# How to Make Your Teaching More Engaging

**ADVICE GUIDE** 

By Sarah Rose Cavanagh

onsider a student in an introductory math class — let's call him Alex. Alex had some unpleasant experiences with math in high school. When he got to college, he tested into a math course below the level that would count toward his general-education requirements. He is thus feeling wary about the semester, and resents having to "waste" expensive college credit on a course that he is unlikely to enjoy and that won't get him any closer to his degree.

To have any hope of learning the material, Alex needs to actually involve himself in the course. He needs to direct his attention to the lecture and the problem sets. He must be willing to use his working memory to attempt solutions rather than daydream about his life outside the small windowless room full of equations. He needs to decide the information is important enough to commit to memory and then be motivated to grapple with it later, on his own time, to prepare for the exams.

Alex can do all of that — but he could use your help. As his instructor, you can stimulate his curiosity with an inspiring and energizing presentation style, with activities and assignments that maximize his sense of control over the material, and with expertise that helps him reach just a bit beyond his current abilities.

The psychologist Todd Kashdan <u>writes</u> (https://www.amazon.com/Curious-Discover-Missing-Ingredient-Fulfilling/dp/0061661198), "If you want people to be interested, committed, and willing to devote effort to learning, mastering, and using these skills for the long haul, then you can't avoid the initial step of stimulating excitement." In short, if you really want a student like Alex to learn and succeed, something needs to happen first: You need to engage him.

### Who Is This Guide for?

Welcome to *The Chronicle*'s guide on how to make your teaching more engaging. This guide is for anyone who wants to introduce energy or enthusiasm to their classrooms using methods that have been tried — and found true — through research and in classrooms.

"Some teachers are naturally compelling and intuitively spark a zest for learning in students. But most of us have to work at it." Certainly some teachers are naturally compelling and intuitively spark a zest for learning in students. But most of us have to work at it. You can energize your classroom for Alex and every other student by using principles familiar to both emotion scientists and pedagogical experts — principles available to any faculty member willing to investigate and apply them.

Here's what you'll find below:

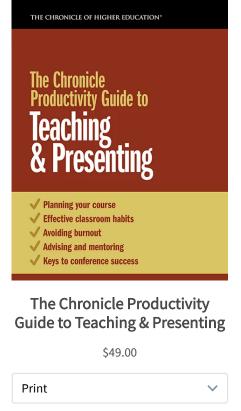
- A brief argument for why academics should care about engagement in the first place, and answers for skeptics who believe that efforts to enliven the college classroom are frivolous and/or doing a disservice to the solemn work of higher education.
- An explanation of four key principles of student engagement.
- Concrete suggestions on how to actually put each of those principles into practice.
- Anecdotal evidence from instructors in a variety of disciplines who have used the principles to teach in creative ways.

## First: Why Care About Engaging Students at All?

Let's put an old misunderstanding to rest: "Engagement" is not a synonym for "entertainment."

To care deeply about whether students are actively involved in class and interested in the content *does not* mean you advocate coddling students or treating the college classroom as a free-for-all fun zone. In fact, anyone who conflates engagement and entertainment is not only mistaken but also quite in conflict with the psychology and neuroscience underlying how human beings learn, which demonstrates that learning requires the motivated application of attention and working memory.

"When educators fail to appreciate the importance of students' emotions, they fail to appreciate a critical force in students' learning," wrote the neuroscientists Mary Helen Immordino-Yang and Antonio Damasio in the <u>book</u> (https://www.amazon.com/Emotions-Learning-Brain-Implications-Neuroscience/dp/0393709817) *Emotions, Learning, and the Brain.* "One could argue, in fact, that they fail to appreciate the very reason that students learn at all."



ADD TO CART

Engagement is a necessary first step for learning — which is one reason why efforts to enliven your classroom can't be dismissed as empty entertainment. But beyond that, deep engagement in a course actually requires hard work. "Engagement means setting up challenges for students that are meaningful beyond getting a grade," argues (https://www.insidehighered.com/blogs/just-visiting/we-have-engagement-crisis-not-grit-deficit) the writer and speaker John Warner (https://www.johnwarnerwriter.com/), "challenges which encourage risk without unduly punishing failure so they may experience the pleasure of resiliency and be enthused about trying again." It is less work for Alex if he remains unengaged — sitting passively in class not really absorbing the material and only half-heartedly attempting to study.

Engaging Alex using a variety of methods to attract his interest and excitement doesn't mean that you are taking on the work of learning for him, or somehow cheapening your material. Instead, it is an invitation — to take the initiative, to apply effort, to risk the daunting possibility of failure.

It is an open hand.

It is good teaching.

Here's how to do it.

