# REACHING TODAY'S DISTRACTED STUDENTS: A HANDBOOK FOR PROFESSORS



Smart profs will use technology to easily update course material pg. 12



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# PROBLEMS IN THE LECTURE HALL

**HOW'S THIS FOR AN ABSURD PARADOX:** over the last 200 years universities and colleges have been hotbeds of technological change and innovation, yet their classrooms haven't changed at all. Since the early 19th century adoption of the blackboard, classrooms have been structured like theatres, with rows of seats facing a large screen, and a professor's pulpit.

The problem of student boredom, fed by this static pedagogical model, is at least as old as the classroom itself. Listless pupils are left to daydream or doodle until they (hopefully) hear something that coaxes them back to attention. Technology, rather than helping to solve this issue, is only making it worse. Today's students, armed with laptops, smartphones and free Wi-Fi, have a world of distractions at their fingertips, all of which they find more immediately engaging than the curriculum and oration they've paid to receive.

For university teachers, the problem is now omnipresent. The 2016 Professor Pulse Survey<sup>1</sup>, with more than 21,000 university faculty respondents worldwide, found that "students not paying attention or participating in class" is the biggest teaching challenge they face.



After 200 years, we have reached the point where the traditional post-secondary pedagogical model is irretrievably broken

The survey also found that 42 per cent of professors say students don't come to class prepared to learn. The anecdotal evidence is worse. In interviews for this publication, professors told dispiriting stories of sitting at the back of their colleagues' classrooms and watching students wander the internet: checking sports scores and Twitter feeds, shopping for shoes and watching pornography.

Such is the evolution of student inattention: from passive ennui to active distraction to, ultimately, full disengagement. And the deterioration is having a detrimental impact on comprehension and grades. One study at The Catholic University in Washington, D.C., showed that students' attention spans during traditional lectures do not even last 10 to 20 minutes. Rather, students constantly fluctuate between engagement and disengagement in ever-shortening cycles.<sup>2</sup> After 200 years, we have clearly reached the point where the traditional pedagogial model is irretrievably broken.

# FIVE STRATEGIES TO REACH DISTRACTED STUDENTS

**IT IS THE TEACHERS WHO MOST SHARPLY SEE AND FEEL** the impact of classroom disengagement. They are also the ones best situated to correct the trend, by incorporating new techniques and new technology into their teaching. The Professor Pulse Survey found that 69 per cent of faculty use learning management systems, while 49 per cent use social media such as Facebook, Twitter and YouTube. And while many classrooms maintain a taboo against using smartphones during class, 37 per cent of survey respondents incorporate mobile devices into their learning.<sup>3</sup>

But there is little point in devoting more time and effort into teaching, and adopting new technologies in the classroom, if it falls on deaf ears—that is, if students would still rather shop online than learn online. Successful teaching will ultimately depend on how technology is applied to keep students engaged and raise their comprehension. Here are five ways professors can use new technology to greatest effect, and keep their tech-savvy students focused on learning.

## **GET PERSONAL**

#### THE PHRASE "PERSONALIZED LEARNING"

prompts many academics to despair. They already spend countless hours meeting with students individually and providing feedback on assignments. How are they supposed to personalize every weekly lecture for 12 students, or 50, or 500?

But this response understands the problem backwards. It's students themselves who drive the personalization of their learning, by choosing their assignment topics, pursuing the specific curiosities piqued by class instruction, and sharing and collaborating with peers.<sup>4</sup>

True, there's nothing new about assignment choices or group

projects. What's changed is the technology that enables them, which can transform the learning process into something far more social and diverse. Catalog searches were always solitary activities; digital queries are not. Students, networked together online, can share information and discuss relevant discoveries immediately, cobbling together a group project while never gathering in a meeting room. Video materials, which once required advance bookings of special equipment for editing and classroom viewing, can now be prepared at home and posted to message boards or social media pages.

These methods have been part of

Students who are networked together online can share information and discuss relevant discoveries

Millennials' learning routines since middle school, so it likely comes as a surprise when higher education doesn't systematically incorporate them. Digital technology, already the infrastructure of student learning, must become the infrastructure of the classroom as well.

And if today's students learn through digital content, then producing and sharing digital works with classmates should be part of their evaluation. This trend towards "student generated content" marks an important shift, because the projects are never intended solely for the professor's eyes. The public nature of wikis, blogs, podcasts, apps and videos raises the stakes: the projects are more meaningful and engaging when they are shared with a broader audience. Students are more likely to invest their sense of self in the project.<sup>5</sup>

Personalization also means giving each student a say in the progress of the course. Online engagement systems help professors regularly check in for feedback on course materials and assignments. Profs can also simply take five minutes before each class to informally chat with different groups of students-this helps students build a relationship with their professors, which can make them feel more comfortable speaking up during the lecture or approaching the professor outside of the classroom.

