

CONNECTING DISCUSSION WITH LEARNING

Jennifer H. Herman and Linda B. Nilson

An effective discussion creates a structure in which students are able to meet specific course learning objectives. However, many discussions are disconnected from the objectives, and students don't learn what the faculty member wanted them to learn. The following three scenarios illustrate how this disconnect can manifest in different disciplines.

Scenario 1: Discussion Is Superficial or Off Topic

In preparation for class, Professor Collins arranges 15 chairs in a circle for today's discussion on *Jane Eyre* (Bronte, 1847). Her British Literature II course is small and dominated by non-English majors who take the course to fulfill a humanities distribution requirement. Although her students complete the reading and seem to enjoy it, Professor Collins struggles to help them "get deeper" in class discussion, and today is no exception.

She begins the discussion by soliciting an overview of the book's plot and then asks the students, "Class conflict is clearly a central theme in this novel. What are some examples of how Jane perceives or struggles with class? Is she a conformist or a rebel? Do you think Brontë is critical of the class system, or is her perspective more analytical, more of a context for the characters' struggles?" The class is silent for a few moments and then students carefully share superficial comments:

"Well, her options are just so limited because of her class. I feel bad for her."

"She's always so careful since Mr. Rochester is high class and she isn't, and he's also her boss. It's not like dating your boss is a good idea today either; that hasn't changed a whole lot."

“She was also plain because she didn’t have the money to buy fancy clothes or jewelry, so it affected her that way, too. It’s easier to date if you have the funds.”

Professor Collins sighs to herself again as the students veer off topic into discussing dating. It seems they don’t even remember her original question and are more interested in socializing.

Scenario 2: Siloed Comments Dominate Discussion

Before class in his 200-level Global Health course, Professor Brussey assigned the article “Systems Thinking and Action for Nutrition” (SPRING, 2015) to give an overview of how various interconnected systems, such as policies, communications, infrastructure, and the sociocultural environment, shape nutrition. He asks the students to discuss in groups of three the meaning of *systems thinking* and to report out a summary of the idea along with their thoughts on which factor might have the biggest impact on an individual. He hopes that through debate the students will realize that there isn’t one primary factor and that the different systems are, in fact, interconnected.

The students form triads, and Professor Brussey circulates while they discuss. He notices that students dive right in and are quickly engaged in arguing for their particular factor. He is pleased that they are using examples to support their argument—both from the reading and from real life—and really seem to understand how systems impact individuals. However, he soon notices that the students aren’t recording or building on each other’s ideas. They are impatiently waiting for whoever is speaking to finish and just jump into sharing their own idea without even acknowledging what was said before.

When he asks the groups to share, they begin by stating the definition of *systems thinking* from the article. Then, the reporter states that “many ideas were discussed,” shares his or her own idea, and then notes that they did not come to consensus. With 10 groups, the reporting out is long and tedious, and much of the content is repetitive. Students are clearly not listening, and Professor Brussey is frustrated that they never got the larger point.

Scenario 3: Discussion Is Based on Opinion, Biased, or Not Supported by Data

In her Introduction to Gender Studies course, Professor Weckle has just finished an overview of the adoption of *they* as a singular, gender-neutral pronoun by the *Associated Press Stylebook* in March 2017 and the American Dialect Society’s declaration of the singular *they* as the Word of the Year in

2016. Professor Weckle then places the students in groups of six and asks them to discuss the potential impact of this formal legitimizing of the singular *they* on gender-nonconforming people and the acceptance of gender-neutral language. Once in their groups, the students begin sharing personal experiences with gender-neutral language, naming people they know who use the singular *they* and describing their interactions with those individuals. The students also share their own pronoun preferences and talk about other gender-neutral pronouns that they've heard. Some of them speculate how the legitimization of *they* might emotionally impact people who use that pronoun. Others voice the opinion that this is just a trend and other ways of referring to people will emerge, while still others argue that the word "just isn't grammatically correct," despite what the Associated Press or the American Dialect Society says. Professor Weckle is frustrated: She feels that the students' comments are based on their opinions or personal experiences and that they are not using any evidence to back up their ideas. She observes that some of the unsupported comments are not only biased but actually contradictory to her message about the current evolution of language toward the acceptance of gender-neutral terminology.