# **The 4 Principles of Engagement**

I have organized some related strategies and research evidence into four core principles that you can use to foster student engagement in your classroom.

Readers will no doubt expect one of the four to be "active learning." This term has been repeated so often in recent years that it has started to <u>lose its meaning</u> (http://cte.rice.edu/blogarchive/2018/7/16/active-learning-has-become-a-buzzword). It is pretty much canon now that an engaging classroom is one that incorporates active learning at least some of the time. For that reason, I've threaded active learning throughout each of the four principles rather than having it stand alone.

" 'Active learning' has been repeated so often in recent years that it has started to lose its meaning."

At its most basic level, active learning means getting your students involved in activities in class rather than just passively listening. Jennifer Gonzalez (https://www.cultofpedagogy.com/author/gonzjennyahoo-com/), editor of the teaching blog Cult of Pedagogy (https://www.cultofpedagogy.com/), summed up the concept quite nicely in the title of a blog post (https://www.cultofpedagogy.com/dosomething/): "To Learn, Students Need to DO Something."

It isn't that lectures can't be dynamic and engaging in and of themselves. Some lecturing is always going to be required, especially in fields like the sciences and history. But to engage your students most effectively, you should, wherever possible, try to involve them in their own learning.

Any number of popular techniques will do the job, including:

Think/pair/share

(https://teachingcommons.stanford.edu/resources/learning/learning-activities/think-pair-share).

- Debates.
- Scavenger hunts (https://www.fractuslearning.com/edtech-scavenger-hunts/).
- Jigsaw (http://www.teachhub.com/jigsaw-method-teaching-strategy) activities.
- Fishbowl (https://en.wikipedia.org/wiki/Fishbowl\_(conversation)) discussions.
- Concept mapping (https://ctl.byu.edu/tip/concept-mapping).

- Polls (https://www.chronicle.com/article/How-Peer-Instruction-And/242031) and clicker-style (https://derekbruff.org/?page\_id=2) questions.
- Class presentations.
- Peer teaching (https://www.chronicle.com/article/How-Peer-Instruction-And/242031).

#### For instance, Kimberly N. Russell

(http://deenr.rutgers.edu/faculty/Kimberly\_Russell.html), an evolutionary biologist at Rutgers University at New Brunswick, teaches "Evolution of Sex and Gender in Animals." Rather than lecturing on common misunderstandings about sex and gender in nonhuman species, she divides students into groups and asks them to imagine discovering a new alien species. They must sketch out male and female versions of the alien. After collecting the sketches and examining them together, she and her students discuss the assumptions they made about the evolution of sex in creating the sketches. They also talk about why science-fiction authors often assume that alien species will be mammalian in appearance — for example, giving the female versions breasts, even when they are otherwise fishlike or birdlike species. The students participate in both the activity and the resulting discussion enthusiastically, Russell says, demonstrating more energy and engagement than on other days.

The well-established effectiveness of active-learning strategies is why they are threaded throughout the four principles below.



# Principle No. 1: Cognitive Resources Are Limited. Emotion Trumps.

What It Means

ecades of psychological science have shown that cognitive resources (like attention and working memory) are sharply limited — you have only so much to go around. If you pay selective attention to a complex game of ball passing, the odds are good that you will <u>miss a man in a gorilla costume</u> (http://www.theinvisiblegorilla.com/gorilla\_experiment.html) walking through the scene and thumping his chest. Your ability to maintain focused concentration has its own strict limits. Working memory can handle only the infamous <u>seven (plus or</u> <u>minus two)</u>

(http://www.psych.utoronto.ca/users/peterson/psy430s2001/Miller%20GA%20Magi cal%20Seven%20Psych%20Review%201955.pdf) chunks of information at a time.

All of these cognitive resources are required for effective learning in a classroom. Cognitive load theory

(https://onlinelibrary.wiley.com/doi/abs/10.1207/s15516709cog1202\_4) argues that

in trying to grasp new material, students face several related demands: intrinsic (understanding the task and how it is presented — e.g., reading and following lab instructions), germane (those involved in the process of learning — e.g., acquiring new knowledge and skills in completing a lab assignment), and extraneous (distractions — e.g., your lab partner cracking jokes while you are trying to focus). To help our students learn, we must direct their limited cognitive resources to the tasks at hand rather than to classroom distractions.

"Once you've hit the groove in your semester where everything is running smoothly, ... shake things up."

One of the best tools we have to achieve that is emotion. We know that emotions evolved in order to motivate behavior — to tag certain things as important either to approach (e.g., tasty food, attractive mates) or to avoid (e.g. venomous spiders, rotten food). Emotional stimuli <u>draw our attention</u>

(https://www.tandfonline.com/doi/abs/10.1080/02699930903205698) and are more likely to be remembered (https://www.cell.com/trends/cognitive-

sciences/fulltext/S1364-6613(00)01707-1?

