

## INSTRUCTOR CHECKLIST

### *Adopt an inclusive mind-set:*

- Ask yourself in every pedagogical decision you make: “Who might be left behind as a result of this practice?” and “How can I invite those students in?”
- Recognize that inclusive teaching practices are broader than content and discipline. Furthermore, inclusive teaching practices are effective teaching practices.
- Acknowledge that there are differences among students and that diversity is an asset to be leveraged in the classroom.
- Because our students, courses, and culture are ever-evolving, inclusive teaching is a process that will never be complete. Teaching inclusively requires our persistent attention.

### *Embrace structure:*

- Do not assume your students know how best to approach your course. Embed resources and assignments that help make how to succeed transparent to all students.
- Consider how students will be held accountable to complete aspects of the course that are essential to success.
- Overlay structure in your active learning approaches.

From: Hogan, K.A. and Sathy, V. (2022):  
Inclusive Teaching: Strategies for Promoting  
Equity in the College Classroom.  
University of West Virginia Press.

## CHAPTER 2

# THE VALUE OF STRUCTURE

Kelly attended a workshop many years ago in which the facilitator showed a video, a parody of teaching and learning in a typical college class. In the video, the professor lectured about ballroom dancing, drawing choreographic configurations on a chalkboard all semester. The students demonstrated their boredom in as many exaggerated ways as they could. A last scene showed the students at their final exam. They were brought to a gymnasium for the first time, where they had to demonstrate proficiency dancing with a partner in order to pass the class. Students were unprepared and dismayed, to say the least.

The video left quite an impression, staying with Kelly to this day. It absurdly highlighted what we are sometimes blind to in our disciplines: that the end goals for learning need to align with the semester-long practice. In other words, whatever we want students to accomplish at the end of the course has to be practiced deliberately throughout the semester.

Let's say your goal for students is to be able to critically analyze research literature. Relying solely on watching someone else do this in a well-organized lecture is not going to get

most students there. Students will need multiple opportunities to practice analyzing research studies for themselves, with feedback from an expert. Without practice for all, those with previous experience doing this kind of analysis may excel, while students without prior experience may be lost. We can imagine a professor taking credit for the students' success and blaming those who do not excel—when in fact, the professor did not have much to do with the outcomes. The inequities in skills that existed before the semester began were carried through to the end of the semester.

For practice to be effective and inclusive, it must be structured and required in your course—not optional. We're all familiar with "not optional" practice. Consider how new drivers learn to drive. Numerous safety studies over the years have led to graduated driving programs in every state. For example, in North Carolina, new drivers must now log sixty hours of distributed practice with a parent (ten of the hours at night). Once licensed, the new driver needs to continue practice under limited conditions for six months; there is a curfew and they cannot have more than one friend in the car. These laws are based on research and they protect everyone. Most people would agree that requiring sixty hours of practice for new drivers is a good idea. If new drivers don't complete the practice, the negative outcomes are serious.

There are also negative outcomes in a course if students aren't required to engage in a certain amount or kind of practice that is distributed over time. What might be the consequences? Some subsets of students won't become proficient in the concepts and skills. Other more serious outcomes are higher drop or failure rates, students leaving a discipline they were once interested in, and, in some cases,

students exiting higher education altogether. In a classroom that doesn't require practice for all students, some students will have the know-how to study and practice on their own. These students may have the time and motivation to do all of the "extras" to be prepared. They may be privileged with social capital. Some students will not have the know-how. To be clear: we are not suggesting that certain students lack motivation to succeed, but rather that they may not yet understand the approaches it often takes to succeed. These could include students who are first in their families to attend college, students who come from underresourced backgrounds, students with learning differences, or perhaps students who come from different cultural backgrounds where expectations or norms about education may differ. These types of students might be the ones shouldering the majority of negative outcomes when we do not embed the know-how to succeed in our coursework.

In this book, we will advocate for the concept of high structure. This includes establishing the practice required for learning and recognizing that a rich and firm structure helps all students when minimum requirements and expectations are put in place. Putting structure in place doesn't harm students who already have the skills for practicing. But it does help level the playing field for the diverse groups of students who have not yet developed that skill. In other words, it brings some equity to educational opportunities.