In each of these scenarios, the learning objective wasn't clear, and different challenges emerged that created a disconnect between the instructor's goal for the discussion and the actual learning that took place. In Scenario 1, the contributions were superficial and off topic; the students didn't engage in the complex analysis of class that Professor Collins was hoping for. In Scenario 2, the quest to have the right answer led to students not listening to each other and just waiting for their turn to speak. The discussion didn't build off each contributor's ideas to lead to a deeper understanding, as Professor Brussey anticipated. Finally, in Scenario 3, Professor Weckle's students shared opinions and ideas that were not supported by evidence, and in some ways the discussion contradicted what she was trying to teach.

Each of these scenarios demonstrates how important it is to design a discussion so that students are actually learning the content of the course. This chapter will provide a framework for designing discussions within the larger course context. At the end of the chapter, we will revisit these three scenarios and suggest alternative methods of designing each discussion so that students reach the intended objective.

Connecting Discussion and Learning

As the three scenarios illustrate, discussion as a pedagogical tool can fail to lead students to achieve the planned learning objectives for the course. How do you

avoid this failure? Unfortunately, creating an effective discussion to meet learning objectives doesn't follow an easy recipe in a "tips and tricks" guide, a process described in a published case study, or a method used in a colleague's classroom. Sometimes attempting to reproduce another's success in your own course works, but often it doesn't. The best designed and most successful discussions cannot be cut and pasted from another context but rather are built into the course as part of a larger course design process. This larger design must come first to delineate the most useful cases and examples and to furnish clear, course-specific guidelines for selecting and adapting others' successes to your own context.

The next section of this chapter explains how to incorporate discussion into the larger course design, using the proven backward design model (Fink, 2013; Wiggins & McTighe, 1998). We will explain how learning objectives, assessments, and other teaching methodologies should drive decisions about when and why discussion belongs in your course. This initial step emphasizes understanding and articulating the *function* of the discussion within the larger course design. Then you can plan the *structure* of the discussion within a particular class session or learning unit using the successful models and approaches of others.

The alignment between course design and discussion design determines the effectiveness of discussion in helping students learn. As the three scenarios show, discussion is likely to fail pedagogically if disconnected from the broader course design. So please read and apply the framework and process described in this chapter.

Discussion as Part of Course Design

Selecting and incorporating discussion as a teaching methodology is one of the last steps of a broader course design process that centers around learning objectives. Wiggins and McTighe (1998) developed the process of *backward design* originally for the K–12 system. Five years later, Fink (2003, 2013) reframed the approach for higher education as *integrated course design* in *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. Biggs and Tang (2011) also wrote a text focused on *constructive alignment* for higher education course design based on a similar process. As the backward design process has proven popular and successful in fostering student learning in higher education (Fink, 2003), we use it to explain how to integrate discussion as an effective teaching methodology.

Step 1: Aligning Discussion With Learning Objectives

Backward design begins with identifying the student learning objectives (or outcomes) for your course. In other words, what do you want your students

to be able to do by the end of your course or some shorter unit? We often think in terms of the content that they should master, but what should they be able to *do* with that content? What cognitive skills should they develop? What social or ethical skills? What affective or values-based goals should they attain? Clearly articulating these learning objectives is a necessary first step to clarify the purpose that discussion will serve in your course.

Because all courses have cognitive skills, let's first home in on these. Although discussion can help students meet lower level learning objectives, such as remembering and understanding (Anderson & Krathwohl, 2001; Bloom, 1956), chapter 1 in this book lists many more complex learning benefits of discussion—in particular, higher level thinking (applying, analyzing, evaluating, and creating), problem-solving, inquiry, questioning, communication, and retention of the material. In terms of Bloom's taxonomy, the cognitive level of the key verb in the objective will impact what tasks or questions you give to the students. Depending upon this level, you might ask students to summarize an argument, explain a key concept, give a novel example, analyze how a system works, evaluate data to support an argument, listen actively, or debate a controversial issue using evidence during a discussion. All of these cognitive operations should help students deepen their understanding of a complex concept or multifaceted issue.