\_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1364 661300017071%3Fshowall%3Dtrue), much the way an angry face stands out from a crowd of neutral faces.

Liven your course content by <u>connecting it (https://wvupressonline.com/node/642)</u> to the emotional lives of your students and they are more likely to dedicate their cognitive resources to their classwork than to the phone buzzing in their pocket or to their anxieties about a calculus exam that afternoon. Present the material in the context of an arousing controversy. Use a quick demonstration or a brief video clip to hook their emotions. With more cognitive resources on deck, their understanding and future recall should benefit.

### How to Do It

**Chunk your class up into smaller time periods.** Each one could be 15 to 30 minutes (depending on the overall class time). Assign each chunk of time a subtopic and introduce it with an "emotional hook." The educational psychologist <u>Kentina Smith</u> (https://nobaproject.com/blog/2017-06-07-stimulating-curiosity-using-hooks) describes emotional hooks as "brief lesson content teasers, relevant activities, stories, songs, provocative questions, headlines, current events, images, demonstrations, videos, or case studies designed to stimulate interest, curiosity, and

active interaction with information that can be connected to course concepts." Those hooks should not replace the day's lesson, she says, but rather serve as a trailer of sorts for it, to spark student interest and curiosity.

Choose activities and assignments that are clearly relevant to your students. That doesn't mean you have to be an expert on their personal lives or on contemporary pop culture. You can also make class activities relevant to contemporary social movements, to future careers in your major, or to some transcendent purpose (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4643833/). James Hauri (https://www.assumption.edu/faculty-profile/james-hauri) teaches an introductory chemistry class for nonmajors at my home institution, Assumption College, and aims to make the entire course relevant to students' daily lives. All of the labs center around chemicals and materials that students interact with regularly. For instance, they evaluate bottled water versus tap water, test both for pH, conductivity, and taste, and then debate why so many people choose bottled over tap. His nonmajors do the same sorts of labs and practice the same skills learned in a traditional chemistry lab, but their curiosity about the material is aroused because of its direct relevance to their lives. Relevance attracts interest and motivates engagement.

## What do you want to see?

Do you have a topic you would like to see in our next advice guide? <u>Email us (mailto:advice-ideas@chronicle.com)</u>, and let us know.

**Invite students to solve a mystery of your field.** Present a persistent puzzle in your discipline. Mysteries, as the writer Ian Leslie (http://ian-leslie.com/curious/) put it, "inspire long-term curiosity by keeping us focused on what we don't know. They keep us 'alive and active' even as we work in the darkness." Presenting unsolved mysteries also sends a message that students could have a hand in creating new knowledge in the world.

Interrupt the routine. Especially once you've hit the groove in your semester where everything is running smoothly and students now can anticipate everything that is going to happen in your classroom, shake things up. Keith Johnstone, an actor and teacher, writes of the power of interrupting routines in <u>his book</u> (https://www.amazon.com/Impro-Improvisation-Theatre-Keith-Johnstone/dp/0878301178) *Impro*. All storytelling (more on that in a bit) involves

describing a routine and then interrupting it. Two families are at war and hate each

other — but their children fall in love. A little girl visits her grandmother — who has been replaced by a wolf. It is the interruption of the routine that arrests our attention. If you find that certain successful strategies prove less effective as the semester progresses, try a dramatic shift in routine.



ADD TO CART

**Make it funny.** Course-relevant humor is a good way to liven up the classroom, because in order to understand the joke, you have to process material twice — once to understand the frame of the joke, and then again to understand the sudden reversal that triggers the humor. An entire body of research called the <u>"instructional</u> humor processing theory"

(https://www.tandfonline.com/doi/abs/10.1080/03634520903367238) supports the value of cracking quips in the classroom to improve student learning. So use your own humor if you are naturally funny. And if you're not, use someone else's humor, via memes and videos that are easily found on the web.

# Tips From Someone Who Has Done It: Candy, Candy, Candy

Every October, Heather L. Urry

(https://ase.tufts.edu/psychology/ebbl/personnel/personnelUrry.htm), an associate professor of psychology at Tufts University, focuses her "Experimental Psychology" course on a topic that is on everyone's mind as Halloween approaches: candy. When discussing research study designs, she has her students evaluate the evidence behind a friend's "Hierarchy of Candy Goodness Model," which organizes types of candy into tiers of deliciousness. Tier 1 has Reese's, Kit Kats, Twix, and Snickers, while way at the bottom on Tier 4 is candy corn and "anything with marzipan."