Before we dive into more thoughts about setting structure and expectations, we want to clarify that this chapter is about the importance of structure in designing a course. Thus, we won't be focused on the individual curricular elements, such as assignments or assessments, as much as on how the individual pieces make the whole.

### What Do We Mean by High Structure?

Let's think about a course design we would characterize as low-structure, one that leaves some at an unfair disadvantage. Dr. Slim, our hypothetical professor, wrote a syllabus with a chapter listed beside each class meeting time and a topic stated in a short phrase. The students are expected to do the reading before class and be ready for a class discussion. In class, Dr. Slim uses a mostly lecture-based approach, occasionally asking questions, and volunteers raise their hands to answer. Over the semester, students are required to demonstrate their proficiency through one analysis paper, one midterm exam, and one final exam. Dr. Slim provides some optional review sessions and guides for success.

How might students with competing demands on their time *behave* in Dr. Slim's course? Based on our years as educators, our best guess follows. Many students will not do the reading, because there is no accountability for the reading. They will decide that Dr. Slim just summarizes it in lectures anyway. Only a subset of students will participate in class, because many are not prepared (they didn't do the reading, after all) and because there is no incentive or requirement for raising their hands to participate. Most students will not review their notes until they are asked to take an exam or write a paper. Many students will produce low-quality work, because they didn't take the optional opportunities to practice and Dr. Slim's expectations were not explicitly established. While behaviors might be similar among many students, the reasons some don't do the work might be different: not knowing best practices in learning, poor time management, lack of motivation or interest, to name a few. Nonetheless, it would be easy to imagine Dr. Slim telling a colleague, "except for a few bright ones, these students are lazy and underprepared."

What could we suggest to Dr. Slim to increase course structure and include more students in the learning? As in a home-design reality show, let's conceive of a makeover to turn Dr. Slim's course into a high-structure course. In the high-structure course, Dr. Slim lists specific pages that are most relevant to the upcoming class with explicit goals for what the students should take away from the readings. Dr. Slim requires students to complete and turn in guided reading questions (GRQs) *before* class that include new vocabulary and foundational concepts. Other days, the pre-class assignments include required discussion board posts or online quizzes related to videos or readings. *During* class, Dr. Slim highlights the day's objectives and poses questions that all learners are required to answer through group discussion, individual writing, and anonymous polling (see chapter 5 for various types of ideas). Dr. Slim uses these in-class questions to ask more probing questions than the pre-class work and to debunk misconceptions in the discipline. Lastly, *after* class, Dr. Slim's students are required to synthesize short responses to essay prompts or answer exam-like questions that help them reflect on their learning of the stated objectives. Students receive feedback about whether they are meeting expectations or not in a timely fashion. Now Dr. Slim's class has incorporated elements of structure that make it clear to all students how best to succeed in the course with clear expectations, routine practice, and frequent feedback.

In Dr. Slim's high-structure course:

- the work before and after class is not optional for students.
- the level of difficulty increases as students move from pre-class work to in-class activities to post-class homework.
- students have guidelines, expectations, and opportunities for practice before they are evaluated.

How might students *behave* in Dr. Slim's high-structure course? Once again, we have a great deal of experience with student behavior in our high-structure courses. Most students will distribute their work before, during, and after class because it is required of them as part of their final grade and for social interactions in class. If they are accustomed to cramming a few times in a semester, they may complain that the course is a lot of work or something along these lines. However, high structure can lead to efficiencies for a student. Spacing out their studying each week may lead to less cramming before an exam. We've both had students come to office hours seemingly seeking our permission to *not* stay up all night like they often did before other exams because they felt like they had practiced a lot already. In fact, in a study of biology students at Eastern Michigan University in which the instructor moved from low- to high-structure design, students reported spending less time studying outside of class, even though student performance increased (Casper, Eddy, & Freeman, 2019).

In sum, the work is not optional in high-structure courses and there is required practice before, during, and after class. How do you require something of all students? We find that a few points toward a participation or homework grade, or something equally low stakes, motivates most students. Additionally, when students know there will be structured social interactions for everyone in the class (such as discussing a concept in pairs) they don't like feeling unprepared. We hope we've emphasized that the design of the assignments can easily be scaffolded to increase thinking levels and skills as a lesson progresses from before to after class. The scaffolded practice combined with continual feedback in the high-structure course equates to all students having a clearer road map or know-how for meeting expectations.