If one or more of your learning objectives is social, such as building students' skills to work effectively on a team, the questions or content involved in the discussion matter less than the appropriate discussion processes—for example, how you set up the teams and help them learn to manage themselves. If one of your objectives is ethical, another purpose discussion serves well (see chapter 1), you will want students to analyze the moral ramifications of various courses of action.

Discussion also helps foster interest in the material and motivation to learn it; citizenship; and open-mindedness to new beliefs, values, ideas, and behaviors—all of which represent affective objectives (see chapter 1). Suskie (2009) includes appreciation, integrity, valuing learning, and self-awareness in these goals. In discussion, you can ask students to examine new ideas and information and to reflect on how these deepen their understanding of a complex issue or challenge or change their previously held assumptions. Such a discussion benefits from opportunities for individual feedback in advance; anonymous contributions; think-pair-share opportunities; small-group exchanges; rules for respectful dialogue; and careful facilitation to ensure contributions are heard, acknowledged, and considered.

Regardless of the types of learning objective, you can strengthen a discussion by designing both its structure and its content to explicitly meet the objective(s). Explaining the discussion's goals and design to the students can also help them understand how it fits into the bigger picture of what they are

learning in your course and other educational experiences and lead to enduring learning (Maki, 2010).

Step 2: Using Discussion to Support Assessment

The second step in the backward design process—developing graded assignments or nongraded activities to determine how well the students have met the learning objectives—also impacts discussion design. The assessments answer the question, “How do you know that they know?,” which Jane Vella (2002) raised in *Learning to Listen, Learning to Teach*. Discussion can serve to help students prepare for an assessment, assess the learning itself, or both. Most commonly, discussion serves the former purpose. In this case, you should explain the learning objective to the students; give an overview of the paper, quiz, or other assessment method; and clarify how discussion will help prepare them to do well on that assessment. Seeing this connection will motivate students to fully engage in the discussion.

As an assessment method, discussion can provide both you and your students with either formative feedback (a measure of students’ progress) or summative feedback (an end-of-learning assessment). As Vella (2002) advises, assessments supply the strongest data when they are *authentic* (from real life), *observable* (students say or produce something), and *measurable* (you can judge the quality) indicators of the degree to which each student has achieved an objective. If you intend to summatively assess (grade) the discussion as a whole or the contributions of its participants, see chapter 5 for various strategies.

Step 3: Improving Discussion by Setting Performance Expectations

After the learning objectives and assessments are in place, the third step in the course design process is to articulate the level of performance that you want the students to achieve. What does success look like? Many faculty members develop a rubric to help them articulate their expectations in writing. Creating a rubric requires you to clearly identify the knowledge, skills, and affective context that students will need for the assessment. You begin by listing the criteria by which you will judge the quality of the students’ work and then describe “acceptable” and “excellent” work for each criterion (Stevens & Levi, 2012). All students should perform acceptable work to meet the learning objectives and pass the course, although excellent work remains the ideal.

If you are using discussion as a pedagogical tool to help prepare students for an assessment, you should integrate the criteria and their acceptable level into your discussion design. For example, let’s say that one of your objectives is for students to analyze the charter school funding debate, and you will

assess this through an argument paper. Your rubric includes the criterion that students use reputable sources of evidence to support their argument. Therefore, for the preparatory discussion, have students bring three pieces of evidence with them and evaluate each source in small groups on how scholarly, reputable, free of bias, and supportive of their argument it is. If students understand that the discussion will help them write a better paper, they will have more reason to engage in and focus on the discussion.

If discussion figures into your course grades, then developing and sharing with students a clear rubric with your criteria and expectations can motivate better preparation and stronger engagement in the discussion. Your criteria can include, for example, using readings or outside sources to support a claim, building explicitly off a classmate's ideas, or asking questions that help deepen the complexity of the conversation. No doubt, developing a rubric will result in a higher quality discussion with a stronger connection to learning (see chapter 5).

Step 4: Using Discussion as a Teaching Methodology

In this fourth and final step of the backward design process, you select teaching methodologies that help prepare students for each of the assessments. How do you know what to select and when to include discussion? In *Creating Significant Learning Experiences*, Fink (2013) introduces learning activities for active, holistic learning, which include gathering new information and ideas, gaining experience by observing and doing, and reflecting in dialogue with oneself or others. Discussion can serve any of these purposes: The jigsaw method (see chapter 2) helps students acquire and understand new information, debates and task-based discussions add experience, and thought-focused discussion encourages reflective dialogue.