In a prototypical semester she might have students taste-test Reese's (Tier 1) versus Hershey's (Tier 3) and rate their feelings of enjoyment and gustatory pleasure. Students design a mini-study, collect the data in class, run the statistics, and make conclusions about whether or not their data support the Hierarchy of Candy Goodness. They can also debate theoretical constructs like: Do students' pre-existing biases about candy influence the results? Does knowing the hierarchy ahead of time affect the results?

She has two aims here — to teach students about this type of experimental design and to give them some hands-on practice with it. Her candy activity achieves both. Conveniently for our purposes, it also illustrates an effective use of an emotional hook — students begin immediately debating the merits of the Hierarchy ("How *dare* they put Almond Joys on Tier 3?") and are eager to find out whether or not their data support the model.

The free chocolate doesn't hurt, either.



# Principle No. 2: Your Persona and Performance Matter, Like It or Not

### What It Means

### n a compelling 2016 profile

(https://www.theatlantic.com/education/archive/2016/01/what-classroomscan-learn-from-magic/425100/) in *The Atlantic*, Teller — the silent member of the magic act Penn & Teller — shared his insights on teaching, having taught highschool Latin for six years before turning to a life on the stage. He argued that, before anything else, the job of a teacher is to help students fall in love with the subject matter. "That doesn't have to be done by waving your arms and prancing around the classroom," he said in the interview. "There's all sorts of ways to go at it, but no matter what, you are a symbol of the subject in the students' minds."

"You may have a knee-jerk reaction against the idea that college teaching is, in some sense, a performance art."

Teller's ideas about teaching are consistent with scholarship on several fronts:

- Research on "emotional contagion
  - (https://journals.sagepub.com/doi/abs/10.1111/1467-8721.ep10770953)" suggests that emotions and moods are likely to spread among members of a social group. That phenomenon is at work in the college classroom, too. For instance, research indicates (https://www.sciencedirect.com/science/article/pii/S0959475214000243) that your enthusiasm as an instructor is indeed contagious and helps predict variables like student motivation in the course.
- An 8-year longitudinal, qualitative study (http://www.hup.harvard.edu/catalog.php?isbn=9780674049024) of undergraduates and alumni at Hamilton College found that students quite often reported choosing their major based on taking introductory courses with particularly dynamic professors.
- Research studies on various aspects of pedagogy on <u>teaching evaluations</u> (https://www.tandfonline.com/doi/abs/10.1080/23808985.1979.11923782), on student <u>learning outcomes</u>

(https://www.tandfonline.com/doi/abs/10.1080/036452042000228054), and on student "reactance"

(https://www.tandfonline.com/doi/abs/10.1080/03634523.2012.727008)
(defensive, negative reactions to a course that can spread from student to student)
— all show that one of the best predictors of good course outcomes is an instructor's use of something called "immediacy cues" — primarily nonverbal social behaviors like eye contact, gestures, varied vocal tone, and movement.
Students "read" such cues to decide if you as the instructor are enthusiastic, effective, and in the moment.

You may have a knee-jerk reaction against the idea that <u>college teaching is, in some</u> <u>sense, a performance art (https://www.chronicle.com/article/All-the-Classroom-s-</u> <u>a-Stage/240429</u>). But as an instructor, you are using your words, props, and actions to try to get students involved in and excited about something you are involved in and excited about. The degree of effort and enthusiasm you invest in your presentation will be evident to your students and may, in part, determine how much effort and enthusiasm they will invest in your class.

## How to Do It

**Observe yourself in action, or get someone else to.** People who do any form of public speaking are often advised to record themselves and then watch the video to spot areas for improvement. Try videotaping one of your classes. Do you sway back and forth in a distracting way? Say "um" too frequently? Talk to only one side of the classroom? If the idea of watching yourself teach is a bit too nauseating, you can always ask a colleague to sit in on your class and give you feedback. Many teaching centers or faculty-development programs offer this service. A colleague's evaluation of your videotape might reveal a few behavioral tics that tend to discourage student engagement, and you can work on avoiding them.

Focus on your immediacy cues. A videotape of your teaching might also reveal a *lack* of behavioral cues that would *encourage* engagement. It is probably best to work on one at a time so you don't appear distracted or awkward. Focus one week on making more eye contact, another on moving around the room, and another on being sure that you're not lapsing into a monotone. An easy immediacy cue to adopt is to use language that invites students to see the course as a communal effort ("today we are going to …" versus "today I am going to have you …").

#### Watch good communicators in action. In his widely viewed TED talk

(https://www.ted.com/talks/christopher\_emdin\_teach\_teachers\_how\_to\_create\_ma gic?language=en), "Teach Teachers How to Create Magic," the Columbia University professor Christopher Emdin recommends visiting places where people are already skilled at the art of public performance and audience interaction — like rap concerts and the black church — and taking notes on the techniques people use to enliven their performance and energize the audience.

