

2018-2019 Teaching Issues Writing Consortium



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Falling in Love with Teaching and Learning

Years ago, one of my students was interviewed by the campus paper. She described how she fell in love with learning with me, a professor she described as in love with teaching. We eventually co-presented and published on this topic. What follows are key recommendations.

- Do not teach unless it brings you joy and fulfillment. (There are many ways terminal degrees earn money consulting and prestige/status prioritizing research).
- Do not lecture for more than fifteen minutes at a time. (Attention spans are shortening yearly. Passivity and learning are contradictory).
- Create a safe classroom culture free of disrespect and personal judgment. Discuss problems; not people. Classroom “rules” (parameters—understandings) can be brainstormed and negotiated with students. This is particularly important in a multicultural classroom. Learn what each of your students needs to feel safe.
- Like improvisational guidelines, say yes to and support your students when they participate and speak up. Co-create a meaningful, informative conversation.
- Try dyad and small group discussion and activities to encourage the most reserved, insecure and shy. Students love engaging with each other most. Give credit for lifting each other up. Leadership is taught through active participation, process observation and other reflective assessment.
- Try authentic assessment where students apply their learning to real world problems that interest and concern them.

I have taught undergraduate and graduate students from over eighty different countries at the University of Denver, Metropolitan State University, the University of California Berkeley, Oslo International Summer School, Cornell and Pepperdine’s Schools of Law, California State University Dominguez Hills and Pontifercio Catholic University Rio de Janeiro. Two years ago I received Outstanding Professor. Hope that the above recommendations serve you and your students as much as they have me and mine.

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How Students Think About Learning

Our students' success or failure in learning in a class may stem at least in part from their underlying beliefs about how they learn and about their own intelligence. If we, as professors, can help a student shift from a self-sabotaging mindset to a more constructive one, we can help them achieve greater success both in our classes and in others. Carol Dweck's 2006 book, *Mindset: The New Psychology of Success* offers insights into people's beliefs about intelligence and learning.

According to Dweck, a person with a fixed mindset believes that intelligence is a trait—you have a certain amount of it, and that's it. Same with talent: either you're good at something, or you're not. We've all heard students explain failure in a course by saying, "I'm just not good at _____." A fixed mindset leads to seeing successes as proof of their fixed intelligence or ability. In this view, effort will yield relatively little change.

A person with a growth mindset believes that success or ability is the result of effort—in other words, it depends on a person's actions rather than an essential quality that doesn't change. In a growth mindset, intelligence is just a starting point, and the ability to do something is the result of consistent hard work over time.

Growth mindset, metacognition, and self-regulation go hand in hand, as a student who can reflectively self-monitor, evaluate the success of certain actions or practices, and change them as needed is most likely operating from a growth mindset. If beliefs about intelligence and ability have a significant impact on performance, then it's worth addressing our students' beliefs.

Sandra Yancey McGuire offers suggestions on how we can frame criticism and mistakes so that students can view them as constructive and as essential parts of the learning process rather than attacks or failures that prove lack of ability. She notes that "when students become aware that their instructors have provided criticism in order to help them improve rather than as a judgment of their ostensibly fixed abilities, they are likelier to use that criticism constructively" (64). By emphasizing action and effort over time, she writes, instructors can help students achieve growth over time and the willingness to take on challenges. Another suggestion she offers is to give homework assignments that begin with easier exercises and gradually increase in difficulty. The initial success will encourage students to persist through the more challenging material.

References:

Dweck, Carol S. *Mindset: The New Psychology of Success*. New York, NY: Random House, 2006.

Yancy McGuire, Sandra, with Stephanie McGuire. *Teach Students How to Learn: Strategies You Can Incorporate Into Any Course to Improve Student Metacognition, Study Skills, and Motivation*. Foreword by Thomas A. Angelo. Sterling, VA: Stylus Publishing, 2015.

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Set Reasonable Expectations for your Availability

In this age of twitter and text messages, faculty fear that students expect near-instantaneous responses to their questions. I hear this especially when talking with faculty about adding an online component to their courses. One way to manage student expectations is by being proactive and communicating your availability up-front and often. I suggest a two-part solution to my faculty:

- 1) Use the discussion board in your LMS, and create a forum called “Instructor’s Office.”

Tell students that this is the place to post any questions about the course, whether it’s about content or an assignment. That way every student can see all the questions and answers. The only time a student should contact you privately should be when the question concerns a grade, or another confidential matter.

If a student sends you a question by email, respond “What a great question! I’m going to respond in the “Instructor’s Office” forum so everyone can see the Q&A.” When posting the question, start with “This question came to me via email, but I am answering it here so you all can benefit.” After this happens a few times, students will quickly catch on.

- 2) Tell students when they can expect you to access the discussion forum, so they can anticipate your response time. I put this information in my syllabus, telling students that I check the “Instructor’s Office” first, before doing anything else, so posting their questions there is the best way to ensure a response. I indicate my availability in broad strokes, using a table. For an online class, or a course with a lot of homework, the table might look something like this:

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning		X		X			
Mid-day	X		X		X		
Afternoon				X			X
Evening		X					

If the box is checked, it’s a guarantee that at some point during that time frame, I will log in and address the posted questions. I might log in more frequently, but never less. In the above example, I’m checking in once or twice a day – on the assumption that a student who has posted a question about an assignment cannot proceed without the response. In a face-to-face course that is primarily reading-based, I might modify the table to only once a day.

The system works well – students know when they post a question how long to expect before checking back. Sometimes, I find that students have answered each others’ questions about the content, and all I need to do is confirm that they are on the right track. In practice, each login often takes only a few minutes, because there are relatively few questions each time. I have an enduring record of the Q&A in each course, and my email box is not as stuffed.

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Teaching that Aligns with How the Brain Works

In recent years, neuroscience has played an increasing role in helping educators understand how the brain works in general and how learning happens in particular. Bransford, Brown, and Cocking (2000), Doyle and Zakrajsek (2013), and Medina (2014) provide important principles related to how the brain learns. While these principles are aimed at helping learners, I've rewritten them from the perspective of the instructor, providing suggestions for how best to teach that aligns with how the brain works. My hope is for instructors to find creative ways to implement them in their teaching.

Principles	Evidence	Teaching Application
1. Sleep is critical to memory formation.	Studies show that adults who sleep 7-9 hours a night regularly perform better on cognitive tasks than those who are sleep deprived.	Tells students that sleeping enough is just as important as studying. Encourage them to take naps if necessary to restore focus and attention.
2. All movement is good for learning.	Studies show that exercising at least 30 minutes a day 4 to 5 times a week improves overall brain function.	The brain works best when the body is moving. When possible, make your class an active learning environment where students are moving around.
3. Multisensory learning is ideal.	Multisensory learning allows students to process and master new information quicker and deeper.	Incorporate the five senses (sight, sound, smell, touch, and taste) in your teaching to help students relate and retain new materials. For example, use audio-visual media to reinforce concepts.
4. The brain likes patterns.	Recognizing patterns in information is essential to improving understanding and recall.	Structure what you're teaching into patterns to make it easier for students to follow. For example, use concept maps and visual syllabi to organize your materials so students know how one concept relates to another.
5. Retrieve a memory to strengthen it.	Each time a memory is recalled, the brain makes it stronger, making future recalls easier.	Use recall (as opposed to recognition) formative assessments to help students solidifying understanding of materials. For example, a recall assessment is fill-in the blank, whereas a recognition assessment is multiple choice.

Resources:

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). How people learn: Brain, mind, experience, and school. Washington, DC: National Academies Press.

Doyle, T. and Zakrajsek, T. (2013). *The New Science of Learning: How to Learn in Harmony With Your Brain*. Virginia: Stylus Publishing.

Medina, John. *Brain Rules* (2014). *12 Principles for Surviving and Thriving at Work, Home, and School*. Washington: Pear Press.

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Know Your Audience: The iGens Have Landed!

For the past 20 years, higher-education instructors have grown accustomed to teaching millennials, which is now an unfortunate mindset. The bulk of today's college students belong to the next generation, the iGens, and they differ greatly from their predecessors. As a result, higher ed instructors as good communicators need to know their audience and create a new pedagogy.

According to Twenge (2017), iGens were “Born in 1995 and later, they grew up with cell phones, had an Instagram page before they started high school, and do not remember a time before the Internet” (p. 2). They check their phones more than 80 times a day—which means in your one-hour class, their full attention is diverted at least five times—and they spend less time on their homework than the previous generation. Twenge importantly notes, “iGen’ers academic skills lag behind their Millennial predecessors’ by significant margins” (p. 63).

Specifically, Twenge details some other educational traits of the iGens:

- They “are more hesitant to talk in class and to ask questions.”
- They are fine with lectures if the information is going to be on the test.
- “They like discussion but don’t want it to take too much time from learning the material.”
- Used to watching three-minute videos, they have short attention spans and might fall asleep without an in-class video.
- They don’t like to read books or magazines.
- They cannot judge the content of what they read—i.e., they lack critical thinking (pp. 307-308).

Twenge’s book and other like Larry Rosen’s *Rewired* (2010) and Nicholas Carr’s *The Shallows* (2010) paint a similar portrait of our current audience. What matters the most is the need for college instructors to gain insight into this new generation and adjust their pedagogies accordingly.

References

- Carr, N. (2010). *The Shallows*. New York, NY: W. W. Norton.
- Rosen, L. (2010). *Rewired*. New York, NY: Palgrave MacMillan.
- Twenge, J. (2017). *iGen*. New York, New York: Atria Books.

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Writing a Course Description

How do you capture the attention of your students before they even set foot in your classroom? What makes an effective, enticing course description stand out from all the rest? While you probably have seen dozens of course descriptions by this point in your academic career, you may not have put much thought into how to write one in a way that captures your vision for the course. This post contains a few hints for writing an original and effective course description.

The Job of a Course Description

Your course description should answer two primary questions: why and what. Why should students take this course, and what will they experience as learners? Try to refrain from making yourself or the course itself the subject of your sentences. Keep your focus on what will students learn and do in the course.

Remember your audience. Your course description is primarily for the benefit of people who have not taken the course, so do not use abbreviations or technical language. In a description intended for students, you may use the first or second person (“we” or “you”). Also check whether your course description must meet any departmental or university requirements (e.g. maximum word length, list of prerequisites).

The First Sentence (or Two): Why

Starting your description with “This course explores...” or “In this course, you will learn...” is not only clichéd, but it also wastes the crucial first words of your description without conveying important information.

Start with the aim or goal of the course. Be intellectually bold here. Use your grant-writing skills to communicate the significance of the course to a non-specialist audience. How does your course matter to students’ intellectual development or personal lives? You might phrase it as a key question (e.g. “What makes us love reading stories?”) or a statement of the end goal of the course (e.g. “Fiction allows us to live a story as if it’s our own.”).

The Body: What

Then, use the rest of the course description to detail what the learning experience of students will be in your classroom. The exact format and content of this section is open-ended. Remember that the description is neither a set of learning goals nor a reading list. Keep the lists to a minimum and focus on the bigger picture. Some of the points you may wish to touch on include:

- Learning objectives
- Teaching methods
- Teaching philosophy
- Course content examples
- Final accomplishments

The following example demonstrates how you can mix and match the above categories to pack a significant amount of information into a short course description:



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An Exercise for Students to Write a Learning Objective

(and possibly teach their peers to achieve it!)

“Docendo Discimus” – We learn by teaching

The following exercise is an effective way to accomplish a number of goals for your learners. First, as stated in the Latin above, when we feel the pressure to teach a topic to others we put in extra effort to learn the material well. No one wants to be embarrassed and fail to get their message across in a public speaking situation like teaching. Second, if students have an awareness how to write a learning objective, then they are better able to understand the learning objectives you have for them.

How can you use this natural need to succeed to encourage better learning in your classroom? One way is to set students in to small groups and have them write both a learning objective, and a short lesson plan. You may then choose to have them actually teach the short lesson to their peers, if you have time, or evaluate the learning objective and teach the content yourself.

Begin the exercise by dividing students into small groups. You will need the same number of student groups as topic areas you want students to teach. Instruct the students to create a lesson that will last 8 to 10 minutes (you decide if they will actually teach the lesson to their classmates, or if you will teach it). They must create the lesson in steps.

Step 1 – Write a learning objective for your classmates to achieve. Your learning objective must include 4 parts:

- 1) A statement of what the students will have accomplished after the 8-10 minute lesson is complete.
- 2) A statement of the conditions for the lesson to take place. For example, “Teachers will need to use whiteboards and markers to teach this lesson and the students will need their astronomy textbook in hand.”
- 3) A description of the measureable content that students will learn. Usually this comes in the form of general statements of content.
- 4) The cognitive complexity level that students will achieve in the content taught. For example, “When the lesson is over you will be able to name the phases of the moon,” or “When the lesson is over you will be able to name and describe all the phases of the moon and also why they occur.” You can introduce Bloom’s Taxonomy for defining the learning complexity level if you desire, or just let students come up with their own definitions.

Step 2 – Write an opening motivational event for the lesson that will stimulate interest for the coming content of the lesson. A “hook” or “motivator” event that gets people excited to be learning about the content.

Step 3 – Write down some questions to ask about the opening motivational event. Ask questions like, “What was your reaction to what just happened?” “What did you see going on?”

Step 4 – Write down the content of the lesson. Display a sequence of the content and how you will teach it to your audience.

Step 5 – Write down some questions you can ask your students to find out how the content just taught is valuable to them now and how they will use it in the future.

Step 6 – Develop a short (2 or 3) question quiz that checks student learning of your 8-10 minute lesson. Be careful to ask questions that match the cognitive complexity level shown in the learning objective!

This exercise has the advantage of illustrating for the students the difficulty experienced by teachers trying to develop topics for themselves to teach while also demanding the students to learn the content well enough to write a lesson and teach the content to their peers.

Have a class-wide discussion of the content and issues taught and what was learned via this exercise.

Adapted from the Army University, “Common Faculty Development CGSC Instructor Course” used at the US Army Command and General Staff College, Fort Leavenworth, KS.

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Growth Mindset Discussion

Help raise students' awareness of how they receive new ideas by incorporating the following discussion into an online/hybrid course or face-to-face class:

Watch this [five minute video on Fixed versus Growth Mindset](https://youtu.be/KUWn_TJTrnU): https://youtu.be/KUWn_TJTrnU

Think about the quote from Samuel Beckett in this video:

"Ever tried, ever failed, no matter. Try again, fail again, fail better."

1. What do you think "fail better" means?
2. How does "fail better" relate to developing a growth mindset?
3. Do you have a growth or fixed mindset?
4. Can you share examples that show what type of mindset you have?
5. How can we move from a fixed to a growth mindset?
6. How can a growth mindset help us learn?

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Articulating the Value of What You Teach

A common complaint of faculty is that their students are unmotivated to learn. It does seem at times that our most brilliant lecture or most well-designed homework assignment just elicits blank stares and yawns. We know from the significant body of research on motivation (see [Ambrose et al. 2010](#)) for a succinct summary of the research) that one of the major factors affecting motivation is that the student values the task at hand. Students in upper-level courses in the major, for instance, often are interested in what they are studying and can see that the work they are doing will lead directly to goals after college, so they have a mixture of intrinsic and instrumental values at play that lead to high motivation and good outcomes. On the other hand, we may have more trouble getting students motivated in a general education or foundational class required for the major or for graduation.

In a class that looks to students as just a hurdle to be jumped over on the way to the good stuff, we need to think more deeply about what we do to communicate value. I once asked a pre-calculus teacher why students should take her course; her response was “it’s a pre-requisite for calculus.” When pressed to articulate the value of learning pre-calculus, she couldn’t do it. If we can’t articulate the value of what we teach, how will students appreciate the value?

Here’s a little exercise to stretch your ability to communicate value. *Imagine a student can choose between your course and another course to fulfill a requirement. Using only a discussion about the value of the course, convince this student to take your class.* Try writing down your argument. Think about how course content connects to student interests, the skills students will learn, the habits of mind they will develop. Here’s a [guide](#) to help you with this thinking exercise.

Then start communicating that value starting from day one on your syllabus and throughout the semester. You may see your students’ motivation rise before your eyes.

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Helping Students Articulate Knowledge and Skills

Students, and particularly those in the humanities, arts, and social sciences, often [struggle to articulate their knowledge and skills](#) to prospective employers.

Your college or university's career center may have worked with local employers to identify the skills they most desire in students. Boise State University's Career Center, for example, [maintains a list](#) that includes, among other things, analyzing and interpreting information, collaboration, communication, problem solving, and taking initiative.

These are, of course, all skills students build through course assignments. Near the end of each semester, I co-create with my students a list of the skills they have built that semester. We then craft phrases they might use in résumés, cover letters, and interviews. Here are some examples from a women's history course I taught recently:

- Located valuable sources when information is difficult to find
- Conducted primary source research in analog and digital repositories
- Collaborated with a diverse team on multiple iterations of a project
- Pivoted a project's focus when resources proved unavailable
- Navigated ambiguity; can "think on my feet" when obstacles arise
- Demonstrated persistence and resilience when identifying and learning new technologies
- Set realistic goals and timelines
- Learned who to ask, what to ask for, and how to ask for it
- Built accessible digital resources

Most students wouldn't consider a women's history course vocationally focused, yet this exercise helped them emerge from the class confident they had transferable skills. Chances are your courses are similarly useful to students on the job market, but they might not realize it, let alone know how to describe the knowledge and skills they acquired.

Further reading

[A curriculum model for transferable skills development](#)

[Analysing student perceptions of transferable skills via undergraduate degree programmes](#)

[Humanities and social science degrees 'develop key employment skills'](#)

[Dispelling the myth of the unemployable humanities major](#)

[A list of transferable skills undergraduates develop](#), from Marquette University

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Icebreaker: Find Someone Who . . .

