. Cheating through memorization or using external resources becomes less effective because the questions often demand higher-order thinking and require the ability to analyze and synthesize information in specific contexts.

Complex problem-solving: Authentic assessments often involve complex problems that cannot be easily solved by simply looking up information. These assessments focus on assessing a learner's ability to think critically, make reasoned judgments, and develop creative solutions. Cheating becomes more difficult because the tasks typically require a deep understanding of the subject matter and the application of acquired knowledge to novel situations.

Performance-based tasks: Authentic assessments often involve performance-based tasks such as presentations, demonstrations, or projects. These assessments require learners to showcase their skills and abilities in a tangible and often personal way, making cheating more difficult.

Assessment process: Authentic assessments often involve a process rather than a single final product. For instance, a research project may require learners to develop a research question, gather and analyze data, and present their findings. The assessment process itself provides opportunities for instructors to observe and evaluate a learner's progress, making it harder for cheating to go unnoticed.

Assessment variety: Authentic assessments can take various forms, including group work, field experiences, internships, and simulations. These diverse assessment methods make it more challenging to cheat, as the evaluation is not limited to traditional test formats. The authentic nature of the assessments reduces the predictability of cheating methods and requires learners to demonstrate their skills in different contexts. Figure 4-5 shows examples of competency based assessments.

Figure 4-5 Example Competency-Based Assessment - TV commercials

This is an example of learners creating a series of commercials, promoting a local business for a viewer contest, as part of a local TV station's self-promotion initiative.

- Learners were enrolled in the Radio, Television, and Broadcast News diploma at the southern Alberta Institute of Technology (SAIT).
- Learners were tasked to find a local business or not-for-profit.
- Working with this business they needed to write a script that their client approved, and then direct the shoot, editing, and production of two commercials (30 second and 15 second versions).
- The client could freely use the commercial where they wanted, and the learner could keep it for their demo reel (like resume for the video industry).
- The examples were made in 2016. These commercials aired on CHAT TV in Medicine Hat Alberta for about 2 months.

Primetime 30-second spot

Watch on YouTube

Primetime 15-second spot

Watch on YouTube

Created by Bennett Gustafson, 2016

4.4.3 Incorporating Exam Proctoring

Exam proctoring is the process of monitoring learners as they take an exam. Exam proctoring can happen in-person or remotely using digital technologies. Typically, the monitoring is done for high-stakes, summative assessments to discourage academic dishonesty and ensure that the exam conditions setup by the instructor are enforced.

In-person Proctoring. In the in-person classroom, proctoring is often done by the instructor who walks around the classroom observing learners to ensure that cheating does not happen and that learner questions during the exam are addressed (see Figure 4-6). Some institutions have a separate testing center where learners can take exams overseen by human proctors outside of class time.

Figure 4-6. Photo of live exam proctoring

BYU-Idaho Testing Center

Digital Proctoring. Digital Proctoring involves using technology to monitor learners and ensure desired test conditions are met while they take an exam (see Figure 4-5). Some common features of digital proctoring software include:

- **video monitoring** — use of video to record or observe the learner taking the exam in real-time.
- **screen recording** — recording of activity taking place on the computer monitor during the exam.
- **browser lockdown** — locking down browser screens or features to prevent accessing unauthorized information.
- **identity verification** — features such as facial recognition or ID verification that ensure the test taker is a registered learner.
- **environment monitoring** — detecting suspicious behaviors in the exam environment such as eye movement, head gestures, audio activity, or anomalies in screen activity to identify potential irregularities.

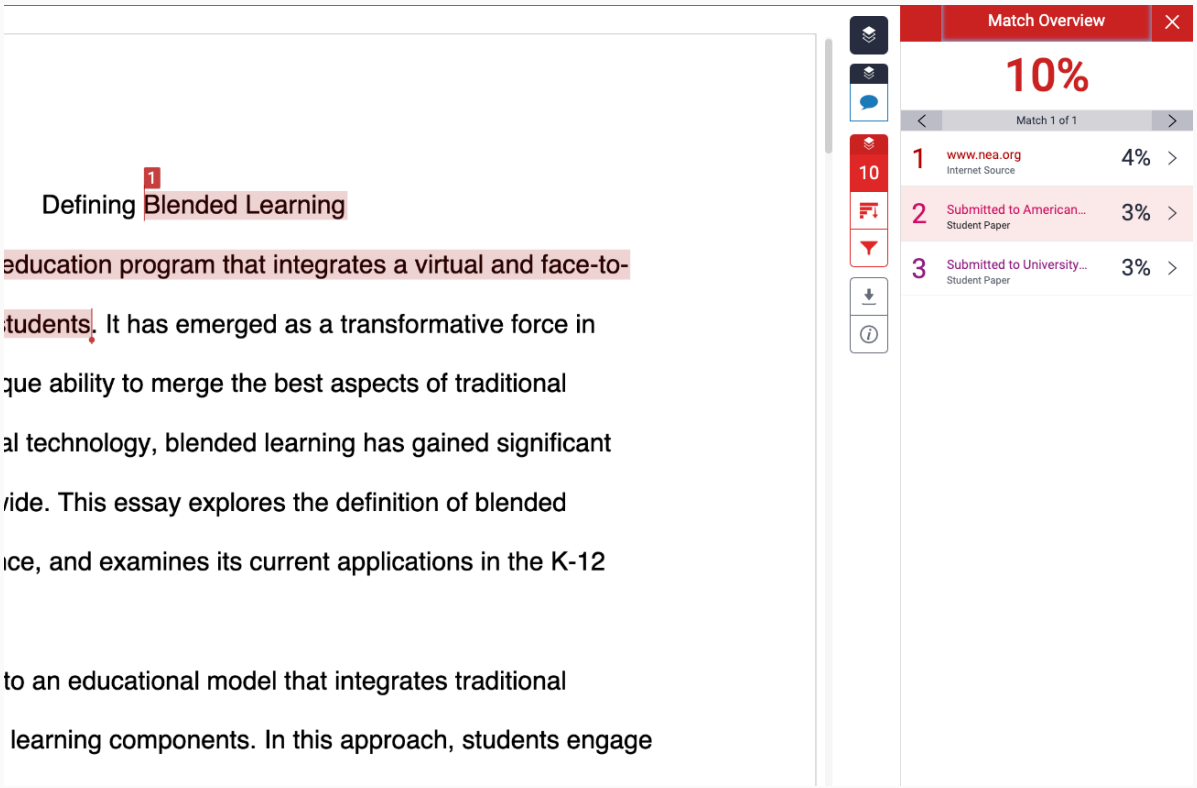
4.4.4 Incorporating Plagiarism Detectors

Plagiarism is when a person presents someone else's ideas or work as their own without adequate acknowledgement. Some examples of plagiarism include:

- copying blocks of text from a website for use in an essay without proper attribution.
- copying code written by another person and representing it as your own work.
- using artwork or images from another author without proper attribution.

Plagiarism detectors are software programs that help identify instances of similarity in written content. The software generates a report identifying places in a submitted text that are similar to other work in the database. Figure 4-7 shows an example of plagiarism software.

Figure 4-7. Photo of Plagiarism Detector Report



Created by Breanna Slaugh, CC BY

Instructors and learners can then use the report to determine if plagiarism may have happened. In this example, 10% of this paper is similar to other sources. Clicking on the

match in the report links to a side-by-side comparison of the texts.

⚠️ Caution: Interpreting Reports

It is important for instructors and administrators to know that it is unrealistic to expect 0% plagiarism in a report. The program can only detect how similar the paper is to other sources. For example:

- If a learner has done the bibliography correctly, the references will be the same as other papers that cite the same source and will be highlighted in the report as similar.
- The learner cannot change proper nouns, so those will be the exact same as other papers that contain the same proper nouns and will be highlighted in the report as similar.

The instructor must review each report for accuracy before accusing a learner of plagiarism.

Plagiarism detectors can be used to encourage academic honesty through plagiarism prevention and detection strategies.

Prevention

Sometimes learners commit intentional plagiarism. They purposefully use work from other people and claim it as their own. Informing learners that their writing will be processed by a plagiarism checking program may be enough to deter them. It is a best practice to inform learners in advance that the assignments will be checked, show them the program that will be used, and explain the generated report. Once they are informed of the instructor's expectations, they may be more likely to act with academic integrity.

Detection

However, it is more common for learners to commit unintentional plagiarism because of carelessness or ignorance. Learners usually think they have made sufficient changes to the borrowed information, or they think they have given sufficient acknowledgement to the original author, when they have done neither of those things.

Allowing learners to upload drafts to a plagiarism detector and teaching them how to use the report to revise their writing can be a very beneficial learning experience. The learners can see where they have insufficient or inappropriate quoting, paraphrasing, or

summarizing, and learn how to do it better in the future. The detectors do not scan for citations or references, so the instructor will need to teach the learners how to review their own writing to verify adequate in-text citations and a correct reference list.

Use of Generative AI

Using generative AI, such as ChatGPT, can be a helpful tool for brainstorming and drafting. Many institutions are still trying to develop policies around its use to help learners to know when it is appropriate and inappropriate to use it. In some situations, the use of generative AI can be a form of academic dishonesty because it doesn't necessarily reflect what a learner knows about a subject. The plagiarism detector will not flag text generated by AI as plagiarism because the text will be unique. Be aware of this, come up with a plan that addresses academic integrity, and communicate your expectations to your learners.

✏️ Chapter 4 Blueprint Challenge

Blueprint Challenge Part 1 Assessment Brainstorming Table - Third Column.

Open your assessment plan document. Read the directions for Part 1 Assessment Brainstorming Table.

Review the example in the third column. Then fill in the third column with your academic integrity plan.

Conclusion

Chapter 4 has helped you think through aligning your assessments with your learning outcomes and introduced you to types of assessment, strengths and limitations of the different types, and ways to address academic integrity. You have completed the foundational work and can now create your digital assessment plan.

✏️ Chapter 4 Blueprint Challenge

Open your assessment plan document.

Read the directions for Part 3 Digital Assessment Plan.

Review the example. Then fill in the table with your ideas.

In Chapter 2, we started talking about your syllabus. Eventually information about assessments will be added to your syllabus. There will be a section in your syllabus about major course tests and projects in which you will include brief summaries of the major tests, such as midterm and final, and major projects, such as a choice board assignment. You will also include a course calendar with assessments listed.

And finally:

👷 Course Checklist Part 1: Design

Step 4 Create a Digital Assessment Plan

Open your course checklist. Read the directions for Step 4 Create a Digital Assessment Plan. Then complete the assignment with your ideas. Check the completion box.

This content is provided to you freely by EdTech Books.

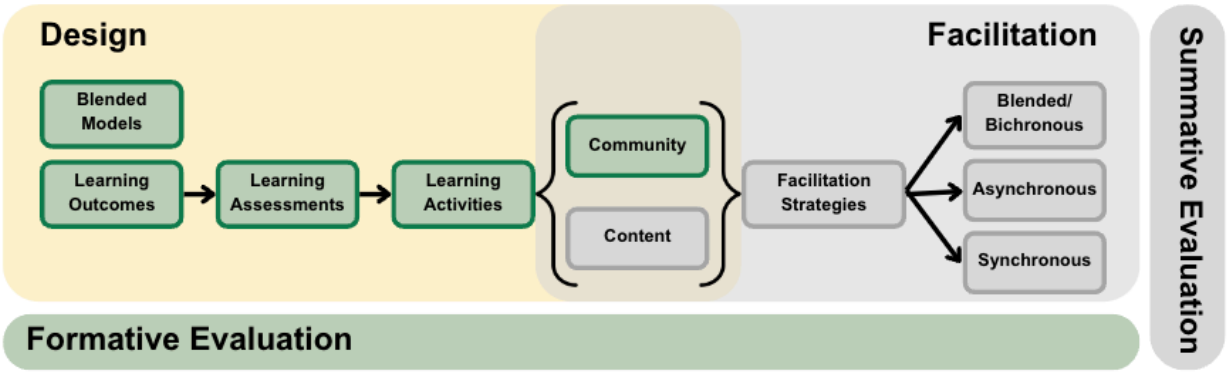
Access it online or download it at
https://edtechbooks.org/he_blended/chapter_4_assessment_plan.

5

Learner-Community Activities

Group work | Asynchronous Online Course Discussions | community-based learning | communities of engagement | learner-instructor interaction | learner-learner interaction

The next step in our framework is to design learner-community activities. As always, formative evaluation will be conducted to help you thoroughly think through your design decisions.



Created by Charles Graham CC BY

Chapter Learning Outcome: I can create community-based activities for my blended course.

Sub-section outcomes:

- I can articulate reasons for incorporating community-based activities into my blended course. (Section 5.1)
- I can plan positive learner-instructor interactions. (Section 5.2)
- I can plan engaging learner-learner interactions. (Section 5.3)
- I can intentionally design community-based activities with an online component for my blended course. (Section 5.4)

✏️ Chapter 5 Blueprint Challenge

You will use the skills presented in this chapter to develop community-based activities for your blended course.

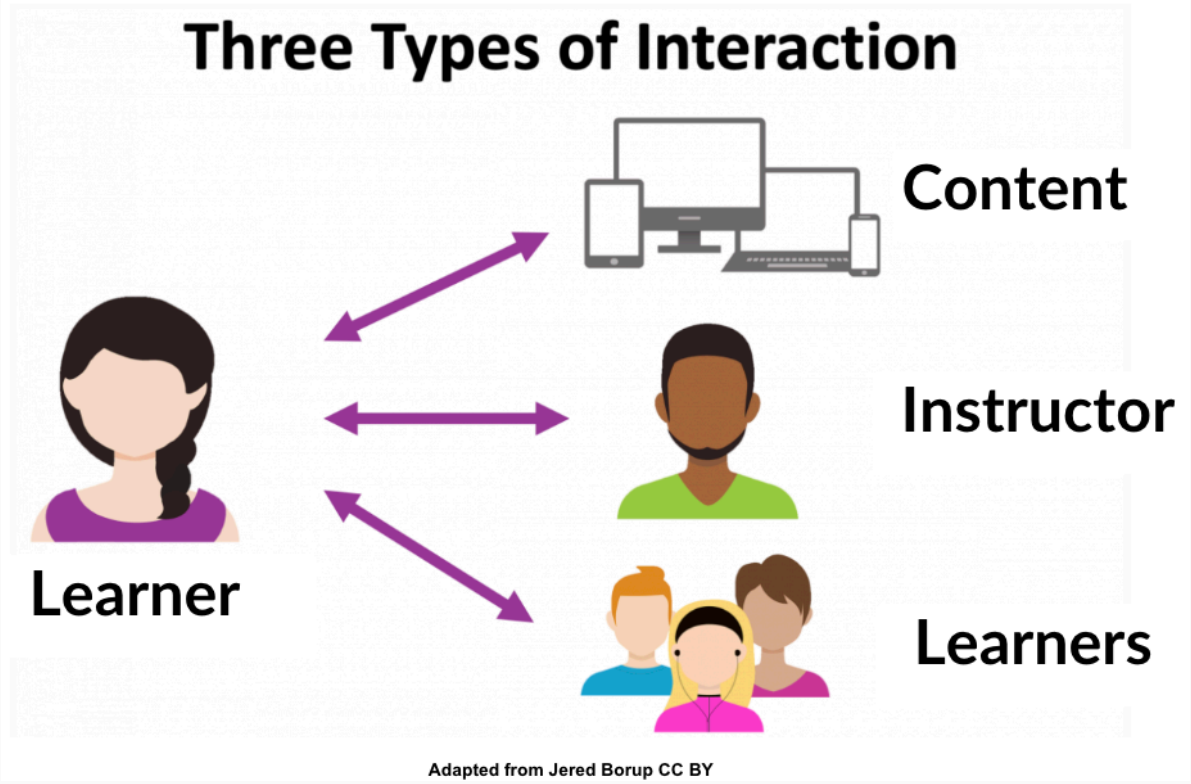
Open the Community Activities Template and save a copy. Label the copy Your Name Community Activities. (Example: Hyun Joo Community Activities.)

Some sections of this chapter guide you to complete a part of your community-based activities. You will finish your activity plans at the end of Chapter 5.

5.0 Introduction

Moore (1989) focused on models of interactivity between learners, instructors and content as key elements of meaningful engagement and learning. See an example of this in Figure 5-1 below.

Figure 5-1. Three Types of Learner Interactions



Learner-content interaction describes the experiences and engagement learners have with learning materials and course content. This can include reading, listening, watching, creating, and/or reflecting. You will learn more about learner-content interaction in Chapter 6.

Learner-instructor interaction describes the experiences learners have with the instructor. This can include conversations, getting feedback or grades, and the instructor's presence in the classroom. That is discussed in this chapter!

Learner-learner interaction describes the experiences learners have with one another when they share their understanding and mentor each other. This can include discussion groups, group projects, and each learner's presence in the classroom. We'll also talk about this in this chapter!

This chapter will introduce you to design principles that create a sense of community by engaging learners with their instructor and other learners. The chapter will teach strategies for discussions and group work. Notice that regardless of synchronous or asynchronous learning environments, strategic activity design can build positive community interdependence.

5.1 Community-Based Learning

There are learning theories that explain how community interaction can strengthen the learning experience. A few of those are the Academic Communities of Engagement (Borup, et al., 2020), Communities of Inquiry (Garrison, 2017), and even Vygotsky's More Knowledgeable Other (1978).

Learning Outcome: I can articulate reasons for incorporating community-based activities into my blended course.

Cooperative Learning

Cooperative learning is an instructional strategy that has learners work together in small groups to reach learning goals. It emphasizes active participation, collaboration, and individual accountability. Cooperative learning has the potential to promote critical thinking, communication skills, and positive interdependence among learners.

Johnson and Johnson (1989) did a meta-analysis of almost 600 experimental studies and over 100 correlational studies. The studies compared *cooperative* learning methods with *individualistic and competitive* methods. The studies spanned all major age groups: primary (K-3), intermediate (4-6), middle school (7-9), high school (10-12), post-secondary,

and adults. They classified the outcomes from the studies into three major categories: achievement/productivity, positive relationships, and psychological health. Individuals who cooperated achieved on average ⅔ a standard deviation above those involved in competitive or individualistic learning. They found that cooperative learning typically results in:

- Increased productivity and greater academic achievement.
- Supportive peers and long-term friendships.
- Better overall health, including social and emotional health.

Individuals are more likely to have successful outcomes when they participate in supportive, collaborative learning communities. This is because the capacity for learning increases when learners feel connected and safe. Video 5-1 discusses this principle.

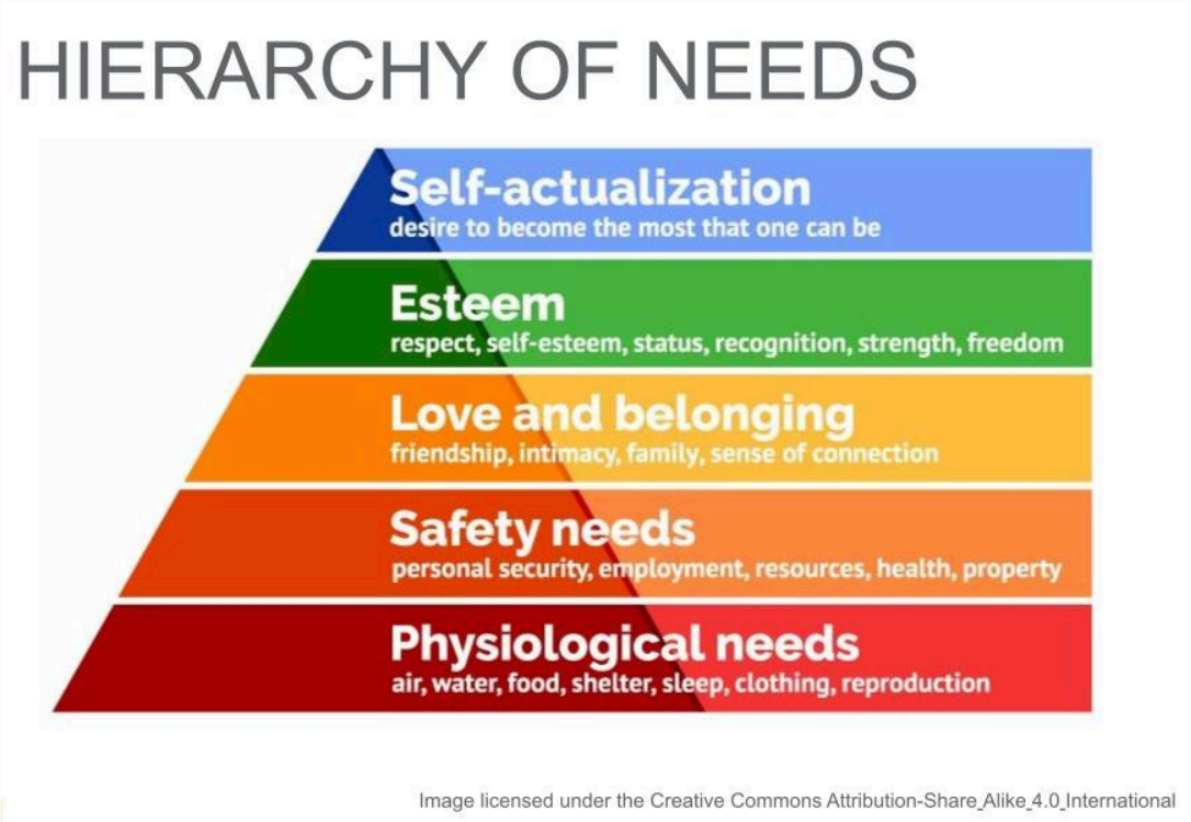
Video 5-1. Building Belonging in the Classroom (3:58)

Watch on YouTube

Maslow's Hierarchy of Needs

This principle is based on Maslow's Hierarchy of Needs (1943). In order to achieve the highest level in the hierarchy, which he called self-actualization, the needs of the lower levels must be met first. See how this is represented in Figure 5-2 below.

