

HARNESSING THE POWER OF LARGE CLASSES

3 EFFECTIVE STRATEGIES FOR ENGAGING LARGE
GROUPS AND SUPPORTING STUDENT LEARNING

Written by **Jonathan Golding, Ph.D.**



cognella® | ACADEMIC
PUBLISHING



Introduction

Teaching large classes effectively in a higher education setting can be challenging—but with the right strategies and resources, you can transform that challenge into an opportunity!

This guide will highlight three effective approaches for teaching large classes. The information will help you engage students, refine your teaching methods, and fully embrace the idea that scholarly teaching can occur in a class of any size.

Approach 1: Create Community

In any classroom environment, it's important that everyone, regardless of their role, is on the same page. When instructors, TAs, and students come together and work toward a common goal, a community naturally develops—a place where everyone is united in their thinking about the course and has the same opportunity to interact, learn, and grow.

The thought of building a community may seem daunting, but with a few key strategies in place, you can easily and effectively foster a sense of community that enlivens your classrooms, supports connection, and helps your students achieve both socially and academically.

Communicating with Students

The ability to create community within a large class relies a great deal on communication. It sounds so easy, but communicating with your college-aged students is a skill that may require a great deal of time and effort.

Part of the problem you may face in communicating with your students is that you must deal with reality—you're most likely older than them! If you're fresh out of grad school, the age difference between you and your students may only be around 10 years—but every year, you get older and your students remain, more or less, in the same age bracket. Thus, you may have had some things in common with your students when you first started teaching, but as time moves on, you and your students may naturally grow disconnected.

But don't lose faith in your ability to communicate effectively with relatively younger students. There are things you can do to bridge the gap and forge a sense of community and connection in your classes through various communication strategies.

Here are a couple of approaches you might find helpful.

1. Before you enter your classroom, sit down and really think about how best to design your course in order to facilitate community, connection, and communication. Ask yourself whether your syllabus relays to students that you are striving for high level of class unity. Are you setting that expectation clearly? You may also want to think about including policies that support community building and community maintenance within your syllabus.

For example, you might consider some type of attendance policy. Why? Because a large class that is almost empty each day is not a community. Your students need to know that you're expecting them to show up and be united in the learning goals of the class. If the students feel they can blow off class, they'll never be on the same page with you and each other, thus negating any sense of community you're hoping to build.

Attendance policies are difficult to formulate in a way that doesn't overwhelm you. Perhaps you can have required random assignments on a small number of days to keep the class honest. Since the assignments are random, students will have to show up—they'll never know when an assignment will be given.

2. Consider the format of your lectures. Are you going to simply stand at the front of a large lecture hall droning on about some subject as you click through PowerPoint slides? Let's hope not! Think of ways you can



add some pizzazz or finesse to your lecture. Perhaps the secret ingredient is a class demonstration, a video that resonates with your class (there are countless clips from television and movies you can draw from), a group activity, or the use of clickers. The key is to make lecture time more than just listening to you—students need to feel as though they are not just listeners, but rather a critical piece of the class community.

3. Consider doing things that are outside of the box. Play music before class to energize your students and start the session with everyone focused on the same thing. (Of course, you'll want to make sure that the music is not just what you like—remember the possible 10-plus year age difference!) Stop in the middle of class, take a picture of you and a student, and post it on a class Instagram account. Try your best to learn as many names as you can. One way to facilitate this is to fully incorporate yourself within the class and the classroom space. They know you're the leader of the classroom, but let them know you are united with them, too. Walk around before class and talk to your students, be sure to say good-bye when they leave, and always hold office hours. Note that you could always require students to visit your office at least once, but this can get unmanageable when your class size is really large.

Using Technology

Today's large college classroom is a very exciting place, partly because of the ability of instructors to use various types of technology. One of the most powerful examples is the ability to go online and communicate with students in real time.

Think about it—just 15 years ago your ability to connect and communicate with your students via computers 24/7 was nearly impossible. Today, however, you can use apps and programs to build and maintain strong connections and communication with and among you and your students.

Let me be clear. I'm not talking about constructing websites for your courses. You might consider such an option, but building a really useful website can require a lot of time and knowhow. Instead, I'm talking about using online programs and applications that are more easily accessible—social media accounts. The beauty of leveraging social media is that all students use it—no teaching is really necessary! You might require a bit of training, but social media accounts are typically intuitive and user friendly.