Icebreakers help us create a sense of community which is essential when we are going to work with people. In the classroom, especially in a foreign language class where students need to try to get their mouths to pronounce unfamiliar words and sounds, people need to know that they are in an environment where it is safe to take risks and make mistakes. I use a few different icebreakers at the beginning of a semester to facilitate the process of getting to know one another and this is one of my favorites.

This icebreaker is basically this is a game of BINGO. It's important to take a few moments before playing to make sure that everyone knows the rules of the game and understands how to play because not all of our students are from the United States and some might not be familiar with it. I usually ask the class for a volunteer who can explain what the object of the game is, and how you get a BINGO by having 5 answers vertically, horizontally, or diagonally.

Because I teach Spanish, I create questions that have to do with student experiences with the language and culture. It is easy to customize the BINGO with questions that relate to a specific discipline or instead use general questions that simply help students to get to know one another as in the example below.

Remember: When giving the instructions to students, emphasize that the game is an excuse to meet people; everyone is to get up and move about the classroom. When they approach a classmate, each student should introduce him/herself and then ask the classmate a question. If the person has done the activity, the asker should record his/her name and pose a follow-up question; again, it's more about getting to know classmates than about winning the fabulous prize for getting a Bingo! Also, for that reason, students can only use each classmate's name for one square.

Demonstrate: It's a good idea to do a few practice examples, either you can approach students and model the interaction you desire or you can ask students to model one or two examples.

Play: Then, have your students all stand and begin the game. They should approach a classmate, introduce themselves, ask a question, and if the person responds in the affirmative, write the person's name and a detail or two in the appropriate box. If someone gets four in a row, the student should say BINGO and then call back their answers as this step will allow students another opportunity to hear classmates' names and learn a little bit about them. If you have small prizes (pencils, bookmarks or candy, for example) to award to the winners, it adds to the fun.

BINGO Board:

Has studied at another college besides CCRI	Has a child	Has taken the bus in Rhode Island	Has visited another country	Plays a musical instrument
Plays on a sports team	Was born outside the United States	Exercises every day	Works while attending college	Has friends or relatives who speak another language
Takes more than three classes	Has enjoyed WaterFire in Providence	*	Commutes more than 30 minutes to study at CCRI	Has moved to RI from another state
Is the first in his/her family to attend college	Wears glasses to read	Has attended a concert during the past year	Speaks a language other than English	Has a pet
Likes pizza	Has studied at CCRI for more than 1 year	Has taken classes in another community college	Has lived in a state other than Rhode Island	Takes classes on more than one CCRI campus

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Welcoming and Supporting Students during Office Hours

Rationale

Most of us are required to hold regular office hours. Yet how often do students attend? I have often heard faculty say, “I sit in my office week after week and no student ever comes” or “students only come to complain about a grade but never seeks me out to provide support or guidance”. Why is this? Research indicates that factors in student success include faculty who are responsive, supportive and accessible (Kuh et. al., 2010; Tinto, 2012). Students also tend to be more successful when they have a relationship and connection to their faculty member. Interactions during office hours can be one bridge to help build faculty student relationships.

Suggested practice to encourage students to attend and ways to support them during office hours:

1. In syllabus, use student-welcoming language to encourage students to come to office hours. An example might include “I am here to support your learning. I encourage you to meet with me when you feel that you need support or assistance”.
2. Include both set office hours and “by appointment” to accommodate students who cannot attend during scheduled time.
3. If you have a large class and have a teaching assistant, you may to have students meet with the TA.
4. For online courses and for students who have difficulty meeting during set times- offer virtual office hours using simple systems such as “Skype” or “Go to Meeting”.
5. Hold your office hours at the Tutoring Center or in other central locations (students may feel intimidated to come to your office).
6. Divide the class into groups of 4-5 and assign them a time to come and visit you in your office during the first number of weeks. This can be a short (10 minute) introductory meeting. This may help “break the ice” so they are more comfortable to come back when they need help.
7. Reach out through a personal email/text (in addition to early alerts or faculty feedback systems) to students early in the semester who are struggling and invite them to meet with you.
8. When students do come, stay focused and on task to meet certain goals. Provide them prompts and questions so they can articulate their needs. Remind them of how much time you have for the meeting and give them reminders a few minutes before it is time to leave.
9. Listen for underlying issues. Sometimes students come to see you, indicating that they have an academic question, when in fact, they have a personal issue or concern. Listen and be supportive but know that you are not their therapist or their buddy. Have a list of places to refer them to (Dean of Students, Title IX Coordinator, Counselling Center, etc.)
10. Let them know that if they share certain information about harassment or abuse, you are required to report this to the Title IX coordinator. (in the United States)
11. Sometimes a student will try to monopolize all your time and want to meet with you regularly. Be direct and set boundaries.
12. Although you want to meet privately with your students, be cautious that you do not create a situation that puts you into a compromising position (keep your door ajar, do not meet late at night if no one else is around, if you are concerned ahead of time alert someone in the office).

13. If a student comes in and they are exceedingly angry (pertaining to a grade or other issue) and they begin to yell or make threats, remain calm and state that “you are clearly upset right now and while you are so upset it is not possible to have a productive meeting. You will need to calm down now (take three deep breaths) or else you will have to leave and come back when we can continue the conversation”.
14. Have Kleenex available.
15. Have candy, snacks or coffee available if possible.

Good luck as you build productive relationships with your students.

References

Kuh, G., Kinzie, J., Schuh, J., Whitt, E. (2010) *Student Success in College: Creating Conditions that Matter*. San Francisco, CA: John Wiley and Sons.

Tinto, V. (2012) *Completing College: Rethinking Institutional Action*. Chicago, IL: University of Chicago Press.

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Ensuring Students' Prior Knowledge Helps (not hinders) Learning

When we endeavor to teach students something new, it is important that we first consider what students already know. Depending on several features of their prior knowledge, what they bring with them may either help or hinder their learning. Fortunately, there are several quick and straightforward ways that we can assess students' prior knowledge so that we can be sure that we're meeting students where they are, so we can maximize their learning.

For prior knowledge to *help* learning, it must be:

ACTIVATED: Even if students have the relevant prior knowledge, it doesn't help them learn something new unless it's activated, or brought back into their minds.

★ How can you activate prior knowledge? Try using exercises such as brainstorming or concept mapping, making explicit connections between new material and past course content, or using analogies that connect to students' experiences.

SUFFICIENT: Sometimes students have some prior knowledge, leading us as instructors to assume that they are more prepared than they really are. Other times, they may have a different type of prior knowledge (e.g., declarative vs. procedural), rendering what they already know insufficient to be built upon.

★ How can you check if prior knowledge is sufficient? Try identifying what prior knowledge you expect students to have or remediating insufficiencies in prior knowledge (e.g., with an online review module, a review session from the TA, or checking in with instructors or prerequisite courses).

APPROPRIATE: Students may bring with them prior knowledge which is accurate, but which is not appropriate for the present context (e.g., assuming that the technical meaning of a word is the same as the everyday meaning of that word).

★ How can you check if prior knowledge is appropriate? Try giving a diagnostic assessment, using brainstorming to reveal what students already know, or looking for patterns of errors in student work.

ACCURATE: If students bring with them misconceptions which are inaccurate, they will have a much harder time making sense of the new information because it won't fit with the concepts they think they know.

★ How can you check if prior knowledge is accurate? Try asking students to make and test predictions (this is a powerful way to help them overcome misconceptions) or having students justify their reasoning when answering questions.

References and additional resources:

★ The content of this teaching tip is based on the analysis of the research on prior knowledge from Ambrose, S. A., Lovett, M., Bridges, M. W., DiPietro, M., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass

Additional resources related to prior knowledge and how we might assess it include:

National Research Council (2000). [How people learn: Brain, mind, experience, and school](#). Washington, D.C.: National Academy Press.

Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers*. San Francisco: Jossey-Bass Publishers.

[Prior Knowledge as an Unexpected Obstacle to Learning](#) by Janet G. Hudson
[What Do Students Already Know](#), from Cornell Center for Teaching Innovation

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Strategies for Increasing Student Motivation

“People often say that motivation doesn't last. Well, neither does bathing - that's why we recommend it daily.” Zig Ziglar, American author and motivational speaker

Students spend hours on co-curricular activities, but can resist investment in coursework. Why is that? One possibility is low motivation. Jon Wergin's motivation framework yields actionable strategies to influence motivation. Although Wergin's framework focuses on faculty, his principles apply to all learners.

Autonomy: Having choice and ownership lead to high autonomy and contribute to positive motivation, and are easy for an educator to manipulate in her course. For example, rather than assigning an essay exploring the cultural forces leading to a specific event (e.g., the French Revolution), the educator could allow each student to choose which event they think best illustrates the core concepts (e.g., how does national identity contribute to the Arab Spring or the American Civil War).

Community: Humans, even introverts, are communal creatures. Educators can welcome students to the scholarly community of the classroom. They can adopt strategies like collective determination of exam dates, an email list or message board for anyone to post to, responsibility of students to others to promote their success (e.g., peer review approaches), and having the class norm of summarizing the previous comment before adding a new idea. These strategies and others help build a learning community.

Recognition: According to Dale Carnegie of *How to Make Friends...* fame “Remember that a person's name is to that person the sweetest and most important sound in any language”. I'd add “attached to praise”. Students do many praise-worthy things. Educators can make public affirmations (“Malcolm sent me this great website, let's take a look”) and illustrate how past work becomes future affirmation (“Last term, Jackie Benson and Jerry Marshall drafted this model that incorporated at least seven different concepts”). Word spreads. For especially neat outcomes, alert your communications office.

Efficacy: Everyone is motivated to do things they are good at. The problem is that *good* requires a lot of practice and mistakes, two experiences most people choose to avoid. In addition, the point of learning is that one isn't already an expert. To counteract our nature tendency to avoid new and challenging tasks, educators can create heavily scaffolded experiences and intentionally escalate the complexity of work. Then, refer to past success to point to the likelihood of future success.

By using these strategies, educators can create an environment that promotes student motivation.

References & Additional Resources

- Pintrich, P. R. (XX). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95(4), 667-686.
- Ryan, R. M. & E. L. Deci. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Wergin, J. F. (2001). Beyond carrots and sticks. *Liberal Education*, 87(1), 50.

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Learning as a Journey: Early, Low-stakes Assignments

Should we be giving students more tests? Well, yes, and no. In order for assessments of learning to be effective, they must be “frequent, early, and formative” (Tinto, 2012). Offering opportunities for students to practice and receive critical feedback right from the start helps to guide their learning. Given that early, low-stakes assignments influence future performance, rather than past, we can understand where our students are before and during their learning. This in turn helps us in creating opportunities to further grow their self-efficacy by identifying misconceptions and gaps. This approach has many benefits to both instructor and student.

Benefits for Students

- Motivates and increases class attendance
- Opportunity for active and reflective evaluation and control of their own learning (Nicol & Macfarlane-Dick, 2006)
- Opportunity to translate prior knowledge/experiences to course topics (Kift, 2009)
- Increases engagement, specifically for those who might be at risk for failure or withdrawal
- Builds skills and confidence with specific, timely, feedback that empower them to make adjustments (Kuh, Kinzie, Schuh, & Whitt, 2010)
- Increases opportunity for practice, recall, and retention of information
- Increases self-efficacy
- Opens communication with the instructor that can lead to more meaningful conversations and connections
- Fosters deep learning (Bain, 2014; Nilsen, 2010)

Benefits for Faculty

- Personalizes the learning experience by modifying instruction based on students’ learning
- Opens communication with your students that can lead to more meaningful conversations and connections
- Connects to bigger course concepts to help student scaffold their learning
- Identifies students who may need additional support, e.g., students on academic probation, students not attending class, students who would benefit from other support such as writing, etc.
- Referral support using an early alert system
- Directs students to additional resources if needed
- Contributes towards helping students not only be successful in their courses, but also make significant progress toward their degrees

Examples of Low-stakes Assignments

- Drafts
- Peer review
- Group work
- Quiz
- Discussion
- Self-assessment

- Quick Write
- Muddiest Point
- Journal/reflection

References

Bain, K. (2004). What the best college teachers do. Cambridge: Harvard UP.

Kift, S., (2009), First year curriculum principles: Program coordinator checklist, Articulating a transition pedagogy. <http://www.csu.edu.au/student/transition/deliverables/5.htm>

Kuh, G. D., Kinzie, J., Schuh, J.S., and Whitt, E.J. (2010). Student success in college: Creating conditions that matter. San Francisco, CA: Jossey-Bass.

Nicol, David J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. *Studies in Higher Education*,_31(2).

Nilson, L. B. (2010). Teaching at its best: A research-based resource for college instructors. San Francisco: Jossey-Bass.

Tinto, V. (2012). *Completing college: Rethinking institutional action*. Chicago, IL: University of Chicago Press.

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Encouraging Students to Read

“From the moment I picked up your book until I put it down, I was convulsed with laughter. Someday I intend reading it.” –Groucho Marx

Most of us have seen this downward spiral: We assign reading. Students—inexperienced at academic reading—find it challenging and don’t complete it. During the next session, we encounter blank faces, so we give an ad hoc lecture on the reading instead of leading a planned discussion. We assign more reading. Students—having concluded that they don’t really need to read—skip the assignment. In class, we again encounter blank faces and again begin summarizing the contents of the reading.

As the spiral continues, we become more frustrated and students lose opportunities to engage in the richness of the course content and to develop the reading skills they need. What to do? Here are three suggestions.

- Mary Ann Weimer suggests stopping the downward spiral early. The first time students show up unprepared, she suggests calmly saying something like this: “This article is really quite important. Too bad you aren’t ready to work with it as I had planned” and moving to an alternative activity designed for just that moment. Weimer says no scolding—but no summarizing the reading, either.
- John Bean notes that background knowledge helps students understand a text. Often we provide that just before a discussion. Bean suggests shifting the overview to the end of the previous class, when we make the assignment. We might point out the central focus of the reading, or alert students to a tricky passage or important term. We can also record these short introductions and post them on the class web site.
- Norman Eng proposes an activity he calls QQC for “question, quotation, comment.” As students read, they note a question, select an interesting quotation, or make a comment; the instructor then devotes 10 or 15 minutes to QQCs. Eng suggests three ways to make QQCs work. Use them regularly. Call on students randomly rather than waiting for the typical volunteers. Use this “cold calling” in good faith—involve many students but avoid deliberating embarrassing the momentarily distracted.

Want to read more?

Bean, J. C. (2011). *Engaging ideas*. 2nd. ed. San Francisco: Jossey-Bass.

Gonzalez, J. (2017). 5 Ways College Teachers Can Improve Their Instruction. *Cult of Pedagogy*.
<https://www.cultofpedagogy.com/teaching-college/>

Weimer, M. (2010). 11 Strategies for Getting Students to Read What’s Assigned.
<http://www.facultyfocus.com/free-reports/11-strategies-for-getting-students-to-read-whats-assigned/>

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Using Reading Prompts to Promote Students' Academic Reading

Do you have concern around students attending classes without pre-reading? Ever wondered how can you make them read? Students in higher education are expected to comprehend the text, connect their prior experiences with the text, evaluate the text, and consider alternative view-points to the text. Reading prompts is considered to be a way to motivate students to read. It improves students' comprehension and critical thinking skills by engaging them actively with the reading material.

Provision of reading cues/prompts helps the learners to actively read, analyse their own thoughts during and after reading to expand, clarify or modify their existing thinking about the concepts or idea at hand. The reading prompts can be categorized into six categories a) identification of problem or issue b) making connections c) interpretation of evidence d) challenging assumptions e) making applications, and f) taking a different point of view. Sample question for each category are as follows:

- a) What is the key issue/concept explained in the article? What are the complexities of the issue? (*Identification of problem or issue*)
- b) How is what you are reading different from your prior knowledge around the issue/topic? (*Making connections*)
- c) What inferences can you draw from the evidence presented in the reading? (*Interpretation of evidence*)
- d) If you get a chance to meet the author, what are the key questions that you would ask the author (*Challenging assumptions*).
- e) What are the lessons that you have drawn for your practice, from this reading? (*Making application*)
- f) Write a letter to your friend who has no expertise in this subject area, explaining him the theoretical concept presented in the article? (*Taking a different point of view*)

Generally, students are asked to complete the **reading prompts** before the next class by writing a paragraph-long response to each question. Teacher may ask some or all questions depending upon the learning objectives of the session and may adapt the question(s) to gauge specific information around the text. For sample questions and detailed literature around reading prompts, please read Tomasek (2009).

Reference:

Tomasek, T. (January 01, 2009). Critical Reading: Using Reading Prompts to Promote Active Engagement with Text. *International Journal of Teaching and Learning in Higher Education*. Retrieved from <https://files.eric.ed.gov/fulltext/EJ896252.pdf>

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Ensuring that Students Complete Assigned Readings

Students are often reluctant (or unable) to complete readings before class. They might lack the confidence, motivation, or skill to read difficult texts (Starcher & Proffitt, 2011). Instructors can make things worse with expectations that don't align with their students'. Fairly or not, instructor and student are often not on the same page.