In her course design workshops, Herman presents a framework of content-experience-reflection (C-E-R). She derived it from Fink's categorization of learning activities to foster thinking about the role of discussion in a course. In the C-E-R framework, each cohesive learning experience must contain three components: the introduction of new content, direct experience engaging actively with the content, and reflection that enables the learner to analyze the content through the lens of the active learning experience. The C-E-R framework also draws upon Kolb's (1984) experiential learning cycle, particularly the idea that learners learn best from experience through reflection.

When designing a class using the C-E-R framework, first identify the breadth of each learning experience, which is often one class and the related homework you assign before or after the class. (You can also stipulate that the learning experience encompasses several class sessions.) Then consider how

you can apply a C-E-R structure across multiple learning units to add coherence and predictability to your course.

To illustrate, you typically deliver the first part of the framework, content, through readings, videos, websites, or lectures, either inside or outside class. But discussion can also deliver content, such as when each student shares an article, new knowledge, or personal experience with the group. More broadly, you might want to decide how and when students typically get content and build that into your framework. For example, you can regularly have students view a recorded lecture and read a selection before class and then allow class time for discussion and other activities. You can also have a routine of sharing content through lecture and then having students briefly discuss the content for clarity and comprehension—an excellent strategy to reduce cognitive load and increase understanding in large, content-heavy lecture courses. Regardless, having a pattern of content delivery and discussion throughout the course will help create greater coherence and predictability.

Experience, the second part of the C-E-R framework, encompasses a wide range of active learning teaching methods: simulations, role-playing, case studies, problem-based learning, debate, lab work, interviewing, project-based learning, problem-solving, writing to learn, and many others. Sometimes these activities use discussion as the mechanism for the experience, such as debate, interviews, or group work. Experience activities often take place during class but also make viable out-of-class assignments, such as service-learning, skill practice, and group projects.

The third and final piece of the C-E-R framework, reflection, allows students to connect content and experience in a meaningful way. It can take place inside or outside class as an individual or a group activity. With its focus on meaning-making (Fink, 2013), it can assume many forms, such as writing a reflection paper on a service-learning project, writing up lab results, or answering essay questions on an exam, all of which represent individual reflections. Discussion is the most common form of group reflection, whether done in a large class or small groups, and can also take various forms: debriefing an experience, analyzing it against a best practice example or a rubric, sharing reactions to an experience, connecting it with prior experience, interpreting it using content, or getting or giving feedback to others.

In the backward design model, selecting discussion as a teaching method takes place during this final step. By this time, you know what learning objective(s) discussion helps support; how discussion prepares students to perform well on the assessments; which specific content, skills, attitudes, or values the students are gaining from the discussion and for which assessments; and whether you intend the discussion to deliver new content, create an active learning experience, or facilitate reflection to connect new content with a learning experience.

Backward Design of the Learning Unit and Discussion

Once you design your course as a whole, you can start developing the learning units and the discussion activities using the same backward design process. For an individual learning unit, you first articulate clear learning objectives. Do you hope students will develop a deeper understanding of a concept in the reading? That they will be able to analyze a role play experience based on theories from the literature? Compare and interpret results from two different data analysis techniques? Focus on the *verb* in the learning objective—what you want the students to *do*.

If you decide discussion can help students meet your learning objectives, then decide what role discussion will play in relation to the course's assessments. Does the discussion prepare students for a future assignment, or will the discussion itself serve as the assessment of learning? If discussion is the form of assessment, are you using this to gauge students' progress, or are you grading them on their results? Have you articulated, on a rubric or elsewhere, what an acceptable level of performance looks like either for the discussion or for the future assessment for which the discussion is preparing students? Have you communicated those expectations to the students? How will the criteria in your rubric inform how you construct your discussion?

Next, consider the C-E-R framework for this unit. What role should discussion play—content, experience, or reflection? Should certain content or experience precede or follow the discussion? Do students need to gain any knowledge or develop any skills through the discussion that are directly tied to the “acceptable” or “excellent” results that you are seeking on a related assignment?