## **PLAY THE GAME**

#### **ACCORDING TO A 2012 PEW RESEARCH**

Centre study<sup>6</sup> on teens' increasing reliance on technology, "negative effects include a need for instant gratification [and] loss of patience." Sound familiar? But it's narrow to assign these traits only to young people, or to see them as irrational. Everyone with a laptop expects information to flow immediately. We have all honed the ability to quickly sift through search results to find what we are looking for. And we are all familiar with the frustrations of a webpage that won't load or a pokey, unresponsive browser. The desire for immediacy is a social and cultural trait for anyone who is tech-enabled.

The pace of the traditional classroom lecture obviously grates against these shifting expectations. But immediacy in the classroom doesn't have to mean instant gratification. Rather, it's another form of engagement: a means of presenting course materials that can encourage students to dwell upon them, interact with them, and weave them into their personal knowledge.

What's most gratifying of all and what most helps learning and retention—is applying the knowledge to a given situation, real or artificial. Many professors are turning toward classroom "gamification": the use of competitive scenarios, and the public distribution of points and rewards. The trend is recent, but some studies already show that gamification has a positive impact upon both engagement and learning.<sup>7</sup>

Higher learning is not a game, but the typical course outline does have some obvious affinities with video games. Both begin with basic learnings, then move on to related scenarios of increasing complexity to achieve new levels of mastery.<sup>8</sup> Moreover, as MIT's Education Arcade and others have pointed out, many learning behaviors that traditionally found their greatest utility in college classrooms persistence, problem solving, risk taking and collaboration—are expressed through online gaming.<sup>9</sup> The way to repatriate those behaviors back into the classroom, and incorporate the professors back into the equation, is to gamify course content.

The key to successfully implementing this strategy is to make sure the games are designed to support the course's learning objectives.<sup>10</sup> Professors should start with a clear statement of the skills and comprehensions that constitute the course's foundation, and the development and advancement they expect to see at semester's end—and gamify the curriculum to help both them and their students, achieve those goals.

#### **GAMIFICATION STRATEGIES INCLUDE**

SIMPLE REWARDS Gold stars for attendance, completed readings and participation. SELF-DIRECTED AMBITIONS Complete a series of tasks to unlock new challenges. **COMPETITIONS** Competitive quizzes that track scores, streaks and leaderboards. CLASS-WIDE COLLABORATION Reward students for their collective success to encourage knowledge sharing.

## **PIVOT TOWARD THE FUTURE**

#### THE YOUNGER GENERATION'S

expectation of immediacy isn't just about screen habits and web searches. It's also about learning itself: they want their education to be relevant to their everyday lives, and to the path they envision for themselves. If it's not, they tune out.

Whether they approach their post-secondary experience as a broad education, or as specific vocational training, students today live by the 21st century truism that they are training themselves for jobs that don't yet exist. That requires them to be ready for cutting-edge technologies that will transform the knowledge base of future learning in their field. In such a world, the idea that the subject matter they're learning today will be pertinent to their careers 10 years from now seems quaint.

This is one of the most compelling reasons for professors to adopt technology in any classroom, for courses on everything from metaphysics to nursing to teaching itself. The classic skills of a liberal-arts education—analysis of evidence, argument construction, problem solving—are as important as ever. But they are no longer solely sufficient. For those skills to be useful in the job market, students need to practice applying them not just on paper, but in digital



Students today know that they are training themselves for jobs and technologies that don't yet exist. They need to be highly adaptable

environments and social networks.

Students want to be highly adaptable, by developing strong relationship skills, following industry trends and keeping at the forefront of computerized applications. These expectations align with those of their future employers, who expect graduates to be resourceful, able to communicate clearly and unafraid to seek clarification or feedback.

Professors can keep their courses relevant by targeting specific skills for development and using interactive technology to support their adoption. They can also structure their courses to provide ongoing feedback to students on their progress, including formal evaluations and peer review, all while explaining to students that their ability to receive, question and apply feedback—the very definition of adaptability—is itself a highly marketable skill.<sup>11</sup>

With technology constantly changing and evolving, it's no longer practical to train students to use specific tools. Instead, applying technology in the classroom will sharpen the highlevel competencies that make the students more employable: good communication skills, resourcefulness and the ability to collaborate, assess, provide feedback and develop a marketable digital persona.

## **FRESHEN UP THE LECTURE**

**EVERY PROFESSOR IS FAMILIAR** with what happens when he or she develops new course materials and then fails to update the content. Students engage so well in the first year, professors decide to re-use the same outline and lecture notes—only to have students engage less and less in subsequent years. The material, and its instruction, always need refreshing.

Classroom technology, when fully integrated into a course, makes this process easier. Quiz questions can become a staple of every lecture, with results available instantaneously to review and parse. Digital textbooks can embed links to related materials, and excerpts can be easily referenced in class. Student-maintained course wikis are inexpensive, easily adaptable to new developments in any field, and include their own historical record of changes. When combined, wikis and digital textbooks make expensive print textbooks seem obsolete.