To ensure that students complete important readings, you can use Class Prep assignments. First, you design questions that can only be answered if a student completes an assigned reading. You can use Bloom's taxonomy to adjust question difficulty based on your class's needs (Ewell & Rodgers, 2014). Second, create an audience for each question that forces students to answer in their own words. This can reduce plagiarism, and it keeps students from using textbook language as a crutch (Bean, 2011). Below are some examples from a 100-level Literature class (examples from other disciplines can be found in Ch. 3 of John Bean's *Engaging Ideas*):

- **Remembering/Understanding Question:**

In your own words, briefly explain what happens in Susan's Glaspell's one-act play *Trifles*. Imagine you are explaining it to a friend over lunch. Be comprehensive, but also be honest. If you didn't understand certain parts, describe what happened in the play and why you think it happened. Keep your tone PG-13, as if there were children running around your table at the restaurant (*around 200 - 250 words*)

- **Applying/Analyzing Question:**

After discussing Glaspell's play, your friend notices that a major plot point centers on domestic violence. Nervously, he reminds you that a mutual friend has been acting strange lately, prone to nervous laughter and flinching at sudden movements. Your friend thinks she might be in an abusive relationship. What can the two of you do? Keep in mind, this is a hypothetical. You don't need to share these thoughts with your peers if you don't want to. So, be as honest as you can. Would you be likely to approach this friend and offer help? Are you likely to confront the alleged abuser? Is it possible you might do nothing at all? Explain what you might do, and then explain whether your choices are similar to those made by Mrs. Hale and Mrs. Peters (*around 200 – 250 words*)

Third, assign a due date of about 1 – 2 hours before class (Patterson, 2005). This lets you skim the responses before class to see where students are struggling. You can give feedback in class, celebrating excellent insights and addressing common observations and misconceptions. Finally, you can grade this class prep as a participation assignment. If a student tries to answer all the questions, you give them full marks, whether right or wrong. This minimizes your grading burden, lowers the stakes, and incentivizes students to do the reading.

Keep in mind, as a general rule, you should *not* accept class prep late. If you accept it late, you lose the ability to make sure students are doing the reading before class. If you don't want to punish excused absences, you can always include a policy to drop the lowest grade for 1 or 2 class prep assignment(s). Done well, these assignments not only make sure students are prepared for class, they can provide a strong foundation for in-class discussion and activities.

References

- Bean, John (2011). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and Active Learning in the Classroom* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Ewell, W. H., & Rodgers, R. R. (2014). Enhancing Student Preparedness for Class through Course Preparation Assignments: Preliminary Evidence from the Classroom. *Journal Of Political Science Education*, 10(2), 204-221. doi:10.1080/15512169.2014.893760
- Lineweaver, T. T. (2010). Online Discussion Assignments Improve Students' Class Preparation. *Teaching Of Psychology*, 37(3), 204. doi:10.1080/00986283.2010.488546
- Patterson, E. (2005). Just-in-Time Teaching: Technology Transforming Learning: A Status Report. *Successful Pedagogies*.
- Starcher, K., & Proffitt, D. (2011). Encouraging Students to Read: What Professors are (and Aren't) Doing about It. *International Journal Of Teaching And Learning In Higher Education*, 23(3), 396-407.

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The Monte Carlo Quiz

Encouraging completion of pre-class assignments with the roll of a die

Let's face it: most of our students just do not do the pre-reading or homework that you want them to do prior to coming to class. Why? Those who research this sort of thing would suggest that it is because they do not see the need or value in doing so. And, they do not have the intrinsic motivation to overcome this perceived lack of value. Unfortunately, simply telling students that something is important and that they will need it later – either for the test or in the workforce – just does not carry enough weight to increase intrinsic motivation and get them to do the pre-reading and/or other pre-class assignments. So, how can we help them find a little more motivation? By creating extrinsic motivation and helping students find value in the assignment by making them routinely accountable for it.

There are many options for increasing accountability and encouraging students to do the pre-reading and many incorporate some sort of assessment – usually at the beginning of the class in which students will need and use the information. Making these assessments periodic and random is more useful than a routine schedule (Ruscio, 2001). One such tool that students seem to value and enjoy is Fernald's Monte Carlo Quiz (MCQ). Fernald (2004) originally developed the MCQ for upper division undergraduate psychology courses to not only inspire students to do the reading, but to also encourage them to read at a deeper level, to truly try to understand the content, and to enhance retention.

Design

In Fernald's original iteration of the MCQ, he wrote five standard questions that could be applied to all assigned readings: 1) Knowledge of the content, 2) Comparison of two ideas in a reading, 3) Application of the concepts to the student's life, 4) Critique of an idea within the reading with a rationale for agreeing or not, and 5) Passion in which students identify some passage from the reading that elicited an emotional response. Students were routinely assigned six chapters or articles for pre-reading. The Monte Carlo name of the method comes from the way in which randomness was determined – by up to three rolls of a die.

Implementation

At the beginning of class, a student rolls a die. An odd number on this first roll means “no quiz” and class proceeds. If an even number is rolled, there will be a quiz and the student rolls the die a second time to determine over which of the assigned readings the quiz will be. The student's third roll of the die then determines which of the five previously mentioned questions students will address, with six being student's choice. Student question responses were limited to one paragraph of no more than eight sentences and graded on a four-item scale from Exceptional to Unsatisfactory.

Results

Fernald reported that students reported increased motivation, doing more pre-reading, and preparing more deeply than they might otherwise. In addition, they liked the format and felt as if they had more control of the process. He also stated that his teaching transitioned to more active learning and problem solving because the students were better prepared.

Modifications

The MCQ format can be modified to fit almost any instructor's needs by adjusting the question types and formats, the pre-class assignments, and who generates the questions (students vs. instructor). Others have found similar student and teaching outcomes.

References

Carney, Amy G, Sara Winstead Fry, Rosaria V Gabriele, and Michelle Ballard. 2008. "Reeling in the big fish: changing pedagogy to encourage the completion of reading assignments." *College Teaching* 56 (4):195-200.

Fernald, Peter S. 2004. "The Monte Carlo Quiz: encouraging punctual completion and deep processing of assigned readings." *College Teaching* 52 (3):95-99.

Ruscio, John. 2001. "Administering quizzes at random to increase student reading." *Teaching of Psychology* 28 (3):204-206.

Simonson, Shawn R. 2017. "Modifying the Monte Carlo Quiz to increase student motivation, participation, and content retention." *College Teaching* 65(4):158-163.

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No Textbook – No Problem: OER is the Answer!

“The book you don’t read won’t help.” - Jim Rohn

Students do not buy a textbook for a number of reasons ranging from high costs to prior poor experiences, where some instructors do not make use of the text or replicate the text in their lectures making the textbook obsolete. There is a direct correlation between the use of Open Education Resources (OER) and course completion, class achievement (grades) and enrollment intensity (Fischer, Hilton, Robinson, & Wiley, 2015). OER used to supplement or replace an expensive textbook can lead to higher student engagement and improve student learning. Faculty who are dissatisfied with the traditional textbooks or want to decrease barriers of student degree completion [invest their time and energy into learning more about OER](#). The realm of OER is broad and could be rather confusing as you get started.

Don’t Recreate – Reuse

Explore existing resources before you decide to create your own. You can [use Google, search discipline specific sites, and OER repositories](#). You may even be able to find a full OER textbook! Do not get discouraged when you cannot find a textbook – you may have to go unit by unit and replace a textbook chapter by chapter with several OER resources. This will allow you to refresh and renew your course: you might be able to locate resources that are current and will help students grasp complex topics.

Start Small

If you are not ready to completely eliminate an expensive textbook you may want to supplement your weekly readings with additional resources. Those resources could be OER or other resources that are free to students (library database subscriptions, [video repository subscriptions](#), etc.). You can start by eliminating a chapter or two and test things out – ask students for feedback about learning materials when you replace the textbook reading.

Less is More

Offer several (one to three) additional resources when supplementing or replacing a textbook reading. Be mindful to not give a one-page list for each unit. When conflicted which resources to include – revisit the unit’s learning outcomes to guide your decision-making process. If the list of resources is getting long – categorize it and let students choose one resource from each category.

Engage Your Students

Rather than providing all learning materials to your students engage them in a learning journey. Create an activity for your students to search, evaluate and present their OER findings on a specific topic; have students make connections with the textbook reading or other unit specific resources.

Find Support!

Find out whether you have an OER librarian or if you have an Office of Innovative Pedagogies or a Center for Teaching and Learning that supports OER initiatives on your campus. Ask your colleagues, see if anyone in your department already does not use a textbook or find a colleague to collaborate with on redesigning a course to replace a textbook with OER or free-for-students resources.

Resources

Open Education Consortium <http://www.oeconsortium.org/>

CUNY OER Workshop to Steal <https://oerworkshop.commons.gc.cuny.edu/>

Cengage OER Podcast <https://www.cengage.com/oer#podcast>

Open NYS <http://www.open-nys.org/>

References

Fischer, L., Hilton, J., Robinson, T. J., & Wiley, D. A. (December 01, 2015). A multi-institutional study of the impact of open textbook adoption on the learning outcomes of post-secondary students. *Journal of Computing in Higher Education: Research & Integration of Instructional Technology*, 27, 3, 159-172.

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Using Food for Attention, Participation, and Reflection

Are you looking for a new way to:

- gain students' attention?
- review lessons learned in a course?
- ensure student participation in your class?

If you answered yes, consider implementing Candy Questions into one or more of your lessons. I used to hand out candy as a reward for students who would participate in my class. More often than not, the same two people would answer questions each week. Discouraged at the lack of voluntary participation, I decided to leverage candy for a new multipurpose activity.

To implement Candy Questions, first gather fun size candy bars. Try to obtain a variety that corresponds to the number of question prompts you want to use. In my first year seminar I use four varieties to represent four different prompts. Make sure to have one piece of candy for each student in your course. At the beginning of the class, have each student select a piece of candy. Let students know they do not have to eat the candy, but they need to take a piece for the activity. Then, announce the question prompt corresponding to each type of candy. For example, in my first year seminar I use:

CANDY	QUESTION PROMPT
Heath English Toffee Bar	How is your time management schedule working out?
Snickers	Which learning strategies have you employed? Were they effective?
Reese's Peanut Butter Cup	What's the best/most exciting thing that has happened in the past week?
Hershey's Milk Chocolate Bar	What's the most fun word to say?

The first two question prompts relate to the application of topics we have discussed so far in the term. You can easily substitute topics appropriate for your course. Another question prompt promotes positive thinking, and the final prompt is just really fun! I go around the room, call each student by name, ask what candy they selected, and repeat the question prompt, to which the student then responds. From there, I may go on to the next student, or we may engage in a short discussion about the response.

I typically have about 15 students in my course, so this activity takes approximately 10 minutes. If you have a large enrollment, consider implementing the activity during multiple class periods with different students participating each time. Or, have students select candy, divide into groups, and answer the questions within their group. Using Candy Questions not only secures students' attention and participation, but also provides an opportunity for students to reflect on their use of the skills being taught.

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Clarity & Organization in the Classroom Improve Student Learning

Although we may have cherished memories of eccentric instructors, I have yet to hear anyone reminisce that they loved a course because the instructor was disorganized or that the lectures were incomprehensible. As a student, I appreciated courses that were well-structured, with a clear plan for the academic term. These courses included assignments that made sense as meaningful learning experiences. I appreciated instructors who could explain difficult concepts, gave clear directions for assignments, and established unambiguous criteria for how they would evaluate my work. Faculty also seem to value clarity and organization as evidence of skilled teaching. Instructors pay particular attention to student ratings for *organization and clarity* in their course evaluations and cite these ratings as evidence of their teaching skill in their narratives for tenure and promotion.

Is our intuitive esteem for clarity and organization based only on personal preference? Are evaluations of clarity and organization meaningful indicators of effective teaching?

Roska and his colleagues (2017) examined the relation between instructor clarity and organization (as perceived by student raters) and student achievement on disciplinary content. Their analysis lends substance to the notion that organization and clarity are important attributes of effective teachers. Based on data from over 7,000 students (first-year students attending 38 four-year institutions), Roska et al. found that students who reported greater exposure to clear and organized instruction also reported high levels of academic motivation. Moreover, students who reported frequent experiences with clear and organized instructors also reported that they spent more time on study, participated in class more often, and prepared for class.

Roska et al. also found that students who reported more experience with clear and organized instruction also reported higher first-year GPAs. The benefit associated with taking courses from instructors who were clear and organized was large as the educational advantage observed for students from families with college-educated parents. Moreover, Roska et al. report that the positive relation between instructional clarity and academic achievement was strongest for the subset of students who were appeared to be least prepared (based on ACT scores and high school GPA).

What are the hallmarks of instruction that is organized and clear?

Roska et al. (2017) evaluated the clarity and organization of instruction by asking students to rate faculty on the following ten indicators (p. 285):

- Presentation of material is well organized
- Faculty are well prepared for class
- Class time is used effectively
- Course goals and requirements are clearly explained
- Faculty have a good command of what they are teaching
- Faculty give clear explanations
- Faculty make good use of examples and illustrations to explain difficult points
- Faculty effectively review and summarize the material
- Faculty interpret abstract ideas and theories clearly
- Faculty give assignments that help in learning the course material

Why is organization and clarity important?

When faculty design courses that are well-organized, write a syllabus and assignment instructions in language students understand, and explain course content clearly, students interpret these behaviors as indicators of faculty interest in the academic success of their students and faculty intention to teach well. When students believe that an instructor is invested in their learning, they may engage in more effective study behaviors and increase their efforts to learn.

Advice to faculty: Get feedback on organization and clarity

Students can be a valuable source of feedback about instructor clarity, course organization, and the perceived relation between assignments and learning goals. The voice of the students is needed to determine if an instructor can bridge the gap between experts and novices because an explanation that is crystal-clear to an expert may confuse a novice. However, the student voice should not be the only source of information about teaching quality. Instructors rightly question whether students have the expertise to make judgments about all aspects of effective teaching. For example, a judgment about how whether an instructor has a “command of the material” requires disciplinary expertise that students do not possess.

Instructors should also seek feedback from colleagues with specific expertise. For example skilled teachers from other disciplines can provide feedback about teaching (e.g., class structure, timeliness of feedback, clarity of explanations, classroom management, whether the instructor creates assignments that provide meaningful opportunities to learn). Colleagues within a discipline can provide feedback about whether explanations are accurate and whether instructional materials are designed well, present appropriate disciplinary content, and are appropriate for the level of student enrolled in the class (introductory through graduate).

Resources

Roska, J., Trolan, T. L. Blach, C., & Wise, K. (2017). Facilitating academic performance in college: Understanding the role of clear and organized instruction. *Higher Education, 74*, 283-300.
<http://dx.doi.org/10.1007/s10734-016-0048-2>

Submitted by:

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Create High-Impact Assignments

The success of team-based learning depends on the quality of the assignments instructors design for team projects. The principles for creating a high-impact assignment that engages students in complex, high-level thinking also apply to individual assignments.

The “four S’s” describe four characteristics of successful team-based learning projects. These characteristics also apply to high quality projects that students complete alone.

- **Significant problem.** The assignment must pose a problem that captures interest and that students recognize as a relevant problem. Make the value and relevance of the problem explicit when you frame the problem in the initial assignment. Don’t rely on students to discover the importance or relevance of the problem on their own. Pose a problem that is
- **Same problem.** Create a single problem, case, or question for students to solve. The problem should be complex enough to generate multiple reasonable solutions. When students work on the same problem, the different solutions they generate create the foundation for a rich discussion among students (or among student team) about the strengths and weaknesses of the proposed solutions. When students are allowed to select their own problem for an assignment, learning stops during class discussions when students attempt to share what they learned from their individual problem. Resist the temptation to engage student interest by allowing students to select different problems. Although unique problems selected by students may enhance interest and engage the student in the process of problem-solving, they do not deepen their learning by examining how other students solved their problem.
- **Specific choice.** Completing the assignment must require students to apply course principles and content to make a specific choice as a recommended solution to the problem posed. The problem posed should create a situation in which students must apply course content, disciplinary models, and analytic processes to make their choice.
- **Simultaneous report.** Create a reporting process that requires every student (or team) to report their choice at the same time. Clicker questions or response cards are one mechanism for simple choices. More complex choices/solutions can be presented in a gallery walk of posters. The ensuing class discussion of the various solutions will engage students and deepens their understanding of course concepts.

What makes a problem significant?

Significant problems ask students to engage in class content in meaningful ways. Pose complex problems that will generate multiple solutions that may all be acceptable but might vary in quality. Avoid questions or problems that can be answered by mechanically repeating textbook content or applying a “plug and chug” process.

The following three versions of a problem represent different levels of problem quality:

- **Least effective: Make a list.** The question asks students to identify the characteristics of a high-quality problem solution. Usually students can find such a list in their textbook. “Solving” this problem only requires students to locate and copy the list. Discussion of different lists among students is likely to be deadly boring.
- **Moderately effective: Make a choice.** Present a case study and ask students to identify the best choice for this case. For example, present students with a set of data on multiple measures

(quantitative or qualitative) and ask them to predict an outcome (e.g., next likely event in a geopolitical conflict, impact on an ecosystem, impact on group dynamics, success of company or marketing scheme) or select an explanation (e.g., choose a medical diagnosis, select among competing theoretical explanations).

- **Highly effective: Make a specific choice.** Which piece of information from the case is most critical for making a choice (i.e., for predicting an outcome, making a diagnosis, supporting one explanation over another). This assignment is more effective because it requires students to be able to make the list of key characteristics and complete the activities for the **make a choice** assignment and then go one step further. This assignment requires students to move beyond rote reproduction of a collection of “facts.” Instead, students must evaluate options and, if working in a group, discuss the merits of options with others before making their choice. The class discussion of specific choices broadens the analysis by increasing the diversity of proposed choices and considering the strengths and weaknesses of each. Students and groups are sufficiently invested in their choice to support a spirited and thoughtful discussion.

Activities for a gallery walk activity

Students rotate among the posters, evaluate, and provide feedback on the solutions.