Besides the availability of social media, these accounts are useful because they can help students (especially freshmen) in large classes settle into college life. Given that large classes are generally the norm on many college campuses, and most large state colleges and universities will likely see increases in mega-sections (over 200 students) in the near future, it is critical to use available resources like social media to reduce the sense of isolation some students may feel as they adjust to college life. The thinking in this regard is that anything that can help students in large classes not feel like “just a number” is worth the effort.

Social media accounts you can use for your course include:

- Facebook page
- Facebook group for each of your classes/sections/class teams
- Twitter account
- Instagram account

One thing to keep in mind with Facebook is that a “page” is set up to serve as a profile for a person or entity, whereas a “group” is designed to serve as a destination for like-minded communication. You may have to play around a bit and explore the options open to you before you decide what will work best for you and your large class.

There are a number of ways you can use a social media account to build community.

1. You and your students can post on anything related to class content. The posts can refer to lecture material or link directly to additional information (e.g., media articles about new research, a more detailed

description of a concept raised in lecture, etc.), or images that relate to course material or concepts.

For example, an instructor who lectures about obsessive-compulsive disorder might post a link to a clip of the television show *Friends* in which Monica is acting in this manner. Rest assured, all college students have watched *Friends* (it's experiencing a cultural revival and is trending with younger generations!). They know Monica's character is known to be obsessive, so the material is sure to resonate. The key is that the video is able to make concrete what for some students is a very abstract notion of a particular mental disorder. Of course, there are endless examples of this type of material available to you in pop culture. You just have to find the example that is relevant to your students and illustrates an academic concept.

Another example is posting a link to a National Institute of Health website that discusses new treatments for Alzheimer's disease in greater detail. Instructors know that lecture time is precious. Being able to direct student to more detailed descriptions of information outside of lecture is a real benefit.

You can encourage students to comment on posts, asking them to share their opinions, link to additional information on the topic, or answer predetermined questions.

Note that you'll need to have a way in which you (or a teaching assistant) can monitor your account to be sure relevant and appropriate information is being shared and presented.

- 2. You and your students can move beyond academic content and participate in focused discussions on the class itself and how it's run.** This could include making announcements about upcoming exams, quizzes, and readings. It could also offer solutions for issues related to class notes and studying. For example, if a student misses class, he or she can post a request for the notes from that session. This will lead to another class member communicating with them about how to make contact to get the notes. With regard to studying, students can post their notes or flashcards for others to study or even the links to online flashcard sites like Quizlet.
- 3. You can use social media to stimulate online discussions about issues raised in class or new ideas.** This might include a "Question of the Day." The thread that follows each question can be a great way to get students more involved with the course material and each other, and can be a real help to those students who do not want to speak publicly in a large classroom.
- 4. Finally, you might want your social media accounts to highlight social aspects of the class.** For example, you can use Instagram to post photos of interactions that occur between you and students. This can be as simple as posting a photo of a student who asked a great question in class (i.e., "Star of the Day!" - of course, get permission from your student before taking and posting their picture online). One thing to keep in mind if you go this route is that while all social media accounts allow for photos, Instagram is not really designed for back-and-forth conversation. In addition, Instagram does not offer an easy way for you to include links in your post.

Approach 2: Maximizing the Physical Environment

Let's face it, large lecture halls are not conducive for creating a sense of community. They often share the same basic design: a room that's only accessible from the back, set off from smaller classrooms, and which includes tiered, immobile seats. The instructor's area (i.e., computer and audio-visual control system) is generally located in the front of the lecture hall. These rooms impede community-building because they afford limited instructor-to-student access (unless a student is near the aisle), limited student-to-student access, limited space to move around, and difficulty seeing from the back of the room to the front (in some cases at least 100 feet!).

Let's discuss ways you can take advantage of the room you are in, as well as ways you can use the actual campus to engage students and facilitate learning.

Fixed vs. Enhanced Space

If you are teaching in a traditional lecture hall, all is not lost. You just need to be a bit creative about how you use this space.

Initiating conversation through group questions is also an option. With fixed seating it may be difficult for students to talk in small groups of three or four, but we all know students can be very adaptive. Ask a question and have students break into small groups to discuss this question and come up with a single answer. Voila, you have conquered the room!

Still, a traditional lecture hall may require a bit more thinking in order to come up with activities that do not let the room control you. Here are two quick examples you can try.