Figure 5-2. Maslow's Hierarchy of Needs



The best learning happens at the top level, self-actualization. That is the learning environment we are attempting to create through design and instruction.

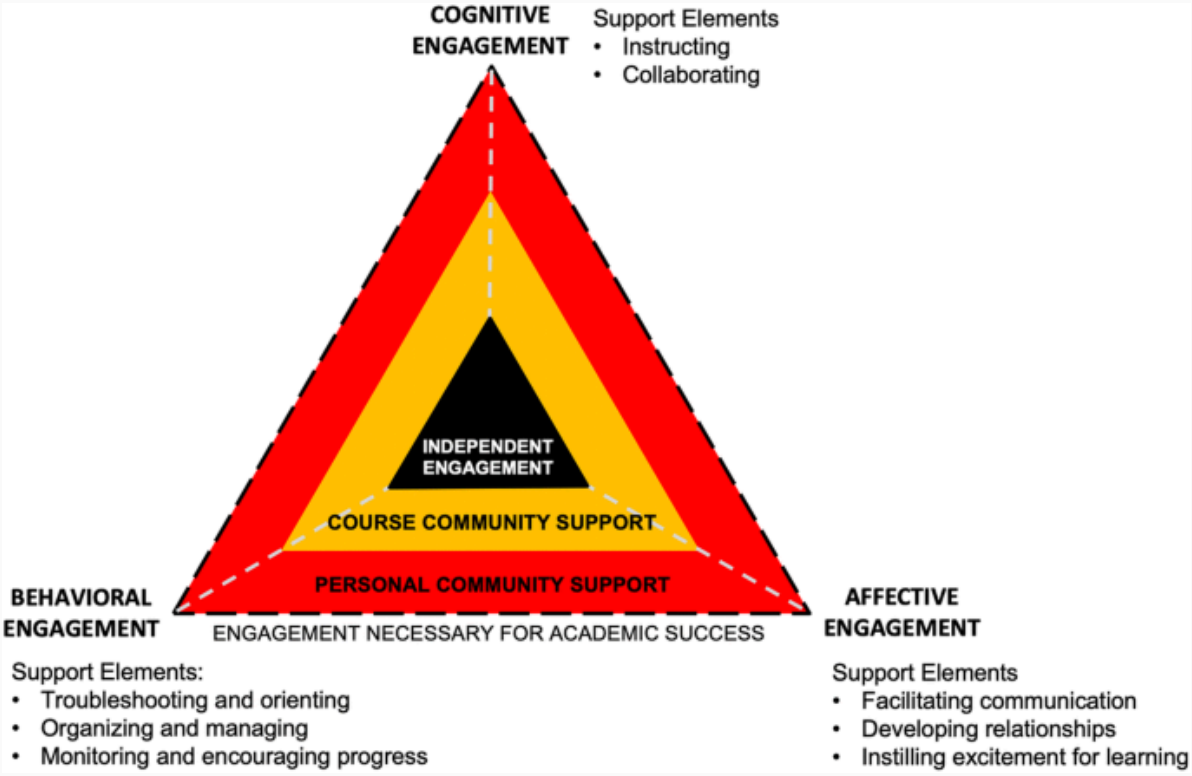
Addressing the lowest level, physical needs, is outside the capacity of a class: someone struggling with food, shelter, and drinkable water would need to find help from another source, such as a housing agency or a food bank. A learner facing difficulty at this level will be very affected by their circumstances and their learning will be impeded. As an instructor, you can be patient and kind and make sure the learner knows about campus community resources that could help.

You can see the middle levels are titled safety, connection, and confidence. These areas can be addressed in a classroom setting. Within your classroom, with you and with each other, the learners can feel safe, connected, and confident. This will allow learners to thrive in your classroom. Occasionally, outside factors can impede individual learning, such as domestic violence, beginning or ending significant relationships, or working through mental health challenges. Again, as an instructor, you can be patient and kind and make sure the learner knows about campus community resources that could help.

Academic Communities of Engagement Framework

The Academic Communities of Engagement Framework (Borup, et al., 2020) explains that the course community needs to support learner engagement in three areas: Cognitive, Behavioral, and Affective. See Figure 5-3 below.

Figure 5-3. ACE Framework



Borup, J., Graham, C.R., West, R.E. et al. (2020). Academic Communities of Engagement: an expansive lens for examining support structures in blended and online learning. Education Tech Research Dev 68, 807–832.

- The cognitive area addresses the course content and how well learners understand it. Supporting cognitive engagement includes quality instruction, positive collaboration, mentoring, and tutoring.
- The behavioral area addresses course organization and learner behavior. Supporting behavioral engagement includes orienting learners to the course (both course culture and expectations), curriculum organization, assignment management, grading, problem-solving, and monitoring and encouraging learner progress.
- The affective area addresses that which influences learners' emotions, moods, or feelings. Supporting affective engagement includes developing mentoring relationships, facilitating group communication, encouraging resilience, and sharing excitement for learning.

Purposefully designing support in these areas into your course will contribute to learner engagement and academic success.

In summary, why community-based activities? Because they help. Because learners are more likely to be successful when they are supported cognitively, behaviorally, and affectively by an academic community where they feel safe, connected, and confident.

5.2 Learner-Instructor Interactions

Research has shown that learners are more motivated to engage in online learning when they can recognize the instructor's presence in the course and have positive learner-instructor interactions.

Learning Outcome: I can plan positive learner-instructor interactions.

Assessment: Blueprint Challenge Community Activities Part 1.

Instructors establish their presence through regular, meaningful communication with the class and with individuals, but also through the strategic facilitation of online learning activities. While instructor presence is largely a function of facilitation, it can also be a design consideration. As you design a course and its learning activities, keep in mind the instructor's role to invite and maintain learner engagement. Video 5-2 provides some strategies to consider.

Video 5-2. Instructor Presence (3:17)

Watch on YouTube

The learner-instructor interactions need to support cognitive, behavioral, and affective engagement in a way that helps learners feel safe, connected, and confident. For example, you can support learner engagement in:

- Cognitive interactions with the instructor by delivering competent instruction, with good scaffolding, acting as a kind mentor and helping learners through the zone of proximal development. This could include well-designed activities, prepared instructions, and modeling mastery.
- Behavioral interactions with the instructor by presenting clearly defined course and assignment expectations, monitoring progress, and providing sincere encouragement. This could include having a very well-organized syllabus, good grading rubrics, and giving prompt feedback.
- Affective interactions with the instructor by creating a safe, welcoming classroom (including a virtual classroom), forming positive mentoring relationships, and providing clear communication. This could include assigning and responding to weekly learning journals, arriving early to synchronous class times, and visiting with the learners as they arrive, or being very present and involved in learner discussions.

Overall, it is worth the investment of time and energy to plan and carry out positive learner-instructor interactions.

✏️ **Chapter 5 Blueprint Challenge**

Blueprint Challenge Community Activities Part 1.

Open your community activities document.

Read the directions for Part 1: Plan positive learner-instructor interactions. Review the example. Then fill in the table with your ideas.

5.3 Learner-Learner Interactions

This section focuses on designing effective interactions among learners, including establishing community expectations, creating engaging discussion prompts, providing clear discussion guidelines, and using synchronous and asynchronous tools. These strategies can promote active participation and meaningful learning experiences.

Learning Outcome: I can plan engaging learner-learner interactions.

Assessment: Blueprint Challenge Community Activities Part 2.

The learner-learner interactions also need to support cognitive, behavioral, and affective engagement in a way that helps learners feel safe, connected, and confident. For example, you can support learner engagement in:

- Cognitive interactions with each other by utilizing best practices of sociocultural learning theories, peer mentoring, and reflective inquiry. This could include well-designed cooperative and collaborative activities, facilitating study groups, and encouraging groups to meet synchronously and asynchronously.
- Behavioral interactions with each other by having groups establish group norms, require accountability in their group work, and encouraging positive peer feedback and interactions. This could include carefully structured study groups and learning activities.
- Affective interactions with each other by creating a class culture of a safe, welcoming classroom (including a virtual classroom), forming positive friendships, and participating in clear group communication. This could include team-building activities, peer evaluation, and self-evaluation.

5.3.1 Effective Group Strategies

Effective group work strategies involve thoughtful planning of group size and composition, structuring activities to promote positive interdependence and individual accountability, facilitating promotive interactions and interpersonal skills, and addressing common challenges. Here are some specific considerations for each strategy:

Create Groups

When creating groups, it is important to consider factors such as group size and composition. Determining the group size depends on the nature of the task and the desired level of interaction. Smaller groups can foster more active participation and engagement, while larger groups may provide diverse perspectives. Group composition can be homogeneous, where members share similar abilities or characteristics, or heterogeneous, where individuals have diverse backgrounds and skills. Video 5-3 compares these two types of groups.

Video 5-3. Best Teaching Practices—Group Composition (2:42)

Watch on YouTube

Allowing learners to inform your decisions, such as who they study with and where or how they meet, is one aspect of personalization of learning (more will be said about personalization in Chapter 6). Even if you make the grouping decisions, you can ask for learner input first. Sometimes learners do not get along and it is good to know that before placing them together in a group.

Research conducted by Stoddard, Karpowitz, and Preece (2020) suggests that adding one token member to a group, such as adding one token woman to a group with four men, devalues the contributions of the token member. They wrote:

"Using laboratory, survey, and administrative data, we find that even after accounting for their proportion of the group, token women are seen as less influential by their peers and are less likely to be chosen to represent the group than women on majority-women teams. Token women also participate slightly less in group discussions and receive less credit when they do. Across multiple indicators, our results show a pattern of devaluing women's participation and expertise in work teams, especially when they are in the minority."

This suggests that a token member of any type may face similar devaluation in group settings. Therefore, create groups mindfully, get learner input if possible, and be willing to

adjust groups as needed.

Establish Course Community Expectations

Learners need to understand your expectations for online interaction. You are creating a shared culture within your classroom and becoming a community of learners. You need to clearly explain guidelines for their interactions and lead by example. You will participate in group discussions and model appropriate posting and responding. One model that could help inform your class netiquette is the THINK acronym. It has several elements to consider when making posts or comments in a discussion.

- **True** — Make only **true** comments. If you are unsure about something, state that in the discussion. Find sources to support your claims if necessary.
- **Helpful** — Make only **helpful** comments. If the thought you wish to share would be distracting in any way, do not share it. Participate in a way that benefits the conversation.
- **Inspiring** — Make only **inspiring** comments. If your comment would cause others to withdraw or begin to argue, reconsider what or how you would share. Encourage others to higher thinking and new perspectives.
- **Necessary** — Make only **necessary** comments. If it is repetitive or off-topic, think of something else to say. Your comment can agree with and support another comment, but be sure to respond to the other person rather than hijacking their idea.
- **Kind** — Make only **kind** comments. If your statement would be hurtful or rude, do not share it. Discussions are not a place for argument or debate. Respectful sharing of differing perspectives without contention is the goal for all discussion groups and class activities.

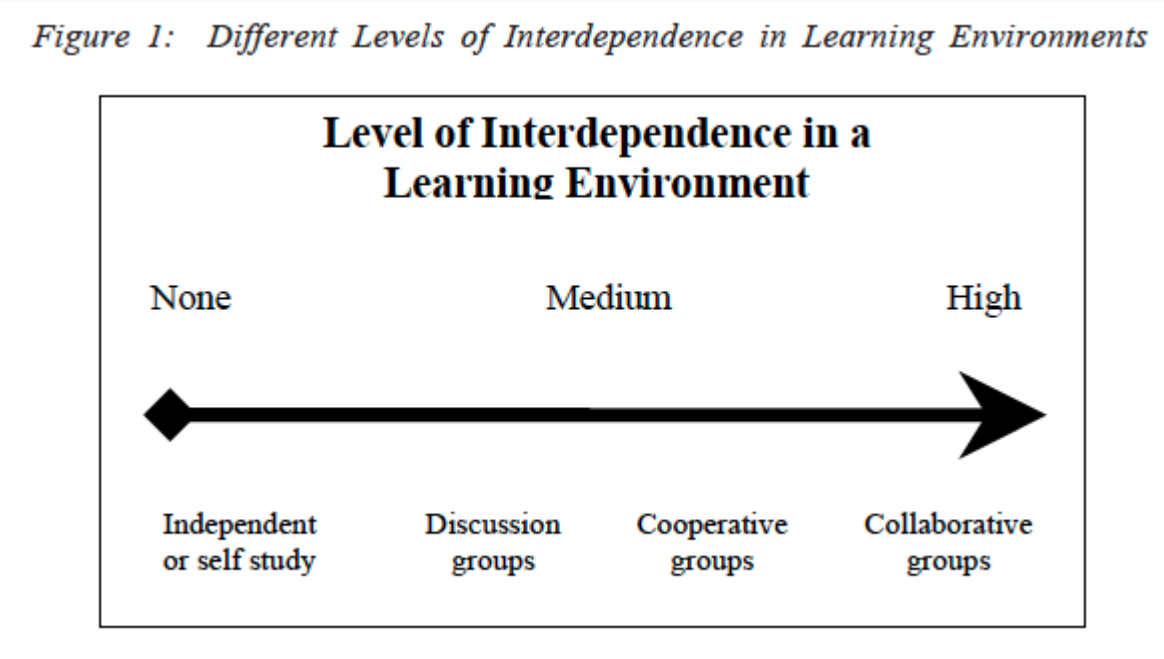
Remember you need to create a class culture of belonging, unity, and collaboration. Everything should contribute to the feeling of safety for all learners, instructors, and TAs in the course.

Group Structure

A cooperative activity should encourage learners to collaborate, communicate, and rely on one another. Establish positive interdependence among group members, considering the elements of positive goal, resource, and role interdependence.

Positive interdependence is the first requirement for successful cooperative activities. This means that there is mutual dependence among group members for the activities of the group to be successful. Graham and Misanchuk (2004) described the level of interdependence necessary in various group settings, as seen in Figure 5-4 below.

Figure 5-4. Level of Interdependence in a Learning Environment



Graham and Misanchuk, 2004

Instructors and designers need to plan for positive group interdependence in these learning environments. Types of positive interdependence include:

- *Positive goal interdependence.* Group members perceive that they share a common goal or objective and understand that the achievement of that goal is dependent on the collective efforts of the entire group. In other words, the success of one individual is linked to the success of the entire group.
- *Positive resource interdependence.* Group members recognize that they have shared resources, such as information, materials, or skills, that are necessary to accomplish the group's goals. Each member contributes their unique resources, and there is a mutual reliance on the collective knowledge and abilities of the group.
- *Positive role interdependence.* The group distributes different roles and responsibilities among members, where each individual has a specific role to fulfill that contributes to the overall success of the group. Positive role interdependence fosters cooperation, coordination, and a sense of value and contribution within the group.

To ensure accountability, strategies like assigning individual roles, setting clear expectations, and providing specific criteria for evaluation can be employed. Holding each

learner accountable for their contributions fosters a sense of responsibility and motivates active participation. You can give learners opportunities to choose their roles within the group. Figure 5-5 shows some ideas of responsibilities that could be a starting place for choosing roles within groups.

Figure 5-5. Group Roles and Responsibilities

Created by Alison McMurry, 2023, CC-BY 4.0

Establish Group Norms

Groups should establish a positive and respectful group climate, promote active listening, and provide guidelines for effective communication. You will want each group to establish their **group norms**. Group members should discuss and agree upon the following norms. These guidelines are important contributors to group-work success:

- **Workload.** Establish each individual's workload and assigned content. Determine an appropriate balance.
- **Communication.** Decide how participants will communicate with each other, including what media platforms they will use (LMS, email, text, etc.).
- **Timing.** Discuss the reasonable expectation of response time from group members. Create a timeline for intermediate tasks with agreed-upon interim and final deadlines.

Encourage synchronous and asynchronous interactions. Synchronous interaction can facilitate immediate feedback and spontaneous exchange of ideas. Asynchronous interaction allows for flexibility and accommodates different schedules. In a blended class, strike a balance between both modes, utilizing synchronous interactions for critical discussions and collaborative tasks, while using asynchronous platforms for ongoing communication and individual contributions.

In addition, group processing sessions at regular intervals allow members to discuss their experiences, identify areas for improvement, and develop strategies for better collaboration. The frequency of these sessions may vary based on the length and complexity of the task. The instructor will need to facilitate these processing sessions to help learners debrief, refocus, and reconnect.

Avoid Common Challenges

“GroupThink,” a phenomenon where group members conform to consensus without critical evaluation of ideas, can hinder effective decision-making and creativity. Strategies to avoid it include encouraging diverse perspectives, promoting constructive dissent, and assigning a devil's advocate role.

“Social loafing” is the tendency for individuals to assume they can exert less effort in a group setting. This challenge can be addressed by raising awareness among learners, promoting a sense of collective responsibility, and emphasizing the importance of individual contributions. Clear expectations regarding individual accountability and opportunities for individual recognition can also discourage social loafing tendencies; where appropriate, these considerations can be built into the activity rubric.

5.3.2 Engaging Discussion Groups

Blended courses often use discussion groups. Careful planning must go into the creation of discussion prompts and responses.

Create Engaging Discussion Prompts

Creating effective prompts plays a vital role in online discussions as they set the stage for engaging and worthwhile interactions. Video 5-4 presents some ideas on how to make online discussions more meaningful.

Video 5-4. Making Online Discussions Meaningful (2:01)

Watch on YouTube

To elicit discussion among learners, educators can employ different types of prompts to encourage diverse perspectives and critical thinking.

Convergent prompts focus on a specific answer or solution and aim to elicit consensus or agreement among participants. These prompts can help consolidate knowledge and provide a starting point for discussion.

Divergent prompts, on the other hand, encourage multiple perspectives and open-ended responses. They foster creativity, encourage the exploration of different viewpoints, and promote a deeper analysis of the topic.

Evaluative prompts invite learners to assess, critique, or evaluate a concept or idea, allowing them to demonstrate their analytical skills and ability to make informed judgments.

Table 5-1 presents some examples of how to encourage different types of thinking.

Table 5-1. Discussion prompt wording examples

	Convergent Thinking	**Divergent Thinking**	**Evaluative Thinking**
	Usually begins with: • Why • How • In what ways...	Usually begins with: • Imagine • Suppose • Predict • If... then... • How might... • Can you create... • What are some possible consequences...	Usually begins with: • Defend • Judge • Justify • What do you think about... • What is your opinion...
Marketing Class Examples	What is the primary goal of a market segmentation strategy?	Share an example of a company's marketing strategy that adapted to changing trends.	Evaluate the ethical implications of targeted advertising.
Psychology Class Examples	Where are the main stages of memory?	How does culture influence personality development?	What are the strengths and weaknesses of cognitive-behavioral therapy?
Computer Science Class Examples	What is the purpose of a computer in programming?	What are the potential future applications of artificial intelligence?	Assess the advantages and disadvantages of cloud computing.

Graham et al., 2019. Accessed under a CC BY-SA License

By incorporating a mix of convergent, divergent, and evaluative prompts, you can create well-rounded discussions that stimulate critical thinking, encourage active engagement, and promote a deeper understanding of the subject matter. In addition, open-ended questions encourage learners to use higher-order thought processes. Put effort into creating good discussion questions.

Provide Discussion Guidelines

The structure, content, flow, and timing of online discussions play a crucial role in their success. See this further explained in Table 5-2 below.

Table 5-2. Characteristics of Online Posts

Category	Factor	Suggestions
Structure	Length	Communicate your expectations for the length of posts and responses. It might be different for each assignment depending on the purpose and focus of the discussion. Remember that learners do better with reading and responding to shorter posts.
	Style	Communicate your expectations for the tone of posts and responses. The tone can be informal and conversational, but still academic in nature.
	Formatting	Communicate your expectations for the formatting of posts and responses. Make it simple and easy. Perhaps include the learners in setting these standards.
Content	Requirements	Communicate your expectations for the content of posts and responses, especially if you want them to include sources or references. Keep it simple and easy! The more complex it is to respond, the less likely

		the learners are to stay engaged over an entire semester.
Flow	Replies	Communicate your expectations for the flow of posts and responses. Make sure the learners know who to respond to. You could ask them to respond to everyone, or a small group, or to the posts directly before and after theirs, or any other scheme you like. However, consider cognitive load when setting these guidelines.
Timing	Due Dates	Clear due dates should be provided to ensure learners understand the expectations and can plan their participation accordingly. Additionally, there should be sufficient time between the initial post and the required response, allowing learners to thoroughly engage with their peers' contributions and provide thoughtful feedback. By allowing for a reasonable timeframe, educators can encourage in-depth discussions and create a supportive learning environment where everyone has the opportunity to receive peer feedback.

Graham et al., 2019. Accessed under a CC BY-SA License

Tables 5-3 and 5-4 below show examples of discussion prompts and a range of examples of (1) group size, (2) feedback structure, and (3) timing/flow.