- Ask students to vote on the best solution among those posted. Class discussion focuses on why that solution is better than the others.
- Students identify the single greatest weakness of each proposed solution. Class discussion might focus on how each weakness might be addressed to create an improved solution.
- Students develop a list of best ideas and a list of “remaining problems” questions based on all of the posters. Class discussion might involve developing a new solution that incorporates the best ideas from several posters while minimizing the problems identified for individual solutions.

Resources

Michaelsen, L. K., & Sweet, M. (2008). Creating effective team assignments. In L. K., Michaelsen, D. X. Parmelee, K.K. McMahon, & R. E. Levine (Eds.), *Team-based learning for health professions education: A guide to using small groups for improving learning* (pp. 35-59). Sterling, VA: Stylus.

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Strategies that Support the Development of Critical Thinking

Critical thinking is hard. Like other important cognitive skills, critical thinking requires practice. We don't learn to think critically by memorizing a set of rules. We must practice these skills in a variety of contexts and learn to think critically about a variety of contents (Nelson, 1999). Moreover, because critical thinking creates intellectual and emotional challenges for students, they may resist adopting critical thinking skills, just as they resist other threshold concepts (Land, 2014).

College students often begin their studies as *dualist thinkers*, who believe that knowledge is certain and learning is a matter of accumulating the corpus of "facts" authoritative sources determine to be true (Perry, 1970). These students arrive on campus with experiences and expectations about learning that emphasize memorizing and repeating facts without questioning their credibility.

Some students resist thinking critically because dealing with ambiguity and uncertainty is uncomfortable. The notion that scholars accept knowledge tentatively, depending on the current state of evidence, including criteria such as what "counts" as evidence, can be disconcerting, especially for students accustomed to a culture that expects authority to be believed and followed without question.

Critical thinking requires that students evaluate the quality of evidence based on specific disciplinary contexts. They must learn to apply these criteria to specific models and theories. Moreover, students must develop a tolerance for uncertainty and ambiguity. Most disconcerting of all, they must determine when to continue using a model known to be "wrong." For example, Nelson (1999) notes that Newtonian laws of motion make accurate predictions when applied on a small scale but are clearly wrong when applied on a large scale. Students are often puzzled and might even be disturbed when an instructor requires students to learn and apply a model and also tell them that the model is flawed.

Nelson (1999) offers several strategies that instructors can use to overcome these challenges and support student acquisition of critical thinking skills.

- **Confront uncertainty head-on.** Devote class time and exam questions to the nature and process of reasoning in the discipline. Discuss the evolution of thought about models and what scholars currently believe in terms of how alternative explanations and perspectives have been evaluated and defended. Make the *process* of critical thinking in the discipline explicit as part of your discussion of content. Discuss *why* scholars describe the state of the world as they now do rather than just present the current thinking.
- **Articulate the disciplinary criteria used to construct an argument and support an interpretation.** These discussions may include criteria for evidence, disciplinary values (what are important questions to try to answer), and how scholars in the discipline construct and evaluate arguments.
- **Make big ideas accessible to students.** Complex material can be daunting to novices. Experts can zero in on key details rapidly, but novices have difficulty deciding which details are important and which ones are marginal. Create outlines or guiding questions that direct student's attention to the most important concepts.
- **Help students learn to appreciate the value of learning from mistakes.** Create low-stakes assessments or allow students to retake early exams to enable them to directly experience successful acquisition of a new skill or mastery of a challenging concept after experiencing an

initial setback. These experiences promote a “growth” mindset that supports internal motivation (Dweck, 2008).

- **Create opportunities to practice through structured small-group discussions.** Create a reading assignment that students complete before the small-group discussion in class. Ask students to summarize the author’s argument, evaluate the support for the argument the author provided, determine criteria for evidence and the amount of proof required, and decide whether the author’s argument was adequate (Rabow, Charness, Kipperman, & Radcliffe-Vaslie, 2000). Structure the small-group discussion around the completed assignment. Grade the work based on student preparation (completeness of the reading assignment) and participation in the discussion. Give students explicit guidelines on expectations for the discussion, which might include assigned roles such as note taker, devil’s advocate, facilitator who ensures that every student contribute.

Resources

- Dweck, C. S. (2008). *Mindset: The new psychology of success*. New York: Random House.
- Rabow, J., Charness, M. A., Kipperman, J., & Radcliffe-Vaslie, S. (2000). *Learning through discussion (3rd ed)*. Long Grove, IL: Waveland Press.
- Land, R. (2014). Liminality close-up. *Thought paper presented for HECU7 at Lancaster University in July*. [<http://www.lancaster.ac.uk/fass/events/hecu7/docs/ThinkPieces/land.pdf>]
- Nelson, C. E. (1999). On the persistence of unicorns: The trade-off between content and critical thinking revisited. In B. A. Pescosolido B. A., & Aminzade, R. (Eds.). *The social worlds of higher education: Handbook for teaching in a new century*. (pp. 168-184). Thousand Oaks, CA: Pine Forge Press.
- Perry, W. G., Jr. (1970). *Forms of intellectual and ethical development in the college years: A scheme*. New York: Holt, Rinehart & Winston.

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H5P for Creating Interactive Lessons

H5P is a new HTML5 editing software that is fun and easy to use. There are 39 tools available using H5P, and you can access it as an activity right in Moodle or go to their site at H5p.org. If you use the H5P site you will need to upload the content to Moodle by going to H5P interactive content in the activities window on Moodle. For an overview of what you can do with H5P and to access their website click [here](#)

One of the best uses of H5P is for the creation of interactive videos. You can add captions, annotations, quiz questions, buttons and links to a video your previously created or one you accessed on You Tube, Vimeo, Open Video Project, Khan Academy, etc. By having students interact with the content they will be more engaged and learning will increase. You can assign points for the quiz questions so students do more than just watch the videos they become responsible for their learning.

You can also create flashcards, interactive presentations, many different types of quizzes, and many other types of learning objects. The tool is very easy to and content can be imported into your learning management system, website, or WordPress. The tool can also be integrated into your system as well.

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Connecting Writing, Revision, and Thinking in the Classroom

Precis: Frequently, students encounter course work in which writing and revision practices are not integrated into the work of the classroom. These tasks are left to students to undertake independently and this approach reinforces a belief that writing and revision are separate from learning and understanding content. The aim of this set of techniques is to forge a stronger connection among writing, revision, and thinking practices so that students see these as continuous across the parts of a class, from lecture, class discussion, writing drafts, revising, and producing final papers.

Here's how one might integrate writing, revising, and thinking into the class period:

1. Begin by having students write individual responses to a discussion question grounded in the course readings (5 mins). These responses may take the form of a position with or against the author's argument, statement of doubt about a key claim, question about the reading, or something else. The important feature is to have students explain why and how they came to their conclusions or questions.
2. Have the students share their individual responses with a partner (5mins). This move stages the larger class conversation by giving students a chance to test their ideas.
3. Before inviting students to have a larger class discussion, ask them to fine tune their initial response given the conversation they just had with their partner. Again, ask them to explicitly identify both how they are modifying their initial response and how their conversation prompted the change (3 mins).
4. Facilitate the larger class discussion on the question you posed to students. Leave time for students to write in their notebooks at the end of class about how their thinking about the reading changed by virtue of listening and taking part in the class discussion (5 mins). Encourage them to identify specific remarks made by their classmates that nudged them to reconsider their initial responses and/or perspectives they had not considering in their initial evaluation of the reading. Once again, encourage students to be explicit about how the introduction of new ideas prompted to revise their thinking.

Finally, take a moment to go "meta"—that is, address the meta-learning that these practices are meant to enforce either at the beginning or end of class, or ideally at both the start and end. The purpose is explicitly connect the thinking, writing, and revising practices in the classroom to how these same practices should be employed by students working independently on writing and reading assignments.

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Question of the Day Activity

Rationale

Our students' minds are going every which way. When they are not checking the endless number of notifications on their phones, they might be worrying about an exam or a recent fight with a roommate. This simple five-minute activity at the beginning of class can help students shift their attention toward the class, their classmates, and to you. The activity can also help students familiarize themselves with their classmates through self-disclosure, which can be especially critical in discussion-oriented classes.

The Activity

At the beginning of class, take attendance by asking students a short-answer question of the day. For some classes, it may be easy to think of a question that relates to the course material. For example, when I lecture on relational conflict, I ask students to name the animal—bear, bird, fox, or turtle—that best symbolizes their communication style when fighting with a roommate or friend. Yet, for other days, you may simply ask students to share their favorite place on campus, another course that they are currently enrolled in, or their favorite emoji [insert eye-roll emoji here].

Appraisal

The brief activity gives students the time to unpack their materials for the day, get to know their classmates, and a moment to switch gears. I find the question-of-the-day activity especially useful at the beginning of the term as we are learning each other's names, and I do the activity less frequently as students become more familiar with one another and with me. Overall, students have noted on course evaluations that the question-of-the-day contributed to a supportive and encouraging climate in the class.

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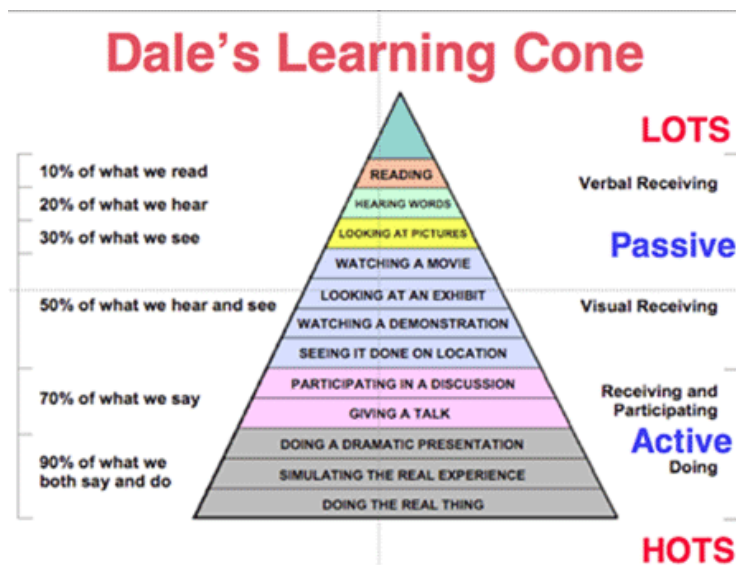
Submitted by:

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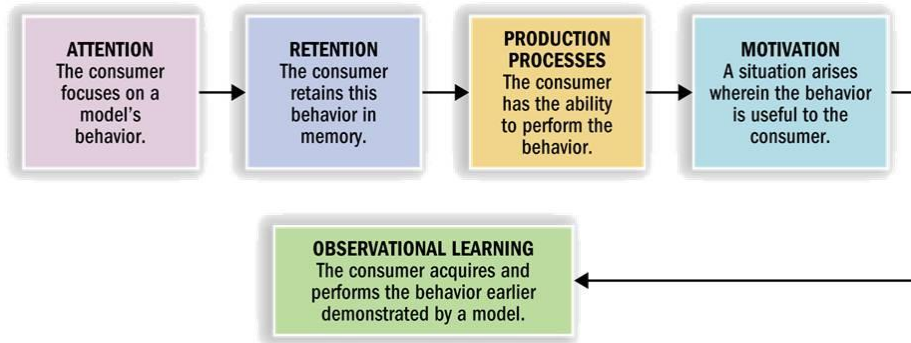
Demonstration Lectures



This style of lecturing is frequently used in science, technology, engineering, and math. The professor illustrates how to complete a task while explaining concepts and theories. Demonstrations can be live, videos, and/or simulated. After the demonstration, students are often provided with the opportunity to apply what is learned to either a situation or problem. Balch (2014) found that students who viewed a demonstration outperformed students that listened to a lecture only. Neurons in the brain known as visual-motor neurons are activated when we observe someone else performing, particularly if we visualize ourselves performing the same task. This allows us to mentally rehearse the skill. Learning and engagement are high in demonstration lectures because students are provided with context for the knowledge being taught and are often asked to explore solving problems.



Components of Observational Learning



Quick Tips for Using the Demonstration Lecture

1. Giving a demonstration involves the students hearing and seeing the content. This greatly increases student learning from hearing or seeing alone. Ensure that you talk through a demonstration, or chose a video that does that same.
2. To enhance learning even more, follow a demonstration by having students perform and apply the new knowledge as soon as possible.
3. Demonstrations come in a variety of forms. We often think of demonstrating a skill such as taking blood pressure or staining a blood smear. However, demonstrations can be working out a math problem on a board, rationalizing a problem aloud to demonstrate thought process, student presentations, a scientific experiment, models, and even pointing to parts of a diagram.
4. If a demonstration goes wrong, learning can still be successful! Learning through demonstration is accomplished by the student modeling what was observed. If the demonstrator encounters a problem during the demonstration, students will also learn the coping mechanisms observed, which can be used to problem solve later.

Learn more

For more tips visit: https://en.wikipedia.org/wiki/Observational_learning

Observational Learning and Social Learning Theory: <https://youtu.be/2Cptzo3-sHI>

Balch, W.R. (2014). A referential communication demonstration versus a lecture-only control: Learning benefits. *Teaching of Psychology*, 41, 213-219.

Bandura, A. (2014) Observational Learning. *Learning and Memory*. Ed. John H. Byrne. 2nd ed. New York:

NY. Macmillan Reference USA, 2004. 482-484. Gale Virtual Reference Library. Document URL
http://go.galegroup.com/ps/i.do?id=GALE%7CCX3407100173&v=2.1&u=cuny_hunter&it=r&p=GVR&sw=w&asid=06f2484b425a0c9f9606dff1b2a86c18

Harrington, C. & Zakrajsek, T. (2017). *Dynamic Lecturing: Research-based strategies to enhance lecture effectiveness*. Sterling, VA: Stylus Publishing Company.

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Interactive Lectures



Within interactive lectures professors typically lecture for a portion of the class, then provide students an opportunity to apply the content covered. This process is repeated throughout the class time. Activities used to provide application opportunities include:

- student discussion
- asking students to write a summary of what was covered
- a hands-on experience
- a question-and-answer session
- a small quiz
- a case study, requiring students to provide a solution using new content

Technologies such as Poll Everywhere and Kahoot! are great tools to implement some of the above strategies. Because lecturing is often 15-20 minutes before content is applied, student engagement is often high in an interactive lecture.

Interactive lectures also allow professors to more flexible with their teaching points, letting students guide the learning more through real-time feedback and generation of new questions. The interactivity within the lecture often promotes a transferability of information to problem-solving skills (Gulpinar & Yegen, 2005).

Interactive lecturing does require planning and expert knowledge to most effectively organize the material. Although this is the case, do not let this prevent you from developing an interactive lecture, as learning is often very high!

Quick Tips for using the Interactive Lecture

1. Organize your lesson into modules/sections to cover each teaching point, making each section no longer than 20 minutes before an interactive activity.
2. Pick a variety of interactive techniques to implement throughout the lesson to keep engagement high.

3. Promote problem-solving, using the material, within each interactive activity. You want to guide students on HOW TO THINK ABOUT the material and apply the theories to a variety of situations, promoting transfer of knowledge.

Learn more

For more tips visit: <https://www.unmc.edu/facdev/resources/new-faculty-resources/teaching/interactive-lectures.html>

<http://www.ascd.org/publications/books/110127/chapters/Section-1@-Introducing-the-Interactive-Lecture.aspx>

Are We having Fun Yet? Developing Interactive Lectures and Presentations:

https://www.slideshare.net/infolit_group/are-we-having-fun-yet-developing-interactive-lectures-and-presentations-jackson

Gulpinar, M. A., & Yegen, B.C. (2005). Interactive lecturing for meaningful learning in large groups. *Medical Teacher*, 27, 590-594.

Harrington, C. & Zakrajsek, T. (2017). *Dynamic Lecturing: Research-based strategies to enhance lecture effectiveness*. Sterling, VA: Stylus Publishing Company.

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Lecturing with Storytelling

Humans have been telling stories for centuries. Stories elicit emotion. Even when students have had little experience with the material being taught, telling a story can provide them a way to connect with the material via emotion. Stories also put information in a framework making it easier to understand and learn. A good story can create an active learning environment because you are creating a high level of cognitive engagement, which is needed for good learning (Mayer, 2009).



Quick Tips for adding Storytelling to your Lecture

1. Make sure that you choose a story that has a theme that is meaningful to a diverse groups of students. Consider genders, age gaps, and culture when forming your story.
2. Create a hook at the beginning of your story. Start your story by creating a problem or incident that immediately engages the learners. A great way to do this is to describe a situation where what you are trying to teach doesn't exist, thus showing how important it is. Or you can start with a strong emotional reaction that gives students something to connect to right away.
3. Keep it simple. No matter how complicated the material is that you are teaching, you can find a way to reduce it down to a nugget of a story that can really impact the learners. Analogies and metaphors work well for condensing difficult new principles.
4. Be dynamic. Great story tellers often draw us in with movement to demonstrate pictures in our mind. Or a dramatic pauses, giving us time to reflect on what we've heard thus far before we find out the resolution of the crisis. Also, voice changes to give characters personality or demonstrate an emotion. These are all ways to maintain engagement.
5. Lastly, Close strong. Save your most important points for the end as your take away message. If you've covered them within your story, reiterate them again at the end. Alliteration, repetitive words, or even a singsong cadence can help.

[Learn more](#)

For more tips visit: 30 Storytelling Tips for Teachers: How to Capture Your Student's Attention. found at <https://www.teachthought.com/pedagogy/30-storytelling-tips-for-teachers/>

TEDxGallatin - Amanda D'Annuncci - Storytelling, Psychology and Neuroscience
https://youtu.be/KKB_JVNGjLY

Harrington, C. & Zakrajsek, T. (2017). *Dynamic Lecturing: Research-based strategies to enhance lecture effectiveness*. Sterling, VA: Stylus Publishing Company.