**Table 2.1** The elements of a low-, moderate-, and high-structure course

	<b>Graded preparatory assignments</b> (example: reading quiz)	<b>Student in-class engagement</b> (examples: clicker questions, worksheets, case studies)	<b>Graded review assignments</b> (example: practice exam problems)
<b>Low</b>	None or <1 per week	Talk <15% of course time	None or <1 per week
<b>Moderate</b>	Optional*:1 per week	Talk 15–40% of course time	Optional*:1 per week
<b>High</b>	≥ 1 per week	Talk >40% of course time	≥ 1 per week

\*Need either a preparatory or review assignment once per week, but not both

Source: Reproduced by permission from Eddy and Hogan 2014

Kelly and her collaborator defined structure in her 2014 study (Eddy & Hogan, 2014). See table 2.1 for one way to define course structure.

### How Can I Prepare My Students for a High-Structure Experience?

High structure is new to many students and can be uncomfortable. Consider a student comment from a course in which the instructor requires an upload of guided reading questions and the completion of reading quizzes before highly active learning class sessions:

"I did not like the layout of this course. I do better when I am being taught material. Instead, in this class I felt like I came into class expected to already know everything. I felt like I had to teach myself more than anything. Class time only consisted of being quizzed on the material when I did not feel like I knew



it that in depth yet, as I do not learn well from just the textbook. I would much rather have class consisting of a real lecture of the material telling me what everything is."

We have found this sentiment expressed more than a few times in our courses. Students see independent practice as "not teaching." They see quizzing or learning from peers as "not teaching."

In our experience, one way to dispel these myths with students is to repeatedly remind them about how learning works and that we created the materials that guide them through the learning objectives. This is part of our *teaching*. The activities in class, which promote deeper thinking in the more difficult concepts, were also designed by us and are about increasing student success. This is how we *teach*. Ideally, every student would come to us knowing more about the process of learning. Often, this is not true for many college students and is rarely recognized by educators. Unless your institution has a required course where all students are exposed to best practices in learning, we recommend that you explain the reasoning behind your teaching choices transparently and frequently in your interactions with students. We like to imagine we are running a semester-long marketing campaign for how learning works and how we are aligning our teaching to these best practices. We'll use phrases like this after an active learning exercise: "I expected some of you to struggle through that activity, but I wanted you to make mistakes to help you realize that your understanding of that concept was not quite as deep as you thought it was just by reading about it in our homework" or "Look how much the whole class has improved on this concept simply by justifying your thoughts to each other. That kind of practice helps us build connections in our brains."

These continual reminders about how we've designed the course to focus on how learning works begins to sink in for most students and become a point of appreciation.

Because many students do not have a grasp on how best to learn, they don't appreciate that deep learning is difficult and sustained work. Cognitive science reminds us: learning takes effort and needs to be distributed and varied. We see these principles incorporated in the way people learn to drive: not in one or two sessions around the same route, but over many days and weeks on many different roads. In Dr. Slim's redesigned course and in our courses, increased structure makes clear the learning cycle: practice before, during, and after class. In the end, we know incorporating requirements for best practices in understanding their learning process is going to help more students and be more inclusive.

Why not help students learn cognitive science by presenting evidence to them? For example, Viji shares with students a study from 2002 on student procrastination. Nestled deep in the article is a finding that the more distributed the work is, the less enjoyable it was for participants (Ariely & Wertenbroch, 2002). It is reasonable that people would choose to mitigate certain challenging tasks by doing them quickly, much like ripping off a bandage. However, in the case of producing high quality work, which this study was measuring, the slow and steady approach created the best results. She decided to share the study with her students to draw the parallel about their daily preparation before class. Viji acknowledges that it may not always be enjoyable, but that it is evidence for distributing learning before, during, and after class. A phrase she repeats often to help students move away from cramming knowledge that will be easily forgotten is "easy in, easy out," which is not what we want for learning. It is helpful to consider the ways you might

communicate with your students that effective learning will be deliberate and structured and not without effort.