Table 5-3. Group Size and Responses

Not Good	In the class (of 20-30 people) discussion page, explain what you felt when you read the article from the *Washington Post*. Then read and respond to the other posts. *Feedback*: Too big of a group means they won't read everyone's ideas and their responses will be superficial.
Good	In your reading partner (2-3 people) discussion page, describe what you felt when you read the article from the *Washington Post.* Then read and respond to all other group members. *Feedback*: Too small of a group means there won't be enough responses for diversity of thought.
Better	In the class (20-30 people) discussion page, first explain what you felt when you read the article from the *Washington Post,* and then read and respond to five class members' responses. *Note* look for the posts with the fewest responses. We want every post to get responses.* *Feedback:* This narrows the scope of their response to a manageable number, but might result in some learners' posts being ignored.
Best	In your discussion group (5-7 people) discussion page, explain what you felt when you read the article from the *Washington Post.* *Feedback:* A mid-sized group allows for diversity of thought with a manageable number of posts and every post will receive responses.

Graham et al., 2019. Accessed under a CC BY-SA License

Notice the better and best examples both target approximately 5 responses. This is the sweet spot of responses. It allows for depth of responses to a few posts and is large enough to hopefully produce diverse thoughts.

Table 5-4. Timing and Flow

Not Good	In your group (5-7 people) discussion page, explain what you felt when you read the article from the *Washington Post.* Your post should be about one paragraph in length. Then respond to your group members'

	posts. Find something about each post that you can challenge, pushing them to consider other points of view. Be courteous in your response. Our aim is NOT to argue, but to encourage deeper thinking. *Feedback*: When is the initial post due? When is the response due?
Good	Before class, in your group (5-7 people) discussion page, explain what you felt when you read the article from the *Washington Post*. Your post should be about one paragraph in length. Then respond to your group members' posts. Find something about each post that you can challenge, pushing them to consider other points of view. Be courteous in your response. Our aim is NOT to argue, but to encourage deeper thinking. *Feedback*: The due date is before class... which is very vague. Most learners will submit their initial post before class and there won't be time for responding.
Better	By Tuesday, in your group (5-7 people) discussion page, explain what you felt when you read the article from the *Washington Post*. Your post should be about one paragraph in length. Then, on Thursday, respond to your group members' posts. Find something about each post that you can challenge, pushing them to consider other points of view. Be courteous in your response. Our aim is NOT to argue, but to encourage deeper thinking. *Feedback:* This is better, but still somewhat vague. When on Tuesday? When on Thursday?
Best	By Tuesday night, in your group (5-7 people) discussion page, explain what you felt when you read the article from the *Washington Post.* Your post should be about one paragraph in length. Then, by noon on Thursday, respond to your group members' posts. Find something about each post that you can challenge, pushing them to consider other points of view. Be courteous in your response. Our aim is NOT to argue, but to encourage deeper thinking.

	Feedback: These are clear guidelines for posting and responding.

Graham et al., 2019. Accessed under a CC BY-SA License

Overall, it is worth the investment of time and energy to plan and facilitate effective learner-learner interactions.

✏️ Chapter 5 Blueprint Challenge

Blueprint Challenge Community Activities Part 2.

Open your community activities document.

Read the directions for Part 2: Plan engaging learner-learner interactions. Review the example. Then fill in the table with your ideas.

5.4 Designing Community-Based Activities with an Online Component

One important aspect of blended learning is comparing the advantages of forms of communication and making informed decisions for each assignment. **Synchronous** communication is that which occurs in real time, such as telephone conversations, video conferences, or in-class discussions. **Asynchronous** communication is that which does not occur in real time, such as an email thread, an online discussion board, or receiving voice mail. Both are useful in blended settings and instructorts must be purposeful in what they choose.

Learning Outcome: I can intentionally design community-based activities with an online component for my blended course.

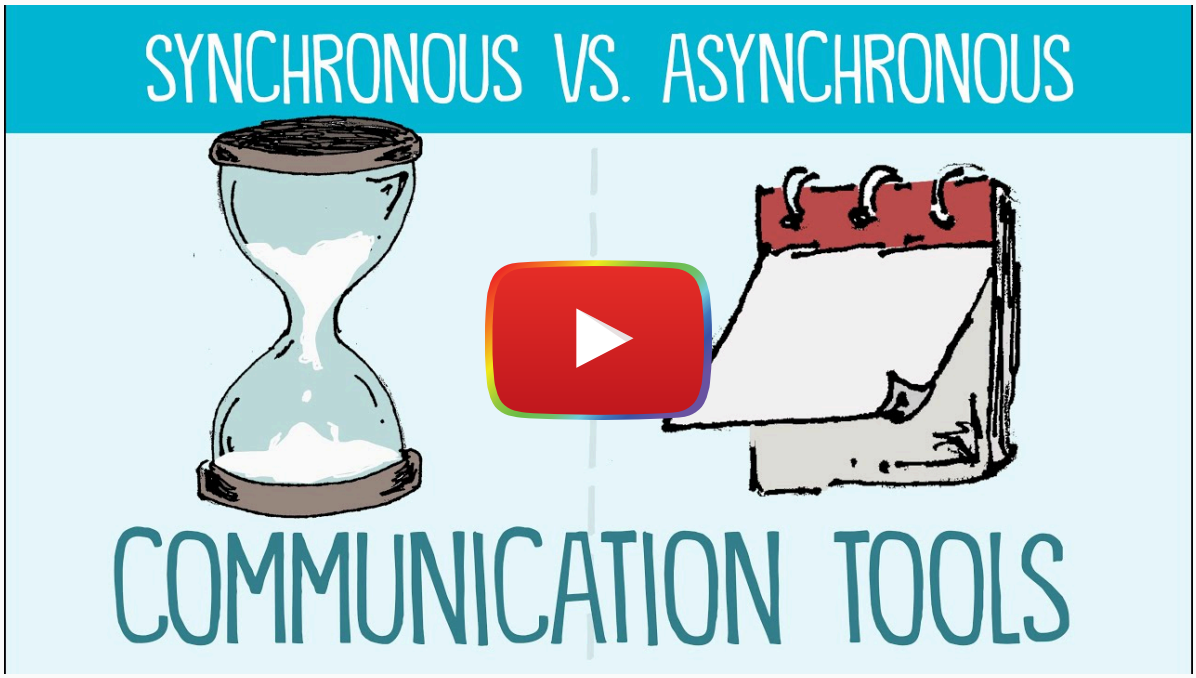
Assessment: Blueprint Challenge Community Activities Part 3

5.4.1 Synchronous and Asynchronous Tools

Asynchronous and synchronous tools play distinct roles in fostering learner community engagement within the context of blended learning. By leveraging both asynchronous and synchronous tools, blended learning environments can provide learners with diverse opportunities to engage with their peers, build relationships, and cultivate a sense of

community, ultimately enriching their learning experiences. See this further explained in Video 5-5 below.

Video 5-5. Synchronous and Asynchronous Communication Tools (2:50)



Watch on YouTube

Asynchronous tools, such as discussion boards and online forums, provide flexibility for learners to participate at their own pace and convenience. They enable learners to engage in thoughtful discussions, share insights, and provide feedback, even if they are not online simultaneously. These tools create a space for in-depth interactions and encourage collaboration beyond traditional classroom boundaries.

On the other hand, synchronous tools, such as video conferencing and real-time chat, facilitate immediate communication and foster a sense of real-time presence among learners. These tools can be utilized for virtual meetings, live discussions, and group activities, enabling learners to connect synchronously and engage in spontaneous exchanges that enhance the feeling of community and collaboration. Table 5-5 lists some tools you can use.

Table 5-5. A few examples of tools you can use

Communication Tools	Document Sharing Tools	Digital Whiteboard Tools
• Google Meet • WhatsApp	• Canva • Box	• Jamboard • Miro
Collaboration Platforms	**Quiz/Poll Tools**	**Simulation/Game Tools**
• Nearpod • Trello	• Poll Everywhere • Kahoot!	• Blooket • Sli.do

You can learn more by reading *Online Tools for Teaching and Learning* by Torrey Trust.

5.4.2 Comparing Synchronous and Asynchronous Online Interactions

We must understand the strengths and limitations of these interactions and how we use them to benefit learning. For example, many blended courses use discussion boards, but some discussions would be better in-person. Instructors must weigh their strengths and weaknesses and make decisions based on the hoped-for outcome of the learner-learner interaction. Table 5-6 discusses some of the strengths and weaknesses of asynchronous discussion boards compared with the strengths and weaknesses of synchronous in-class discussions. As you study the table, consider how you will make mindful decisions about the use of modalities.

Table 5-6. Comparing Discussion Environments

	Asynchronous Text-Based Discussion	Synchronous In-Class Discussion

Strengths	• Flexible in terms of time and place learners can access the discussion. • Inclusive because all learners can contribute in similar ways to the discussion. • Considered responses are more common because learners have time to think deeply before responding.	• Human connection is possible because learners are together. They can have casual conversations before and after class (and sometimes during). They can share snacks (if they are in person). In general, we respond better to face-to-face interactions. • Spontaneous discussions are possible because learners are together in real-time and can respond to nonverbal cues, such as facial expressions and body language.

Weaknesses	• Lack of spontaneity because the exchange is not happening in real time and learners are more likely to send carefully considered and crafted responses. • Procrastination is likely. Many learners wait until just before the deadline to post or respond. This can be mitigated by having deadlines for initial posts that are a day or two earlier than deadlines for responses. • Lack of human connection because they are responding to names and words instead of faces and nonverbal cues. This could be mitigated by having learners record and post video responses from time to time.	• Inflexible: There is only one time and place that learners can participate. • Exclusive because class time is limited, and some learners are more vocal, so not all learners can participate at the same level. This could be mitigated by having small group discussions in class which would allow everyone to participate more equally. • Considered responses are less likely because learners are usually responding on the spot. This could be mitigated by having learners prepare thoughts before class or giving them time to prepare in class before having a discussion.

Graham, 2006

Conclusion

This chapter has prepared you to create community-based activities for your blended course. You have planned learner-instructor interactions and learner-learner interactions. Now create one community-based activity for your course. Consider everything you have learned in this chapter as you plan interactions to support learner engagement.

✏️ Chapter 5 Blueprint Challenge

Open your Community Activities document.

Read the directions for Part 3: Designing community-based activities with an online component.

Review the example. Then fill in the table with your ideas.

In Chapter 2, we started talking about your syllabus. Just like with your assessments, major assignments will be summarized in one section of your syllabus, and assignments listed in the course calendar.

And finally:

👷 Course Checklist Part 1: Design

Step 5 Plan Community Activities

Open your course checklist. Read the directions for Step 5 Plan Community Activities. Then complete the assignment with your ideas. Check the completion box.

References

Borup, J., Graham, C. R., West, R. E., Archambault, L., & Spring, K. J. (2020). Academic Communities of Engagement: An expansive lens for examining support structures in blended and online learning. *Educational Technology Research and Development,* 68(2), 807–832. https://doi.org/10.1007/s11423-020-09744-x

Garrison, D. R. (2017). *E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice* (3rd Edition). London: Routledge/Taylor and Francis.

Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 3–21). Pfeiffer Publishing.

Graham, C., Borup, J., Short, C., and Archambault, L. (2019). *K-12 Blended Teaching: A Guide to Personalized Learning and Online Integration.* https://edtechbooks.org/k12blended. CC BY-SA License.

Graham, C. R., & Misanchuk, M. (2004). Computer-mediated teamwork: Benefits and challenges of using teamwork in online learning environments. In T. S. Roberts (Ed.), *Online collaborative learning: Theory and practice* (pp. 181-202). Hershey, PA: Idea Group, Inc.

Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and competition: Theory and research. I*nteraction Book Company.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review,* 50(4), 370–396. https://doi.org/10.1037/h0054346

Moore, M. (1989). Three types of interaction. *American Journal of Distance Education,* 3(2), 1-7.

Stoddard, O., Karpowitz, C., and Preece, J. (2020) Strength in Numbers: A Field Experiment in Gender, Influence, and Group Dynamics. IZA Discussion Paper No. 13741, *Institute of Labor Economics.* http://dx.doi.org/10.2139/ssrn.3704122

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Massachusetts: Harvard University Press.

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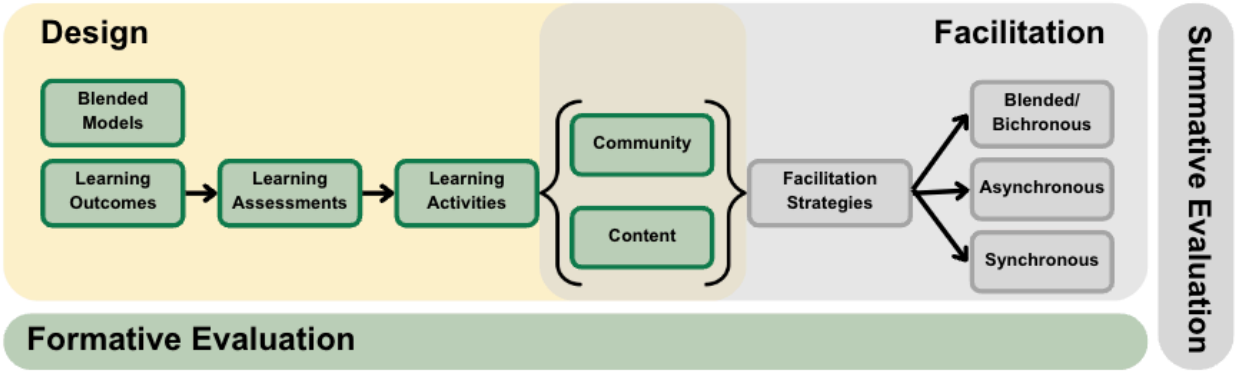
6

Learner-Content Activities

The next step in our framework is to design learner-content activities. As always, formative evaluation will be conducted to help you thoroughly think through your design decisions.



Created by Charles Graham CC BY

Chapter Learning Outcome: I can create content-based activities for my blended course.

Sub-section outcomes:

- I can plan effective learner-content interactions that align with my outcomes and assessments. (Section 6.1)
- I can create opportunities for learners to choose their goals, pace, and/or path as they interact with the learning activities. (Section 6.2)
- I can present content-based activities with appropriate cognitive pacing to increase learner engagement in my blended course. (Section 6.3)

✏️ Chapter 6 Blueprint Challenge

You will use the skills presented in this chapter to develop content-based activities for your blended course.

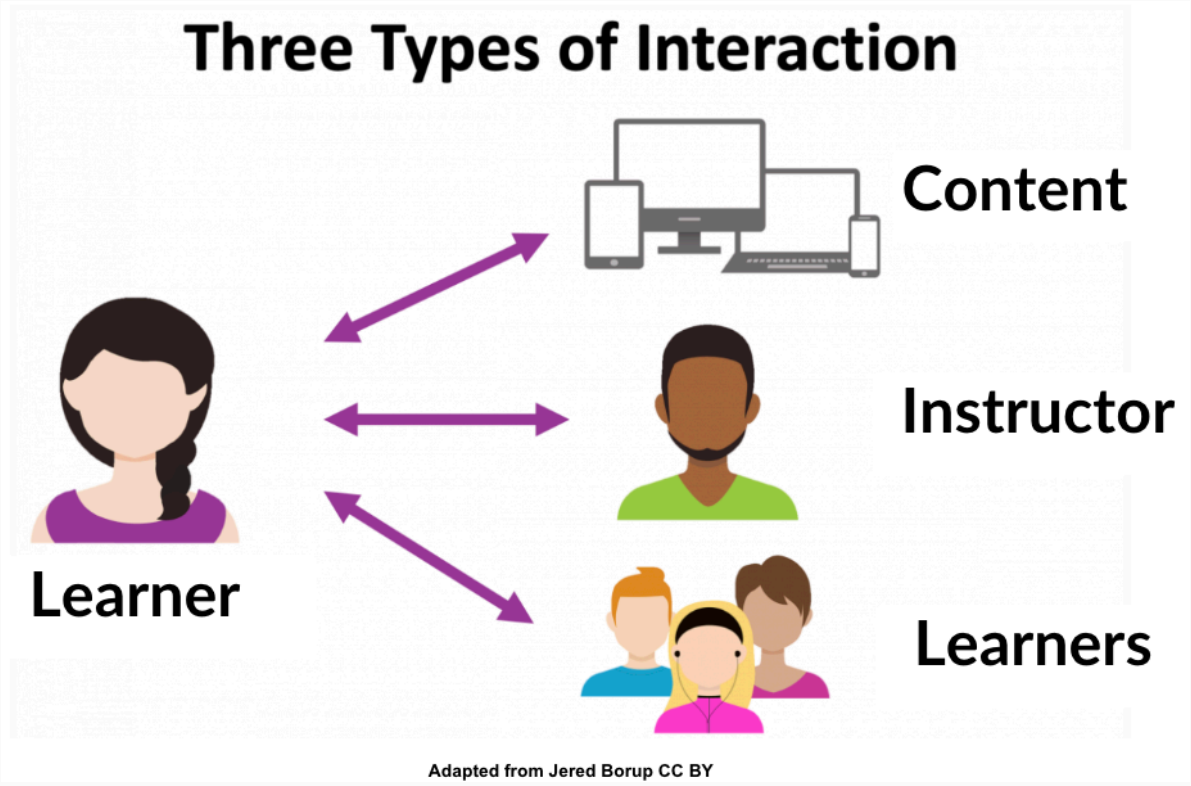
Open the Content Activities Template and save a copy. Label the copy Your Name Content Activities (Example: Hyun Joo Content Activities.)

Some sections of this chapter guide you to complete a part of your content-based activities. You will finish your activity plans at the end of Chapter 6.

6.0 Introduction

Remember that Moore (1989) focused on models of interactivity between learners, instructors, and content as key elements of meaningful engagement and learning.

Figure 6-1. Three Types of Learner Interactions



Adapted from Jered Borup CC BY 2.0.

We already talked about learner-instructor and learner-learner interactions in Chapter 5.

Learner-content interaction occurs when learners engage with learning materials through reading, listening, watching, reflecting, writing, manipulating, mapping, and/or problem-solving. That is what we are going to talk about in this chapter.

Content-based activities in blended learning refer to instructional strategies and tasks that are designed to engage learners with the subject matter or content being taught. These activities focus on delivering the core content of the course or curriculum in a meaningful and interactive manner.

Learner-content interactions play a vital role in creating engaging, personalized, and effective learning experiences. These interactions stimulate cognitive processes and higher-order thinking skills, like critical thinking and problem-solving. Ideally, learner-content interactions support the transfer of learning by providing opportunities for applying knowledge to real-world contexts, enhancing learners' ability to use what they have learned in practical situations. We will explore strategies to engage learners with

course content, including the integration of multimedia tools and the creation of personalized options.

6.1 Aligning Activities with Outcomes and Assessments

In backwarddesign, learning activities are the last elements to consider when we talk about alignment. We started with creating a learning outcomes map that defines what learners will be able to do by the end of the course (or unit or lesson). Then we designed an assessment plan to measure how learners achieve the outcomes. Now we need to plan activities and lessons that align with the outcomes and assessments. These activities need to guide learners to accomplish the outcomes and perform well on the assessments.

Learning Outcome: I can plan effective learner-content interactions that align with my outcomes and assessments.

Assessment: Blueprint Challenge Content Activities Part 1.

6.1.1 PICRAT Part 1

The PICRAT model (see Video 6-1 below) provides a framework for planning and evaluating the use of technology to enhance learner-content interaction. In this chapter, we focus on PIC, which is the progression from passive to interactive to creative learning activities, helping learners to become increasingly active participants in the learning process. PICRAT Part 2 is in Chapter 7, where we will discuss RAT.

As you design learning activities, consider to what degree you want learners to take responsibility for their own learning and develop higher-order thinking skills.

Video 6-1. PICRAT Model (4:33)

Watch on YouTube

Passive learning activities are characterized by low levels of learner engagement and interaction with the content. In this mode, the learners' role is primarily to receive and absorb; they do not actively participate or contribute to the learning process. Examples of passive learning activities include reading textbooks, listening to lectures, or watching educational videos. These often require lower-order thinking, as described in Bloom's Taxonomy.

Here are some examples of passive learning activities in a computer science course and a Shakespearean literature course:

- Computer Science Course — Watching a video lecture on programming concepts.
- Shakespearean Literature Course — Reading an analysis of a Shakespearean play.

Interactive learning activities involve higher levels of learner engagement and interaction with the content, materials, or resources provided. Learners might solve problems, complete exercises, or participate in interactive online modules that require them to actively engage with hands-on exercises, simulations, videos, animations, virtual experiments, or other practical applications. These activities could involve either lower-order or higher-order thinking, depending on the activity, but as learner-content

interactions become more interactive, they usually involve more higher-order thinking skills.

Here are some examples of interactive learning activities in a computer science course and a Shakespearean literature course:

- Computer Science Course — Participating in a virtual coding lab.
- Shakespearean Literature Course — Participating in a virtual tour of Shakespeare's Globe Theatre.

Creative learning activities represent the highest level of engagement and involvement in the PICRAT model. In this mode, learners not only interact with the content but also generate new ideas, synthesize information, and apply their knowledge in innovative ways. Examples of creative learning activities include project-based assignments, research projects, design challenges, or presentations. These often require higher-order thinking.

Here are some examples of creative learning activities in a computer science course and a Shakespearean literature course:

- Computer Science Course — Programming a short "Choose Your Own Adventure" game.
- Shakespearean Literature Course — Using descriptive AI prompts to generate an appropriate costume or set design for a scene from a play.

6.1.2 Explore Ideas for Activities

As you plan activities, incorporate a variety of formats and platforms to engage learners with your course content.

- Use real-world examples, such as case studies or scenarios.
- Include text-based resources, multimedia materials (videos, podcasts, interactive presentations), infographics, or simulations.
- Incorporate quizzes, polls, discussions, case studies, problem-solving exercises, reflection journals, or virtual simulations.
- Utilize learning management systems (LMS), virtual labs, digital resources, online research, collaborative tools, or multimedia creation tools to facilitate content delivery, interaction, and exploration.