**Take risks, and freshen up your material.** In my own teaching, I've seen certain activities that used to reliably induce enthusiasm fall flat over time. I've realized that it's probably because an activity loses its ability to hook student interest as I smooth out all of the rough corners and present it with more polish and less raw enthusiasm. As Kevin Gannon, a historian at Grand View University and director of its teaching center, writes in his Teaching Manifesto

(http://www.thetattooedprof.com/2016/07/06/radical-hope-a-teachingmanifesto/): "If I want my students to take risks and not be afraid to fail then I need to take risks and not be afraid to fail." Inject new material. Try new things. Experiment.

**Jazz up before class.** My go-to, for better or worse, is coffee. A friend of mine ramps up for large lectures with loud heavy-metal music. Some people need to be sure they have a full belly; others work better on an empty tank. Whatever puts you in an energized state, do it before you teach.

#### Get enough sleep. I am a bit of a sleep evangelist

(https://www.psychologytoday.com/us/blog/once-more-feeling/201503/10reasons-you-should-go-sleep-right-now). I won't belabor the point, but to have good energy in any area of your life, I believe you need to be well rested.

# Tips From Someone Who Has Done It: A Nonlecture-y Lecturer

As part of a recent research project on student learning, I observed some of my colleagues teaching in various disciplines. One such course was "Introduction to Art History," taught by Elissa Chase (https://www.assumption.edu/people-and-departments/directory/elissa-chase-jd), a lecturer at my campus. On paper, her lesson plan would look like a straight lecture via PowerPoint for a solid hour, sending a shudder down the spine of diehard advocates for flipped classrooms and active learning.

But in practice, her "lecture" was instead a lively, enthusiastic, energetic tête-à-tête. She began each class with a music video related — often very tangentially — to the day's topic and played loudly over the classroom's speakers. She then invited students to guess its relevance. For instance, one day she played Taylor Swift's "We Are Never Ever Getting Back Together" because they were covering the Reformation. The result: Students started the class curious and thinking ahead to the topic of that day's lecture.

Chase proceeded to conduct the class like a vibrant conversation. She spoke quickly and energetically, in a way that made you sit up and pay close attention in order to keep up. She moved quickly around the lecture hall. She knew all of her students' names and would often query them or make sarcastic quips that set them laughing. They knew they could be roped into the lecture at any moment, and so seemed at attention and eager throughout the class. Time passed quickly, and at the end, I leaned over to one of my research assistants and murmured, "I've never been interested in art — but I really wish I could take this class!" And I meant it.

Teaching with gusto, whatever strategy you use, is key to student engagement.

# Principle No. 3: We Are Intensely Social Creatures, Motivated by Community

### What It Means

Human beings are not just a social species — we are an ultrasocial species. We crave community and form groups easily. Our ideas, emotions, and theories about how the world works spread as easily as cold viruses in midwinter. <u>Michael Tomasello</u> (https://psychandneuro.duke.edu/people/michael-tomasello), a psychology professor at Duke University, believes we are so ultrasocial that even when we're alone in our own head, thinking our own thoughts, our sociality is still stamped all over the moment. "Thinking is like a jazz musician improvising a novel riff in the privacy of his own room," he <u>writes (http://www.hup.harvard.edu/catalog.php?</u> isbn=9780674724778). "It is a solitary activity all right, but on an instrument made by others for that general purpose, after years of playing with and learning from other practitioners, in a musical genre with a rich history of legendary riffs, for an imagined audience of jazz aficionados. Human thinking is individual improvisation enmeshed in a sociocultural matrix."

A college course is a group of human beings working together for up to 15 weeks on a mutual enterprise. There, the sharing and influence is explicit, baked into the very structure of the endeavor. Establishing a sense of community in the classroom helps predict (http://webcache.googleusercontent.com/search?

q=cache:http://www.ijessnet.com/wp-content/uploads/2016/07/5.pdf) whether your students will participate in class discussions, have high or low levels of anxiety, and even have better grades.

# *"Learn their names. You've probably heard that a million times, but it doesn't make it any less true."*

It is particularly important to make sure that all of your students feel equally welcome and equally valued in the conversation. Students whose identities and backgrounds vary from those of the rest of the class (in terms of gender identity, race, ethnicity, nationality, disability status, social class, etc.) may feel less able to easily join the community, and so it is critical that you <u>plan carefully</u> (https://community.acue.org/blog/why-were-speaking-up-about-inclusiveteaching-strategies/) how to help them feel included.