Mayer, R.E. (2009). *Multi-media learning* (2nd ed.) New York: NY: Cambridge University Press.

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Know/Don't Know/Do Charts

“An education isn’t how much you have committed to memory, or even how much you know. It’s being able to differentiate between what you do know and what you don’t.” Anatole France, Nobel Prize-winning author

At the end of a class period, the end of a section, or when helping students review for a test, have them create a “Know/Don’t Know/Do” chart. This technique serves two purposes: (1.) to help students identify gaps in their knowledge and understanding, and (2.) to provide students with the opportunity to take responsibility for identifying the best ways to gain the missing knowledge and understanding.

These charts are most often made by hand-drawing three simple columns on a sheet of paper. However, to promote sharing, consider having students articulate their ideas on a wiki in your LMS. They will pick up ideas from each other about what to study and how to study.

While this is a great way for students to simply learn content, it can also apply to higher order thinking. For instance, sometimes what a student doesn’t know is foundational knowledge. However, more often, what a student doesn’t know is how to apply a theory or methodology. It may take some coaching to encourage students to think about those application skills being as important as the content knowledge.

Many students have limited approaches to studying. Faculty often know techniques that are especially relevant to their discipline, which can be highlighted for students as they consider the “do” portion of this activity. Consider partnering with your campus’s Learning Center, early in the semester, to share additional ways of “doing” to learn or study for the course.

Content Knowledge Example from American History:

What I Know: The Jim Crow Era was after the Civil War and before the Civil Rights Movement.

What I Don’t Know: There were important U.S. Supreme Court cases, but when did they happen and why were they significant?

What I Will Do: I’ll use my textbook and a free online timeline tool to map out and annotate the most significant cases. I’ll then pair up with 3 peers from class so we can study the timeline and quiz each other on the details of the cases.

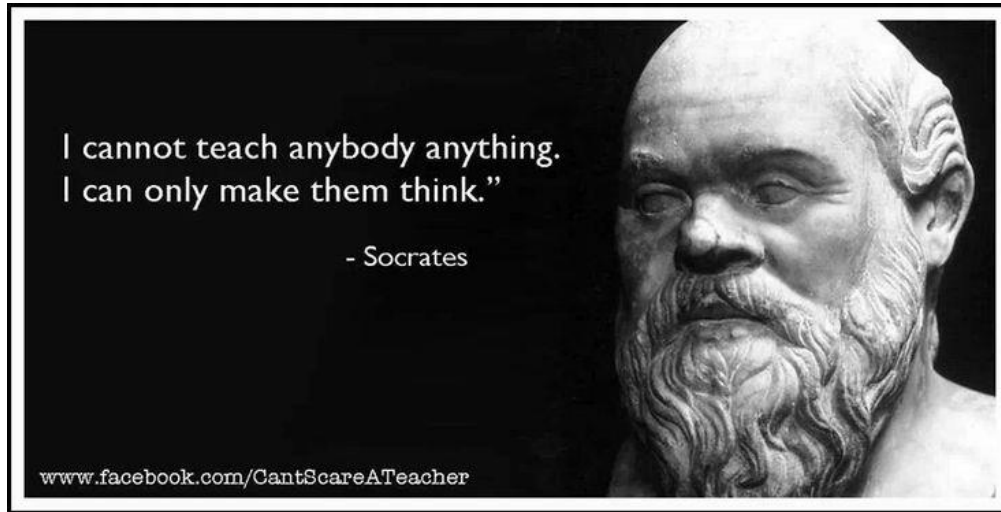
Additional resource:

Vanderbilt University has a wonderful page with more details about the significance of helping students develop skills in metacognition (<https://cft.vanderbilt.edu/guides-sub-pages/metacognition/>).

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The Socratic Method



The Socratic Method is often used to promote critical thinking. It focuses on providing more questions than answers to students and fosters inquiring into subjects. Ideally, the answers to questions are not a stopping point for thought but are instead a beginning to further analysis and research. Faculty should craft questions before class to present during their time with students. Faculty should require students to consider how they rationalize and respond about topics, thus teaching them to process information. Additionally, the Socratic Method should promote collaboration and open-mindedness, not debate.



Quick Tips for using the Socratic method

1. Students need to come to class prepared to discuss. This means they will need to put effort into becoming familiar with the material enough to contribute. You may want to guide their preparation with a pre-class assignment.

2. As you craft questions for your class, remember to let the discussion lead the way through the material. Your questions are a guide, teaching points you'll want to hit during your class, but they are not set in stone. This will give you the flexibility to provide a student-centered learning environment.
3. Make sure your questions are open-ended enough to promote inquiry. Good questions guide students to explore different perspectives. This method should help students gain perspective and explore multiple perspectives and viewpoints from their classmates. Each question should lead to a discussion, rather than one answer. It may be necessary to have follow-up questions prepared, in case discussion needs to be prompted.
4. Rationalize! Work through ideas and different answers. The moments spent rationalizing incorrect theories often produce more learning than simply stating facts. You are guiding students thought process, teaching them to think about the material, not simply teaching them the material.
5. Take notes on the discussion to use for review or quizzes/exams. Discussion will make it easier for students to retrieve information later, because they will have memory cues from what was said. You can help them make these connections when you review with them from notes on what they discussed. (or have students act as record keeper during the discussion, trading off each class)
6. A good sign that you are successfully implementing this method is when students are openly contributing to the discussion, freely asking questions or ideas without prompting, and especially if they admit errors in their understanding. These are signs that you have created a safe place for open expression.

Learn more

The Socratic Seminar: <https://youtu.be/RBjZ-4MK1WE>

How to Bring Socratic Seminar to the Classroom: <https://www.teachingchannel.org/videos/bring-socratic-seminars-to-the-classroom>

For more tips visit: <https://www.unl.edu/gradstudies/current/news/asking-good-questions-socratic-method-classroom>

Harrington, C. & Zakrajsek, T. (2017). *Dynamic Lecturing: Research-based strategies to enhance lecture effectiveness*. Sterling, VA: Stylus Publishing Company.

Copeland, M. (2005). *Socratic Circles: Fostering Critical and Creative Thinking*. Portland, MN: Stenhouse Publishers, p. 7.

Tredway, L. (1995). "Socratic Seminars: Engaging Students in Intellectual Discourse." *Educational Leadership*. 53 (1).

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Course Design and Discussion Boards

Here are some quick tips about **how online discussion boards can fit into your course design**:

1. Always Be Opening. Alec Baldwin might prefer the mantra of ABC, “Always Be Closing,” but opening back up the conversation is the best practice for your participation in your course’s discussion board. It is great to be a regular presence in your discussion boards, but you want your posts to prompt more discussion, not shut it down. Try to avoid simply answering questions outright. Instead, frame your responses in a way that invites the students to take over the discussion.
2. Will this be on the test? It can be beneficial for engagement to indicate to students that you will pull test questions from thoughtful discussion board posts. Although this method is less likely to inspire an intrinsic motivation for discussing the course material, it is a surefire way to increase the attention given to your discussion boards. Of course, you will need to follow through on this claim when it comes time for assessment!

Whether your course meets as a face-to-face, online, or hybrid course, an engaging online discussion board can enhance student learning if you set the right tone for engagement. Contact **[your teaching and learning center]** for help with implementing discussion boards in your course design and more!

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Empowering Students When Creating Discussion Guidelines

In *Teaching to Transgress* (1994), bell hooks describes “engaged pedagogy” as placing an emphasis on the well-being of the students and teachers. Hooks says, “teachers must be actively committed to a process of self-actualization that promotes their own well-being if they are to teach in the manner that empowers students.” The current emphasis in pedagogical practice on wellness aligns with hooks’s notion of engaged pedagogy. Focusing on the wellness of the entire class, students and teacher, creates an environment that improves engagement and critical thinking.

As we find ourselves amidst such a divisive society, practicing engaged pedagogy has become a challenge. Conversations on politics and the cultural climate permeate coffee shops, sporting events, family gatherings, and classrooms. In such a heated atmosphere, how do we as educators prepare our students for civil discussion on topics of politics, civil rights, sexuality, gender, race, class, disability, etc.? We must be prepared to face these conversations at any time, regardless of our discipline or class size.

Lee Warren from the Derek Bok Center for Teaching and Learning at Harvard describes “hot moments” as that moment when a student says or does something that “threatens to rupture the social fabric you have worked to create.” He says, “Hot moments occur when people’s feelings—often conflictual—rise to a point that threatens teaching and learning. They can occur during the discussion of issues people feel deeply about, or as a result of classroom dynamics in any field.”

How might engaged pedagogy help prevent and diffuse potential “hot moments” in the classroom? One example is to create discussion guidelines that meet the needs of the individual students. This can be accomplished by asking the students what they need to establish a safe learning environment that promotes critical thinking. Hand out index cards during the first week of class and ask the students to anonymously submit suggestions for the discussion guidelines. After doing this myself, I noticed that most students wrote variations of the same request—they wanted a safe learning environment where they could take risks and try out ideas without fear of retribution. In order to create such a community, we as instructors must be just as willing and comfortable taking risks alongside our students. We are all learning together.

I share the following quote with my students and tell them that we are all going to make mistakes. Asian American playwright, David Henry Hwang said, “A wise friend once said that, in order to have a conversation about race with a member of a different race, you have to be willing to make a fool of yourself.” Failure is all part of the learning process.

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How to Really Get Students to Learn from Video

Videos can be an engaging way to present information to your students. They can entertain. They can inspire. They can change one's views about the world.

Despite these benefits, watching videos too often becomes a passive activity for students. Students may forget the content of even the most informative and entertaining video, simply because they are not actively engaging with the content.

So how do you make videos more active for your students? Include activities with every video! Here are a few suggestions to get you started:

Give your student a list of questions to look over prior to watching a video. That way, they can be actively thinking about them as they watch the video and will be more apt to remember the information being presented.

If creating your own videos, consider embedding questions into each video. Have your students pause the video and answer each question before moving on.

Once your students have finished watching a video, present them with an activity that ties to what they just watched. You could give them a problem to solve, have them reflect upon what they just watched, or come up with additional questions on their own.

If students are watching the video in class, pausing for a think-pair-share or other activity mid-video can also increase engagement.

Want to learn more about making videos more active for your students? Check out the following resources:

[Effective educational videos](#)

[From Passive Viewing to Active Learning: Simple Techniques for Applying Active Learning Strategies to Online Course Videos](#)

Submitted by:

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Nearpod for Deeper Learning

In looking at my university's Student Course Evaluations recently, I came across the following statement about one of my classes: "This is the best class that I have ever taken. I learned so much and have so much information to take with me into my new career. You take your time to make sure that students understand the information. You are the best teacher that I have ever had on this campus. All the horror stories were lies."

Of course, I was focused on that last line. What are those horror stories that precede students arriving in my class? I believe it has to do with me holding students accountable for completing all of their numerous readings and assignments. My course is tough, and I expect my students to work very hard!

Want to get students to read the assigned readings ahead of time? Tired of lecturing and death by PowerPoint? Running out of class time to actually have students apply their skills and knowledge?

I have found Nearpod a useful tool in flipping learning and ensuring that my students come to class ready to apply their knowledge. I post all my PowerPoint slides ahead of time using Nearpod, and embed within the slides a variety of multiple choice, open-ended, and fill-in-the blank questions based on the week's readings and the content of the slides, along with videos and useful resources. Completion of these student-paced Nearpod activities is tied to hefty participation points, so students know that completing them is essential for a good grade in my course.

This leaves the students and me with the luxury of more in-depth discussions and meaningful activities that allow them to think more deeply about and apply their knowledge and skills. Using the Nearpod app on their Smartphones or logging in on a laptop, students can also actively participate during in-class sessions in which you can embed poll questions, or use an interactive brainstorming tool in which students view text and images they share with the whole class in real time.

You know, creating a class where students hear horror stories and fear the amount of work required, but then think you are the best professor they've ever had!

[Nearpod](https://app.nearpod.com/home) can be found at <https://app.nearpod.com/home>.

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Using Clickers to Check Learning

The best teaching tool I have used is audience response devices, otherwise known as "clickers", even though most don't use clicker anymore but some electronic device.

I use these (about 2-5 questions TOTAL for a 50 minute class session) at the beginning, where I ask a question about the previous classes' material; I'll ask one in the middle of the class that is asking the students to apply content they've had within the previous 2-3 classes. Their responses to this application question are usually all over the place but now, we can discuss their choices. I find that hand-raising doesn't work as well. Once a student presses that choice button, they are invested and more likely to ask a follow-up question. And finally, about 7 min before the end of the session, 1-2 questions about content covered.

Students really like these, as it gives them a chance to see how they are responding relative to the class.

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It's Not a Clicker, It's a *Plicker*

Technology can be our best friend, and technology can also be the biggest party pooper of our lives.
---Steven Spielberg

Some of us are intrigued by student response systems, but prefer that students keep their phones out of their hands during class. In this situation, the *Plicker* system is an interesting possibility because students use cards, and the technology stays in the instructor's hands. (For "*Plicker*," think paper + clicker.) Here's how it works:

- Each student has a card with a different bar code.
- The teacher poses a question, and students rotate their cards to choose A, B, C, or D.
- The teacher scans the room with a smart phone or iPad.
- The *Plicker* software records each student's answer and also prepares a graph with the distribution of student responses.

Like the more familiar clicker systems, *Plicker* provides retrieval practice and quick formative feedback. Students know right away if they can solve the equation or define the key term. The instructor also knows if a topic needs more attention. Because the software records each individual student's answer (and because each student has a different card), *Plicker* can easily work for graded quizzes.

Plicker can also be used in a survey mode. Here the instructor asks a question without a right or wrong answer. Displaying the distribution of answers sets the stage for a discussion of alternative opinions on a controversial subject or contrasting interpretations of a text.

Like any teaching tool, *Plicker* has its strengths and weaknesses. On the positive side, *Plicker* gets lots of students involved and provides immediate feedback on their learning; moreover, it does that without exposing students to the tempting distractions of the internet. On the negative side, the system involves some advance preparation, since instructors must prepare their questions in advance.

The *Plicker* software and cards are a free download. The system works on Apple or Android devices and can be used by 63 students per class.

What to learn more?

Visit the *Plickers* site <https://www.plickers.com/>

Or take a look at a [tutorial](https://www.youtube.com/watch?v=Qpx56rjCVjQ) <https://www.youtube.com/watch?v=Qpx56rjCVjQ>

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Break for a Tech Check

Mobile devices are everywhere, including our classrooms, and many faculty struggle to decide exactly how to handle their use. We all know that students (or, let's face it, most of us) [can't multi-task](#) as well as they think they can. Some instructors try to ban devices outright but that often means students simply make greater efforts to hide their phones. Others go to the opposite extreme and [employ mobile devices](#) as [instruments of learning](#). If you aren't comfortable with either end of that spectrum, a good compromise can be to build in breaks for a 'tech check': go ahead and restrict device use but let students know you will stop periodically to allow them to check their phones. Not only can this alleviate [the anxiety](#) many students have about putting their devices away, it can be a good reminder to break up lectures into smaller chunks (which, if you're mostly lecturing, is always a good idea!).

References:

- Graham, Edward (2014) "Using smartphones in the classroom," *National Education Association*, <http://www.nea.org/tools/56274.htm>.
- Hardison, John (2013) "44 ways to use smartphones in class," *Getting Smart*, posted January 7, 2013, <http://gettingsmart.com/2013/01/part-1-44-smart-ways-to-use-smartphones-in-class/>.
- Rosen, Larry (2015) "iPhone separation anxiety," *Psychology Today*, posted Jan 18, 2015, <https://www.psychologytoday.com/blog/rewired-the-psychology-technology/201501/iphone-separation-anxiety>.
- Weimer, Maryellen (2012) "Students Think They Can Multitask. Here's Proof They Can't," *Faculty Focus*, posted Sept 12, 2012, <http://www.facultyfocus.com/articles/teaching-professor-blog/multitasking-confronting-students-with-the-facts/>.

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Ask Me a Question

Often we ask students if they have questions and are met with complete silence. One way to encourage more engagement is after a lecture to simply say “Ask me a question” This sets up the environment where questions are expected.

Another way to use this is to share a particular model, visual, handout, etc. and show it to students. Before telling them what it is about, ask them to ask you a question. Students will pay more attention to answers to questions they have asked than something you have simply told them without their prior engagement.

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Promote Learning with Metacognitive Microactivities

As we all know, the sage-on-the-stage model is not always an effective method for teaching. However, many faculty struggle with giving up that control of their classes—both in person and online—or are unsure of how to break up lectures or what kinds of activities to put in place to help students to learn more effectively. Ideas from the books *Visible Learning and the Science of How We Learn* (Hattie & Yates, 2014), *Make It Stick* (Brown & Roediger, 2014), and *Small Teaching* (Lang, 2016), help us to understand how the brain works when it comes to learning... and what types of activities are most effective at helping us to learn.

Hattie and Yates shared that learners have to “touch” information multiple times, and preferably in different ways, before they can move it from short-term to long-term memory. This idea is reiterated in *Make it Stick* and *Small Teaching*. Additionally, most of us have heard that the attention span of the average person is around 12-15 minutes, and in terms of lecturing, we need to “chunk” our information so that we can reset our students’ attention spans and keep them attuned to what we are saying. Couple this with the primacy (what is heard first) and recency (what is heard last) effects, which means that what happens in the middle of a lecture is more likely to get lost in the mix.