Let's be realistic. When learning requires effort, many students may articulate this as frustration in their end-of-course evaluations. These comments can dissuade an educator from implementing a high-structure experience for their students. On top of that, designing a high-structure course requires a great deal of effort by the instructor, at least initially. Educators may wonder if it is worth the effort or may be reluctant to abandon strategies they have implemented for years (such as a set of canned lectures). But while students might be put off initially by the work demanded in a high-structure course, many of our students' comments provide reasons to implement and stick with it. As the learning cycle becomes part of their routine, learners will start to feel success in a variety of ways. Here are some comments we collected from our own and colleagues' students in high-structure courses:

- "The course is well designed, with a good amount of homework to review topics and plenty of resources that are provided to get help that we need. It is apparent that the instructor cares about our success."
- "Although I was initially critical of the guided reading questions, they helped me grasp the material more than just reading on my own. I'm so glad you required them because I probably wouldn't have done all of them otherwise."
- "The course really challenged me and helped me to develop better study habits."
- "The course was organized to reduce the barriers to success: that is, course assignments were laid out clearly with many reminders, and also many ways to self-check that assignments were completed. The only burden on students was to learn the

material, not to spend time on organizing course assignments or produce our own checklists. The course was also structured to discourage procrastination, with homework and quizzes serving both to ensure students were keeping up with material and also to reinforce learning that material."

- "I wanted to personally thank you for a great class. I'm a transfer, this is my second year—and your class is by far one of the best I've taken . . . ever. Sure, I griped about the workload, but looking back on everything we've covered and completed this semester is so impressive. Your sincere desire for us to succeed is so refreshing and appreciated."

The value of structure is perhaps even more obvious to students in an online course. During the COVID-19 pandemic, as face-to-face courses abruptly transitioned to remote, students across the country expressed various sentiments that often amounted to frustration with a lack of structure. Whereas many emergency remote classes left students feeling that they were on their own with "busy work," well-designed online courses are more intentional about how students experience an organized learning environment. As Flower Darby and James M. Lang note in *Small Teaching Online: Applying Learning Science in Online Classes*, students given a series of structured video assignments build their confidence and self-efficacy steadily through the semester in a task that once seemed nerve-wracking to them (Darby & Lang, 2019). They point out that when structure is in place around course design, as well as expectations like participation, students learn what it takes to succeed.

As we have outlined here, an intentional design with high structure is vital to inclusive teaching. Whether in person, online, or both, being transparent with students about your

rationale for the design and how learning works can be crucial to its success.

### Is There Evidence That More Structure Is More Inclusive?

While high structure includes active learning, they are not the same thing. We have much evidence that active learning improves learning, retention, and success for more students (i.e., is more inclusive), yet not all implementations result in positive outcomes compared to lecturing (Freeman et al., 2014). Complications arise because the execution of active learning varies in effectiveness. Thus, we don't think the terms "active learning" or "flipped classroom" describe what we have been talking about when we talk about high structure. It is possible for active learning activities or a flipped classroom to have little structure (i.e., the pre-class work and post-class work is optional, and students don't have much incentive for attending and participating in class). We choose to focus on a few studies that show the benefits of active learning plus a focus on the effectiveness of structure and spacing out learning (Lang, 2016a). Many of the studies around course structure have been done in the sciences, often comparing courses that have been redesigned to incorporate more structure.

In a well-designed study, Scott Freeman and colleagues tested the hypothesis that implementing reading quizzes and/or extensive in-class active-learning activities and weekly practice exams (high structure) would reduce failure rates in a very large enrollment introductory biology course at the University of Washington, compared with lecturing and a few high-risk assessments (low structure) (Freeman, Haak, & Wenderoth, 2011). By controlling for the difficulty

of exams across six semesters with the same instructor, the researchers found failure rates dropped from 18.2 to 6.3 percent after increasing structure. If one definition of inclusive is helping more people stay in a discipline, then this study surely provides evidence that high structure is inclusive.