In *How Humans Learn: The Science and Stories Behind Effective College Teaching,* Joshua R. Eyler, a historian and director of the Rice University Center for Teaching Excellence, provides an extensive review (https://wvupressonline.com/node/758) of the research supporting three fundamentals for a social classroom:

- A sense of belonging.
- A classroom-management philosophy that privileges community building.
- An instructor who effectively models intellectual approaches.

## How to Do It

**Learn their names.** You've probably heard that a million times, but it doesn't make it any less true. If it is at all <u>feasible</u>

(https://twitter.com/GeekyPedagogy/status/1086263989477216256) given your class size, learning your students' names is a powerful first step in establishing a warm social climate in the classroom. See some names on your roster that you aren't sure how to pronounce? Consult Google before the first day of class.

**Make sure everyone gets a chance to contribute.** A variety of techniques can be used to that end:

- Mix classwide debates with small-group discussions, since introverted students might feel more comfortable speaking up in a small group of peers.
- Don't call on someone too quickly after you've asked a question. Waiting a bit allows those who require more time
   (http://www1.assumption.edu/cte/2018/10/29/waiting-for-your-students/) to gather their thoughts (and courage) to participate.
- Question stacking a practice in which students indicate by some gesture or nod that they have something to contribute and get added to a list that you work through during discussion — can also allow for a greater number and variety of students to participate. While it can be controversial, progressive question stacking (http://www.thetattooedprof.com/2017/10/20/the-progressive-stack-andstanding-for-inclusive-teaching/), in which the professor prioritizes marginalized voices that traditionally get silenced, can help you establish that diverse voices are valued in your classroom.

**Work as a class on a shared project.** Rather than asking students to work alone or in a small group, unite the entire class on a major project. In a beautiful example of this, a biology instructor recently replaced his final exam

(https://www.chronicle.com/article/Why-One-Science-Professor-Has/244844) with a class project that developed a children's book on the topic of the course.

**Diversify your curriculum and your teaching strategies.** Mix up the <u>voices that are</u> <u>included</u> (https://www.latimes.com/books/la-et-jc-decolonize-syllabus-20181008story.html) in your course content so that students hear from people with a variety of backgrounds and life histories. Vary your teaching strategies and assessments so that students with different skill sets and different strengths have an opportunity to shine. Rather than offer separate policies for students who need learning accommodations, practice <u>universal design (https://wvupressonline.com/node/757)</u>, so that all students have access to policies that benefit students with disabilities. As the prototypical example of universal design goes, having sloped curbs doesn't just help people using movement aids like wheelchairs, but also helps the elderly, parents pushing strollers, etc. The same is true of <u>universal design</u>

(https://chroniclevitae.com/news/1912-a-welcoming-classroom) in the classroom. As an example, you might provide captioning and transcripts for any films or videos you show in class. This practice will benefit not just hearing-impaired students but all students in understanding and taking notes on the material.

**Build community in small ways.** Instead of a traditional roll call, do a <u>question roll</u> (https://fillingthechalkboard.wordpress.com/2014/06/16/question-roll-1-buildingcommunity/) where you take attendance that day by having everyone answer a fun question about their favorite movie or food. Or offer a <u>two-stage exam</u> (http://www.cwsei.ubc.ca/resources/files/Two-stage\_Exams.pdf), in which students complete the test on their own first and then have an opportunity to work together to earn more points. You don't have to wait for the first exam to begin building community, either. As James Lang, a professor of English at Assumption College who writes regularly on teaching for *The Chronicle*, reflects <u>here</u>,

(https://www.chronicle.com/interactives/advice-firstday) the first day of class is a great time to begin laying the foundation.

### Tips From Someone Who Has Done It: Bonding Over Brains

Many colleges have attempted to ease the transition from high school with the introduction of learning communities for first-year students. The models vary but involve some mix of shared classes, dorms, and extracurricular activities.

As a professor, I was part of a freshman learning community with a colleague, Michele Lemons (https://www.assumption.edu/people-and-

departments/directory/michele-lemons-phd), who teaches biology at my college. The same group of new students took both my "Introductory Psychology" course and Michele's "Introduction to Biology" course. To demonstrate that true knowledge spans disciplines, we dovetailed our topics at several junctures — talking in both courses about neurons and brains, eating and motivation, the biology of vaccination and the psychology of why some people opt out of life-saving vaccines. Outside of class, we met with our students for occasions that were both social and intellectual — for instance, we all had breakfast together one morning before class while a nutrition expert answered student questions about healthy eating. Michele took the lead on a community-building project in which students worked together to craft a miniature science fair on basic aspects of neuroscience, which they presented to local middle-schoolers during Brain Awareness Week.