With these ideas in mind—presenting and using information in multiple ways, breaking every 12-15 minutes of lecture to reset attention spans, and the need to revisit information from the middle of a lecture more than what was at the start or end of it, let’s consider [Amy Marin’s \(2011\) “Mindful Moments”](#) activities (you can find them online here: <https://docs.google.com/file/d/0B1ERChsMmczqbDhvM3p0Vi04OTQ/edit>). While they are written for psychology classes, they are easily adaptable for pretty much any discipline. They are meant to be quick metacognitive check-ins for students to pause, retrieve and use information, and have a chance to quickly ask questions before you continue on with your lesson on lecture. Ideally, each one will last fewer than 5 minutes, but you can expand any of them to last longer. There are 50 of them, so you can pick and choose those that best align with your learning objectives and fit your needs—both those of your content and those of your personality.

A few tips in choosing them:

1. While students appreciate variety and “mixing things up,” they (and you) will be much happier if you find just a few to use through the semester. This ends up being a time-saver, too. While you’ll have to explain how to do each one the first time you do it, after that, you can, for example, tell your students, “Okay! Let’s do a brainstorm blitz!” and they will know exactly what to do, thus helping to keep your lesson moving.
2. Practice your microactivity before you take it into the classroom. Make sure you know how to explain the activity to students, and perhaps do a test run of it with student workers, colleagues, or your friends/family.
3. Make sure you have all of your materials needed. For example, one requires a beach ball, and many require sticky notes or other easily obtained but vital materials that will keep you from doing the activity if you forget to bring them to class.

You will notice that many of them are, well, FUN. Marin found that students learn better when they are motivated and interested in their learning activities, and so some of these are game-like. I have found that students of all levels—from first semester freshmen to graduate students... and even participants in

faculty development workshops and conference sessions—enjoy these. I enjoy the energy and new levels of learning that they can bring to a class, and I hope you will, too.

Many of the activities can be adapted for use in online courses, too, or used in conjunction with video lectures. Contact your campus instructional designer for ideas on how to do this if you're not sure. If you do not have a local instructional designer, feel free to contact me, and I'll be happy to do my best to help you adapt for your needs.

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Incorporative Interleaving to Improve Student Learning

A common concern among instructors involves students forgetting content from foundational courses as they move into upper-level courses. As you take the time to prepare your courses for the fall, think about how you've designed the course to help students retain content and skills in the long term. One way to support students in retaining what they are learning is to interleave topics during practice and assessment opportunities. "Interleaving" refers to the shuffling of content areas, as opposed to blocking them together. For example, students who practice one skill extensively before moving onto the next are blocking their practice (AAABBBCCCC), while those who practice several related skills at the same time are interleaving (ABCABCABC).

You can build interleaving into your course by incorporating in-class practice that requires students to draw from older knowledge (e.g., using [peer instruction clicker questions and think-pair-share](#)) and by making homework, quizzes, and exams cumulative in nature.

Why does interleaving improve long-term retention? When a student blocks their practice (e.g., focuses on one category of math problems at a time), they already know which strategy or approach to use when approaching a problem, so part of their problem-solving process becomes automatic. Interleaving requires students to engage in the added step of *choosing* a strategy or approach when faced with a new problem. This step can be quite difficult, but pays off when students must demonstrate their ability to do this during an exam ([Rohrer & Taylor, 2007](#); [Rohrer, Dedrick, & Stershic, 2015](#)). Interestingly, students are resistant to interleaving - they prefer to block their studying, even when shown evidence that interleaving is the more effective approach, because blocking is easier and feels more productive ([Kornell & Bjork, 2008](#)). Because of this, it's even more important that you build interleaving into your course when possible.

References

Kornell, N., & Bjork, R. (2008). Learning concepts and categories: is spacing the "enemy of induction"? *Psychological Science, 19*(6), 585-592.

Rohrer, D., & Taylor, K. (2007). The shuffling of mathematics problems improves learning. *Instructional Science, 35*(6), 481-498.

Rohrer, D., Dedrick, R. F., & Stershic, S. (2015). Interleaved practice improves mathematics learning. *Journal of Educational Psychology, 107*(3), 900-908.

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End on an Intro

How would you like to have students come to class prepared and excited to learn? It's not impossible, you just need to set the stage for the next class. Television shows end with a dilemma that makes viewers wonder what will happen next and tune in the following week. Faculty can use the same strategy by leaving students hanging with an unanswered question, or a problem that needs solving. The trick is that the question or problem needs to be solvable by using the information the student already has and incorporating some of the preparation for the next class.

Ending on an intro helps students to develop interest in the subject matter. By providing a problem that the student has to solve you incorporate principles of adult learning in which students are motivated by solving problems that are important to themselves. Adult learners are self-directed learners who require assistance and direction from their faculty to find answers to their questions (Merriam & Bierema, 2013).

The problem helps students to focus on what is most important. Chose an important concept from the next unit as the basis for your question. Base the problem on one of the most important concepts from the next unit and be sure to direct students to the appropriate resources to find the answer.

You can use *End on an Intro* to set up prework for your next class and a ticket to class. Providing a challenging problem for your students to solve gives direction for their learning. Use this opportunity to jump start your next unit. Ask students to bring their answer to the next class session and write it on the board as they enter the room. As students enter the room they will see the answers of their peers and be able to compare their thinking process to their peers. The process also encourages students to begin thinking about the class ahead instead of their commute, home problems, etc.

Now you can begin your class with a thoughtful discussion about solutions to the problem you presented at the previous class. Be careful not to correct student's answers, it is important that students have a chance to hear the thought process of their peers and compare it to their own. Listen carefully to students thought process during this discussion. You will be able to detect errors in thought during this process which you can use to modify your teaching plan.

Reference:

Merriam, S.B. & Bierema, L.L. (2013). *Adult learning: Linking theory and practice*. San Francisco: Jossey-Bass.

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Ending Class with Purpose

So often we start class by setting-the-stage or doing warm-up exercises, but we rarely take the time to end class with the same purpose. We teach up until the last-minute, forgetting that students benefit from opportunities to check for understanding, tie up loose ends and correct misunderstandings. An intentional closure activity creates a more lasting impression. Rob Lucero of Colorado State University calls this the [recency effect](#), also known as a lasting impression. Below are a few tried and true strategies that work well for closure activities:

- 1) Three W's- Students discuss or write: (1) What did we learn today? (2) So what (how does this fit into what we are learning)? (3) Now what (can we predict where we are going)?
- 2) 3-2-1- Students reflect and record 3 things they learned, 2 things they have a question about, 1 thing they want the you to know.
- 3) If you prefer to end class with a question for individual or group reflection, Rick Wormeli wrote an excellent book called [Summarization in Any Subject: 50 Techniques to Improve Student Learning](#). Below are some questions to guide student reflection from his book:
 - a. How does something you learned connect to what you already knew?
 - b. What questions do you still have?
 - c. What is the most interesting thing you've learned?
 - d. Imagine a simile or a metaphor about what we learned.
 - e. Think of one thing you have learned in this class that you can apply in another class or another part of your life. What is it, and how can you apply it?
 - f. What was your favorite activity in class? Why?
 - g. What was your least favorite activity in class? Why?

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Recognizing & Reinforcing the Value of Groups and Collaborations!

Do you use group projects in your classes? Do you notice that some groups produce high quality products without much distress while other groups struggle to work together? Have you heard students complaining about their entire group getting the same grade on their project because one or two students did more work than the others? Are you concerned about using group graded assignments for these very reasons?

In most professions, much of the work of an organization or a project occurs in task groups (or teams or coalitions or partnerships or collaborations, or a variety of other terms that are used to describe groups). Team work is an expected professional skill and group graded projects are often utilized as a way for our students to build or enhance this skill set.

However, if, as faculty, we are simply expecting the group-graded assignment to miraculously produce the professional skills of working collaboratively in a team, we are going to be very disappointed...and our students are going to be very frustrated. Group-graded projects CAN be highly effective, but only if we prepare ourselves, our students and our content to align to [best practices for using groups in academic settings](#).

Here are a few tips to ensure that your group projects actually achieve the learning outcomes we want our emerging professionals to exhibit:

In Advance of Assigning a Project to a Group

- When planning your course assignments, be intentional about your rationale for group projects. Clearly articulate this rationale to your students so they are aware of the purpose and expectations for the group's process and product.
 - Things to consider:
 - What benefit does working as a group bring to this particular assignment? Consider both the product and the process:
 - How will the finished product be stronger as a result of working together?
 - What can students learn about themselves and their classmates from the process of working as a group?
 - What are the potential pitfalls that working as a group will bring to this particular assignment?
 - What resources will you offer to address the potential pitfalls?
 - Do you want the group to work together for a short length of time (just one class period/project/paper/presentation) or will you have the same group work together for the entire semester?
 - Make an intentional decision about how students will be assigned to a particular group – will they self-select into groups or will you assign students to a particular group?
 - Are there particular dynamics that you need to consider when forming the groups? (learning styles, individual student backgrounds and experiences, just to name a few).
 - This can be especially important to consider if you have a diverse class makeup and want to encourage students to learn from those with different backgrounds or experiences. Some recent research (Rienties, et al 2014) suggests that students who are assigned by the instructor to a group have stronger learning networks at the conclusion of the project than students who were allowed to self-select their groupmates.

At the Beginning of a Group Project

- Consider having the group [create a team charter](#) at the outset of the project. The charter is a working document that outlines expectations and creates accountability. Consider including categories related to:
 - Attendance and participation
 - How to give and receive feedback
 - Personality traits (including True Colors descriptions) and personal situations that need to be taken into account when assigning elements of the project.
 - How (and how often) the team's collaborative functioning will be assessed.

During the Group Project

- Be sure to allocate sufficient time (during and/or outside of class) for the group to work through the challenges and create a polished product.
- Create a dedicated page in your LMS for each small group. They can use this group page to virtually collaborate on the assignment. They can email each other, upload content, write and edit drafts of the paper and use all of the other features of the LMS.
- Encourage students to openly discuss the division of labor within the group project. When groups "go bad", it is often because students perceive that the workload was not equitably balanced amongst the group members. Notice that I used equitably, not equally. Most projects will have multiple elements that require different strengths and skill sets. Some students may do better at the written elements and others may do better at the presentation elements. These may not have equal weight within the assignment but by allowing students to focus their efforts on the element that plays to their strengths, the overall product is stronger.
- Include a process for [interim reports or reflections](#). Have the group create a timeline, using backwards planning from the due date for the assignment. The timeline can be shared with the instructor, who can then select a date to check in with the group about their progress with the tasks and with their collaborative process. Use that check in (which can be done in person during class, online through a dedicated discussion board in your LMS or through a brief reflection assignment) to gather information about:
 - Progress towards their end product (are they on track, ahead, behind and why)
 - how the group is working together, with specific examples
 - where they have faced challenges with content or with their process of working together and how they've addressed those challenges.
 - if the anticipated tasks are being completed by the person who was assigned responsibility for them and if not, why not.
 - also use this check in as an opportunity to find out what they need, from you and from each other, in order to experience more success for the remainder of the project.
- Be prepared to teach [negotiation and consensus skills](#) when group members encounter conflict, including disagreements about how the workload is being handled. Instead of seeing conflict as negative, you (and they) need to understand that it is normal for group members to experience disagreement as they delve deep into the project. Encourage them to reframe disagreement as a different perspective that is worthy of exploration and respectful attention. It provides an opportunity to re-visit the charter and since the charter is a working document, it can be revised to reflect new information as necessary.

At the Conclusion of the Group Project:

- Consider a [peer assessment process](#). When all group members receive the same grade for a project, some students may feel that the instructor was unaware of one (or more) of the group member's contributions (or lack thereof). One way to address this is to offer the group the opportunity to grade each other's contributions to the project as part of the overall assignment grade. In order for this to be effective, it MUST include a "formative" assessment element (see the interim report strategy above) not only a "summative" assessment at the conclusion of the project. If implemented only at the conclusion, it will be used as a way to punish the members who didn't complete work in a timely fashion, or didn't attend the required meetings, but the information comes too late to provide a corrective process.
 - Use a behaviorally anchored rating scale [like this one](#) that includes items within five categories of effective teamwork: 1) contributing to the team's work; 2) interacting with teammates; 3) keeping the team on track; 4) expecting quality; and 5) having relevant knowledge, skills, and abilities.
 - Consider using it as both a self-assessment as well as a peer assessment.
- Require self-reflection. This is actually an element that you should consider before, during *and* after the group project. These reflection elements could be individually graded assignments or simply a discussion post in your LMS, depending on how much you want to emphasize this component.
 - In advance of the group project, consider asking each student to self-reflect on their strengths and challenges with regards to task groups. They can identify the skills that they bring to the group process and assignment product as well as areas where they will benefit from learning from their group mates.
 - During the project, consider having a formal "mid-point" check in with each group. You could ask the group members to identify what's going well with the project and a few areas for improvement that they could make in order to have a strong finished product.
 - At the conclusion of the project, consider a self and peer assessment of the product and the process. As noted above with the peer grading strategy, this could be a formal graded element or it could be a discussion board post for the small group only.

References

- Hillier, J., and Dunn-Jensen, L. M. (2013). Groups meet ... teams improve: Building teams that learn. *Journal of Management Education*, 37 (5), 704-733.
- Rienties, B., Alcott, P., & Jindal-Snape, D. (2014). To Let Students Self-Select or Not That Is the Question for Teachers of Culturally Diverse Groups. *Journal of Studies in International Education*, 18(1), 64-83.
- Ohland, M.W., et al. (2012). The comprehensive assessment of team member effectiveness: Development of a behaviorally anchored rating scale for self- and peer evaluation. *Academy of Management Learning & Education*, 11 (4), 609-630.

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Forming Teams

"Talent wins games, but teamwork and intelligence win championships." --Michael Jordan

While best known for "team based learning," Larry Michaelsen offers suggestions for forming effective teams that can work with a range of classes and instructional styles. Michaelsen suggests

- limiting groups to 4 to 7 members (enough human energy to complete tasks, but less room for slacking)
- making the groups permanent for the semester (an opportunity for students to work out their problems)
- forming groups of students who don't know each other well (a way to avoid existing conflicts and to give students an opportunity to meet new people)
- distributing resources evenly among the groups
- forming the groups yourself instead of leaving it to students

Let's look at the last two of Michaelsen's suggestions a little more closely.

When Michaelsen talks about dividing resources evenly, he advocates making sure the assets and liabilities students bring to the course are divided evenly among the groups. For example, instructors might create teams with a mixture of majors/nonmajors, local/international students, high gpa/low gpa, student athletes, and first year students. Individual students may fall into more than one group, but there's no need to make things complicated; just spread different characteristics among the groups.

Clearly, groups that are shaped in these ways need to be formed by the instructor. Michaelsen suggests lining students up—either literally in the classroom or on paper—according to a key attribute they would bring to a group. For example, in a finance class required of all business majors I would have accounting and finance students stand up first, then students who are fluent in more than one language, next student athletes, then first year students, etc. until everyone is in a line. Students then count off so the various attributes are more or less evenly distributed among the groups. This process may sound complicated, but this five-minute video illustrates its simplicity:

https://www.youtube.com/watch?v=sRNpaA8pU_0&feature=youtu.be

Want to read more?

Michaelsen, L. K. (2005). *Team-based learning: A transformative use of small groups in college teaching*. Sterling, VA: Stylus.

Oakley, B., Brent, B., Felder, R.M. & Elhaji, I. (2004) Turning student groups into effective teams. *Journal of Student Centered Learning* 2(1), 9-23.

[http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Papers/Oakley-paper\(JSCL\).pdf](http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Papers/Oakley-paper(JSCL).pdf)

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Facilitating Group Work

"...if somebody knows something, then he knows that he knows it, and at the same time he knows that he knows that he knows..." (Spinoza 1632–1677)

And sometimes we forget, but we know we once knew...right? Related to helping us remember what we know we know, I offer the following tip to help facilitate group work, which may seem obvious to many, but is often neglected:

- Prepare on your own before you work with your group

Sometimes working in a group feels very disruptive and inefficient. Because everyone has a unique perspective, and oftentimes, a different way of approaching a given problem or task, trying to keep track of your own thinking as well as your group members' thinking can be very challenging. To help minimize this problem, it is best to do some work on your own before joining your group. You may want to down your ideas, your understanding of a topic, a proposed plan for solving a problem, or other relevant thoughts pertaining to the group activity. Doing so can be beneficial for you and your group as a whole—it can help increase group output, ensure that everyone's ideas are represented, promote understanding of diverse ideas and perspectives, and facilitate equal participation and contribution.

Further Reading:

Congleton, A. R., & Rajaram, S. (2011). The influence of learning methods on collaboration: prior repeated retrieval enhances retrieval organization, abolishes collaborative inhibition, and promotes post-collaborative memory. *Journal of Experimental Psychology: General*, 140(4), 535–551.

Nokes-Malach, T. J., Richey, J. E., & Gadgil, S. (2015). When is it better to learn together? Insights from research on collaborative learning. *Educational Psychology Review*, 27(4), 645-656.

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Cooperative Learning in Higher Education

Heard an old idiom, 'Two heads are better than one'? The message holds true across the higher education literature. Cooperative learning strategies develop positive interdependence, interactions, individual accountability, group-thinking, problem solving and social skills. It engages learners in working in small groups for achieving a common goal (Jones and Jones, 2008). Theoretically rooted and empirically proven, cooperative learning activities improve students' retention, performance, and participation in the learning in higher education. Having known that the cooperative learning provides an opportunity to the teacher to engage students in deep learning, one should keep the following Do's and Don'ts in mind while planning cooperative learning experiences:

Do's

- a. Conduct team building exercises in class for students to raise awareness of and enable them to get used to of cooperative learning
- b. Explain student and teacher roles in the cooperative learning classroom
- c. Communicate/co-create learning goals for the session
- d. Share guidelines/instructions for students to achieve their learning objectives
- e. Co-create the rules of participation in the class/group
- f. Assess individual and group performance and provide constructive feedback to improve students' understanding and resolve any misconceptions
- g. Task given to the students must be fairly challenging, yet not undoable.