But how does structure affect certain groups of students? Kelly and her collaborator Sarah Eddy followed up on Freeman et al. and asked this question across six semesters while Kelly was redesigning her large enrollment introductory biology course (Eddy & Hogan, 2014). She increased course structure by adding guided reading questions, required pre-class reading quizzes, and required in-class participation. On average, performance improved for all students, but Kelly and Sarah's study garnered national attention because they found a disproportionate benefit for some student groups. Gaps in performance closed for first-generation college students compared to their non-first-generation peers when more structure was added. Differences that existed between Black and white students were halved. Data collected through student surveys suggested some possible answers to why performance improved. Students were more likely to do the pre-class work when it was required instead of recommended. All students felt a greater sense of community under moderate structure. Additionally, there was an "in-class participation gap" for Black students that disappeared under the moderate structure because all students were required to have discussions with peers. Thus, while structure benefits all students, some groups of students can benefit even more.

Sometimes when discussing course redesign to emphasize additional structure, people question if it harms some students, particularly those who have been high-achieving in low-structure environments. To address this, Viji and her collaborator Quinn Moore examined the impacts of

incorporating additional structure in Viji's redesigned introductory statistics course, by requiring students to watch short videos prior to class sessions (Sathy & Moore, 2020). Rather than listening to demonstrative lectures during class time, students were asked to watch them prior to class. Each class then started with a quiz to incentivize preparation. Class sessions were used to work collaboratively through problems or begin assignments. Rather than focus solely on a single measure such as an average gain or loss on achievement for students, they examined how students' scores at different points in a grade distribution were impacted. They found that the redesign amounted to a roughly similar positive result along the distribution of about four to six points. In other words, all students benefited from the additional structure regardless of where they were in the achievement distribution.

The University of Washington and the University of North Carolina represent research institutions with selectivity in their admissions. You may be wondering about the effect of course structure at institutions with higher acceptance rates and more socioeconomic diversity. A study was conducted with biology students at Eastern Michigan University, which admits almost all applicants to its undergraduate program. Nearly half of their students are from low-income backgrounds, 35 percent are transfer students, and 35 percent are from minoritized groups. Anne Casper et al. found that all students performed better under higher structure and differences between minoritized and non-minoritized groups disappeared under this structure (Casper, Eddy, & Freeman, 2019). Interestingly, the type of required assignments used at the University of North Carolina (pre-class readings and reading quizzes) did not produce similar positive outcomes when they were replicated at Eastern Michigan.

The increased performance and elimination of disparities occurred only when the required pre-class work centered around instructor-created videos, not readings. This study indicates that structure matters, but the strategies used to carry out structure may need to be tailored to the course, students, and institutional context.

Lastly, a metadata study led by Elli Theobald included data from more than 50,000 undergraduate students and reinforces the idea that active learning alone won't produce outcomes that disproportionately help underrepresented student groups (Theobald et al., 2020). They found that only when 67–100 percent of total class time was spent on active learning were disparities in performance narrowed. Specifically, they found that inequities in achievement were reduced when there was structured deliberate practice paired with a culture of inclusion. They defined deliberate practice to include focused effort toward improving performance, scaffolded exercises aimed specifically toward deficits in understanding and skills, immediate feedback, and a recurring cycle of these activities. A culture of inclusion centers on a genuine interest and care for students' success, confidence in their ability, and treating all students with dignity and respect. Theobald et al. suggest that it is not only our skill in evidence-based teaching but also our commitment to inclusive teaching that may yield the most promising results in terms of equitable learning.

### What Are Some Practical Tips to Build More Structure into Course Curricular Resources?

As we discussed in chapter 1, we see inclusive teaching as a mind-set or overlay, so it is useful to consider what you are already doing with your courses and ask how to make



them more inclusive. If you are new to teaching, you have the benefit of designing with inclusion in mind from the beginning. Below, we'll explore a few common strategies to increase structure in curricular materials.