Bonk and Khoo have provided a free online book, *Adding Some TEC-VARIETY: 100+ Activities for Motivating and Retaining Learners Online*, which has 100 practical examples

of technology-supported activities. Many of the ideas represent learner-content interactions that can be done in an online or blended class. Here is a downloadable summary of these activities.

6.1.3 Alignment Table

You must design activities that are directly aligned with the learning outcomes and assessments. The need for alignment may seem obvious, but it is not uncommon for courses to get out of alignment, especially over multiple iterations of a course. As you align activities with your learning outcomes and assessments, consider Bloom's Taxonomy to help guide your choices. Keep in mind that higher-order outcomes require activities that promote higher-order thinking. You can use an alignment table to articulate the relationship between your desired learning outcomes, assessments, and activities you are choosing. Table 6-1 shows an example of alignment of outcomes, assessments, and activities in a Shakespearean literature course. We looked back at our learning outcomes map (Chapter 3 Blueprint Challenge) and assessment plan (Chapter 4 Blueprint Challenge) to fill in those columns of the table.

Example context: *In this unit, learners will read, discuss, and demonstrate learning about themes and characters in Shakespeare's Hamlet.*

Table 6-1. Unit Alignment Chart

Learning Outcomes	Formative and Summative Assessments	Potential Learning Activities	Timeline from Assessment Plan

Unit Learning Outcome: Learners will create and present a project that shows their understanding, application, and evaluation of character themes in *Hamlet*.		Instructor micro-lecture outlining major themes (passive, video). Read *Hamlet* and fill in graphic organizer (interactive, text). Watch specific scene clips of *Hamlet* (passive, video). Discuss themes and characters (interactive).	First, second, and third weeks of March.
Supporting Outcomes: Learners will understand basic themes in Shakespeare's *Hamlet*. *Bloom's Taxonomy—Understand.*	**Formative**: Break the choice board project into segments: • Part One: Identify and explain theme. *Bloom's Taxonomy—Understand.*	Jigsaw "learn and present" discussion activity and create infographics (interactive, creative, verbal, visual)	Fourth week of March.
Learners will choose one of the themes and compare/contrast a main character from *Hamlet* (List 1) with a character	• Part Two: Illustrate the theme with a character from *Hamlet* (choose from List 1). *Bloom's Taxonomy—Apply.*	Pair and share to brainstorm ideas (interactive). Mind mapping (creative).	First week of April.

from a different story (List 2) in the context of that theme. *Bloom's Taxonomy—Apply and Analyze.*		Pair and share for reflection/feedback (interactive).	
	• Part Three: Compare with a character from a different story/movie/genre (choose from List 2). *Bloom's Taxonomy—Analyze.*	Pair and share to brainstorm ideas (interactive). Mind mapping—compare and contrast (creative). Instructor/TA conferences for reflection/feedback (interactive).	Second week of April.
Learners will determine which of the two characters did a better job within that framework (opinions must be supported with information from the texts). *Bloom's Taxonomy - Evaluate.*	• Part Four: Who did better? *Bloom's Taxonomy—Evaluate.*	Pair and share to brainstorm ideas (interactive). Find textual support for opinion (active). Create an outline for the project (creative).	Third week of April.

	Summative: A project would be best. It is authentic, renewable, encourages academic integrity, and allows tailoring to each learner's strengths. We will turn it into a choice board so learners can choose what type of project they will do. They will present the projects to the class. They will receive an evaluation of the project from themselves, peers, and instructor. *Bloom's Taxonomy—Create.*	Time-constrained presentations (Pecha Kucha-style) • View examples of Pecha Kucha presentations (interactive). • Create draft presentations (creative). • Practice the presentation (creative).	Fourth week of April and first week of May.
		• Final presentations (interactive). • "Best of" nominations as peer evaluation (interactive). • Personal reflection as self-evaluation (active).	Second and third weeks of May.

Doing this will help you accomplish your learning goals.

✏️ Chapter 6 Blueprint Challenge

Blueprint Challenge Content Activities Part 1.

Open your content activities document.

Read the directions for Part 1: Align Activities with Outcomes and Assessments. Review the example. Then fill in the table with your ideas.

6.2 Personalized Learning

It is important to design appropriate learner-content interactions. We want to stimulate interest and facilitate learning without overloading the brain. However, every learner has a slightly different cognitive capacity. And an individual learner can have good days and bad days. How do we account for variations in cognitive capacity?

Blended teaching allows us to shift from instructor-led practices —in which the instructor determines what should be learned, when it should be learned, and how it should be learned— to more learner-centered practices that give learners power over their learning journeys.

Learning Outcome: I can create opportunities for learners to choose their goals, pace, and/or path as they interact with the learning activities.

Assessment: Blueprint Challenge Content Activities Part 2.

Personalization (see Figure 6-2 below) gives the learners some control over customizing the goals, time, place, pace, and/or path of their learning experience. Technology has made it easier than ever to personalize learning. Through the integration of online learning programs or learning management systems and the use of data, you can help learners learn in ways that align with their interests and goals. Personalization involves two core ideas:

1. Customization: Tailoring/customizing the learning experience to the individual learner's needs and interests.
2. Learner Control: Giving learners some element of control over their own learning experience.

Figure 6-2. Five Dimensions of Personalization

https://edtechbooks.org/k12blended/personalizing_instruction

Personalization gives learners more power, but instructors are usually best suited to make decisions that guide learning. Personalization simply allows instructors to emphasize what we have always known—learning is personal.

In Video 6-2, notice how personalization changes the experiences of learners.

Video 6-2. Basic Personalization Practices (2:27)

Watch on YouTube

Personalized Learning Activities

One of the most common ways instructors implement personalized learning is by giving learners flexibility in the paths they take through learning activities. This section will focus on two ways of personalizing learning activities:

1. Creating playlists and choice boards.
2. Using software with adaptive pathways.

A third way --grouping learners strategically-- was discussed in Chapter 5.

6.2.1 Creating Learning Playlists and Choice Boards

Learning playlists and choice boards are common ways that instructors allow learners to choose their path through a group of learning activities related to a specific concept or skill. Both of these approaches provide learners with a limited range of options focused on a specific learning outcome.

Much like a music playlist, a learning playlist is a group of learning activities ordered in a linear sequence.

The instructor most often curates playlists around a specific learning outcome. However, sometimes learners are given the ability to create their own playlists from a pool of activitiesf. Digital learning playlists almost always provide the instructor with options for personalization around time, place, or pace. Some playlist options allow personalization around path. Learners can progress through a learning playlist using different approaches:

- Learners complete all activities in the playlist in a specified order without a specified timeline (path is not personalized).
- Learners complete select activities from a list based on pre-assessment performance data (path is differentiated but not personalized).
- Learners complete all activities in the playlist but may choose the order of completion (path is personalized).
- Learners complete required activities and have other activities that they can choose to do for additional review, practice, or enrichment (path is personalized).
- Learners can choose the number and sequence of activities they complete until they reach mastery on the assessment (path is personalized).

Table 6-2 is an example of a learning playlist from a Marketing 101 course.

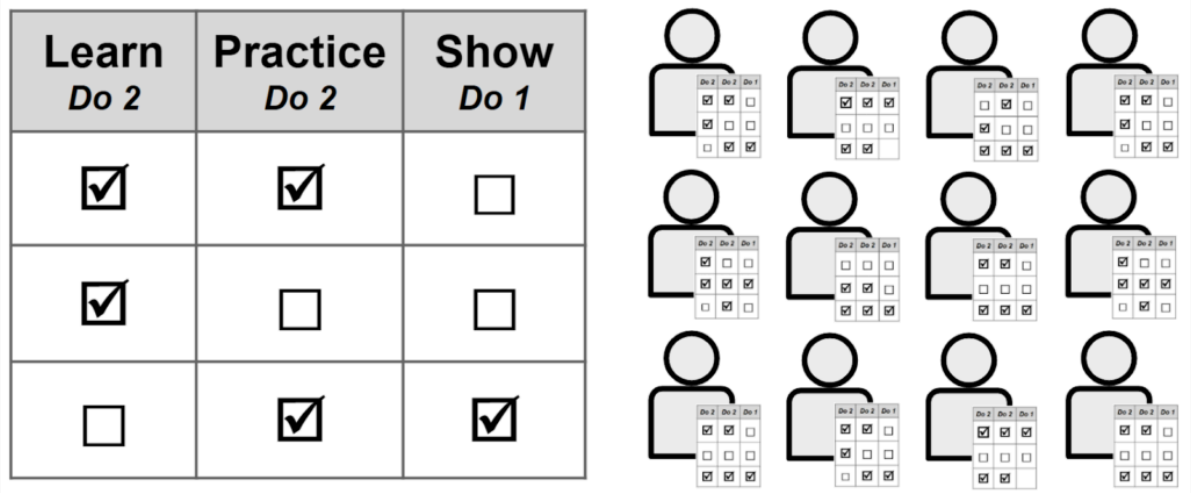
Table 6-2. Learning Playlist

Marketing 101 Project Playlist: Product Development and Branding Unit. Complete playlist items 1-5 to practice the unit's five learning goals. Some assignments require a specific task; others have options to choose from.

1. Understand the product development process. Required Activity: Product Development Timeline Activity.
2. Apply branding strategies to create and position a brand. Required Activity: Branding Case Study Discussion Board.
3. Analyze market trends and consumer preferences. Choose One: Trend Analysis Exercise or Consumer Survey Mini-Project.
  ◦ Option A: Trend Analysis Exercise
  ◦ Option B: Consumer Survey Mini-Project
4. Develop effective marketing strategies for new product launches. Required Activity: Social Media Marketing Plan.
5. Evaluate the success of product development and branding efforts. Choose One: Product Feedback Analysis or Brand Perception Survey.
  ◦ Option A: Product Feedback Analysis
  ◦ Option B: Brand Perception Survey

Choice boards or menu boards share the purpose with playlists of providing learning path options to learners (see Figure 6-3 below for an example). However, often choice boards are organized intentionally in rows and columns. For example, tasks in columns might be organized based on learning preferences or content categories while rows are organized by difficulty or a variety of options to achieve learning objectives.

Figure 6-3. Choice Boards and Personalization



https://avidopenaccess.org/resource/incorporate-playlists-into-blended-learning/#section1

Figure 6-4 is an example of a choice board from a Math Education course.

Figure 6-4. Example Choice Board

CHOICE BOARD

FORMATIVE ASSESSMENT

Essential Question: *How can I use* ***formative assessments*** *to address a variety of student needs in the classroom?*

Directions: Choose and complete activities from three different colored boxes. Be prepared to share and connect what you are learning. Enjoy!

CITE EVIDENCE Read the excerpt from Principles to Actions and cite evidence where you see the purposes of formative assessments: motivating, supporting, and improving student learning and instruction.	**WRITE 3 QUESTIONS** Read the excerpt from Principles to Actions and write 3 questions. A question that... 1. can be answered in the text. 2. you would like to ask someone else. 3. captures something the text made you wonder about..	**RESEARCH** Research the benefits of formative assessments. You may use any of the links below, or find your own resources. NCTM, PowerSchool, ASCD Record your findings in this google form.
SORTING BELIEFS In pairs, 1. Sort the beliefs into two categories: productive/unproductive. 2. Choose one productive and one unproductive belief. 3. Create a brief scenario (script, video, act out) that demonstrates how those beliefs influence teacher decisions.	**GET CREATIVE** Using your student work samples, design a learning experiences that incorporates at least 3 things you know about formative assessments. Show how this learning experience surfaces and/or builds on students' current mathematical thinking. Before you present, determine what feedback you would like about your product.	**RE-ENGAGEMENT LESSON** Using 5 post-it notes (one idea per post-it), summarize the key components of a re-engagement lesson. Planning a Re-engagement Lesson
RE-TEACHING VS. RE-ENGAGEMENT In pairs, 1. Sort the ideas into two categories. 2. Compare the ideas in each category. What do you notice? 3. Check answers. Discuss questions and surprises.	**MY FAVORITE NO** Watch the video and answer the questions: 1. How does this strategy motivate, support, and improve student learning and instruction. 2. What modifications would you make to fit your classroom/students?	**HIGHLIGHTING MISTAKES** Watch the video and answer the questions: 1. How does this strategy **reveal** emerging student understandings, **inform** instruction, **provide opportunities** for all students to both rethink and build on productive ideas? 2. What modifications would you make to fit your classroom/students?

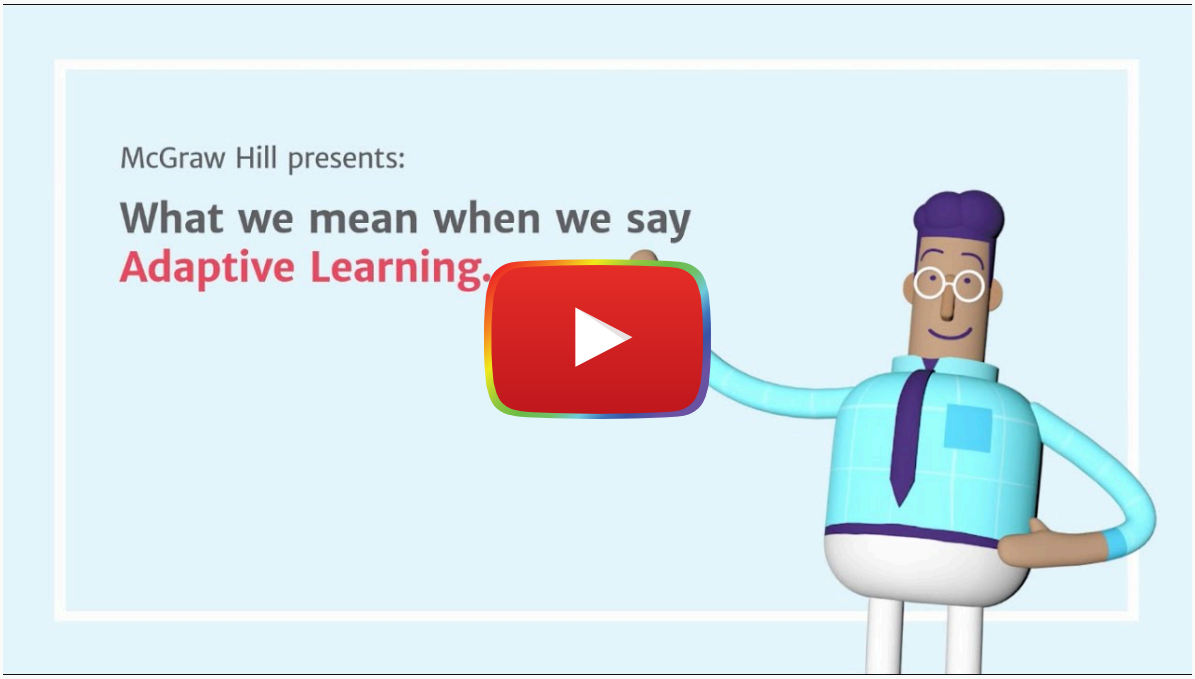
Developed by Jen Tanis, Sarah Lwanga, and Steve Morris, TOSA, Riverside USD.

6.2.2 Using Software with Adaptive Pathways

Personalization can also happen with learners using adaptive learning software. Most adaptive learning software determines the learning path for the learners based on individual needs and performance. This is a kind of differentiation that would be very difficult and time-consuming for an instructor to do for every learner in a class. When learners use the learning software, they are typically able to make other personalization choices about pace as well as time or place of learning.

Adaptive Learning Software uses computer algorithms to deliver a customized path through learning activities for learners based on their needs and past performance. The use of adaptive software in classrooms is becoming increasingly common. Video 6-3 explains the principles associated with adaptive learning.

Video 6-3. Adaptive Learning (1:14)



Watch on YouTube

Personalized learning paths are one of the greatest strengths of blended courses.

✏️ Chapter 6 Blueprint Challenge

Blueprint Challenge Content Activities Part 2.

Open your content activities document.

Read the directions for Part 2: Personalized Learning Activities. Review the example. Then fill in the tables with your ideas.

6.3 Cognitive Load Theory

When designing content, it's important to consider how learning happens. If a learner is understimulated, boredom could result and learning might not occur. If a learner is

overstimulated, burnout could be a result and learning might not occur. We need to hit the sweet spot in Vygotsky's Zone of Proximal Development.

Learning Outcome: I can present content-based activities with appropriate cognitive pacing to increase learner engagement in my blended course.

Assessment: Blueprint Challenge Content Activities Part 3.

6.3.1 Types of Cognitive Load

Video 6-4 explains how the brain processes information and explains why instructors must be aware of cognitive load theory.

Video 6-4. Learner-Content Interaction and Cognitive Load (2:19)

Watch on YouTube

The video explained intrinsic and extraneous loads, and gave several suggestions for how to reduce cognitive load.

Intrinsic cognitive load involves the difficulty or complexity of the content itself. This factor cannot be changed about a subject, but it can be mitigated through effective

planning, teaching, and materials. The other two types of cognitive loads represent two paths instructors can take in their classrooms.

Extraneous cognitive load involves the difficulty or complexity of how the content is presented. Difficult materials make a difficult subject even harder.

Reducing Cognitive load involves the simplicity and clarity of how the content is presented. When the subject is appropriately chunked and scaffolded, schema is activated, materials are easy to use and understand, and student learning is facilitated. Remember learning about the 3 Ms: medium, modality, and method? Germane cognitive load explains why method is the most important factor impacting student learning. Using good teaching methods makes a difficult subject simple enough for cognitive processing.

6.3.2 Managing Cognitive Load

There are three ways to manage cognitive load.

1. Keep the **content** simple. Plan scaffolding into your lesson plan.

- One lesson = one topic.
- Chunk it into bite-sized pieces.
- Organize it carefully to support the learner through increasingly complex ideas or tasks.
- Activate or build schema.
- Prioritize main ideas.
- Be prepared to skip low-priority or off-topic ideas or tasks.

2. Keep the **delivery** simple. Plan pacing into your lesson plan. Video 6-5 below explains how you can introduce pacing into your classroom.

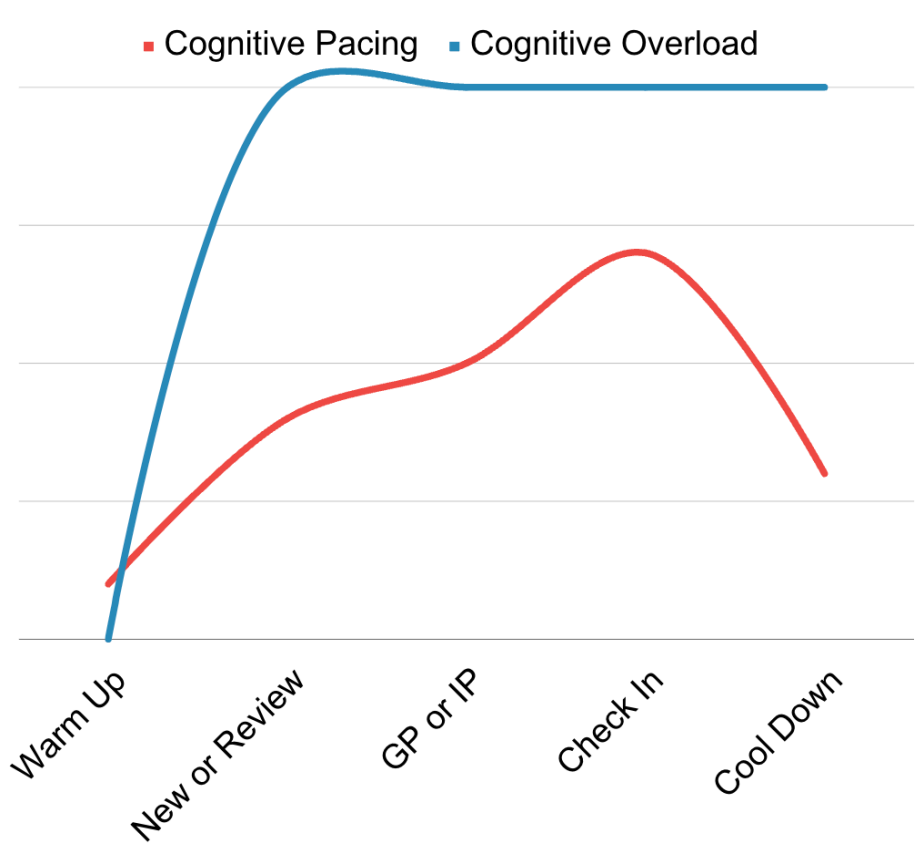
Video 6-5. Pacing in the Classroom (3:56)

Watch on YouTube

- Move from guided practice to independent practice to mastery.
- Change activities every 10-15 minutes.
- Vary the levels of instructor-talk vs. learner-talk.
- Vary passive and active tasks.
- Vary individual, small group, and large group activities.
- Schedule time for decompression, reflection, and metacognition.

Figure 6-5 below compares cognitive pacing and cognitive overload throughout the parts of a lesson. The blue line represents cognitive overload or extraneous cognitive load. The instructor skips a warm-up and goes straight into difficult content without scaffolding. The instructor expects mastery and high performance at all times. The learners quickly become overwhelmed and will either disengage or drop out. You can see that their cognitive energy, represented by the blue line, has no downtime. The pace is relentless and exhausting.