1. Have you considered using a student response system—clickers? (If clickers aren't available to you, there are lots of bring-your-own-device polling applications that students can access via their phones, including PollEverywhere, Mentimeter, and Ask the Room.) The great thing about clickers and other student polling options is that you get your students involved. Instead of just sitting there and taking notes, students must actively think about questions you ask and use their clicker or personal device to respond to your question. It's fascinating to see all of the responses being tabulated on the lecture screen and then find out how students were thinking about an issue. You might even consider having competitions between "teams" in the class when the questions require an accurate answer and not just an opinion.

Keep in mind, however, that if you use clickers or polling applications to check attendance and/or give out points toward the final grade, you need to figure out a good way to avoid cheating (e.g. a student giving their clicker to someone attending lecture or inputting a classmate's information into a polling app). It may not be easy, but if you don't devise a plan, attendance will drop and the students may peg you as someone they can take advantage of.

2. Whatever subject you teach, there are always a variety of demonstrations you can employ. As an added bonus, many don't require any real props. Some may involve only a few students and some can utilize the entire class. For example, you might have small groups of students work together as a team in front of the class to solve a problem. In this way, each team can be given different instructions (i.e., serving as different conditions in an experiment). The teams work to solve the problem, while the rest of the class thinks about and writes about which "condition" they believe will lead to a more accurate or faster result and why. To involve the whole class, you might consider presenting a PowerPoint slide that illustrates a phenomenon (e.g., it's easier for an individual to remember items that appear at the beginning or the end of a list, as compared to their memory of the items that appear in the middle) and have the class serve as participants in your mini-experiment.

If you're lucky, you may be assigned to an active learning space that is enhanced with technology. Think of it—a space where you can have small groups of students sitting at tables with large monitors that are connected to your central computer. You'll have access to the tables both physically and via audio and visual equipment!

In such an environment, you and your students will soon learn how different teaching and learning can be. For example, students automatically inherit a support group, those assigned to their table. In addition, now your PowerPoint slides are just a couple feet away from your students at their table instead of a large distance away at the front of a traditional lecture hall.

There are other aspects of your teaching that can be enhanced in a technology-fitted classroom. First, you can have different student groups working on different problems simultaneously, because you have the ability to send unique problems to each table. You, of course, can move from table to table to monitor their progress. Second, you will be free to have each table communicate with the class through their camera. Third, the students will see themselves as part of a unit working together toward common goals. Fourth, the ability for peer instruction is greatly enhanced. In fact, one could argue that peer-to-peer interaction is a mandatory component of the table arrangement.

Essentially, if you're lucky enough to get a technology-enhanced classroom, use it to its fullest extent!

Using Your Campus

Although faculty typically teach classes in large lecture halls, there is no reason that you can't embrace creativity and have your class expand beyond the confines of your classroom. Sure, it's unconventional, but your campus offers many opportunities for learning.

Let me be clear, I'm not recommending that you take your class of however many hundred students to an amphitheater to hear you lecture. Instead, I'm talking about breaking up the class into small groups who can solve problems and observe the environment. In this way, the students get out of the large-class environment, get to be outside as researchers investigating different issues, and learn to work together with their peers.

One other important thing to keep in mind when venturing onto campus is that you'll need leaders for each group. If you're lucky enough to have TAs, they can serve as team leaders. However, if you don't have enough TAs or the math simply won't work, give each student group the responsibility for making the trek through campus.

If the idea of using the campus to expand your classroom appeals to you, and you can easily break your class into smaller groups, here are a few examples of activities you can assign your students. Each of these examples includes walking through campus and composing a final paper, either by the group as a whole or by each individual group member.

1. If you teach an economics course (or any business course), have the class visit buildings that have something to do with important commercial developments. These could include buildings on your campus named for a pioneer in technology or a business tycoon within a particular industry. This tour could also include buildings that support the business of running a college or university.
2. Each group can serve as a researcher in an observational study. The group can observe any question that pertains to behavior. How often do men versus women hold a door open for another person? How many people ride bikes at various times of day? Are certain types of clothes being worn on campus, and how does that behavior relate to issues of conformity or popular culture? This is a great opportunity for students to grasp the importance of collecting data and conducting research.
3. Students can visit buildings to understand more about the buildings themselves and their unique construction. There are so many interesting questions one can ask about architecture. Why were certain building styles used at a certain time? What was the original use for a building, and what is its current use? Who paid for a building and why?