It was delightful to get to know these students on a deeper level than I usually do, and to joke with them in settings outside of class. I think it was also valuable for them to see their professors socializing. As these students continued in their studies over the years, and occasionally showed up in some of my more advanced courses, I would always smile when I saw their names on my roster. I like to think they felt the same.

# Principle No. 4: Stories Are Our 'Most Natural Form of Thought'

What It Means

ou might notice — as the psychologists Roger C. Schank and Robert P. Abelson once

did — that some words, with just a handful of syllables, seem to contain entire storylines. Words like "betrayal" and "crucifixion."

#### Schank and Abelson argued that stories

(http://www.cogprints.org/636/1/KnowledgeMemory\_SchankAbelson\_d.html) are our "most natural form of thought." A narrative weaves together otherwise isolated bits of information into a meaningful whole, linking them in important ways but also chunking the information so that it takes up less space in working memory and connects to existing threads in long-term memory. The causal relations in stories and the use of reliable narrative structures are also thought to benefit <u>understanding</u> and remembering (https://www.aft.org/periodical/american-educator/summer-2004/ask-cognitive-scientist).

"The stories you tell in your classroom can be about your own intellectual path, about people who have lived through different historical eras, about patient case histories. Whatever their type or shape, tell stories."

Clearly stories are a way to engage students. The stories you tell in your classroom can be about your own intellectual path, about discoveries in your field, about people who have lived through different historical eras, about patient case histories, or about previous students who went on to succeed. Whatever their type or shape, tell stories.

### How To Do It

#### Share your own stories. Research confirms that

(https://www.tandfonline.com/doi/abs/10.1080/01463370802241492), when it's done well, disclosing anecdotes from your own personal history can motivate and inspire your students. As David Gooblar, a lecturer in rhetoric at the University of Iowa and author of the blog <u>Pedagogy Unbound</u>

(http://www.pedagogyunbound.com/), wrote

(https://chroniclevitae.com/news/838-the-pedagogical-power-of-opening-up), "When you talk about yourself to your students, you signal to them that you trust them and see them as worthy confidantes. That, in turn, encourages students to feel more at ease, to open up themselves and commit more fully to the class." Obviously, sharing too much and too often is inappropriate and likely to detract from your credibility, but qualitative research

(https://www.tandfonline.com/doi/abs/10.1080/17459430902751808) suggests that students appreciate, in particular, hearing stories of their instructors dealing with academic obstacles and overcoming them.

**Share your field's stories.** Perhaps you teach in a discipline like math, where the subject matter seems very divorced from the idea of personal stories. But every field has its stories of frustration and discovery, of accidental solutions and sudden new insights. So share the stories of how specific scholars or entire fields traveled a path to discovery. In fields like psychology, neuroscience, medicine, and health sciences, considering or attempting to solve case studies of people who have struggled with disease, brain injury, or mental illness can engage, reduce stigma, and spread awareness all at once. You could even elicit the help of advanced students or alumni to come back and tell stories about how their early training benefited them on internships or working in the field.

**Create stories in the classroom.** Immersion games like the famed <u>Reacting to the</u> <u>Past (https://reacting.barnard.edu/)</u> in history have enviable track records of student engagement, with students volunteering to come in for extra class time. Even if you don't have time for an extensive immersion game, brief role-plays can also energize the class.

Focus on the whole journey. To really maximize the stories you use in class, don't just include a narrative with a beginning, a middle, and an end. Rather, include a story that includes both a goal and an obstacle. In his book <u>on science</u> communication (https://www.amazon.com/Understood-Would-Have-This-Look/dp/1524781924), the actor Alan Alda describes how, in giving a talk, he often asks for a volunteer to carry an empty glass across the stage and place it on a table. He then asks the volunteer to fill the same glass to the brim with water and carry it back across the stage. He tells members of the audience that their entire village will die if even a single drop of water is spilled. It's nonsensical — the audience doesn't even live in a village, never mind share one, and who will do the smiting? — yet people are on the edges of their seats watching that second glass. The point here: Students want to be a part of the story; give them a reason, even contrived, to be invested in the outcome.

**Your students have relevant stories to tell.** Inviting them to share those stories can do double-duty for engagement and inclusion. "Teachers can devise activities for students to share their diverse experiences," <u>writes Dena Simmons</u> (https://greatergood.berkeley.edu/article/item/how\_to\_change\_story\_of\_students\_

of\_color), assistant director of education at the Yale University's Center for Emotional Intelligence. "These could include spoken-word performances, written pieces, podcasts, videos, other multimedia and art projects, or even simply one-onone lunch conversations with classmates or educators." By inviting your students' stories, you demonstrate your interest in them and their potential for contribution to your class and to your field.