Figure 6-5. Cognitive Pacing vs. Cognitive Overload



Created by Alison McMurry CC BY 4.0

The red line represents cognitive pacing. The instructor plans the parts of the lesson carefully to include:

- Starting with a warm-up designed to build or activate schema, encourage positive transfer of previous knowledge or skill to the new lesson, and initiate positive learner-learner interactions.
- Presenting a short lesson that either presents new material or reviews previous material.
- Practicing with the new material.
  - GP stands for guided practice, which means working with the help of the instructor. This could include working on something as a whole class.
  - IP stands for independent practice, which means working without the help of the instructor. This could include individual or group work.
- Culminating in a check-in, which could include something as simple as a thumbs-up or thumbs-down from the learners to indicate their understanding, or as complex as the final exam. The purpose of the check-in is to determine if any concepts need to be retaught or if the learners are ready to move on.
- Ending with a cool-down activity designed to encourage reflection. This could be self-evaluation or class feedback. The goal is to have learners be aware of their learning performance or preferences and make plans for improvement. This time for reflection is important because it gives learners time to decompress from the lesson, encourages metacognition, and increases learners' self-regulation skills. The following video explains why reflection is important for cognitive pacing and deeper learning.

Notice that the red line of the graphic rises gradually, peaks, and then subsides, but ends slightly higher than the original starting point. The instructor plans scaffolding carefully, and gradually moves from lower-order skills and thinking to higher-order skills and thinking. The end point is higher than the start point because of the learning that occurred in this lesson. In the next lesson, the instructor can start at this new point, and that lesson ends slightly higher, and so forth. Over time, the learners' cognitive capacity and endurance grow to mastery of the new material.

Video 6-6 below explains how to use and introduce learner reflection.

Video 6-6. Encouraging Learner Reflection to Support Deeper Learning (2:44)

Watch on YouTube

3. Keep the **materials** simple.

- Avoid distracting fonts, colors, and graphics.
- Keep a lot of white space in visual material.
- Use numbering or other visual elements to guide the learners through the materials easily and in order.
- Keep video content between five and ten minutes in length.

Being aware of learners' cognitive load capacity helps you plan better learner-content interactions.

6.3.3 Planning Lessons

This section will explain how instructors plan lessons with engaging learner-content interactions, and a variety of styles and options, that are mindful of cognitive load.

- In section 6.1, we talked about the PIC part of PICRAT, ideas for activities, and alignment.
- In section 6.2, we talked about personalization.
- In section 6.3, we have talked about pacing.

Now we put it all together to plan lesson modules. Blended courses incorporate synchronous and asynchronous, online and in-person, individual and group work, and all of these modalities of learner-content interaction can be knit seamlessly together. Please note this is all part of the planning and design phase. We are not developing or implementing anything yet.

Review Table 6-1, the unit alignment chart and create a unit calendar. Next, chunk the unit into lesson topics and put the topics into the calendar. Table 6-3 shows an example of this.

Table 6-3. Unit and Lesson Calendar

Week of unit: Dates — Main Activity	Chunking into lesson segments
Week 1: March 1-7 — Read *Hamlet,* Act 1: Scene 1—Act 1: Scene 5.	Schema building, introduce graphic organizer, read scenes, watch movie clips, discuss scenes, characters, and themes.
Week 2: March 8-14 — Read *Hamlet,* Act 2: Scene 1—Act 3: Scene 3	Read scenes, watch movie clips, discuss scenes and characters.
Week 3: March 15-21 — Read *Hamlet,* Act 3: Scene 4—Act 4: Scene 4.	Read scenes, watch movie clips, discuss scenes and characters.
Week 4: March 22-28: Read *Hamlet,* Act 4: Scene 5—Act 5: Scene 2.	Read scenes, watch movie clips, discuss scenes and characters. Introduce themes. Introduce choiceboard project. Choose theme by March 29 and report in Canvas.
Week 5: March 29-April 4 — Explore and better understand chosen theme.	Group investigation and creation of infographics. Choose *Hamlet* character by April 5 and report in Canvas.
Week 6: April 5-11 — Analysis of *Hamlet* character.	Mind mapping. Discussion. Reflection. Choose another character by April 12 and report in Canvas.

Week 7: April 12-16 — Analysis of another character.	Mind-mapping. Discussion. Reflection.
Week 8: April 17-23 — Comparison of characters. Evaluate who did better.	Venn diagram. Find textual support. Find movie clips to support analysis. Create an outline for the project based on the required number of slides.
Week 9: April 24-30 — Choose presentation tool and create presentation.	View examples of Pecha Kucha presentations that use a variety of presentation tools. Choose presentation tool by April 26 and report in Canvas. Create presentation outline in the slide deck.
Week 10: May 1-7 — Work on presentation.	Add content to presentation. Practice giving the presentation.
Week 11: May 8-14 — Presentations.	Individuals present their work to the class. Class members have scoring cards and are required to take notes.
Week 12: May 15-21 — Presentations.	Individuals present their work to the class. Class members have scoring cards and are required to take notes. Class nominates and votes on "Best of" categories. Peers evaluate and give feedback on presentations. Individuals reflect and evaluate their own presentations. Class wrap-up of unit with reflections and feedback.

Next, retrieve your blended course rhythm from your Chapter 2 Blueprint Challenge. Plan each week of your blended course. Table 6-4 shows Week 1 for this *Hamlet* unit. Table 6-5 shows Monday's lesson plan.

Table 6-4. Hamlet Unit Week 1

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Frida**

Modality	In-Person Classroom	Asynchronous Online	Synchronous Online	Asynchronous Online	In-Pers Classro
Medium	Powerpoint, online textbook, film clips, handout	online textbook, film clips, online discussion board	Zoom, Jamboard, breakout rooms, online quiz	online textbook, film clips, online discussion board	Powerp onlin textbo film cli hando
Method	schema building, direct instruction, small group discussions, guided practice, independent practice	small group discussions, independent practice	group discussion and group quiz	small group discussions, independent practice	direc instruct small gr discussi guide practic format assessn
Content	Discuss background and overview of *Hamlet*. Introduce unit.	Discuss characters and themes.	Discuss scenes and characters, group quiz about the plot and characters.	Discuss characters and themes.	Discus scene charact and ther Individ quiz ab Act 1- compa differe film cli and determ which c is close the orig text.

Homework	Read Act 1 Scene 1, watch film clip, fill in graphic organizer.	Read Act 1 Scene 2, watch film clip, fill in graphic organizer.	Read Act 1 Scene 3, watch film clip, fill in graphic organizer.	Read Act 1 Scene 4, watch film clip, fill in graphic organizer.	Read A Scene watch f clip, fill graph organiz

Table 6-5. Monday's Lesson Plan

Lesson Segment	What to do	What to prepare
Warm-up	1. Show film clip of *Lion King*. Ask learners to tell what they know about the story. 2. Hamlet Memes to introduce major themes.	film clip memes
New or Review	1. introduce characters in PowerPoint slideshow	Powerpoint
GP or IP	1. Read part of Act 1: Scene 1 as a class. This will help the learners understand how to navigate the online reader. 2. Fill out graphic organizer in small groups.	graphic organizer
Check-In	Review what to do for homework	film clips, discussion groups, discussion prompts
Cool-Down	Write in your learning journal: If I thought I'd seen a ghost, I would...	

✏️ **Chapter 6 Blueprint Challenge**

Blueprint Challenge Content Activities Part 3.

Open your content activities document.

Read the directions for Part 3: Planning Lessons. Review the example. Then fill in the table with your ideas.

Conclusion

And finally:

👷 Course Checklist Part 1: Design

Step 6 Plan Content Activities.

Open your course checklist. Read the directions for Step 6 Plan Content Activities. Then complete the assignment with your ideas. Check the completion box.

Complete step 7.

Step 7 asks you to retake the Design Competency Self-Assessment. You will again receive a score out of 20 points, which will indicate your new level of competency. Since this is a post-test, you might score higher than you did in the pre-test. Step 7 prompts you to compare your pre- and post-test results.

Design Competency Self-Assessment

A score of 0 =	No Design Competency
1-5 points =	Novice Level
6-10 points =	Intermediate Level
11-15 points =	Advanced Level
16-19 points =	Superior Level
20 points =	Expert Level

Then complete steps 8 and 9. This completes the **design** of your blended course.

Next you need to **develop** the materials, write your syllabus, and create your course calendar. Complete step 10 to develop all or part of your blended course. The next chapters will help you prepare to teach your blended course.

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Facilitation Unit

Introduction to Facilitation

Online Facilitation Frameworks

Blended and Bichronous Facilitation Contexts

Asynchronous Facilitation Strategies

Synchronous Facilitation Strategies

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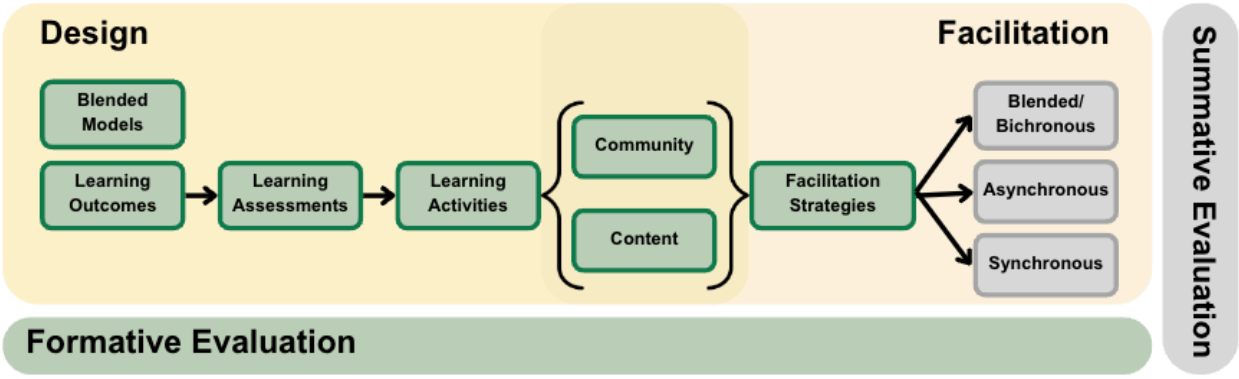
7

Introduction to Facilitation

The next step in our framework begins the facilitation unit. We will discuss facilitation strategies. The unit learning outcome is: I can facilitate my blended course. The mastery challenges are now facilitation challenges. As always, formative evaluation will be conducted to help you thoroughly think through your facilitation decisions.



Created by Charles Graham CC BY

Chapter Learning Outcome: I can explain how instructor facilitation influences student learning.

Sub-section outcomes:

- I can distinguish between online facilitation and design. (Section 7.1)
- I can articulate how online course design affects an instructor's ability to facilitate learning. (Section 7.2)
- I can explain why developing online facilitation skills is important. (Section 7.3)

7.0 Introduction

By definition, to facilitate something is to make it easier. In the context of a discussion, a facilitator would help the discussion run more smoothly and effectively. Similarly, in the context of blended and online courses, the goal of facilitating is to help your learners have a smoother experience when learning the content, participating in activities, and interacting with others. All of which should, hopefully, have a positive effect on learner engagement and learning outcomes.

Many blended and online courses are facilitated by one person—the course instructor. This instructor may be the same person who designed and created the course, or it could be another faculty member or adjunct instructor who was tasked with teaching the course. And while some instructors may be facilitating on their own, others may have teaching assistants or other support. Instructors may also teach learners to be effective facilitators in online discussions and teamwork. In any of these scenarios, the instructor is the main facilitator of the course.

Facilitating a course typically involves a variety of roles, such as guiding learners through the learning process, clarifying instructions, helping learners utilize technology, and promoting discussions and interactions with and between learners.

The course facilitator may have a variety of responsibilities within these roles, such as:

- Creating a course navigation video
- Guiding discussions
- Making regular announcements
- Answering learners' questions
- Clarifying assignment instructions
- Supporting group interactions
- Establishing and enforcing course policies
- Giving personalized feedback on learner assignments
- Encouraging and acknowledging learner contributions

See Figure 7-1 for some verbs describing what facilitators do.

Figure 7-1. What Facilitators Do

What Online Facilitators Do by Tony Carr, CC-BY-4.0

We need to begin with the Facilitation Competency Self-Assessment.

👷 Course Checklist Part 2: Facilitation

Step 1 Facilitation Comptency Self Assessment.

Open your course checklist. Scroll down to Part 2. Read and follow the directions for completing the Facilitation Competency Self-Assessment. It is similar to the design one. You will receive a score out of 20 points, which will indicate your level of facilitation competency. Since this is a pre-test, you might expect to score between 0 and 10, especially if you have little or no previous experience.

Facilitation Competency Self-Assessment

A score of 0 =	No Design Competency
1-5 points =	Novice Level
6-10 points =	Intermediate Level
11-15 points =	Advanced Level
16-19 points =	Superior Level
20 points =	Expert Level

7.1 Facilitation vs. Design

Learning Outcome: I can distinguish between online facilitation and design.

In Chapter 1, we related the design of a course to the design of a building. The blueprint of a course, like the blueprint of a building, shows how each of the elements will work together, with each element designed for a particular purpose. After a course has been designed, facilitation is like a building being used for the purposes it was designed for. Now that the course (or “building”) has been developed, how are you going to help your learners use what has been created to maximize their learning?

Consider an asynchronous discussion. The course designer was careful when designing the prompt: choosing words that would enable evaluative and divergent thinking and setting guidelines on the structure, content, flow and timing of responses (see Chapter 5).

Now envision two instructors simultaneously teaching this course as described in Table 7-1.

Table 7-1. Two contrasting examples of facilitating online discussion

Facilitator 1	Facilitator 2
This instructor logs into the course once a week, looks at whether learners had an original post and a reply, gives them a grade, and doesn't talk about the discussion in their synchronous class session.	This instructor logs into the course frequently, actively participates in the discussion with learners, and summarizes key insights from the discussion during their synchronous class session.

While the design of the activity is consistent across each, the methods the instructors use to facilitate diverge significantly. Are these instructors facilitating this activity in a way that fulfills the purpose it was designed for? Maybe! It depends on the purpose of the assignment.

Another example to compare design and facilitation is a lecture. In this scenario, an instructor may have designed the slide deck by adding information and images, organizing the content, and creating supporting activities. The facilitation of the lecture encompasses all the dynamics during the actual presentation, which may include interacting with learners, noticing when they're not engaged, answering questions, reviewing ideas, and more. Consider two contrasting examples in Table 7-2 of facilitating during a lecture.

Table 7-2. Two contrasting examples of facilitating during a class lecture

Facilitator 1	Facilitator 2
An instructor pauses at the end of the lecture to ask learners if they understand the content that was shared and if they have any questions. The instructor tells learners that they can email any questions they have.	An instructor actively monitors learner body language during a lecture and frequently pauses to ask questions to see if the learners are understanding the material. If learners seem insecure about raising their questions to the whole class, the instructor lets learners submit

	anonymous questions using their cell phones.

Similarly, an instructor might create a lesson plan, which is a specific design for a class session and an outline for what they hope they will do to facilitate. However, when they implement the lesson, there may be moments where learners need support or encouragement that were not already planned for in the design.

While an instructor can plan facilitation strategies for their course and activities, often facilitation is spontaneous and unscripted. In many cases, the instructor is reacting to a set of forces and relationships that can't be predicted ahead of time.

7.2 Design Influencing Facilitation

Learning Outcome: I can articulate how online course design affects an instructor's ability to facilitate learning.

In some cases, there may not be a clear separation between the design of a course or activity and the facilitation of the course or activity, because the two are ultimately intertwined. Usually, the design of a course or an activity creates the structure in which facilitation occurs. In other words, the design shapes the facilitation needs.

Consider our asynchronous discussion example from section 7-1. The course designer specifically created the prompt and instructions keeping in mind prompt types, structure, content, flow, and timing (see Chapter 5). Table 7-3 below shows how each may affect the facilitation needs.

Table 7-3. Asynchronous discussion design scenarios and corresponding facilitation strategies

Category	Scenario	Facilitation
Prompt Type	The designer created a convergent prompt.	With a convergent prompt, learners will post similar, if not identical responses. There won't be a lot of (genuine) back-and-forth discussion. In this case, the facilitator might only pay attention to whether learners responded to the

		prompt or not and check for understanding.
	The designer created a divergent prompt.	With a divergent prompt, learners might post a variety of responses. The facilitator may need to connect ideas between learner responses or prompt learners to elaborate on their ideas.
Structure	The instructions suggest a post length of 2-3 sentences.	Learners typically do better with reading and responding to shorter posts. The facilitator may be able to get more of a back-and-forth discussion going between learners by bringing learners into others' conversations.
	The instructions suggest a post length of 12-15 sentences.	Longer posts like this one allow learners to write more in-depth posts. However, this can also make it difficult for learners to read and respond to each others' posts. The facilitator may need to summarize key ideas from the posts and encourage learners to read more responses.
Content	The prompt includes instructions explaining what learners should include in their replies.	This discussion will have more structure. If the structure is important, the facilitator may highlight and show appreciation for learners' replies that follow the structure and use them as examples.

	The prompt does not include any instructions on what learners should include in their replies.	This discussion will have less structure. The facilitator may need to help focus conversations if learners go off topic. The facilitator may also need to encourage more depth in responses by asking probing questions.
Flow	Learners can reply to any two posts that they want.	If learners can reply to any two posts they want, there may be some posts who will not receive any replies and others who will receive multiple. This could be discouraging for those who do not have replies, so the facilitator might try to respond to these posts or encourage others to participate in this conversation. Similarly, learners may only choose to respond to posts that they agree with. The facilitator could encourage learners to respond to people they don't necessarily agree with.
	Learners are asked to reply to the post directly before theirs (or the most recent post if they were first).	Whenever learners are asked to respond to a specific person or group of people, the facilitator may need to clear up confusion or misunderstandings about who each person should respond to. Learners will likely get better at this over time, but they may need guidance at the beginning. Additionally, since there is a specific structure to how learners are responding, they might have to respond to somebody that they don't agree with. The facilitator may need to emphasize the importance of respect and any

		netiquette policies that have been established.
Timing	The discussion post has no due date. Learners can respond or reply whenever they want.	With no due date, learners might not be motivated to participate in the discussion. The facilitator may want to "nudge" learners to participate by sending emails or announcements. They could also show appreciation for those who have been active participants in the discussion.
	The original response to the prompt is due before class and replies are due 48 hours later.	When there's both a due date for the original response and the replies, the facilitator may want to emphasize the importance of getting those done on time. If the original responses are not posted in a timely manner, learners won't have anything to respond to. The facilitator may want to remind learners of due dates in a synchronous class session, through an announcement, or some other means.

7.3 Why Online Facilitation Matters

Learning Outcome: I can explain why developing online facilitation skills is important.

Imagine a face-to-face classroom with 30 learners. The learners have done their pre-class readings and assignments, and now the instructor wants them to discuss what they've learned before moving on to the next topic. The instructor writes a prompt on the whiteboard and then proceeds to leave the classroom. How would the learners react? How would they interact with each other? Would they achieve the intended learning outcome?

This scenario would be an example of design without instructor facilitation. The prompt was created and provided to the learners, but the learners don't have anyone to support their discussion, helping move it along when it gets stuck, connecting ideas, or answering questions. This very thing happens often in online discussions where the prompt is made available to the learners but the instructor or main facilitator doesn't engage in the discussion, leaving learners to discuss amongst themselves with very little guidance, sometimes as little as, "Answer the prompt and then respond to two peers."

A discussion is just one activity. What would an entire course look like as a design without facilitation? Learners' questions would go unanswered. Nobody would provide feedback on learner work. There would be no announcements, emails, or direct messages. The learners wouldn't interact with the instructor and they would likely be disengaged with the material. There would be nobody to notice when a learner begins to disengage and nobody trying to figure out how to help a learner stay engaged.

For a course to run smoothly, the instructor (and TAs or other supporting facilitators) will be utilizing facilitation skills in some form or another. In the upcoming chapters, we will discuss some of these facilitation skills in various blended teaching contexts. It is important to note that different skills are necessary for in-person and online facilitation.

One large difference is the technological skills necessary to facilitate in online contexts. For in-person classes, an instructor does not necessarily need to use technology to facilitate interactions between learners or between them and the learners. In the online space, they will need some technical skills to facilitate, whether it be sharing their screen in a conferencing tool, organizing learners into groups, or using communication tools to answer questions or send announcements.

If you are teaching in a blended context, you will need to be able to facilitate both in-person and online activities effectively. These skills will help you foster learner participation, enhance learner engagement, create a sense of community, and continuously improve your teaching practices.

For instructional designers, developing online facilitation skills is useful because it can help you better design with facilitation in mind. You can better understand how your designs might be used and help guide instructors with new facilitation ideas.

Conclusion

In this chapter, we introduced facilitation and what it means in the context of blended teaching. You learned the difference between facilitation and design and how the design

can affect facilitation. And lastly, you learned why online facilitation skills are important, whether you are an instructional designer or an instructor. To help guide your facilitation plan, please answer the following reflection questions in your course checklist.

👷 Course Checklist Part 2: Facilitation

Course Checklist Step 1 Reflection 1

Open your course checklist and return to Step 1 in the **facilitation** unit. You have already done the self-assessment. Now read and respond to the questions in Reflection 1. Consider a course that you have designed and/or will be teaching.

- Why might online facilitation be important for learner success in this course?
- What are some of the activities in the course that would most benefit from intentional facilitation?
- What are some of the facilitation skills you would like to develop?

Check the completion box when you are done.