Finally, use the strategies and insights from the 12 principles to design your individual discussion session. We also recommend drawing ideas from the case studies in this book (chapters 6–13) to help you structure your discussion. Let's now turn back to the three examples that opened this chapter and consider how applying backward design to the learning unit and discussion design can help improve outcomes for student learning.

Reconnecting Discussion and Learning: Redesigning the Three Scenarios

For each of the three scenarios at the beginning of this chapter, we will walk through a redesign to improve the connection between discussion and the content, applying principles described in this chapter.

In the first scenario, Professor Collins struggles with her students' superficial discussion of class difference in *Jane Eyre* before they veer off topic altogether. Although they seem interested in the content (they did the reading!),

she has many non-English majors who may not understand how she intends the discussion to further the course's learning goals. Professor Collins needs to formulate clear learning goals for the discussion and then share them with students.

Although willing to speak up, her students only mention points related to class issues from the novel. This is recall and understanding, the step *before* deeper analytic work. Following the backward design process, Professor Collins can tie a future paper to the learning objectives, describe her performance expectations for the paper to the students, and explain how the discussion can help them prepare for this assignment. Then she can suggest how they should get ready for the discussion in advance—perhaps by listing manifestations of class in the novel or prewriting answers to the discussion questions—so they can explore the novel on a deeper level in class.

In Professor Brussey's Global Health course, students fail to build on each other's ideas and miss the larger point, leading to a tedious reporting process. To his credit, Professor Brussey knows what he wants students to learn to do through the discussion: to derive and interconnect the system factors impacting individuals. However, for the discussion, he directs students simply to summarize the meaning of systems thinking and decide which factor has the biggest impact. He would like debate, but he asks students to come to consensus.

The students use evidence to support their ideas and initially share with enthusiasm, but the discussions quickly dissolve into siloed comments as the students realize that the professor has asked for consensus around the one right answer. Their eagerness to be right and win the competition kicks in, so they stop listening to each other. Because they don't move beyond sharing possibilities and lack the criteria to judge what the best answer may be, they just report out ideas without much analysis.

Professor Brussey could avoid this problem by framing the discussion more carefully to meet his learning objective. For example, he could use the C-E-R approach and connect discussion more explicitly with the content (the assigned article). He could prepare his students by having them outline the main points before class and select the most cogent points in their groups. He also could use a case study, such as a scenario about a person in a specific context suffering from malnutrition, and ask the students to analyze how systems might impact that person's situation. Student groups could share their results in ways other than reporting out—for example, creating a concept map, which would also help them connect their ideas.

In the third scenario, Professor Weckle is dismayed that her students are exchanging personal experiences and drawing from unsupported opinions and biased perspectives rather than using evidence to back up their ideas. She

worries that some of their comments may actually contradict what she is trying to teach. Although she regards the discussion as unsuccessful, it is actually following her request that the students talk about the potential impact of the formal legitimizing of the singular *they* on gender-nonconforming people and the acceptance of gender-neutral language. The students are merely sharing examples of the impact on people whom they know and explaining their own degrees of acceptance of gender-neutral language.

Professor Weckle hoped that the conversation would draw on evidence and theory to explore the larger, more systemic impact of the language change. This is another example in which the instructor should have announced her intended learning objective and perhaps modeled a few suitable comments. She also could have used the C-E-R framework. If students are reflecting on content during this discussion, where are they drawing the content from? Professor Weckle provides a helpful overview of how language is changing, but unless the students have read sources that speak to the broader implications of this change, they won't have much content to draw from except personal experience. In the future, she can connect the discussion more explicitly with scholarly content and model how to use evidence to avoid personal opinion and address the issue at a national, rather than personal, level. She can also apply backward design to link the discussion to an upcoming assignment that asks students to use evidence in a similar way and explain how this discussion will give them practice in evidence-based thinking.

All three of these scenarios show that discussion can result in learning if properly planned and guided. Like every other teaching method, discussion requires one or more learning objectives to serve an instructional purpose. We wouldn't introduce a problem-based learning experience, a role-play, a simulation, or a group assignment into a course without a learning objective in mind, nor would we have students write a paper, design an energy-efficient building, or construct a rocket prototype for no specific learning purpose. A discussion deserves the same care and attention.