Approach 3: Active Learning

I'm sure you hear it all the time, but an important idea to consider when teaching large classes is the idea of "active learning." Active learning is the result of using more engaged teaching methods that focus on critical thinking and are student-centric. Thus, active learning ensures that students are not just sitting and listening to you (i.e., passive learning), but are active participants in the learning process. This can be especially important in a large class, where a faculty member might think that a large class necessitates a "sage on the stage." There is no doubt that these sages do exist, but even then, just lecturing will likely not be a very effective way to present course material.

Instead, here are some interesting possibilities that you might consider using with your large class.

Go Technology Free

Everyone talks about using technology in the classroom, but there are some things you can do in a large class that do not require technology and can engage your students in new and interesting ways.

1. **Consider giving two-stage exams—that's right, the same exam given two times in the same class period.** The procedure is really quite simple. You give an exam to all students in a shorter timeframe than usual. After they finish, you use the remaining class time to give the same exam, but now students can work

together in groups to complete it. The individual grade counts the most toward the total exam grade, and the group grade counts less toward the total exam grade.

As you can imagine, the group grade is typically higher than individual grades, but that is not what is most important in this exercise. The process of working on the exam a second time with peers serves to reinforce knowledge, create a lively classroom, and allow for thoughtful student-to-student discussions that can lead to increased learning. One could argue that a two-stage exam gives students the chance to talk about and revisit the exam in a way similar to what occurs in a hallway *after* a typical exam. In the case of a two-stage exam, however, students not only get to talk about the exam but also work through the actual questions again for a small increase in their grade and added learning.

2. A second technology-free technique you might try involves what *Dr. Sara Harris at the University of British Columbia calls “concept sketches.” Each concept sketch is an explanatory and illustrative drawing of an important concept. It is more than a labeled diagram or a concept map with bubbles and lines. Instead, a concept sketch includes lines that link comments to relevant parts of the drawing and arrows to denote motion or transfer.

An example of a concept sketch is one that illustrates the full cycle of moon phases, using arrows to show motion (the moon’s orbit) and transfer (of solar energy). Concept sketches:

- can be completed individually or in groups
- allow students to develop mental models—internal representations of how we make sense of the world
- are worked on over time, thereby letting students evolve in their thinking about concepts throughout the term

3. A third technology-free pedagogy you can use to engage students goes back to the point about using demonstrations in a large class. An interesting way to approach demonstrations is the “5-minute demonstration,” suggested by *Dr. Pamela Dickrell at the University of Florida. This type of demonstration involves a systematic approach to identifying tasks that are easy to build, can be passed around a classroom, and reinforce lecture topics.

Once a demonstration topic is chosen, bring materials on a small tray that has handles (to ultimately transport around the lecture hall—you can, of course, set up multiple trays for really large classes). To start, you’ll complete the demonstration on the tray in front of the class (you may need a document camera so all of your students can watch the individual steps or small details of the demonstration). The tray is then passed around the lecture hall so students can quickly do the demonstration on their own.

An example of this type of demonstration could be building a “potato clock” to show the theory of electrochemical cells, current vs. electron flow, and batteries in a series. Another example would be presenting different materials that can be used in a building project—anything that is quick, to-the-point, easy to replicate, and reinforces course topics.

Redesign Your Course

Rather than adjusting a specific component of your course, you always have the option of redesigning your course in a way that encourages active learning.

One way you can redesign your course is to use a flipped classroom approach. This approach is gaining popularity throughout the U.S. and Canada and involves administering course content outside of the traditional classroom (for example, having students watch pre-recorded lectures prior to class) and replacing the presentation of this content with various activities to promote active learning. These can include quizzes on pre-class work (answered on an individual basis or in a group), group

work (e.g., answering questions about pre-class material), demonstrations, problem-solving, student presentations, etc. Keep in mind that moving to a flipped classroom does not need to change your course goals. It is how those goals are achieved that is changed.

In thinking about a flipped classroom it is important to keep two important issues in mind:

1. First, you must decide what format to present out-of-class material. You could assign readings from a textbook, journal articles, or other types of material. In addition, you could consider producing videos that present core concepts and background pertaining to what is presented during live classes.
2. Second, it is not enough to simply state in your syllabus that material will be presented outside of class, and students will be responsible for reading or viewing this material. Students must understand from the start that completing the pre-class work is a critical component of the class. You can do this by revising your grading system to reward completing the pre-class work (incentives work), thus making sure students understand that their grades will be negatively impacted if they come to class unprepared.