But textbook-supported lecturing needs more than refreshing: it also needs trimming. In the simplest terms, classroom innovation means mixing things up. Video content, such as a news broadcast, can transport students into the world of the subject at hand. Social media can give students a window into the attitudes, exchanges and political



Classroom innovation means mixing things up with fresh, topical reference material, video content and social media case studies

movements of others beyond their scope of experience—for instance, studying the role of social media platforms like Twitter and Facebook in the Arab Spring of 2011, as Harvard's Kennedy School does.<sup>12</sup>

With these materials as part of the mix, time spent lecturing can become more focused, adding depth of understanding and guiding discussion in fertile directions. And technology can make in-class participation more accessible by allowing shy and introverted students to submit questions. Best of all, using digital technology in class, during what was once exclusively lecture time, improves student attendance, participation, retention and comprehension.

### THE FRONTLINE PROF

Class material and instruction must be constantly updated and improved to keep students engaged

### 1

Use digital textbooks and incorporate up-to-date, relevant links and reference material

### 2

Break up the lecture with video content and social media case studies

### 3

Record student presentations as part of assessment and feedback

## MINE THE DATA

#### THE BENEFITS OF INTERACTIVE

classroom technologies don't stop with their impact on student engagement. A well-designed teaching platform, implemented across subsequent years and set up to capture individual and collective student data, can bring countless benefits for professors as well, helping them target their interventions.

By funneling course work through an online learning platform, professors can track the amount of time and effort students are devoting to a course. It becomes easier to test for comprehension of key concepts, as well as for the origins of misunderstanding. Student data from previous years can provide benchmarks against which to measure the current crop's progress. The system can identify individual students who would benefit from additional instruction—and be used to deliver supplemental materials to them.

Before long, student data can be used to identify both patterns and deviations, spotting gaps in learning among individuals and groups, helping professors prepare lectures to fill those gaps, and designing exit quizzes to test learning effectiveness. It can even suggest project teams based on students' shared interests or complementary strengths. Ohio State University's Profs can use student data to spot gaps in learning and then address those gaps in future lectures



Professor Debra Barnette takes a data-driven approach to teaching her pharmacology and therapeutics classes.<sup>13</sup> She uses the Top Hat teaching platform to gain insight into overall class and individual student performance. With the system's transparent learning metrics, Barnette can connect with students who consistently struggle—sooner and on an individual basis—even in a large class. Students who excel use overall weekly class metrics to inspire playful competition.

Barnette's students are responsible for completing and reflecting upon the week's readings, so that they can participate in classroom team-based work. To enrich and support this tactic, Barnette uses the platform to assign her students interactive homework questions, which allows them to test their comprehension of the readings prior to class.

Barnette begins the lesson by taking up the answers submitted to the homework questions with the whole group, using the results to guide the day's team-based work project, answer common questions, or clarify major trends of misunderstanding. Her techenabled classroom improves student engagement with the course, but also improves her engagement with students and helps her understand how they are progressing. CONCLUSION

# THE SMARTEST PERSON IN THE ROOM

**UNIVERSITY AND COLLEGE FACULTY TODAY** are under intense pressure. Increasing enrollment has administrations demanding they teach more. Increased tuition fees have students demanding a job upon graduation. According to the Professor Pulse Survey<sup>14</sup>, 21 per cent of surveyed faculty say they've felt pressure to raise grades, while 25 per cent have felt pressure to make courses easier for students.

Neither of those strategies offers a lasting solution, because they merely contribute to the biggest dilemma in campus life today: classroom disengagement. Student bodies are in an open, quiet revolt on their laptops and smartphones, fueled by online distraction. Inflating grades or reducing workloads doesn't address the problem. And instructors can no longer just keep on lecturing, assuming that distracted students will eventually tune in and rejoin the discussion. They won't.

If online access keeps students actively distracted, professors must take active counter-measures to pull students back in and keep them engaged often employing the very same technologies that are distracting students. Audio, video, and online



If online access distracts students, profs must pull them back in and keep them engaged using the very same distracting technologies

digital materials are easier to incorporate into classroom learning than ever before. Every student has the resources to access them, and most have the rudimentary skills to create them as part of coursework. Students are already deeply engaged in social media; the behavior can be cultivated and shaped for learning. The principles of online game design can be incorporated into course structure. Targeted skills development and continuous feedback make learning more immediate and relevant.

All of these strategies can support the basic metrics of good teaching: attendance, participation, retention, comprehension, grades and teacher evaluations. Professors remain the subject matter experts in the lecture hall—but that alone won't guarantee them the room's undivided attention. By using new strategies to deliver course content, and incorporating digital technology, they'll better enjoy the signature satisfaction felt by teachers: the sharing of knowledge to curious, engaged and motivated students. THE AUTHOR



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