

Why I went digital

Hear from higher ed professionals on why they adopted digital materials

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Open doors with digital tools

Technology's evolution has presented us with an opportunity — to build a 21st-century learning space. While there are challenges to seizing this opportunity, making digital tools a part of your curriculum means opening doors for your students' lifelong education — daring them to learn.

This interactive ebook highlights individuals in the higher ed space who have done just that — used technology to open doors and increase their students' scores across the board.

Through their journeys, you'll learn how to avoid the pitfalls they faced and reap the benefits they found by bringing their classrooms into the 21st century.

Karen Gross

Karen Gross is an author, educator, and higher education consultant based in Washington, D.C. She serves on the Advisory Council of the Penn Center for MSIs at the University of Pennsylvania Graduate School of Education and works as a senior fellow at College Promise.

For more than eight years, Gross was the president of Southern Vermont College, located in Bennington, VT. From 2011 to 2013, she served as senior policy advisor to the U.S. Department of Education in Washington, D.C.

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My caution has always been, 'be careful of shiny new objects unless you know what they do and how one can use them optimally.' New is not synonymous with good. Technology can be made to work in the abstract. I am most interested in how we make it work for students... for me, technology is more than a mode of delivery.



"From 2012 to 2016, distance enrollments have grown 17.2% for students taking at least one distance education course."

Caroline Leary, "Grade Increase: Tracking Distance Education in the U.S.," Pearson, April 12, 2018

We are creatures of habit. I think change is hard. I think we like to tailor things, and we aren't comfortable doing that. I think we like control, and books seem better in that sense. I think too that most digital material is too content-heavy, as opposed to problem-based.

Did you know?

When you set the pace for progress, you set yourself up for success.

Clear and detailed schedules through RevelTM help your students know exactly what's expected of them.

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But I think the potential for technology and AI are enormous, and they call for us to rethink what and how we teach across the entire educational pipeline. We need to move out of silos within disciplines. We need co-teaching, and I think we need the educators to driving the technology, rather than the technology driving the educators.

Did you know?

Select Revel products now include the <u>IBM TM Watson Tutor</u>.

A quick in-text review provides students the benefits of an in-person tutor — like targeted feedback, motivation, and shared knowledge — minus the cost and hassle of finding one.

My advice would be to try it oneself — as a student — before one tries it as a professor. And, it is always good to learn to learn again.





Wendy Fresh & Jessica Bernards

Wendy Fresh is a mathematics instructor at Portland Community College (PCC). She has taught a wide range of classes, from Developmental Math through Calculus, both on campus and online. Before PCC, Fresh began her career in 1992, teaching high school at both rural and urban areas.

Jessica Bernards is a mathematics instructor at Portland Community College. She has taught courses from Developmental Math through Calculus, both on campus and online, and has created curriculum for all of these levels.

Additionally, Bernards is a member of AMATYC's Project ACCCESS Cohort 9 where she developed a math study skills program that is now used across the nation.

In 2017, she was the recipient of the Leila and Simon Peskoff AMATYC Award for her work with Project ACCCESS.







Wendy: I've always loved numbers. I asked for a calculator in the 3rd grade, which should have been a hint to my parents. I couldn't sleep or move on until I solved a problem, so I always felt math was very interesting. I was definitely not the smartest kid in the class, but I was the person who, behind the scenes, was always thinking about solving problems. I started out as a high school teacher.

Now I teach trigonometry and consecutive courses with Jessica Bernards at the same college. I also teach Math 60, and the people who are taking those courses (in the late 20s, 30s, 40s, and 50s) don't have a lot of love for math at this point.

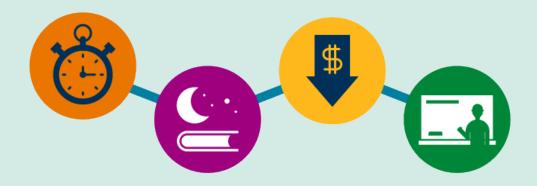
Jessica: I used to have this misconception that things like MyLab™ Math were just multiple choice questions, and that students weren't really going to learn the process that way. With math, so many of us have this misconception that you have to see every step and review every problem in order for the student to learn it. And that's not true. It took a colleague saying no, just go in and look at it for me to realize this — I was amazed how wrong I was.

Did you know?

Learning shouldn't have to stay in the classroom.