Resources

What Online Facilitators Do by Tony Carr

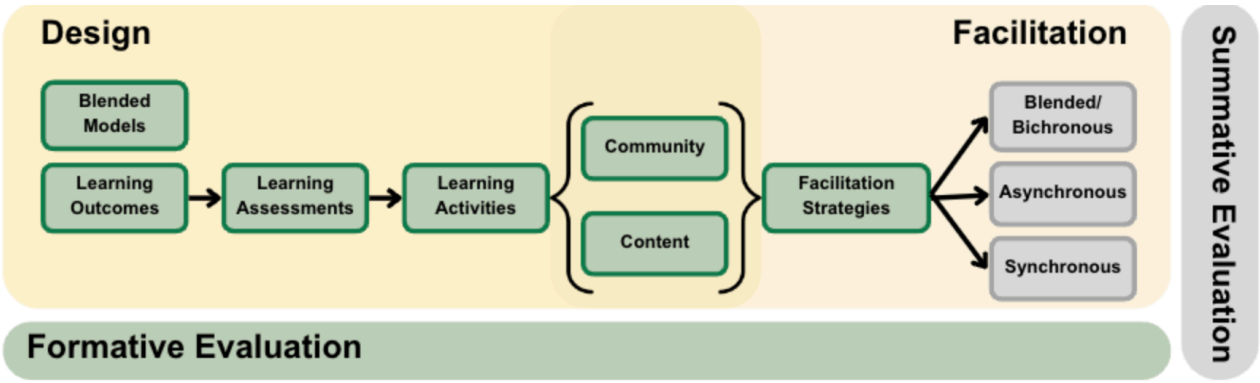
Downing, Pittaway, and Osborne, 2014

This content is provided to you freely by EdTech Books.

Access it online or download it at
https://edtechbooks.org/he_blended/chapter_7_facilitation_principles.

8

Online Facilitation Frameworks



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8.0 Introduction

In this chapter, we will discuss four online learning facilitation frameworks: Anderson's Educational Interactions framework, Berge's Computer Conferencing Moderation framework, Garrison's Community of Inquiry framework, and Borup's Academic Communities of Engagement framework. Each of these frameworks includes elements that facilitators should keep in mind as they provide support in their courses, whether in online or blended contexts.

As you learn about these frameworks, pay attention to how facilitation affects the learning environment and learner engagement. You may recognize elements of your own course facilitation that you could improve.

Learning Outcome: I can use terminology from various frameworks to support my online facilitation strategies.

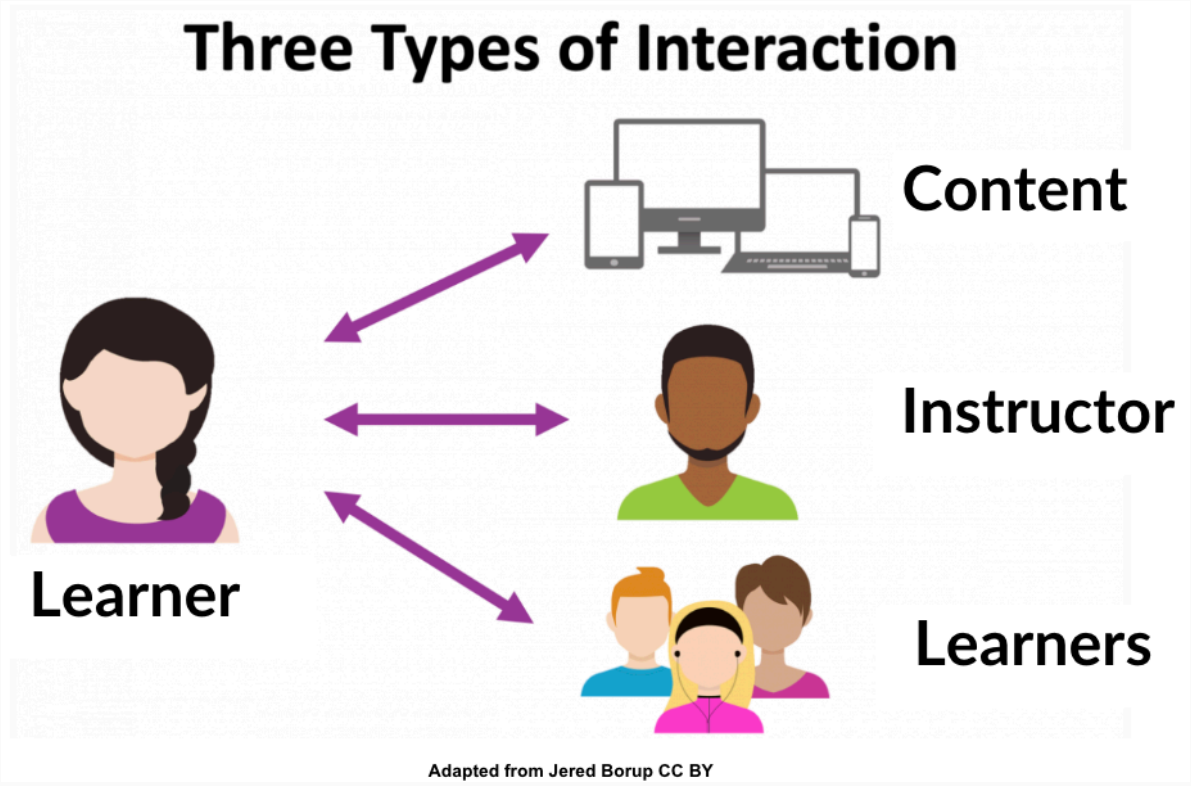
- I can categorize interactions as learner-learner, learner-instructor, and learner-content interactions. (Section 8.1)
- I can describe each of Berge's four categories of facilitation: pedagogical, social, managerial, and technical. (Section 8.2)
- I can discuss how cognitive, social, and teaching presence interact to create a community of inquiry. (Section 8.3)
- I can describe the affective, behavioral, and cognitive dimensions of engagement. (Section 8.4)
- I can compare and contrast different frameworks for talking about online learning facilitation. (Section 8.5)

8.1 Educational Interactions (Anderson)

Learning Outcome: I can categorize interactions as learner-learner, learner-instructor, and learner-content interactions.

In Chapter 5, we introduced three different kinds of interactions: learner-content, learner-instructor, and learner-learner (see Figure 8-1). Each of these interactions can incorporate facilitation in some form or another, though the most observable facilitation happens in learner-learner and learner-instructor interactions.

Figure 8-1. Interaction Types



Created by Jered Borup, CC-BY-2.0

Learner-content interactions describe the interactions learners have with course content, such as reading, listening, watching, creating, practicing, and/or reflecting. Learner-instructor interactions are the ways in which the learners and the instructor interact with each other, such as the instructor giving learners feedback on an assignment or the learners asking the instructor clarifying questions. Learner-learner interactions describe the interactions learners have with each other to share their understanding and mentor each other. Table 8-1 contains some examples of the three types of interactions.

Table 8-1. Examples of Learner-Content, Learner-Instructor, and Learner-Learner Interaction

Learner-Content	Learner-Instructor	Learner-Learner

• Reading a textbook • Watching videos • Interactive games • Taking notes • Creating artifacts	• Receiving feedback on an assignment • Asking questions in lectures, tutorials, or discussions	• Discussing key takeaways from a reading • Peer reviewing • Small group projects

Some learning activities in your course may include multiple types of interaction. For example, you may have an activity that includes both learner-instructor and learner-learner interaction, such as a class discussion. You could also have group projects, which may include learner-content, learner-instructor, and learner-learner interaction.

What might facilitation look like for different activities? See Table 8-2 for examples of activities and how instructors may use different strategies to *facilitate* learner-content, learner-instructor, and learner-learner interactions within each activity.

Table 8-2. Activities, Interactions, and Facilitation Strategies

Example Activity	Interactions	Possible Instructor Facilitation Strategies
In a synchronous Zoom session, learners look at their most recent homework assignment in breakout rooms to compare solutions and the methods they used to find the answers.	Learner-learner	The instructor may assign facilitator roles to a learner in each group to help facilitate group conversations in the breakout rooms.
	Learner-instructor	The learners may invite the instructor into their breakout room when they can't agree on an answer or method.
Learners are assigned to groups for in-person presentations. The learners work asynchronously in a collaborative document to prepare for the presentation.	Learner-content	The instructor may provide a presentation template to encourage learners to create a more focused presentation.

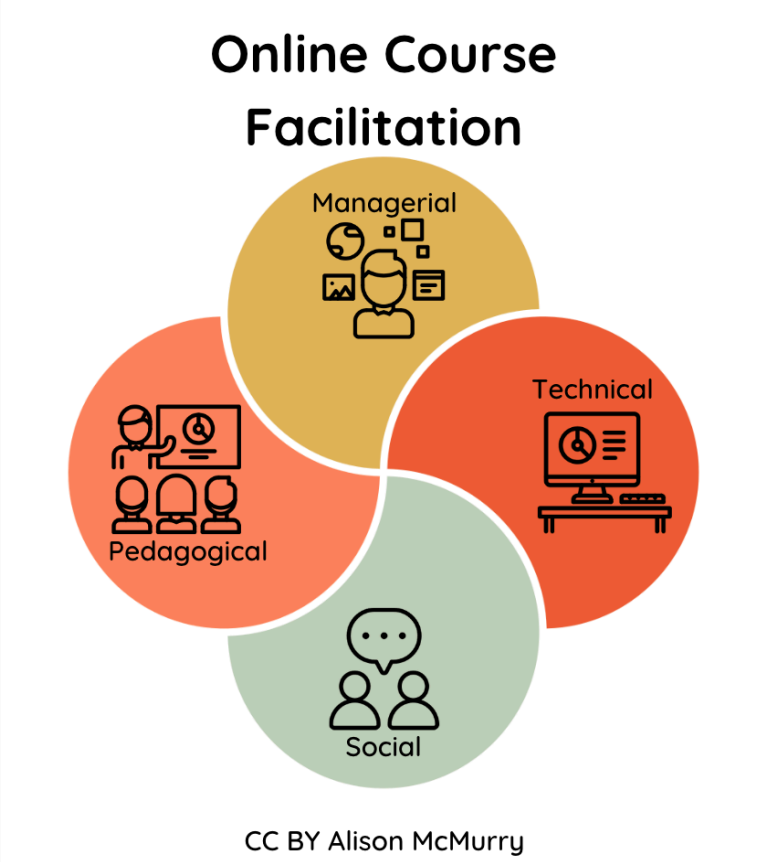
They leave comments for and respond to each other.	Learner-instructor	The instructor may ask each group to share their document with them so they can leave feedback in comments as learners work asynchronously.
	Learner-learner	The instructor may have learners create a “team charter” to describe how they will communicate and interact with one another.
Learners complete a reading and then record a video response in an asynchronous discussion. In their videos, each learner will respond to a discussion prompt and share their thoughts on the reading. The instructor and 1-2 of the learners’ peers will respond to the video.	Learner-content	The instructor may post a video modeling the structure that learners’ videos should follow, such as stating which discussion prompt they are responding to, quoting directly from the reading, and/or sharing whether they agree or disagree.
	Learner-learner	The instructor may encourage learners to respond to each others’ videos.

8.2 Computer Conferencing Moderation (Berge)

Learning Outcome: I can describe each of Berge’s four categories of facilitation—pedagogical, social, managerial, and technical.

In Berge’s (1995) framework, four categories of facilitation describe the various roles and responsibilities of an online instructor or moderator (see Figure 8-2).

Figure 8-2. Online Facilitation Framework



Pedagogical Facilitation: This category focuses on guiding and enhancing learners' learning. This may include strategies such as:

- Asking questions to stimulate critical thinking
- Probing and elaborating on learner responses to deepen understanding
- Encouraging active participation and contributions from learners
- Promoting meaningful conversations among learners
- Directing learners to additional resources for further exploration
- Connecting and synthesizing ideas within a discussion to create coherence

Social Facilitation: This category is concerned with fostering a positive and interactive learning environment. This may include strategies such as:

- Conducting icebreaker activities to build rapport and establish a sense of community
- Setting a friendly and welcoming “social tone” for the course to encourage collaboration
- Modeling effective discussion and interaction behaviors for learners
- Assisting learners in working together on group projects
- Creating dedicated spaces for learners to interact socially and build relationships

Managerial Facilitation: This category deals with the organization, procedures, and administration of the online course. This may include tasks such as:

- Adjusting due dates and pacing of course activities to accommodate learner needs
- Setting the agenda and desired outcomes for synchronous sessions, if applicable
- Organizing learners into groups or teams for collaborative work
- Defining and communicating clear course expectations and guidelines
- Responding to emails or messages promptly and efficiently to address administrative needs

Technical Facilitation: This category pertains to the facilitator’s role in ensuring learners are comfortable with the technology used in the course. Berge (1995) suggested that the technological layer of the course should be facilitated in such a way that the layer is “transparent,” so learners can focus on the academic tasks. This may include responsibilities such as:

- Providing video demonstrations or tutorials to help learners navigate the course learning management system (LMS) or specific tools being utilized within the course
- Organizing content intuitively within the LMS to facilitate easy access and navigation
- Familiarizing oneself with multimedia tools that promote learner engagement in synchronous sessions, when applicable
- Guiding learners to relevant resources or materials to address technical questions and challenges

Berge’s framework acknowledges that while these facilitation categories offer a structured way to understand the roles of an online facilitator, real-world facilitation may involve some overlap between categories as tasks and functions do not always fit neatly into one category.

For example, facilitating a synchronous online discussion could involve all four types of facilitation. The facilitator is likely asking open-ended questions and probing learner responses when necessary (pedagogical facilitation). Additionally, they are setting the tone for interaction and ensuring that learners are participating in respectful ways (social facilitation). The facilitator may organize learners into smaller breakout rooms to have

smaller group discussions (managerial facilitation). And lastly, the facilitator may need to help learners find and utilize tools within the conferencing platform, such as how to share their screen, join a breakout room, or raise their hand (technical facilitation).

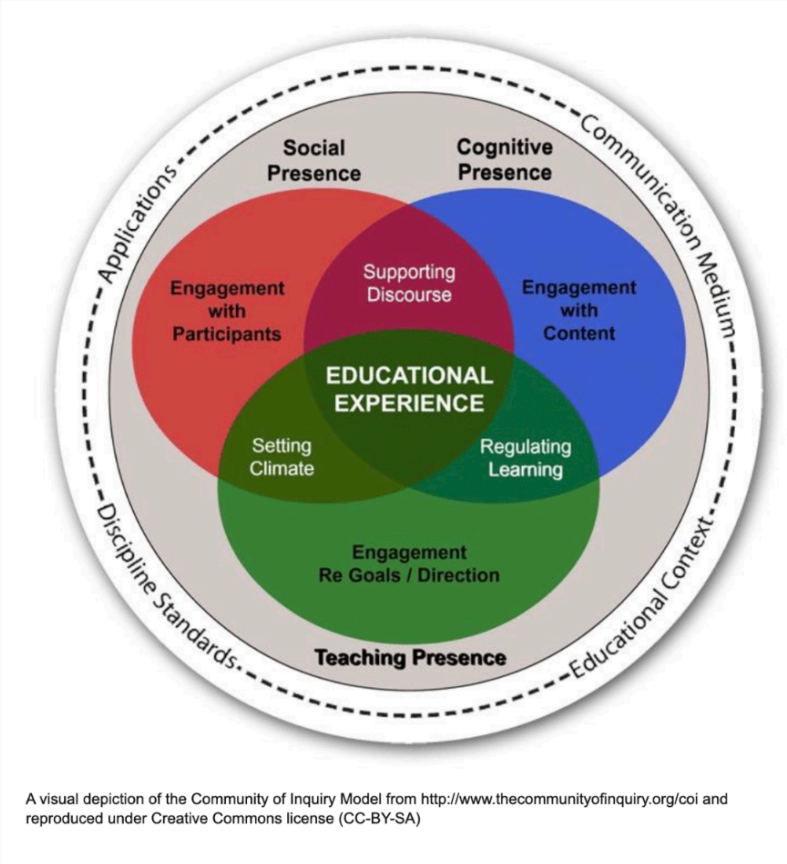
This framework can be helpful because often instructors focus on pedagogical facilitation and don't realize that there is a role for them to fill in terms of the other types of facilitation.

8.3 Communities of Inquiry (Garrison, Anderson, Archer)

Learning Outcome: I can discuss how cognitive, social, and teaching presence interact to create a community of inquiry.

The Communities of Inquiry (CoI) framework was developed to help understand and model the online environment elements that are necessary to facilitate effective educational experiences. While this framework was created with the online asynchronous text-based context in mind, it extends to blended and in-person contexts as well. Communities of inquiry are composed of instructors and their learners. The three main elements of this framework are cognitive presence, social presence, and teaching presence (see Figure 8-3).

Figure 8-3. Communities of Inquiry Framework



A visual depiction of the Community of Inquiry Model from http://www.thecommunityofinquiry.org/coi and reproduced under Creative Commons license (CC-BY-SA)

Community of Inquiry

Cognitive presence describes the learners' ability to create and exchange meaning through their communication.

Social presence describes the learners' ability to present themselves as real people and foster relationships with others in the community. Many researchers suggest that social presence supports cognitive presence. Additionally, it is often the facilitator who sets the "social tone" of the course.

Teaching presence describes the instructor's effort and activity with the design, facilitation, and direct instruction. Teaching presence supports both social and cognitive presence throughout the course.

As a course facilitator, there are strategies to foster each type of presence in your course. Table 8-3 describes some strategies you may use to support cognitive, social, and teaching presence.

Table 8-3. Fostering Cognitive, Social, and Teaching Presence as a Course Facilitator

Cognitive Presence	Social Presence	Teaching Presence
• Ask open-ended questions in course content or discussions to encourage reflection and critical thinking • Create small group discussions for learners to collaborate and ideate solutions together • Include opportunities for learners to provide feedback to their peers, such as with projects, papers, or presentations	• Include introduction activities at the beginning of your course to help learners get to know each other • Open up your classroom or synchronous online space early so learners have an opportunity to interact socially • Model respectful online interactions on discussion boards	• Monitor learner interactions with each other and their participation with course content • Provide timely feedback on learner work and offer support where needed • Create weekly announcements providing encouragement and direction

Cognitive presence, social presence, and teaching presence interact with and support one another to create the learning environment and the learners' educational experience. Deep and meaningful educational experiences typically necessitate all three elements.

8.4 Academic Communities of Engagement (Borup)

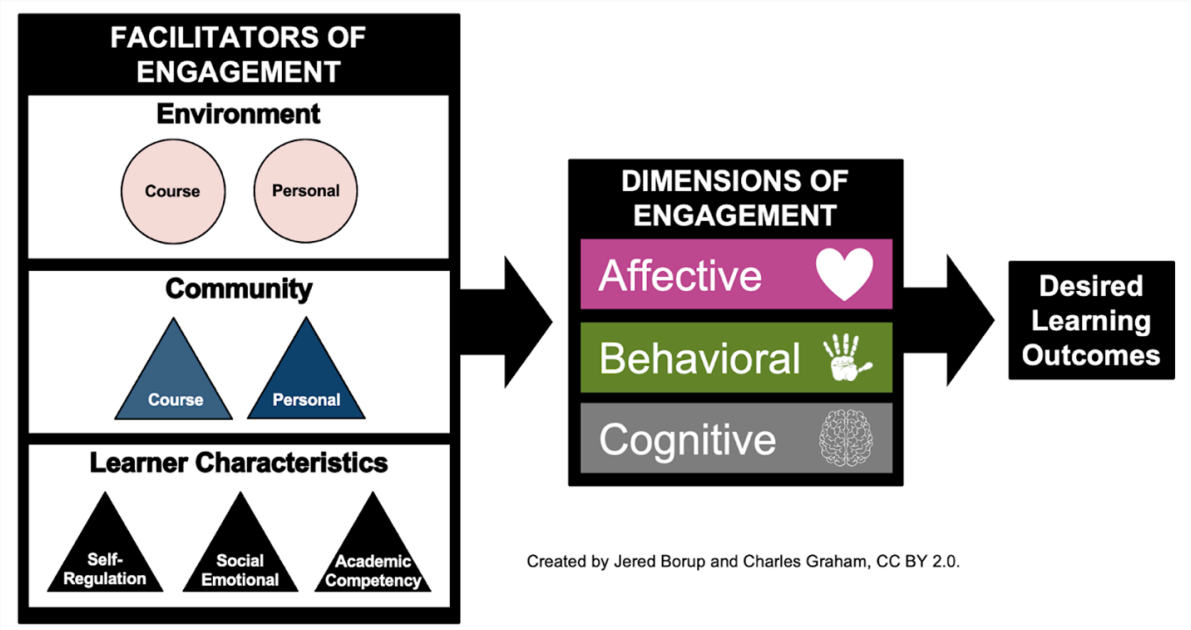
Learning Outcome: I can describe the affective, behavioral, and cognitive dimensions of engagement.

In the Academic Communities of Engagement (ACE) framework, learner engagement can be described across three different, but interconnected, dimensions: affective, behavioral, and cognitive (see Figure 8-4).

- Affective engagement describes the learners' emotions and attitudes involved with engaging in course learning activities. Indicators of affective engagement can include interest, enthusiasm, and enjoyment.
- Behavioral engagement describes the learners' physical behaviors involved with engaging in course learning activities. Indicators of behavioral engagement can include active participation, attendance, and completion of assignments.
- Cognitive engagement describes the learners' mental efforts involved with engaging in course learning activities. Indicators of cognitive engagement can include attention, critical thinking, and metacognition.