Another approach to course redesign is to step back and think about how to develop a large course that appeals to students, and then how to present material in a unique way that facilitates active learning. The idea of having control over the subject matter of your course is very different than what most faculty are used to. For most of you, there is a constellation of courses on any campus that are seen as set, both in name and content. These courses are your typical survey courses (think “Introduction to Psychology”) that have been, and will continue to be, taught as large classes.

But imagine if you could develop a course that had broader appeal—and how you could then take control and teach the class within an active learning environment.

At the *University of Kentucky, Dr. Kathi Kern has leveraged the topic of civil rights and developed a large history course that, through innovative course delivery, allows students to understand how the past lets us make sense of the present.

Using her course model, you first split the class into teams that work together throughout the entire semester. Next, instead of presenting full lectures, each day the class starts with short lectures or a short video that frames a topic. After the initial class presentation, the teams work together on exercises related to the presentation. You, teaching assistants, or peer mentors facilitate by walking around the room and talking to the teams. Exercises can include discussing specific data, looking over maps, analyzing media, preparing for one side of a debate, or preparing media to show to the entire class (e.g., an image that captures a particular issue being discussed). (In this classroom model, it’s particularly helpful to use cloud storage systems like Google Drive and Dropbox to share information.) After students work together in teams, reconvene the class so everyone can hear and see the results of various teams. That’s right, the teams discuss and deliver information to the class as a whole! You can facilitate this portion of class by moving from team to team with microphones so everyone can be heard.

*These are strategic teaching methodologies suggested in *Strategies for Teaching Large Classes Effectively in Higher Education*, written and edited by Jonathan Golding, Catherine Rawn, and Kathi Kern, published by Cognella Academic Publishing.

Conclusion

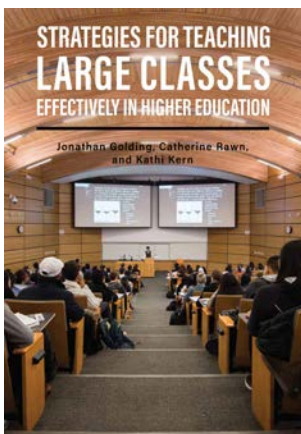
I hope you now see that there are a number of approaches to teaching large classes that can lead to an exciting teaching experience. While it may be challenging to implement new techniques and models into your large classes, I know you’re up to the task, and I think you’ll be happy with the results—an exciting teaching environment where learning is paramount and students are fully engaged. Good luck!

About Jonathan Golding

Jonathan Golding is a professor in the Department of Psychology at the University of Kentucky, where he's no stranger to teaching large classes in psychology, social psychology, and law. Inspired by his experience teaching in higher education, Dr. Golding is the mastermind behind the Beginner's Guide to College Success blog (beginnersguidetocollegesuccess.com) and the coauthor of two textbooks, *A Beginner's Guide to College Success* and *Strategies for Teaching Large Classes Effectively in Higher Education*. He received his doctorate degree in psychology from the University of Denver.

To learn more about specific teaching methodologies proposed in this guide and to take a deeper dive into research-based strategies for teaching large classes, check out *Strategies for Teaching Large Classes Effectively in Higher Education*, written and edited by Jonathan Golding, Catherine Rawn, and Kathi Kern.

About the Book



Strategies for Teaching Large Classes Effectively in Higher Education features advice from instructors across disciplines, results from the initiatives they've tried, and in-depth scholarship to provide you with well-researched, proven methods for engaging large groups.

The book features practical advice for planning ahead, efficiently handling the administrative aspects of a large class, implementing pedagogical strategies, and using physical demonstrations to increase engagement. Dedicated chapters focus on building community with students through the application of technology and gathering feedback. You'll learn various approaches to course development and student assessment, including active learning, the flipped classroom method, concept sketches, and two-stage exams. The book concludes with chapters dedicated to leveraging technology to promote innovation, interactivity, and learning outside the classroom.

To learn more about the book or purchase a copy, visit: titles.cognella.com/9781516519637.



An imprint of Cognella, Inc. © Copyright 2019 | 858.552.1120

Cognella® is redefining academic publishing by creating teacher-driven, student-centric higher education course materials in print and digital formats under three imprints: Cognella® Academic Publishing, Cognella® Custom, and Cognella® Active Learning. Cognella also publishes engaging nonfiction titles featuring modern perspectives as Cognella® Press.

Learn more at www.cognella.com.