Before we jump into some quick tips, it's important to note the large body of literature related to universal design in learning (UDL), a framework for providing students multiple means of engagement, representation, and action and expression (CAST, 2018). It's often easiest to introduce the concept of universal design through its roots in architectural design, implemented since the 1950s. For example, a ramp into a doorway helps someone in a wheelchair, yet it also helps someone pushing a stroller or another person rolling a cart with supplies. Thus, while stairs may be accessible to most, the extra option of a ramp ensures more people can enter the building. Thomas Tobin and Kristen T. Behling, coauthors of *Reach Everyone, Teach Everyone*, say that universal design for learning can be implemented with a "plus one" mind-set (Tobin & Behling, 2018). In Tobin's *Teaching in Higher Ed* podcast interview with Bonni Stachowiak, he explains, "think of all the interactions that you have in your course. . . . And if there is one way to have that interaction now give [students] one more way to have that interaction" (Stachowiak, 2018). For example, if the goal of a pre-class assignment is to gain some foundational content, students might be offered the option to either read an article or listen to a recording of similar material. Listening might be easier for someone who is visually impaired, but it also helps a student who must drive two hours each way to campus.

Our interpretation of using UDL in the classroom is to think about how to make the requirements in our classes accessible to as many learners as possible. But realize we said *requirements*. Coming to class prepared with knowledge

is a requirement we have because that is part of the before-during-after high-structure learning cycle we discussed above. UDL allows us to reflect on how to structure aspects of our course to enable different kinds of learners but within some of the high-structure requirements we have for all students. The tips we discuss below are the ones that come up most with colleagues, and they fit into the UDL framework. (We recommend looking at the UDL framework on CAST's website, <https://udlguidelines.cast.org/>, as an excellent visual summary.)

### *Are You Assigning Readings?*

Some students will feel overwhelmed and lost if a large amount of reading is assigned. Consider providing guided reading questions (GRQs) that help all students actively discern the most important takeaways from the reading and that align with assessments. To bring high structure through guided reading questions, make the readings required and not optional. Perhaps students can turn in or upload their responses to the GRQs. Perhaps students can be required to answer a few quiz questions about the reading either online or during class. Following the UDL plus one framework, can students choose one of multiple ways to demonstrate they have gained knowledge from the reading (e.g., take a quiz, post to a discussion board, or make a video reflecting on the reading)?

### *Are You Assigning Videos?*

As with guided reading questions, a set of required questions or reflections can help a student stay focused on the video and take notes about the main points. It is not uncommon for instructors to assign videos only to find out through data analytics on a learning platform that many students

did not watch it. As with readings, accountability may come in the form of quiz questions or posts to a discussion board. Embedding questions within the video can increase engagement and effectiveness as well (van der Meij & Böckmann, 2021). Another consideration with videos (assigned or shown in class) is to be sure there is closed captioning or an accessible transcript. Beyond hearing-impaired and multilingual students, many people can benefit from captions and transcripts. This is a good example of UDL.

#### *Are You Lecturing?*

Our students might also struggle with distraction in its many forms. Consider providing skeletal outlines that students can take notes on, so that they don't have to write everything down, but must stay actively engaged to fill in *parts* of the outline. For students who can't physically take notes themselves or cannot attend class on some days, a recording of the lecture would allow more students to learn. Some students who were present in class might want to watch the recordings as a way to review at their own pace. Instructors can record the class session and post it on the learning management system for all enrolled students to access.

#### *Are You Asking Students to Engage in Activities during Class?*

Determine if you have made the prompt for in-class activities clear and accessible to all. We like to put up a slide that shows the prompt in a colored box so that as the semester goes on, students immediately know that the boxed text contains their directions. While we often read the directions aloud too, the visual prompts are used by all students multiple times, as they refer back to the goals. Alternatively, prompts can be written on worksheets.

#### *Are You Asking Students to Use an Online Discussion Forum?*

With the swift transition to remote learning in 2020, many instructors, including us, realized we didn't have much experience with online teaching. Through webinars, we looked to leaders like Flower Darby, co-author of *Small Teaching Online*. Many educators were questioning her about a lack of engagement from students with online discussion forums. We were struck by some of Flower's simple suggestions for better engagement, which boiled down to two words: more structure. She suggested requiring students to have a certain number of posts or replies, being clear with students about when posts are due, and providing guidelines about the nature of the posts (e.g., whether citations are needed or not).