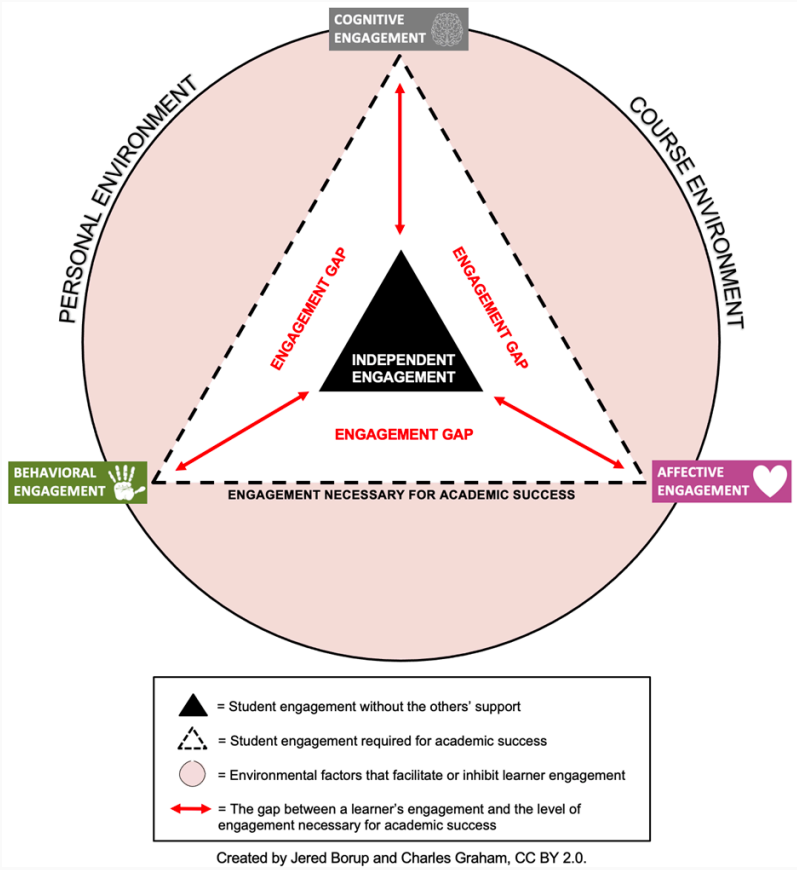
These dimensions of engagement are impacted by "facilitators of engagement." These facilitators include individual learner characteristics and support from the personal and course communities. The instructor, or main facilitator, of the course can have a large influence over the course environment and the course community. When they focus beyond teaching of the content, they can also play a role in helping learners to expand relevant learner characteristics like self-regulation, social-emotional skills, and other academic competencies. While not as common in higher education, instructors can also play a role in enabling or encouraging support in the learners' personal community.

Figure 8-4. Academic Communities of Engagement - Facilitators of Engagement



There is often an “engagement gap” between the levels of engagement learners have on their own and the engagement necessary for academic success (see Figure 8-5).

Figure 8-5. Academic Communities of Engagement Framework



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These gaps can be filled from personal community support and course community support. The course instructor or facilitator, as a large part of the course community support, can utilize a variety of strategies to support each domain of learner engagement. See Table 8-4 for a non-exhaustive list of ideas for the instructor to support learners’ affective, behavioral, and cognitive engagement.

Table 8-4. Supporting affective, behavioral, and cognitive dimensions of learner engagement

	Support elements	Examples
Affective	Facilitating communication	Creating spaces, such as discussion forums, where learners can share their thoughts and

		experiences related to course content.
	Developing relationships	Initiating icebreaker activities at the beginning of the course to help learners get to know each other better.
	Instilling excitement for learning	Sharing personal anecdotes or other examples to demonstrate how course principles apply in real-world scenarios.
Behavioral	Troubleshooting and orienting	Allocating time and resources at the beginning of the course to help learners navigate the course and set up any necessary tools.
	Organizing and managing	Ensuring content is structured clearly within the course and providing detailed instructions for assignments and other interactive elements.
	Monitoring and encouraging progress	Utilizing regular formative assessments or quizzes to gauge learner understanding and progress and providing feedback to promote continuous improvement.
Cognitive	Instructing	Developing instructional videos or interactive presentations to deliver course content in a clear, engaging, and digestible format.
	Collaborating	Designing and incorporating collaborative group work where learners are working together to solve a problem, such as with problem-based learning.

Adapted from Borup et al.'s Support Elements for the ABC dimensions of engagement

8.5 Why are facilitation frameworks important?

Learning Outcome: I can compare and contrast different frameworks for talking about online learning facilitation.

Understanding these frameworks will help you look at course facilitation from various perspectives and can help you as you reflect and conduct informal formative evaluations of your own facilitation. Frameworks act as lenses that allow us to see the interactions between people and content in different ways.

Let's take the following scenario and look at its different facilitation elements using the four frameworks described in this chapter.

Scenario: For a blended class of 60 learners, Dr. Stevenson held a review session for the first midterm synchronously over Zoom. Two days before the review session, she provided the learners with a study guide, and she had the learners get together with their project groups (of 4-5 people each) to review the study guide and submit 2-3 topics or questions they would like to see addressed in the review session. They submitted their topics or questions on a discussion board, which allowed other learners to "like" topics that they also would like to see in the review. Dr. Stevenson selected the popular topics or questions and those that would specifically be helpful for them to study before the exam, organizing them into a review PowerPoint. At the beginning of the Zoom session, Dr. Stevenson briefly demonstrated to learners how to use the chat feature. Then in Zoom, learners were able to ask follow-up questions using the chat feature. See Table 8-5 for examples of framework elements found in this scenario.

Table 8-5. Frameworks and their elements found in the scenario.

Framework "Lens"	Elements in Scenario
Educational Interactions Framework (Anderson)	There is learner-learner interaction since learners are getting together with their groups to discuss course content and submit topics together. There is also learner-instructor interaction as the instructor responds to learner questions. The review may also facilitate learner-content interaction as learners review course content before and after the class review session.
Computer Conferencing Models	Having learners participate by asking questions and the instructor answering those questions in the review session

Framework (Berge)	demonstrates pedagogical facilitation. Setting the agenda for the review session, organizing the learners into groups, and communicating expectations for posting topics/questions into the discussion board demonstrate managerial facilitation. The instructor is engaging in technical facilitation by demonstrating how to use a feature of the technology. The instructor may also serve in a social facilitation role throughout this activity, though it is not explicit in this scenario.
Communities of Inquiry (Garrison, Anderson, Archer)	The instructor fosters cognitive presence in this scenario by grouping learners to review the study guide and having them ask questions. There is some social presence as learners interact with each other and with the instructor. And lastly, there is teaching presence as the instructor facilitates the review session and answers learners' questions.
Academic Communities of Engagement (Borup)	The instructor supports learners' cognitive engagement by creating the study guide, having learners reflect on topics they may need more support in, and organizing those topics and questions into a review session. The instructor may also be supporting learners' affective and behavioral engagement, however, it is not explicit in the description of the scenario.

After looking at this scenario from different lenses, we can see that some framework elements were missing (or not explicitly stated), such as social and technical facilitation or supporting learners' affective and behavioral engagement. For individual activities, it may not always be necessary to touch upon every point. For example, not every activity will warrant technical facilitation, such as when learners are already familiar with the tools. However, as you facilitate the entire course, you should be aware of these various framework elements and be intentional about when and how you are supporting your learners.

Conclusion

In this chapter, we introduced four frameworks for online facilitation and explored how these frameworks can influence your facilitation strategies. These frameworks guide both instructors and instructional designers as they perform formative evaluations of facilitation strategies.

👷 Course Checklist Part 2: Facilitation

Course Checklist Step 2 Reflection 2

Open your course checklist to Step 2 in the **facilitation** unit. Read and respond to the prompt in Reflection 2. Consider a course that you have designed and/or will be teaching.

- Describe an interactive online activity you would use in your course. Where might learners need extra support? Using terminology from the frameworks in this chapter, explain how you will be intentional with your facilitation.

Check the completion box when you are done.

Resources

Berge, Z. L. (1995). Facilitating computer conferencing: Recommendations from the field. Educational technology, 35(1), 22–30. https://www.jstor.org/stable/44428247

Borup, J., Graham, C. R., West, R. E., Archambault, L., & Shin, J. K. (2023). Academic Communities of Engagement (ACE) Framework. EdTechnica: The Open Encyclopedia of Educational Technology. https://dx.doi.org/10.59668/371.12259

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education model. The Internet and Higher Education, 2(2-3), 87-105.

Martin, F., Wang, C., & Sadaf, A. (2020). Facilitation matters: Instructor perception of helpfulness of facilitation strategies in online courses. Online Learning, 24(1), 28-49. https://doi.org/10.24059/olj.v24i1.1980. https://files.eric.ed.gov/fulltext/EJ1249262.pdf

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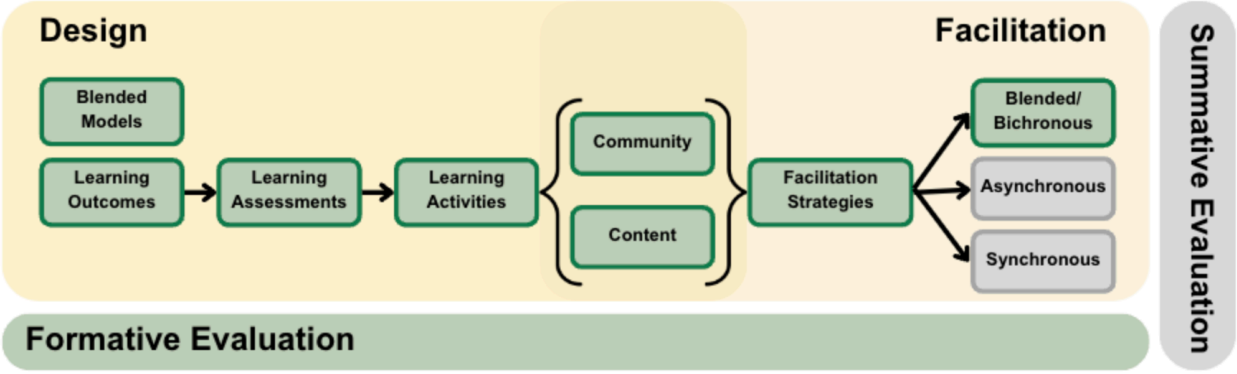
9

Blended and Bichronous Facilitation Contexts



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9.0 Introduction

In Chapter 2, we discussed the 3Ms (medium, modality, method), specifically talking about how modality can affect the methods designed into a course. In this chapter, we will go into more detail about how four different dimensions of modality can shape course dynamics and inform the facilitation methods that are used. We'll also discuss bichronous and blended modalities and connect the content between each. Recognizing and understanding the modalities you will use in your course are essential to identifying the areas where your learners will need support as you facilitate your course.

Learning Outcome: I can explore strategies for facilitating activities in different modalities using different dimensions of interaction.

- I can articulate how time, place, fidelity, and humanness in interactions affect my facilitation. (Section 9.1)
- I can help students see the connection between synchronous and asynchronous activities. (Section 9.2.)
- I can help students see the connection between in-person and online activities. (Section 9.2.)

✏️ Chapter 9 Facilitation Challenge

You will use the skills presented in this chapter to facilitate a blended/bichronous activity.

Open the Blended/Bichronous Lesson Plan Template and save a copy. Label the copy Your Name Blended Lesson Plan (Example: Hyun Joo Blended Lesson Plan.) You can work on this as you read the chapter or wait until you have finished the reading.

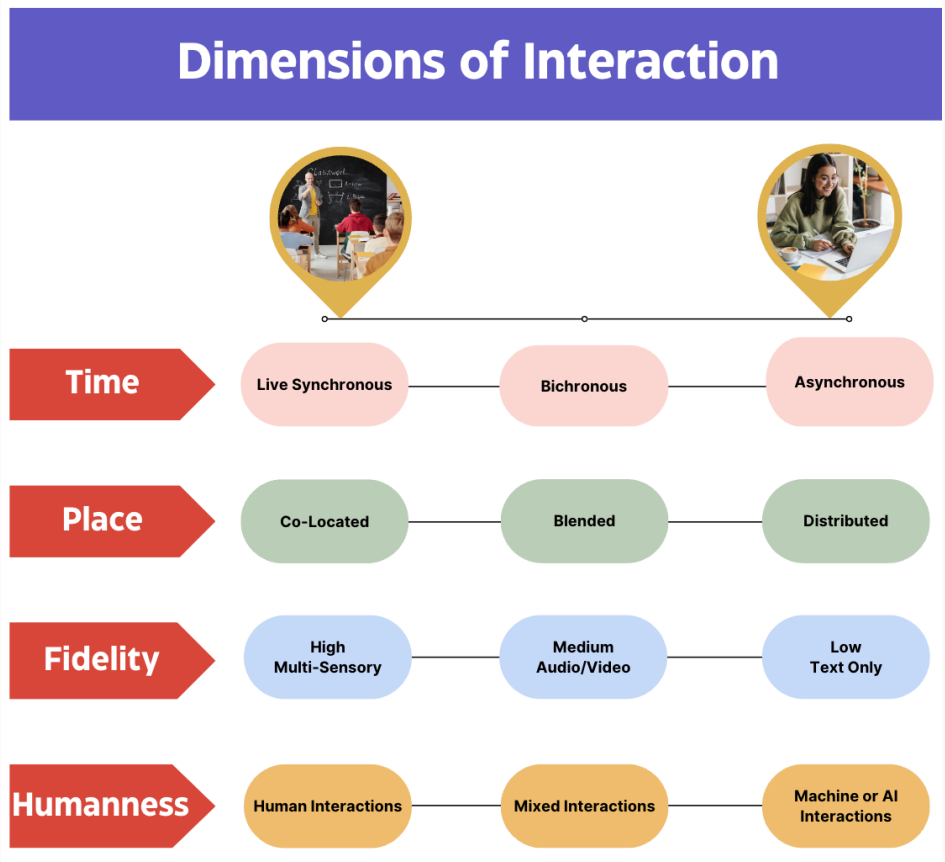
You will plan, facilitate, and evaluate your blended teaching at the end of this chapter.

9.1 Dimensions of Interaction Affecting Blended Learning Facilitation

Learning Outcome: I can articulate how time, place, fidelity, and humanness in interactions affect my facilitation.

There are four dimensions of interaction that affect activities within your course and how you facilitate those activities. These dimensions include time, place, fidelity, and humanness (see Figure 9-1). We'll go more in depth for each in the following sections.

Figure 9-1. Dimensions of Interaction



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9.1.1. Time

In blended teaching, the time dimension plays a crucial role in shaping the dynamics of interactions. Understanding the distinctions between synchronous, asynchronous, and bichronous activities is essential for effective facilitation.

The two ends of the time dimension are **synchronous** (live synchronous) and **asynchronous**. Synchronous interactions have a short lag time between interactions, often just a few seconds. On the other hand, asynchronous interactions have longer lag times between interactions, ranging from minutes to days. **Bichronous** activities combine both synchronous and asynchronous components.

Facilitation practices differ based on the lag time between interactions. See Table 9-1 for a comparison of facilitation strategies for a synchronous discussion and an asynchronous discussion.

Table 9-1. Synchronous and Asynchronous Discussion Characteristics and Facilitation Strategies

Synchronous Discussion	Asynchronous Discussion
Only one person can speak at a time. • The facilitator should be aware of this and facilitate the discussion by indicating who can talk at a given time. • The facilitator may want to call on different people so the discussion is not dominated by one or two learners.	Everybody has the opportunity to participate. • If the class has a lot of students, there will likely be a lot of responses. It would be beneficial to split them up into smaller groups so it is easier for them to read (or watch) each others' responses.
The facilitator and the learners have a limited amount of time to craft a response and participate in the discussion. • The facilitator must determine how long the class or group will spend discussing each topic or question before moving on to the next. • To prepare learners for the discussion, before class, the facilitator may share the topics or questions they plan on addressing.	The facilitator and the learners have a longer amount of time to craft a response and participate in the discussion. • If a discussion is open for a long period of time, the facilitator may need to remind learners that the discussion is ongoing, especially if they are required to respond to peers. • The facilitator may want to suggest a maximum amount of time that learners should spend crafting their response before moving on to other content.
Everybody is present for discussion at the same time. • The facilitator may be spontaneous and pivot the discussion to address misconceptions or explore new ideas. • While discussing, the facilitator can take a quick poll of students' opinions or understanding (by raising of hands or other indicators) to see where everybody is at in the discussion.	Everybody is available for discussion at different times. • The facilitator cannot monitor responses at all times, so they establish community guidelines to help maintain respectful communication. • Responses may be slow between interactions, so the facilitator may suggest that students allow notifications for the discussion board (if possible) so they can see when others have replied to their post.

You should be intentional in the activities that you do facilitate synchronously, asynchronously, and bichronously. You may want consider some of the following questions as you create your facilitation plan:

- Could learners come across complex technological problems that will be difficult to diagnose asynchronously? How will you address those problems?
- How much will learners need to interact for this activity? How will the timing of the activity affect their level of interaction?
- What level of feedback will learners need from the instructor or TA?
- How often will you, as the facilitator, participate in the activity?
- When will you be available to answer learners' questions or clarify assignment instructions?
- Do you want everyone to participate? How will you encourage participation?

In the upcoming chapters, we will dive deeper into specific examples, tips, and platforms for synchronous and asynchronous activity facilitation.

9.1.2 Place

"Co-located and distributed" are the two ends of the place dimension. **Co-located** means that learners are interacting from the same physical space, such as the classroom. **Distributed** means that people are engaging virtually with the content in different physical locations, such as one learner interacting from the library while another is working at home. **Blended** lies between the two, combining elements of both online and in-person modalities. So one class session may be in-person while another class session may be taught online using video-conferencing software. Or perhaps one class session is in-person and then the learners go through the rest of their materials asynchronously. See Table 9-2 for a comparison of co-located and distributed facilitation strategies for group discussions.

Table 9-2. Co-Located and Distributed Group Discussion Characteristics and Facilitation Strategies

	Co-Located	Distributed
Creating Discussion Groups	Learners can be grouped together by where they are sitting in a classroom or lecture hall (e.g. "this table will work together") or the order in which they are sitting (e.g. putting students into groups by "numbering them off").	Since learners aren't organized in a physical space, students might be grouped together by alphabetical order, randomizing groups, or having students self-select their groups.
Monitoring Group Interactions	The facilitator(s) can walk around and listen in on conversations casually. They can also see and hear other discussion groups, in case other groups have a problem or question.	**Synchronous**: Using a video-conferencing platform, the facilitator can move between breakout rooms and monitor conversations, or they can stay in the main meeting room so they are available to answer students' questions. **Asynchronous**: If students are interacting in something like a discussion board, the facilitator can read and respond to students' responses to create instructor presence.
Learning Tools or Resources	Facilitators may provide physical tools or resources (whiteboards, markers, butcher paper, manipulatives, etc.) for student use to support their discussion. If students have access to technology during class (laptops, tablets, cell phones), they can also utilize digital tools or resources.	Learners cannot easily share physical tools or resources when distributed, so they are limited to digital tools and resources. The facilitator may create a list of tools and resources that may be helpful during the discussion.

9.1.3 Fidelity

Fidelity describes the richness of communication cues in interactions. **High fidelity** interactions would allow participants to use all their senses, such as is found in an in-person environment. Further on the continuum is **medium fidelity**, which can include audio and video. This includes communication cues such as tone and facial expressions,

while also losing cues such as body language. With **low fidelity**, interactions are typically text based, requiring only the ability to see text in a document (or sound for those using document readers).

Different levels of fidelity convey varying levels of information, both for learners and for the facilitator. The higher the fidelity, the easier it is to receive or convey affective information through body language, facial expressions, tone of voice, and intonation. Body language cues may include crossing arms, using hand gestures, nodding, tapping feet, or looking around the room. Facial expressions such as smiling, frowning, yawning, raising eyebrows, and using eye contact can provide insights into how the information is being received. When the facilitator and learners can hear tone of voice they can hear whether someone is being serious, cheerful, respectful, sarcastic, or assertive. Lastly, with intonation, listeners can understand where the speaker is placing emphasis within the sentence. The facilitator can use these cues to intuit learners' sentiments regarding a topic, assess their confusion, evaluate group dynamics, and adapt their facilitation approach to address specific needs or challenges. Additionally, the facilitator can give encouragement and show passion or excitement for the topic through their own body language and tone of voice.

However, sometimes it may be more efficient to give and receive written (low fidelity) feedback. Facilitators can use programs that comment directly on learners' work, edit their comments before they send it, and have a record of what feedback they have given to each learner. Also, learners can access the feedback when they are ready and can refer back to the feedback for future assignments.

No fidelity level is necessarily "better" than the others. Each has benefits and drawbacks that should be considered when designing and facilitating course activities. Table 9-3 describes some strengths and weaknesses of discussions at varying levels of fidelity.

Table 9-3. Strengths and Weaknesses of Group Discussions at Varying Levels of Fidelity

	Strengths	**Weaknesses**

High Fidelity, Multi-Sensory: In-person	• Participants can see/hear:
	  ◦ body language
	  ◦ facial expressions
	  ◦ tone of voice
	  ◦ intonation
	• Participants can observe others' reactions to the speaker's comments and see what is happening in the broader classroom context.
		• Participants do not typically have a record of exactly what was said during the discussion.
		• Participants may have limited time to formulate their thoughts for the discussion and may use body language, facial expressions, tone of voice, or intonation that does not support what they were intending in their message.

	Strengths	Weaknesses
Medium Fidelity: Video **(synchronous video conferencing or asynchronous video)**	• Similar to in-person but with visual cues typically limited to head/face only. • Participants can look at others' reactions to the speaker's comments. • It is easy to record a synchronous session for reviewing if needed. • Asynchronous video can be re-recorded before posting to be more intentional with body language etc.	• Similar limitations to in-person. • Some students may become distracted by sights or sounds in the background environment they are participating from. • Some students may choose to turn off their video reducing fidelity to audio only.