Don'ts

- a. expect the collaborative spirit to come naturally
- b. pour the knowledge by lecturing the entire content at the end of cooperative learning exercise
- c. over-rely on the 'good' students of your class for completing the entire group work
- d. wait for the end-of-the-class feedback to make changes in your course
- e. consider that your assessment criteria should remain same for all the learners and groups

References

Jones, K. A., & Jones, J. L. (January 01, 2008). Making Cooperative Learning Work in the College Classroom: An Application of the "Five Pillars" of Cooperative Learning to Post-Secondary Instruction. *Journal of Effective Teaching*, 8, 2, 61-76.

Wilhelm, K. H. (1999). Collaborative dos and don'ts. *TESOL journal*, 8(2), 14-19.

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Avoiding Group Work Divorces

Have you given up on group work because the strong students complain that the weak students are not contributing? Don't give up! It's worth making group work work! Students learn a great deal by observing the learning processes of others and need to learn how to work collaboratively for many workplace settings. Here are some tips:

- Help students understand that not everyone approaches work in the same way and help them to value multiple perspectives. (An abbreviated Myers-Briggs assessment can be a useful exercise to introduce these ideas.)
- Help students understand that if students are not contributing, it is most often that they don't understand how to move forward, not that they don't want to contribute.
- Give students a process. For example: require them to meet weekly, establish an agenda, rotate the chair's position, assign everyone a task, identify questions, and assign everyone a buddy who can assist if help is needed.
- Set the expectation that questions are expected and are an important part of the learning process.
- Help students understand that learning to work with different people in a team is an important life skill.

For more, see Linda Nilson, [Teaching at its Best](#), Jossey-Bass, 2016: 179-189.

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Are Your Assignments Renewable or Disposable?

It may be hard for us as faculty to admit to ourselves that many assignments end up being forgotten—dumped in an actual or virtual trash can—once we’ve graded them. [David Wiley has dubbed these assignments “disposable”](#) because they “add no value to the world— after a student spends three hours creating it, a teacher spends 30 minutes grading it, and then the student throws it away.”

Wiley instead encourages faculty to craft “renewable assignments” that add value to the world (in and/or outside of the course) after they are completed. What the students produce through their coursework can be useful to and usable by fellow students, the instructor, and others. Examples include:

- Students write or edit articles for Wikipedia.
- Students conduct a research project (rather than just planning one) and present their findings at a conference or in a publication of some kind.
- History students use primary sources to produce historical research about their local area, which proves useful to community groups.
- Students create learning objects (including videos, PowerPoint slides, and diagrams) to help teach course concepts to others.
- Students in a course on open education put together [an Open Education Reader](#), a collection of readings and commentary on open education. They released it as a free, open, online book that anyone with access to the internet can use.

Why renewable?

[Wiley says](#), “Students tell me that they invest significantly more time and effort in these assignments and enjoy doing them more.” It is understandable that if students are working for a wider audience, and if they think the work is valuable to others, they might have a larger buy-in than disposable assignments. In addition, higher education institutions might be able to connect renewable assignments to the University’s broader learning outcomes. As for improving student learning, if authentic assessments are valuable in that regard, what could be more authentic than actually doing work that one might otherwise be asking students to simulate?

Finally, students must be given a choice as to whether or not they want their work to be public, and if so, whether they wish to give their work an open license. After all, the copyright for their work belongs to them.

Learn more

[What is Open Pedagogy?](#)

[From consumers to creator: Students as producers of content](#)

[Non-disposable assignments in philosophy](#)

Adapted from

Hendricks, C. (2015, Oct. 29). [Renewable assignments: Student work adding value to the world](#).

Retrieved July 5, 2018.

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Effective Learning through Practice, Skill-building, and Feedback

On the trek of learning, many students have no idea whether they are in the first or the last wagon. Without practice and feedback, students often are in the dark about how well they are learning—sometimes overestimating their comprehension and skill, sometimes underestimating them.

The Need for Practice and Feedback

According to instructional design expert Barbara Seels (1997), "Practice is the most important ingredient of effective instruction; it speeds up learning, aids long-term retention, and facilitates recall. Instruction is less effective when there is no opportunity to perform the task or when practice is delayed Unfortunately, much of the instruction in our classrooms provides little or no opportunity for practice." The more immediate the opportunity for practice and feedback, the more likely learning will occur.

Providing Opportunities for Practice:

- *Paired in-class discussion:* Pose a problem, question, or issue. Ask students to turn to a neighbor and discuss. Then call on a student to share his or her solution with the class.
- *Working problems in class in pairs or small groups:* After each group has completed its work, you can invite one group to present its findings and results with the rest of the class, including the process that produced the solution.
- *Homework exercises that reflect the skills or knowledge required for course mastery:* Provide example problems (practice) and solutions (feedback).
- *Low-stakes quizzes:* Offer frequent, short quizzes (on-line or in class) worth only a few points, providing both you and your students with a "weather-vane" that indicates the direction of the students' learning. Again, the feedback must be rapid to be effective.

Providing Opportunities for Feedback

Feedback is essential to student success and can come in many forms. But how does an instructor provide valuable feedback without spending every waking hour crafting such feedback?

- *Paired in-class discussion:* After having students share their solutions, you should provide immediate feedback. Other learners can self-assess, basing their judgments on the public modeling of feedback they just saw.
- *Online quizzes:* If you use online quizzes, feedback can be built directly into the quizzes to explain to students why certain answers are wrong or right, or why some answers are better than others.
- *Grading rubrics:* These can also ease the time commitment required to provide substantive feedback.
- *Online Discussion Boards:* These tools allow teachers and learners to create video-, audio-, and text-based discussion boards. This is an excellent way for teachers to provide rich feedback to individual learners, specific groups in the class, or to the entire class.

Conclusion

Building in multiple opportunities to practice new skills and receive feedback is one way to keep the wagon train moving forward with all members of the company participating, practicing, receiving feedback, learning, and improving.

Resources

Barkley, E. (2010). *Student Engagement Techniques: A Handbook for College Faculty*. San Francisco: Jossey-Bass.

Barkley, E., Cross, P. K., & Major, C. H. (2005). *Collaborative Learning Techniques: A Handbook for College Faculty*. San Francisco: Jossey-Bass.

Davis, B. G. (2009). *Tools for Teaching*, 2nd ed. San Francisco: Jossey-Bass.

Seels, B. & Glasgow, Z. (1997). *Making Instructional Design Decisions*, 2nd ed. Upper Saddle River, NJ: Prentice Hall, 1997.

Materials from the Carnegie Mellon University Eberly Center for Teaching Excellence: <https://www.cmu.edu/teaching/principles/learning.html#LP04>(items 4-7).

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The Benefits of Peer Evaluation

If you require a written assignment in your course such as an essay or PowerPoint presentation, always include a required peer evaluation activity. One way to do this is to have students swap assignments and “grade” each other using your rubric. Require that the draft, the peer edit sheet, and the final draft be submitted on the final due date.

Some Advantages:

This forces students to have their assignment ready prior to the deadline, therefore, there should be no late assignments on the final due date.

This prevents students’ turning in unedited work. Their final submissions should be more polished and easier to grade and should earn higher grades than the first draft would have gotten.

This should reinforce what students learned in freshman comp and keeps them accountable.

Once students see the benefits, it may encourage them to pursue peer edits on their own, thus potentially raising their grades in other courses and encouraging the integration of knowledge.

Peer editing can increase student ownership of the writing process and agency as self-directed learners.

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Active Collaborative Quizzes with Manipulatives

What is an Active Collaborative Quiz with Manipulatives?

Active collaborative quizzes with manipulatives offer a form of assessment that provides the students with additional learning opportunities while being assessed. Students are able to use multiple forms of communication (oral, aural, kinetic and written) in their small groups to demonstrate their knowledge during the quiz. Furthermore, the group format of the quiz minimizes test anxiety, encourages collaboration, positively motivates students to perform for their team, provides an opportunity for in-depth discussions, and more closely approximates real-world situations than an individual quiz.

Why use Active Collaborative Quizzes with Manipulatives?

Typically, quizzes are solitary endeavors fraught with anxiety for beginning students. In her art history survey course-which is a general education requirement for many students-Ms. Nave Goudas has seen low motivation to learn a very different kind of subject matter. She says, "In order to make the process of learning a little less anxiety-provoking and a little more fun, I developed several interesting approaches to the new and somewhat daunting topic of art history. I make it a community rather than a solitary endeavor and offer several different ways for students to excel in demonstrating their understanding of this new information." The group format gives students a chance to work together to achieve a shared goal and the active nature of the quiz involves the students in experiential learning.

To see more and view other similar resources, go to: <https://www.collegestar.org/modules/active-collaborative-quizzes>

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Assessing Student Understanding

You ask your students to read an article that explores course content in light of current events. You design an in-class activity to illuminate a persistent issue in your field. You engage students in small group discussion around two opposing viewpoints. You craft an essay question that requires students to explain a new concept or apply a recently-taught principle.

Each of these instructional activities is likely to support students' developing understanding of course content, but how can you know for sure that students have mastered your intended learning objectives? A simple rubric is a great way to assess student understanding:

Learning Objective:		
Key Question:		
First Student Response	Second Student Response	Third Student Response
Full Understanding	Basic/Partial Understanding	Minimal Understanding

1. Begin with your learning objective(s), which should always be SMART: Specific, measurable, achievable, relevant, and timely/time-bound. What knowledge, skill, or outlook do you want your students to come away with as a result of the instructional activity? Use the following sentence starter to write your learning objective(s): My students will be able to...
2. Now, generate a list of questions to guide students toward critical thinking as they engage around the topic. Wiggins and McTigue (2011) suggest that questions designed to elicit student understanding require students to explain or apply course content. Once you have a good list, select the one question that best captures the heart of your learning objective(s). This is the key question you will use to assess your students' understanding.
3. Next, anticipate three possible student responses to your key question. The first response should demonstrate full understanding; the second response should demonstrate basic or partial understanding; the third response should demonstrate minimal understanding and/or misconceptions.
4. Finally, use each student response to write a brief descriptor for each level of understanding. Be as specific as you can in terms of your intended learning objective(s).

Once your rubric is created, you can use it in a variety of ways. For example, on the day following an assigned reading, ask students to respond to the key question using an admit slip. Or, following a

discussion or in-class activity, have students respond to the key question using an exit slip. Better yet, conduct a pre/post assessment by asking students to revise or add to what they wrote on their admit slip before leaving class. Even if you don't take a grade, you can read the responses to informally assess student understanding in preparation for the next class period.

Your rubric also can be used to determine the quality of an essay question response in alignment with your intended learning objectives. Use your rubric to distinguish an "A" from a "B" response, and so on. While grading, as you read your students' actual responses, you may find that you need to revise/expand your descriptors slightly, or add a nuanced level of understanding to your rubric (i.e., four or five levels instead of three). Thoughtful and timely revision based on students' actual responses will make your rubric more valid and reliable over time!

Resources

Dalto, J. (2013, November 19). How to write SMART learning objectives. Retrieved from <https://www.convergencetraining.com/blog/how-to-write-smart-learning-objectives>

University of Waterloo Centre for Teaching Excellence (n.d.) Asking Questions: Six Types. Retrieved from <https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/alternatives-lecturing/questions/asking-questions-six-types>

West Virginia Department of Education (n.d.) Exit/admit slips. Retrieved from <https://wvde.state.wv.us/teach21/ExitAdmitSlips.html>

Wiggins, G., & McTighe, J. (2011). *The Understanding by Design guide to creating high-quality units*. Alexandria, VA: ASCD.

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Assess Authentically to be Sure Your Students Are Learning

How do you know if your students can apply what they have learned in your course to situations outside the classroom? Authentic assessment may be a way to measure their learning. Authentic assessment differs from conventional assessment in that the former often involves measurement of learning demonstrated through application of knowledge and skills to “real life” contexts.

But how do you make sure that assessment truly is authentic? Here are some ways:

Make sure the parameters and constraints of the task are similar to what the learner is likely to encounter outside the classroom.

Be transparent about what task(s) needs to be completed and how completion will be evaluated.

Design the task so that learners can experience the assessment as a learning experience and use the experience to improve future performance.

Include complex tasks that may have multiple correct answers, so that learners can think multi-dimensionally.

Even when it may have one correct answer, try to make the task multifaceted and complex.

Have learners justify their answers. A correct answer does not always in itself indicate true learning has occurred.

Creation of authentic assessment measures can be time consuming, but this form of assessment is highly beneficial to student learning. It gives learners a taste of contexts beyond the course, allows for creative problem solving, and gives learners the opportunity to demonstrate learning in multiple formats.

Resources

[Center for Innovative Teaching and Learning - Indiana University Bloomington](#)

[Authentic Assessment Toolkit](#)

[Advice on Using Authentic Assessment for Teaching](#)

[An Example of Authentic Assessment in Action](#)

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Making Time for Formative Feedback

The time commitment necessary to give high quality feedback on drafts can make it seem impossible, especially when papers are long or classes are large. Yet formative feedback is essential to learning.¹

Try collecting a rough draft, but just before they hand it in, ask students to identify a short passage they are struggling with and would like feedback on. It could be a paragraph or a page or more, depending on the length of the assignment. Confine your comments to that section, but try to make them broadly applicable. More often than not, it will be clear even from a small section what areas need improvement.

In addition to saving you time, charging students with applying your feedback to the rest of their project puts the burden on them to actually learn from your comments as opposed to just mindlessly accepting your corrections. Furthermore, if a student is seriously struggling, you have the opportunity to intervene. If many students have misunderstood your assignment or there are broader class-wide concerns, you can address them together during class time.

Use this method in conjunction with other forms of feedback, such as peer review or self-reflection, to create even more chances for students to have an audience and receive constructive feedback on their work.

For more on grading and feedback, check out:

- Gottschalk, K & Hjortshoj, K. (2004). *The elements of teaching writing: A resource for instructors in all disciplines*. Boston, MA: Bedford/St. Martin's.
- Walvoord, B., & Anderson, V. *Effective grading: A tool for learning and assessment*. San Francisco, CA: Jossey-Bass.

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¹ Amborse, S., et.al. (2010). *How learning works*. San Francisco, CA: Jossey-Bass, p. 6.

Mid-Course Survey

Hello Smart People,

Below are the questions associated with the “Mid-Course survey” deployed in the middle of the semester/term. The survey is used to gather information on how the class is progressing from the students’ perspective. The five (5) questions are seeking feedback on what the students are enjoying about the course, what is helping them learn the material, gathering their interest in the course topic outside of the class, and asks what the fellow students and professor/facilitator can do to improve the class.

1. List three things that you have particularly enjoyed or found helpful in this class?
2. Identify two aspects of this course that has helped you learn the course material? (Examples: discussion forum, feedback, assignments, etc.)
3. Has this course stimulated your interest in the subject outside of class? (Explain)
4. What can your fellow students do to improve this class?
5. What can the professor/facilitator do to improve this class?

By utilizing this survey, you can see if the students are enjoying the course or having trouble, aspects of the course they find useful in learning the material, their interest level in the topic and how they feel their classmates and the facilitator/professor can improve the course. The survey provides a formative assessment that provides the facilitator/professor with information that can be used to adjust the course to better meet the learning needs of the student.

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Planning Your Time to Provide Feedback on Assignments

“Good Practice Gives Prompt Feedback. Knowing what you know and don't know focuses learning. Students need appropriate feedback on performance to benefit from courses.” Chickering & Gamson.

Thinking About Time

Students crave and deserve prompt, meaningful feedback about their academic assignments. However, providing feedback quickly can be a challenge for teachers. In project-based courses, student success may depend on timely guidance with sequential assignments.

As I plan courses for the semester, I think about how I will use class time and grading time.

- I consider the alignment and weigh the relative value of assignments in course outcomes.
- I change the course assignments to reflect a realistic relationship between student learning and time (my time and student time).
- I develop efficient assignment grading strategies (rubrics, templates, checklists).
- I incorporate peer feedback activities.
- I use automated feedback from online quizzes and games.

And yet, there are still many high-level constructed assignments for which students need individual feedback. Some of us still do all the grading for our assigned courses. Others have teaching assistants or graders to support their courses. Regardless of whose time will be used for providing feedback, as Doug Robertson says, “Do the math.” Below are examples of how I think about the time needed to grade assignments.

- **20 students x 3 long paper assignments per student x 45 minutes average grading time per paper = 45 hours of grading time** in one course over the semester. That might be reasonable if the course does not require extensive teaching preparation time.
- **120 students x 8 short written assignments x 10 minutes average grading time per assignment = 160 hours of grading time** for one course over the semester. In that case, the hours just to grade these short assignments would likely far exceed the workload time assigned for the entire course. That is not likely to work out well. Unless you have an assigned grading assistant, consider redesigning the evaluation and assignment plans.
- **60 students x 2 large project assignments x 1 hour average grading time per project paper = 120 hours of grading time.** Note that you would need to block out 30 hours/week for 2 weeks to grade each set of project assignments, and you would need to do that twice during the semester—just for one class.

Scheduling Time for Feedback and Grading

Once I've scheduled the assignments for my courses, I block out the grading time on my calendar. So if I estimate that will need about 30 hours to grade a major paper for the students in one course, I block out times in my calendar for several days of grading after that assignment is due. I'm not rigid about grading only at those the times. I change my schedule to accommodate other work, but having the time for grading appear on my calendar helps me to stay mindful of what I value.

Planning time in my semester schedule for prompt feedback means that I can appreciate what students have accomplished, provide students with thoughtful responses to their efforts, and give helpful recommendations for further developing their work. Behaving in a way that is congruent with my values about prompt feedback makes my work as a teacher more sustainable and more enjoyable.