#### *Are You Providing Lesson Objectives in Your Course Materials?*

An objective is a short statement about what a student should be able to know and do after a lesson. In addition to course-level objectives, we recommend providing objectives for each lesson for added structure. Consider starting class with a list of objectives for the day's class and check these off as you move through class. This provides clear expectations about what is coming and what you have accomplished. These objectives can also easily be turned into study guide questions.

#### *Are You Providing Resources That Help Students Learn?*

If you are providing resources to help your students learn to write, study for an exam, or any other activity that is an integral aspect of your course, ensure that students complete it by making it a requirement. If the resource is optional, some students will know to take advantage of it or allocate the time to complete it and some students will not. As we

often like to say of resources on our learning management system: just because you post it doesn't mean they will use it. If you have designed a resource to help your students succeed, bake it into the course requirements and do not make it optional. Additional structure can be incorporated at this level. For example, you can require that a study guide is completed by making it an assignment before an upcoming exam, ensuring that everyone engages with a resource that you have designed for their learning.

These tips are not exhaustive. They are meant to help you reflect upon ways that adding structure can enhance inclusivity. We have found it most useful when educators brainstorm with each other on ways to make their curricular materials more inclusive, as there is no one right way. If done well, there will be many options for including more students.

Structure plays such a vital role in inclusive teaching that we devoted this whole chapter to the idea. Structure can facilitate inclusion and promote equity in the classroom. We find it empowering to think that we, as instructors, can help level the playing field for our students by incorporating more structure. We hope you feel the same way. Designing your courses with high structure and helping your students understand your design decisions will help them learn your course material better. When done well, this additional structure will also give students insight about who they are as learners and how they learn. We think that is an exciting opportunity: to help students become more self-aware and to build their confidence as learners. We will continue to explore an inclusive overlay in the way we structure course design, facilitation, and student interactions in the chapters that follow. In the next chapter, we will discuss how to incorporate more structure in the design of a course and syllabus.

## INSTRUCTOR CHECKLIST

### *Create a high-structure course:*

- Establish required work routines before, during, and after class sessions.
- Pre-class work such as readings or videos should include accountability for completing it. Keep the difficulty level lower as students are being introduced to the concepts.
- Have clear objectives for each class. Pose questions that all learners are required to answer in various modes. Ask questions that probe deeply or get at misconceptions.
- Establish a consistent pattern that requires post-class work such as assignments, quizzes, or discussion board posts due a certain number of days after class. Aim for timely feedback for post-class work. Align the difficulty with the level you expect of students in a high-stakes assessment.

### *Teach students about learning to help them buy into high structure:*

- Explain to students that learning is difficult and requires effort. The effort must be routine and distributed. Perhaps share an idea about learning that students are likely to relate to, such as learning to drive.
- Frequently explain how what you are doing in your teaching aligns with how learning works.

### *Build more structure in course curricular resources:*

- Bring structure to pre-class readings with guided reading questions and a required component to demonstrate they have completed the reading. Check that the readings are accessible to students who need accommodations.

- Bring structure to pre-class videos with guiding questions and a required component to demonstrate they have watched the video. Check that the videos are accessible to students who need accommodations.
- For lectures, provide skeletal outlines. Consider providing recordings of lectures for enrolled students.
- For in-class activities, make sure the instructions and prompts are clear, visible, and accessible to all.
- Bring more structure to online discussions with clear expectations around the number of posts and replies and guidelines for posts.
- Use daily objectives in class, checking them off as you proceed.
- If you have resources to help students learn (such as a study guide), don't assume all students will use them. Require completion by all students to ensure equitable engagement.

## CHAPTER 3

## DESIGNING YOUR COURSE AND SYLLABUS WITH AN INCLUSIVE MIND-SET

Remember the great debate about synchronous versus asynchronous course design during the COVID-19 pandemic? In a challenging time, we rejoiced that many of these conversations centered on empathy and equity for students. Some educators asked, "How will students without access to reliable internet be able to attend synchronous classes?" Others said, "Imagine being a student in five asynchronous classes lacking a reason to get out of bed and start coursework when you know you should." While many of the issues brought up during these conversations were not new—student populations were always diverse—many educators and administrators were new to these conversations about equitable course design and strategies.

These conversations about teaching during the pandemic pushed higher education to a new tipping point around empathy for students that we hadn't witnessed before. "Never