Medium Fidelity: Audio
 	
(synchronous audio conferencing or phone, asynchronous audio messaging)
	• Participants can hear:
	  ○ tone of voice
	  ○ intonation
	• Participants have a record of exactly what was said during the discussion.
		• Participants cannot see:
		  ○ body language
		  ○ facial expressions

Low Fidelity: Text	• Participants have a record of exactly what was said during the discussion.
	• Often more time efficient to communicate and review interactions.
	• Often more accessible than other discussions for those who are hard of hearing.
		• Participants cannot see/hear:
		  ○ body language
		  ○ facial expressions
		  ○ tone of voice
		  ○ intonation
		• Participants cannot hear tone of voice.
		• May be more prone to misinterpretation.

9.1.4 Humanness

The humanness dimension looks at who facilitates interactions: **human actors** or **machine/AI actors**. For example, consider a free response mathematics quiz in a learning management system. An instructor or TA (the human actor) could provide feedback on the learners' responses, indicating if each answer is correct, identifying areas in which they could improve, etc. Or instead, a software or AI actor could go through the same process, comparing learner responses to the correct answers. In most cases, a machine/AI actor would have feedback for the learner almost instantaneously, while learners would have to wait days or weeks for feedback from their instructor. However, human actors can typically

provide more personalized feedback than a machine or AI. See Table 9-4 for a comparison of strengths and weaknesses of human and machine/AI driven interaction.

Table 9-4. Strengths and Weaknesses of Interaction from Human and Machine/AI Actors

	Human Actor	**Machine/AI Actor**
Strengths	• They can provide personalized feedback for each learner, small group, or class. • They can provide genuine encouragement and empathetic feedback. • They can respond to individual needs and challenges. • They can build trust and rapport with the learner.	• It can provide immediate feedback and support. • Feedback and support is consistent and unbiased for each learner. • It can easily provide support for a large group of learners, even at the same time.
Weaknesses	• They typically cannot provide immediate feedback. • Facilitation takes up the facilitator's time, and doesn't scale well with large classes. • Facilitation may be subject to biases of the facilitator.	• Limited emotional expressiveness • Does not adapt as well to individual needs and challenges. • For some content domains, it may have difficulty providing nuanced or content-specific feedback.

Note: Right now, many learners can tell when they are interacting with a real person and when they are interacting with an AI or machine. As technology continues to evolve, these differences may become less obvious.

Referencing these strengths and weaknesses, you can choose whether human or machine actors will best fit the needs of your learners for each activity in your course. See the example below.

Example of Human/AI Facilitation - Computer Science

Learning Objectives:

- Learners will collaborate effectively in pair programming activities.
- Learners will design and implement a two-player Tic Tac Toe game using Python.

Project Instructions:
In this collaborative pair programming project, you will create a Tic Tac Toe game in Python. You will create functions for displaying the game board, handling player moves, determining the winner, and handling invalid inputs. You will have two days in class to work on this project, and the rest will be done outside of class time. Each of you should submit the Tic Tac Toe game file and a 1 page (double spaced) reflection of your pair programming experience.

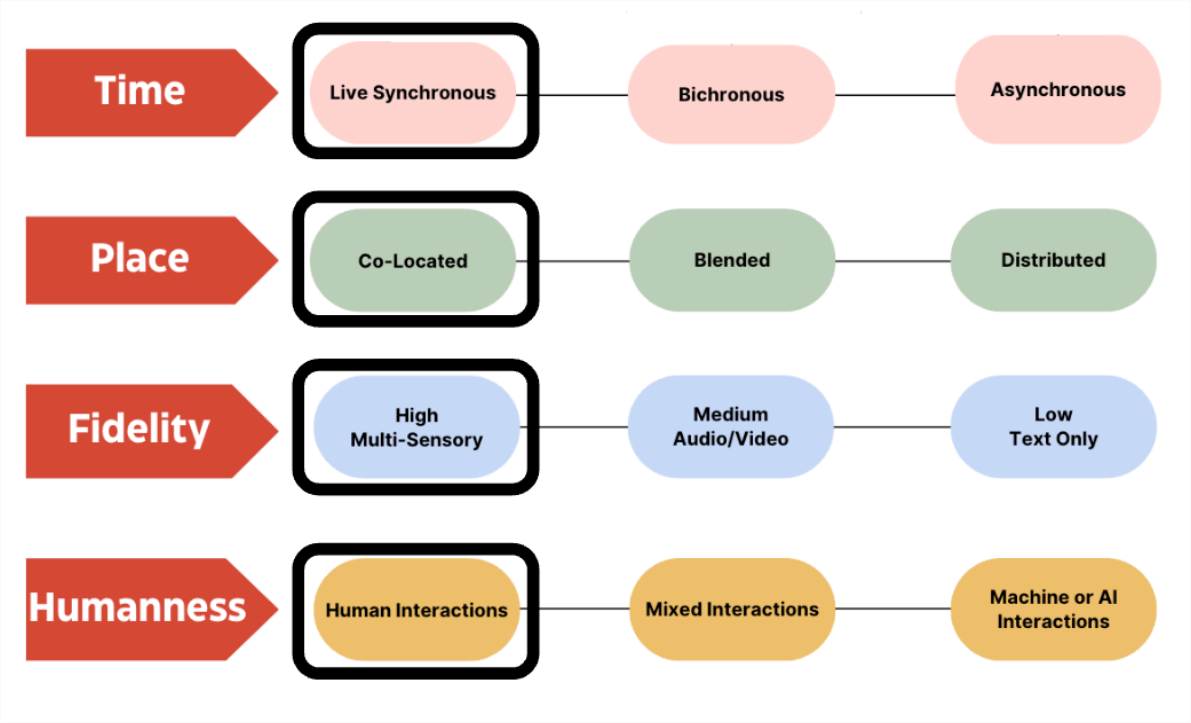
Human Facilitator	Machine/AI Facilitator
• They will organize students into pairs. • During the two in-class sessions, the facilitator will go around the room and see how each group is doing and provide encouragement or suggestions. • The facilitator can provide tips for collaboration, such as using one computer, one person touching the keyboard at a time, writing pseudo code to explain thought processes, etc. • They will answer student questions about assignment expectations or instructions.	• AI can redefine coding terms or principles if learners need another explanation. • If the instructor is not available, the learner can insert project instructions into an AI and have it simplify or restate the instructions. • An AI can provide guidance on Python syntax, debugging, and coding best practices.

9.1.5 Putting the Dimensions of Interaction Together

Now that we've learned about the four dimensions of interaction individually, let's look at a few examples of course activities and determine where they align along the dimensions.

In a traditional in-person class, activities such as discussions are typically done synchronously, in the same high fidelity environment with human to human interactions. In Figure 9-2, you can see how this aligns all dimensions along the left.

Figure 9-2. Dimensions of Interaction for a Typical In-Person Discussion



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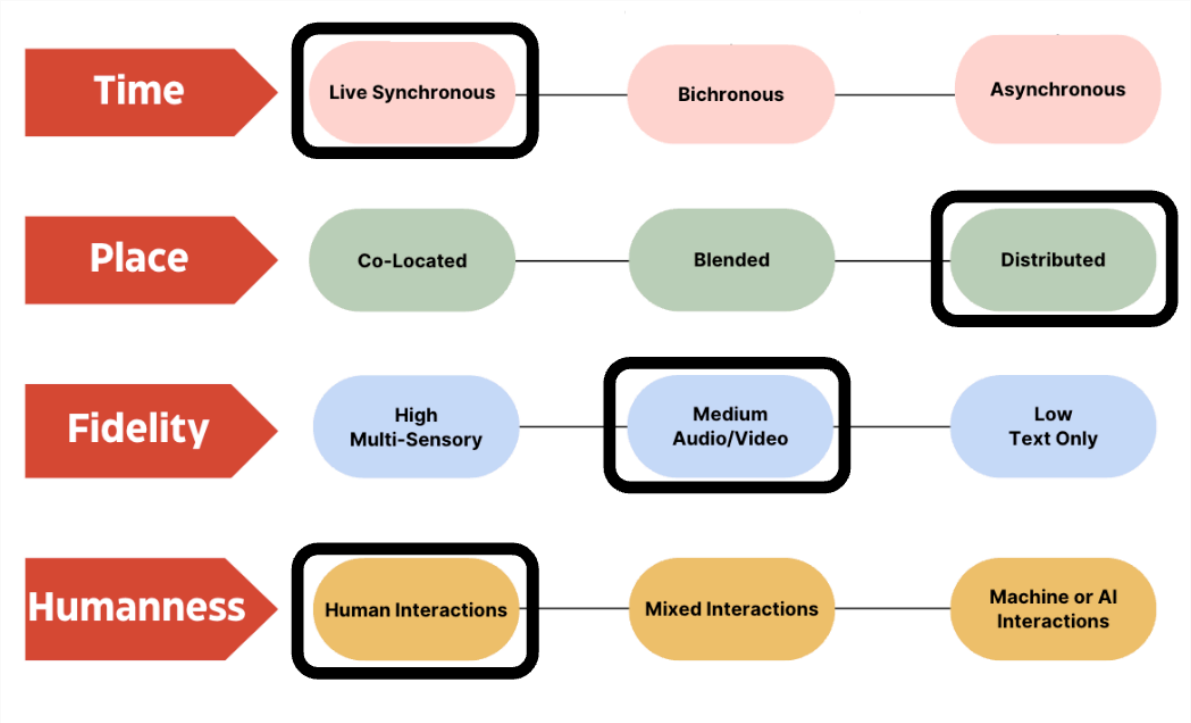
Now consider an online synchronous discussion over a video conferencing software. Participants can interact with each other synchronously though they are physically located in different environments. Since the discussion is done over video, the platform is of medium fidelity. And lastly, there is still human to human interaction, so there is high humanness. In Figure 9-3, you can see this aligns time and humanness along the left, but place and fidelity are in different places.

Figure 9-3. Dimensions of Interaction for an Online Synchronous Discussion



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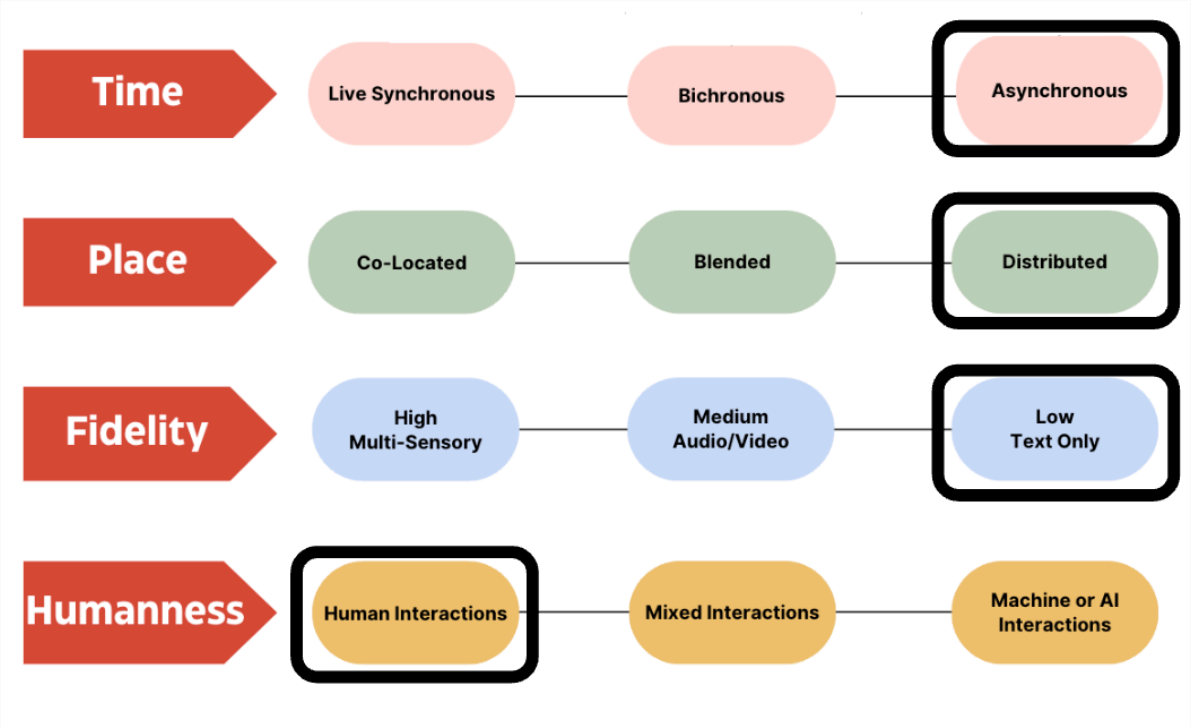
Many courses use text-based online discussions to foster student interaction. These activities are typically done asynchronously in distributed environments. Since they are text-based, they are low fidelity. As for humanness, students may have the opportunity to use AI, but for now, discussions mainly involve human-to-human interactions. Figure 9-4 shows time, place, and fidelity aligned to the right, with humanness aligned on the left.

Figure 9-4. Dimensions of Interaction for a Text-Based Discussion



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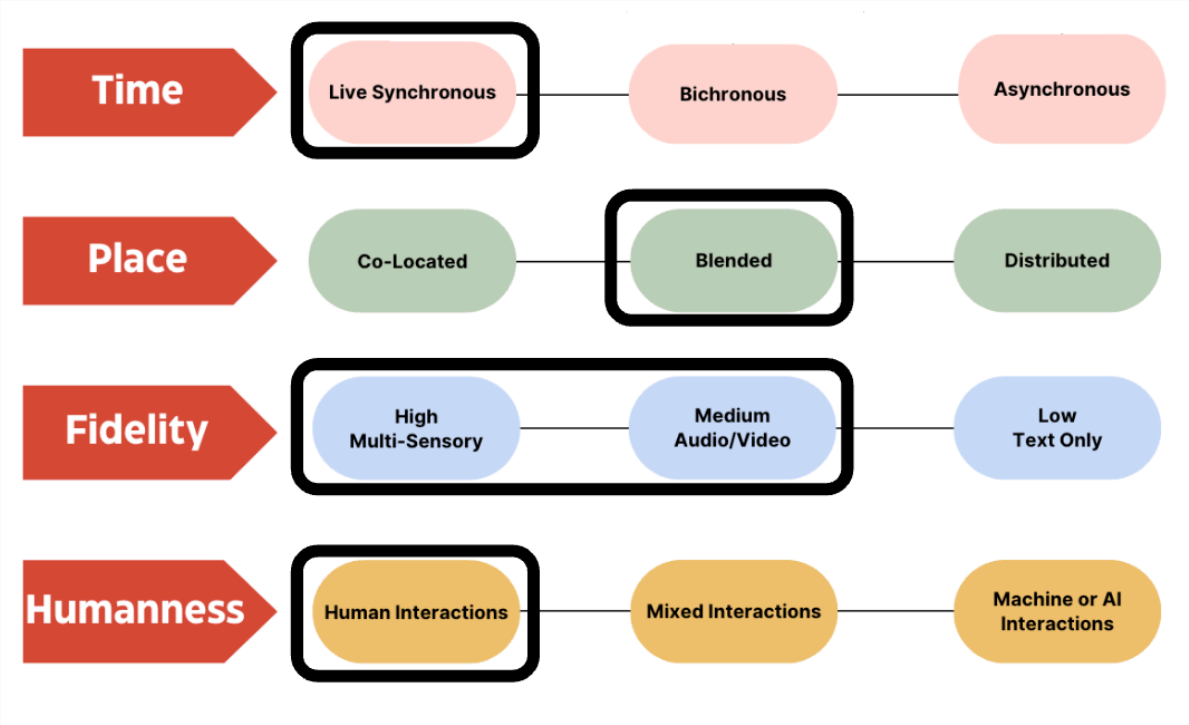
Lastly, let's now consider a discussion where some people participate online over video conferencing software and some participate in-person. In this scenario, students are participating synchronously. However, some are co-located and some are distributed, making it blended. The fidelity is high for those participating in the class together, but medium for those participating online. And students are still interacting with each other, so there is high humanness. Notice how Figure 9-5 looks like both Figure 9-2 and 9-3, since this scenario includes both in-person and online participants.

Figure 9-5. Dimensions of Interaction for a Blended Synchronous Discussion



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By recognizing the dimensions of interactions involved with your course's activities, you can be more intentional with the facilitation strategies you use to support your learners.

9.2 Connecting Bichronous and Blended Activities

It is important to recognize and understand the modalities that you will use in your course. Just as the design of your course is influenced by the modalities you'll be using, the facilitation strategies you will use throughout your course and your course activities are affected as well. See Figure 9-6 for a breakdown of online and blended learning modalities looking at the time and place dimensions of interaction.

Figure 9-6. Online/Blended Learning Modalities

ONLINE/BLENDED LEARNING MODALITIES

Time-Place Dimensions	Synchronous Only	Asynchronous Only	Bichronous (synchronous + asynchronous)
In-Person Only	**Traditional Classroom**	N/A	N/A
Online Only	**Synchronous Online**	**Asynchronous Online**	**Bichronous Online** - Both synchronous and asynchronous online instruction
Blended (in-person + online)	**Concurrent Blends** - Online and in-person take place at the same time **Consecutive Blends** - Online and in-person instruction occur at different times	N/A	**Traditional Blends** - Synchronous instruction happens in-person with asynchronous instruction online

Adapted from Greenhow, C., Graham, C. R., and Koehler, M. (2022). Foundations of online learning: Challenges and opportunities. Educational Psychologist, 57(3), 131-147.

Blended and bichronous modalities are becoming more and more common in higher education. With these combinations of synchronous and asynchronous (bichronous) and/or in-person and online (blended) courses, it is important to have continuity when moving between modalities. Activities in different modalities should connect to each other and those connections should be communicated to learners.

9.2.1 Bichronous

Learning Outcome: I can help students see the connection between synchronous and asynchronous activities.

A bichronous course includes both synchronous and asynchronous elements for instruction. As shown in figure 9-2, bichronous modalities include bichronous online and traditional blends.

In a bichronous online modality, both synchronous and asynchronous instruction happen online with no in-person components. For example, a synchronous lecture using a conferencing tool and asynchronous group discussions in a learning management system.

In a traditional blend, synchronous instruction occurs in-person while asynchronous instruction is online. Asynchronous readings from an online resource and synchronous labs using shared tools and resources would be a traditional blend.

In either modality, there can also be synchronous and asynchronous elements of the same activity, such as a discussion that starts in class and then continues asynchronously online.

Course activities should not be isolated or disconnected from other activities. If activities are disconnected, students may feel like they are doing “busy work.” Instead, activities in each modality should complement and support one another.

Here are some examples of facilitators connecting synchronous and asynchronous activities in a bichronous online or traditional blend context:

- Before class, students read a chapter in their textbook and take a reading quiz. The facilitator looks at the data from the reading quiz to go over questions that students had difficulty with.
- During class, students listen to a guest speaker present and then participate in a Q&A session. After class, in a journal entry, students reflect on their experience with the guest speaker’s presentation and write down any questions they still have.
- Before class, students participate in an asynchronous discussion. Then in class, the facilitator summarizes key points from the discussion and addresses any questions or misconceptions they saw in learners’ responses.

To help students see connections between synchronous and asynchronous activities, you may want to explicitly talk about what you will do in each modality and how they will impact each other. For example, “For your online activity due Thursday, you will submit a reflection on what you learned from our presenter today. So make sure to take good notes!”

You could also remind students of activities. While synchronous, you may remind students about upcoming asynchronous activities. And while working asynchronously, you may send out an announcement of what you will be working on in the next synchronous meeting.

9.2.2 Blended

Learning Outcome: I can help students see the connection between in-person and online activities.

Similar to synchronous and asynchronous activities in a bichronous context, effective facilitators can help learners transition between in-person and online activities in a blended course. As shown in figure 9-2, blended modalities may include concurrent blends, consecutive blends, and traditional blends.

In a concurrent blend, all instruction is synchronous, but some learners are participating online while others are in-person. Often, facilitators focus on the participants that are in-person and are not aware of any questions or comments from the online group. To address this, a facilitator may have a TA or another student log into the conferencing platform and act as an advocate for the online participants. They might read aloud any questions or comments that are in the platform’s chat feature or help direct the camera to point the audience toward those that are speaking. If you plan on having learners work together in groups, make sure you have a plan for how the groups can work together. Will you put those online into their own groups? Will those online be mixed in with those in-person? If so, how will the in-person groups interact with those online?

In a consecutive blend, all instruction is synchronous, but online and in-person modalities occur at different times. For example, an online session on Tuesdays and an in-person session on Thursdays. As a facilitator, make sure it is clear to your learners which days will be in-person and which days will be online.

Conclusion

Knowing your course’s modalities and where activities lie on the dimensions of interaction can greatly influence how you facilitate your course. You should recognize the affordances of each modality and adjust your facilitation to support your learners. Effective facilitators should also be able to help learners transition between synchronous and

asynchronous activities or in-person and online activities. In the upcoming chapters, we will discuss specific tips and facilitation strategies you may consider for synchronous and asynchronous activities.

👷 Course Checklist Part 2: Facilitation

Course Checklist Step 3 Blended/Bichronous Facilitation Plan

Open your course checklist to Step 3 in the **facilitation** unit. Read and respond to the prompt in Reflection 2. Consider a course that you have designed and/or will be teaching.

- Describe an interactive online activity you would use in your course. Where might learners need extra support? Using terminology from the frameworks in this chapter, explain how you will be intentional with your facilitation.

Check the completion box when you are done.

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