# Tips From Someone Who Has Done It: A Story-Centered Course

James Lang, the English professor and *Chronicle* columnist on teaching, recently structured his entire upper-level British literature seminar around stories. The course covers four major historical time periods, and he began each with a set of true historical narratives that set the tone for the rest of the unit.

For instance, he introduced the unit on the Romantic Period (1789-1832) with two contrasting stories that sharply illustrated the socioeconomic divide that would inform all of the literature they read next. One story was of George IV's lavish ball that included such extravagances as exorbitant amounts of food and champagne and an artificial river complete with bridges and greenery and cavorting fish. The juxtaposing story concerned a 5-year-old boy who worked as a chimney climber. Chimney climbers were small boys sold to chimney sweeps by their parents to climb up inside chimneys to clean them of accumulated soot. In short, they were sold into a painful, dangerous life that often ended in death from cancerous tumors, suffocation, or being trapped in the chimney. One chimney boy was beaten to death by his master while witnesses failed to intervene.

The contrasting lavishness and penury, excess and grime, frivolity and tragedy provide a frame for all of the works that the students will encounter for the rest of the unit, and help set the historical stage. The emotions and moral imperative suggested by the stories are also likely to light a motivational fire under the students, create an itch to address the problem — even if just by reading and writing about it.

# **The 4 Principles in Practice**

received my Ph.D. in psychology in 2007, but I became a psychologist over a decade earlier, as a teenager in Cheryl LePain's Advanced Placement class in psychology. At the time all I knew was that her course was highly engaging and deeply motivating. But reflecting on the experience now, I see that she practiced all four of the principles outlined in this guide:

- **Emotions:** She engaged our emotions with one part intimidation (horror stories about the difficulty of the AP test) and one part inspiration (how much psychologists had unlocked about the human mind, how much remained to unravel).
- **Performance:** She was a charismatic and passionate lecturer, who put a lot of thought into her classroom performance, and who frequently employed humor.
- Community: With only eight students, LePain had us pull our desks into a semicircle around hers — all the better for developing a community atmosphere for considering high-minded subjects. She also had us meet after school for fun study sessions.

• **Stories:** And she enthusiastically told stories about prison experiments and dream theories, and invited us to see the material through her own lens of sophisticated understanding.

Most of us aced the AP test. More important, we learned deeply. In college, I would have to get to at least the three-quarters mark of any upper-level psychology course to hit material that I hadn't already mastered at LePain's feet. Several of us formed deep friendships that would endure both the passage of decades and our scattering across the globe. A few of us, myself included, found a vocation.

Cheryl LePain's teaching may have been informed more by intuitive artistry than intentional design, but anyone can learn and apply some of the principles that informed her teaching — the same principles that informed this guide.

## Helpful Resources

- Plenty of polling (http://pollev.com/) websites (http://kahoot.com/) are available to help you ask "clicker" style questions in class or set up discussions.
- Use concept-mapping software (https://en.wikipedia.org/wiki/List\_of\_concept-\_and\_mind-mapping\_software) to illustrate connections among ideas or pieces of information.
- My favorite screen-capture software, for capturing internet videos or creating "flipped" lectures, is <u>Shiny White Box</u> (https://www.shinywhitebox.com/thanksforallthefish#opt1).
- Try attending a conference on <u>Reacting to the Past (https://reacting.barnard.edu/)</u> to understand immersion game tools.
- You can find all sorts of <u>classroom materials</u> (https://www.cultofpedagogy.com/store/classroom-materials/) — discussion activities, icebreakers, and the like — on the Cult of Pedagogy <u>website</u> (https://www.cultofpedagogy.com/).
- The podcast <u>Teaching in Higher Ed</u>, (https://teachinginhighered.com/) led by the warm and wonderful Bonni Stachowiak, provides accessible, fun advice from some of the best thinkers in higher education.

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(https://www.assumption.edu/). She is the author of *The Spark of Learning: Energizing the College Classroom With the Science of Emotion* 

(https://wvupressonline.com/node/642) and the forthcoming HIVEMIND: Thinking

*Alike in a Divided World* (https://www.amazon.com/Hivemind-Social-Reshaping-Collective-Selves/dp/1538713322/ref=tmm\_hrd\_swatch\_0? \_encoding=UTF8&qid=1547948812&sr=1-1-spell). You can find her on Twitter @SaRoseCav.



#### How To Create a Syllabus

There's never a bad time to reexamine and rethink how to write your syllabus. This guide walks you through everything you need to know, with specific tips and strategies, to craft an effective syllabus.



#### How To Teach a Good First Day of Class

The first day of class is crucial both for your students and for you. This guide will help you make opening day as effective as possible.



How to Make Your Teaching More Engaging

Stimulate your students' curiosity — and help them learn — using the tried-and-true techniques in this comprehensive guide.

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