References

Chickering, A.W, & Gamson, Z.F. (1987, March). Seven Principles for Good Practice in Undergraduate Education. *AAHE Bulletin*.

Robertson, D. R. (2003). *Making time, making change: Avoiding overload in college teaching*. New Forums Press.

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Why Grading Makes Us Anxious Too

“There is nothing more demoralizing than the thought that the countless hours we spend grading might be dismissed as meaningless.” – Elizabeth Bare

Although many students think “they are the only ones who worry about grades,” writes [Elizabeth Bare, in a recent blog post](#), “anxiety about grades is also a central feature of faculty life.” While students often worry about how their grades will affect their progress toward graduation, faculty often worry about whether their approaches to grading are valid, fair, and efficient, or as Bare puts it, “meaningful, moral, and manageable.” This tip explores ways of better aligning learning and grading, so attention to one translates to attention to both.

Are my grades meaningful?

When considering whether her grades are meaningful, Bare thinks about grades as measures but wrestles with what they are actually measuring: “performance, competency, growth, or effort?” To make grades as meaningful as possible, we must first define clear goals for student learning. Then, we can design assessments (e.g. projects, tests, quizzes, assignments, and so on) that collect evidence of students’ progress toward those goals. If our assessments measure [what we intend for them to measure](#), the grades students earn with their work will align more closely with their progress toward accomplishing the goals of the course--and therefore be more meaningful.

Are they moral?

When exploring the morality of her approach to grading, Bare is really concerned with the issue of fairness: creating “a system of grading that ensures students in similar circumstances will be treated similarly.” Because developing them helps us define evaluation criteria, rubrics are invaluable tools for making grading more fair. They can help keep us focused on the most important aspects of an assignment as we evaluate each student’s work. This helps us to avoid deducting points for minutia irrelevant to the learning goals we’re trying to assess.

Two additional strategies related to fairness are grade norming and “blind grading,” or grading anonymous student work. [Grade norming](#) entails working with colleagues in an effort to evaluate student work more consistently. It’s particularly important for instructors and TAs working together to grade student work within the same course. To grade anonymously, we can ask students to use the last few digits of their Panther IDs instead of their names, or we might try an anonymous grading feature online. Canvas and Blackboard both include anonymous grading options through which we can review student work, provide feedback, and assign a grade without seeing students’ names.

Are they manageable?

Rubrics can also help with the management of grading. Starting with clearly defined criteria for success can improve the quality of the assignments you receive. This clear picture aids students in getting closer to accomplishing the goals on each attempt, allowing for more targeted feedback. Many colleagues have shared with us that dividing up the work of grading (e.g. grading only five projects in one sitting) also helps make the task more manageable and less overwhelming.

Bare experimented with using [specifications grading](#) in her course and reported that “the grading was most certainly faster and less anxiety inducing, as I expected it would be.” Her post describes her

approach to using “specs” grading in her course, and it also links to several sample syllabi from other courses in which faculty adopted this method.

References

Bare, E. (2016) *Meaningful, moral, and manageable. The grading holy grail*. Rice University. Retrieved from: <http://cte.rice.edu/blogarchive/2016/2/9/grading>

Nilson, L. (2015) *Specifications Grading*. Stylus: Sterling, VA.

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“Last Word” game

“Last Word” is an in-class or online discussion activity designed to elicit in-depth thinking and differing opinions from students.

To begin, students review a short section of a reading assignment (it could be an article, a selection from the textbook, or passage from a novel) and each student identifies a word or short phrase that interests them. You may decide to have students write down their word or phrase on an index card and then write why they found that word/phrase to be meaningful on the back of the card.

As a class or in small groups of three to five students, ask one student to share their word/phrase, but nothing more. Then, ask a few different students to share (or in small groups, have each student share) what they think about the word/phrase shared by student #1. After a few other students have had a chance to give their ideas, student #1 gets the last word and gets to share why that particular word/phrase stood out to them.

Variations: This activity could be used to stimulate reflection about an image or series of images, a film, or other items. You may choose to have students create a list of two to three questions they have about the reading, image, or video instead of a particular word, phrase, or element of the object.

Submitted by:

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Activities for the Last Day of Class

Given the frantic pace of the semester's end, we often rush into final classes without much forethought. We try to cram in too many concluding "essentials," breathlessly remind students of impending due dates and rubric criteria, or trudge through an overly detailed and less-than-stimulating review for the final exam.

Here's a different approach: View final classes as an opportunity for reflection. Something (many things!) were learned, tasks were accomplished, barriers were overcome. Perhaps one or more of the following ideas might help you and your students pause and consider the journey you've taken together over the course of the semester.

Reflection essays: James Lang, author of [Small Teaching: Everyday Lessons from the Science of Learning](#), suggests using the [last five minutes](#) of a typical class for a "minute paper," a brief essay in which students jot ideas about the most important thing learned in that class period. Turn that minute into 15 or 20 and ask students to respond to a set of questions about the class as a whole, e.g., what material from this class will be most helpful to you, or to your major/personal life/future career; on which student learning outcomes did you make most progress; what personal goals did you set for yourself that you achieved; what were the most surprising/interesting/unexpected/memorable things you learned; or when were you most engaged as a learner?

Chalk talk: Try a more public but silent variation of written essays using this technique popularized by Stephen Brookfield. Write your favorite reflection questions on sheets of poster paper (one per page) and tape them around your classroom, asking students to circulate and respond to each. Take pictures of the final products and upload them to your class LMS site as a bit of inspiration before the final.

Letters to future students: Ask students to write brief letters to future students explaining what they'll be learning and doing in your course, and providing them with advice or tips for success. (Ask for permission to use the letters; advice from past classes of students seems to carry more weight than our advice.) As an added bonus, ProfHacker blogger Brian Croxall maintains that a [variation on this assignment](#) can boost course evaluations!

Elevator speeches: If oral competency is a goal of your course, try brief presentations on the last day: Tell students to imagine being asked by a friend, family member, or future job interviewer what your class was "all about." How would they respond in 1-2 minutes? If class size makes individual responses impossible, ask students to practice delivering their "pitches" in small groups. (Note: This idea may come from a source I no longer remember; if so, my apologies.)

Gratitude activities: From positive psychology research, we know that [practicing gratitude increases well-being](#). Simple expressions of gratitude from students about rewarding experiences in your course are certain to end class on a high note. What are students glad to have learned? What did they appreciate about someone else in the class? What authors of course materials would they like to thank for their work? If time is a concern, it's not necessary to read students' ideas aloud for the gratitude effect to take place; it's the moment of being grateful that seems to have the impact.

Review: Finally, if last-class review is essential, experiment with a more active style of review session. Check out [Five Ways to Improve Exam Review Sessions](#) for ideas.

References

Brookfield, S. D., & Preskill, S. (2016). *The discussion book: 50 great ways to get people talking*. San Francisco: Jossey-Bass. (See Chapter 2: Chalk Talk.)

Lang, J. (2016, Mar 7). Small changes in teaching: The last 5 minutes of class. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/Small-Changes-in-Teaching-The/235583>

Weimer, M. (2016, Jan 27). Five ways to improve exam review sessions. *Faculty Focus*. Retrieved from <https://www.facultyfocus.com/articles/teaching-professor-blog/five-ways-to-improve-exam-review-sessions/>

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Help Students Build Empathy Before They Engage with the Community

How do we prepare students to engage sensitively with people who are different from themselves? The following are suggestions for helping students build empathy for people with whom they will interact in the community. The intended audience for this Tip includes faculty who are new to preparing students to engage with the community, as well as faculty asking students to interact with **vulnerable populations**. This list was compiled through conversations with many experienced instructors.

Steps for building empathy:

Start by asking students, “What kinds of activities can you imagine would help you gain empathy?” Their ideas may supplement the suggested steps below.

1. INVESTIGATE -- through reading and research-- learn as much as you can about the group and related issues through secondary sources.

2. REFLECT -- reflect and write about your own identity, and how it may influence your assumptions about others

Here is a sample [class activity on identify, intersectionality, and privilege \(from AVERT\)](#)

3. LISTEN -- invite a guest speaker to share their personal experiences and insights about the issue.

4. OBSERVE -- visit the target community, perhaps with a guide, e.g. attend a community gathering. Brainstorm where and when you can observe respectfully and without being intrusive.

5. TALK -- start a conversation or dialog with a person from a group you wish you learn about. Share information about yourself, too.

Sometimes it's helpful to ask an insider to make an introduction to help start the conversation.

Through volunteering, you may find opportunities to have casual conversations with people.

6. INVITE THEIR PERSPECTIVE – for example, after you establish rapport, you could provide people with a camera and invite them to document their experiences, then share their photos with you.

7. EXPERIENCE: Is there a way you can experience “a day in the life”? (How might we create an experience that replicates elements, feelings, or dynamics of what the other person is experiencing?)

As Archbishop Tutu said, “When we see others as separate, they become a threat. When we see others as part of us, as connected, as interdependent, then there is no challenge we cannot face –together.”

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Academic Integrity: You Can Help Clear the Murky Waters

Every institution, every faculty member, and every student is faced with the issue of academic integrity. There are cases of clear, outright plagiarism, and there are unclear, more subtle cases such as participation in group work. From one extreme to the other, cheating is likely happening on every campus, is affecting the institution, the professors, those who do the cheating, and those who do not.

This teaching tip is intended to give you an opportunity to shine a light on cheating in your course. The ideas are taken from a Faculty Focus Premium article titled **Scenarios: Is It Cheating?** written by Maryellen Weimer. She encourages faculty to use some of the scenarios she provides and create others relevant to their teaching situation to clarify exactly what *is* and what *is not* considered cheating. This structured review of expectations related to academic integrity and personal evaluation of occurrences in academic life may be helpful. One may choose to take this idea and adjust it to fit what is most relevant to you.

It is often that an instructor and a student do not share a common definition of cheating. It is important to provide a structure for the co-development of a common definition of cheating (based on your institutional policies). The result will be improved communication and a clear picture of an institution and instructor's expectations regarding cheating.

The main points from the article include:

- Construct a collection of scenarios that are relevant to your course and instructional setting.**
- Let students decide if cheating has occurred.**
- Collect and then anonymously share the students' responses.**
- Share your results.**
- Share research results.**

How you chose to use these points can vary. A PowerPoint presentation using Poll Everywhere with scenarios that requires students to decide whether or not cheating had occurred could be an effective way to structure this discussion. This presentation strategy forces the student to make an individual decision about whether or not cheating is occurring. This supports their development as an adult learner (Kloss, 1994). This presentation style also allows the student's decision to be a low-stakes one as it is anonymously added to the class data. The class data is viewable in real time and allows for a data-based discussion in which the instructor can share his or her view and relevant institutional policies.

The scenario selection is important. Showcasing occurrences that are likely to arise during the semester increases students' awareness before they happen.

Below are a few of the scenarios from Maryellen Weimer's article followed by related research. These examples can be used to help you create your own.

Paul is working on a take-home test for math. He asks his girlfriend Grace, who's a math major, to double check his calculations on several problems. She checks his answers and doesn't find any errors.

- *Is Paul cheating?*
- *Is Grace cheating?*

[In a study that used a scenario similar to this one, 72% of the students did not think that Paul's behavior was cheating; a bit over 63% of the faculty thought it was.]

Al and Jose are in the same art history course. The instructor gives take-home essay exams. Al and Jose spend some time talking about the questions and possible ways they could be answered. They then each write their essay individually.

- *Is Al cheating?*
- *Is Jose cheating?*

On the next take-home exam, Al and Jose talk about the questions before they write their essays. Then they read each other's essays, make suggestions for improvement, and make some revisions based on those suggestions.

- *Is Al cheating?*
- *Is Jose cheating?*

[In a study that used a scenario with a take-home exam where one student asks if another student got the same answer and when that student says no, the first student finds a calculation error and corrects it, 45% of students said the student who corrected the answer cheated and almost 71% of the faculty called it cheating. Meanwhile, 32% of the students said the student who provided answer cheated and almost 61% of the faculty called it cheating.]

Additional scenarios can be found in the article.

Starting the semester with this type of activity will create an opportunity to clear the murky waters of cheating and set the stage for promoting academic integrity.

References

Kloss, R.J. (1994). A nudge is best: helping students through the Perry scheme of intellectual development. *College Teaching*, 42-151-158. doi:10.1080/87567555.1994.9926847

Weimer, M. (2018, May 3). Scenarios: Is It Cheating? *Faculty Focus Premium: Higher Ed Teaching Strategies from Magna Publications*.

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Creating Accessible Slideshow Presentations

Creating a slideshow presentation so that it is accessible to all students regardless of physical, mental, or cognitive abilities helps to ensure all students have equal opportunities to be engaged with the presentation. And consistent with ideas for University Design for Learning, planning for accessibility can benefit all students, not just those disabilities.

Three Ways to Get Started

Use the templates packaged with the slideshow software. Templates offer a number of benefits. They establish a logical, hierarchical organizational structure, conveyed visually through titles, headings, and subheadings. Templates also use typefaces pre-selected for legibility. The layout of text in a template—along with sufficient white space—helps people with dyslexia or low vision to navigate the slide. The layout also provides visual signals about the content, including priority, importance, specificity, and subordination.

Make text and visuals big enough to be legible from the back of the room. Whenever possible, test drive your presentation in the room in which you will be presenting. Ideally, have a colleague view your slides from the back of the room to see if all the content is discernible. Limit the amount of text on a single slides; large amounts of text will appear crowded and small. Keep bulleted or enumerated lists to three to five items. Use a common sans-serif font (such as Arial, Calibri, or Helvetica.)

Use color carefully. Use color with care—which often means NOT using color. For instance, you should avoid using color alone to emphasize text or to identify information as important. People with color blindness may not be able to see the color, so they will miss whatever emphasis or importance you’ve attached to the text. Also, avoid combining colors with insufficient contrast (e.g., yellow text on a white background). Using the templates in your slideshow software is one way to ensure sufficient color contrast, because each template has been designed by professionals for maximum clarity

Resources

For more information, visit “[Accessibility and Universal Design for Learning at Boise State.](#)”

In “[How to Make Presentations Accessible to All,](#)” the Web Accessibility Initiative provides advice on planning, designing, and delivering accessible presentations.

For tips on making PowerPoint presentations accessible to people with low vision or people using screen readers, see “[Make Your PowerPoint Presentations Accessible.](#)”

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Creating Accessible Documents

In *Don't Make Me Think: A Common Sense Approach to Web Usability*, Steve Krug notes that making digital information accessible to everyone is “not just the right thing to do; it’s profoundly the right thing to do.”

Why?

“Because,” Krug says, “the one argument for accessibility that doesn’t get made nearly often enough is how extraordinarily better it makes some people’s lives. How many opportunities do we have to dramatically improve people’s lives just by doing our job a little better?”

One way to do your job a little better is to create accessible documents, so that students won’t encounter unnecessary challenges while using those documents. The strategies below can apply to printed documents, but they’re especially important for digital text.

Three Ways to Get Started

Use your software’s formatting tools—especially styles—to create headings and subheadings. Text-editing programs such as Microsoft Office and Google Docs use styles to apply predetermined formatting to text, creating titles, subheads, bulleted lists, numbered lists, and more. When you use styles instead of manually formatting text, you make the text readable to text-to-speech software, including screen readers used by the blind and other students with disabilities.

Make sure that the document text is “live,” not an image. Can you highlight text in your document, copy it, and paste it elsewhere? If so, it’s probably “live” text that can be read by text-to-speech software. If the text can’t be copied and pasted, it’s probably an image.

Use high-contrast text, and use color sparingly. People with low vision or color blindness have difficulty reading small or low-contrast text. Avoid opposite color combinations (e.g., red text on a green background). Such combinations may be difficult for colorblind users to perceive; they may trigger migraines in other readers.

Resources

For more information about accessible documents, visit “[Accessibility and Universal Design for Learning at Boise State.](#)”

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Creating Accessible Images

In response to a survey conducted by the US Census Bureau, 20% of Americans said that they have at least one disability. As educators, we have an obligation to ensure our teaching materials are accessible to *all* students, including those in that 20% of the population.

Images in digital content must be accessible, meaning we must provide people with visual impairments or learning disabilities with alternative ways to understand the images. For example, clarifying or descriptive textual information can be added to an image. Fortunately, many of the tools used to create content make it easy to make images accessible.

Three Ways to Get Started

Use ALT tags to describe images. An ALT tag is a descriptive label attached to an image. For people who are blind or who have low vision, screen-reading software reads aloud the description contained in the ALT tag. Microsoft Office, Google Docs, WordPress and most other content-creation tools offer simple ways to add ALT tags to images. For a variety of reasons (mostly technical), ALT tags should contain fewer than 125 characters. If you cannot adequately describe the image in an ALT tag, also provide a long description by using the LONGDESC tag.

Reduce or eliminate text in images. Screen readers can't read text in an image or interpret complex visuals (e.g., equations, graphs, maps). Avoid using text in images if the text conveys meaningful content (as opposed to being strictly decorative). Additionally, use large, high-quality images to ensure accessibility for students with low vision.

Provide a narrative version of complex visuals. Complex visuals containing alphanumeric values are often essential to instruction. When you include a chart, equation, or similarly complex visual, craft an instructionally relevant description or explanation of the image. For example, on exams, you can carefully describe an image while still providing students the opportunity to interpret or draw conclusions from the image. In assigned readings, providing descriptions of complex visuals can help students understand them.

Resources

For more information, visit "[Accessibility and Universal Design for Learning at Boise State.](#)"

Find more tips on image accessibility at [WebAIM](#) (Web Accessibility in Mind).

View a video tutorial titled "[How to Make Graphs, Charts and Maps Accessible.](#)"

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