The Pearson <u>eText mobile app</u> lets your students read, study, and take notes anytime, anywhere — even offline.

I dove into it, and Wendy jumped off the cliff with me. We both had questions about the fact that this is an added cost — is it worth it for the students? We did a study over an entire year, where we taught two sections simultaneously — one class did the problems out of a print book, and another class did the exact same problems out of the MyLab Math. Everything else was the same. The pass rate was 14% higher for the class that used MyLab Math.



"Online learning has the potential to improve educational productivity by accelerating the rate of learning, taking advantage of learning time outside of school hours, reducing the cost of instructional materials, and better utilizing teacher time. These strategies can be particularly useful in rural areas where blended or online learning can help teachers and students in remote areas overcome distance."

"Use of Technology in Teaching and Learning," U.S. Department of Education

Wendy: I saw a former student from my Math 60 course in our Student Learning Center one day and said 'Hi, how are you? You must be in Math 111 by now,' and she looked at me and said 'I'm still in Math 65,' which was the next course after mine. It was her third attempt at it. After she left my class, nobody had required a digital component, and it was that digital component that had allowed her to be successful in my class.

Math builds. It's not like you can just walk in in the middle of the term and catch up in a day. For a lot of Math 60 students, they had tried to do the problems in a print textbook, didn't quite get it and moved on. Slowly, brick by brick, the house started to crumble. So, what a program like MyLab Math does, because of the instant feedback it gives them, that foundation becomes very solid. They should have no reason for moving on until they figured out what their mistake is.





"After implementation of MyLab, the percentage of students earning an A for the final course grade increased 26 percentage points (from 8% to 34%) and the percentage of students failing the course declined 13 percentage points (from 22% to 9%)."

Candace Cooney, "MyLab Accounting Educator Study," Pearson, 2018

Jessica: The key is to overcome feeling uncomfortable. You're using something that's totally not the way that you learned. But you just have to do it. Take the plunge. Even if you have hesitation, just try it. I guarantee you, it's not going to go bad.



► Watch: Creating an optimized course in MyLab Math



George Woodbury

George Woodbury has been a math professor at College of the Sequoias (COS) since 1994. Although he teaches a full range of courses, he focuses on Developmental Mathematics and Introductory Statistics.

While at COS, he has received the Golden Apple Award (awarded by students), the CMC³ Distinguished Instructor Award (awarded by his math colleagues at COS), and was nominated for Tulare County Teacher of the Year (nominated by the COS Faculty Senate).

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When I was starting to teach my online statistics course — I developed this before products like MyLab Math were even around. So delivering the content was pretty challenging, and there was such a difference between my online students and traditional students in terms of what they could do, what they understood, their performance on the final exam, that I originally thought that they were missing the in-person lecture. But I quickly realized that it wasn't the in-person lecture that was the problem; it was the way that they were seeing the material — they weren't getting a chance to engage.

The first thing I tried to do to fix that was to record classroom lectures and make them available. Back then they were on VHS, and the students would come in and check them out — it wasn't very efficient. But there was improvement, and it showed that they didn't have to be in-person. There's an advantage to the pause button.

Did you know?

Prebuilt and customizable assignments with MyLab and Mastering give you the flexibility to teach your way.

Allowing students to learn in a digital format is more productive than with traditional text. In math, so much of the importance comes from learning in real time. Students often say that when they're in class, everything makes more sense than when they go home. Math has to have audio and visual portions to it.

When students are reading an example in a textbook, they get robbed of the chance to think — when they read one line, instead of thinking about what's coming next, they see it by default. When they're watching the same example on a video, they have the opportunity to predict and anticipate what they should be doing next. That brings the best part of the traditional lecture into their homes.

But I teach in an area where there's a high level of poverty. So, we had to make sure that all students have access to the materials, not just the students who could afford it. At our college, we developed lots of computer labs across campus where students could come in and borrow a laptop for an hour or two, or work off a desktop computer.



"...most online textbooks cost about 50 to 60% less than print versions."

Matthew Lynch, "What are the benefits of digital textbooks?" The Tech Advocate, August 3, 2017

I also think it's really important, especially at the beginning of the course, to be flexible in terms of when you accept assignments — understanding that the students may not have access at the times you want them to have access. Education should be about opening doors to everyone, not closing doors to some.

I'll never forget this girl who came to class, who had never taken Algebra before. I put the first example problem up on the board, and she was just whirling away. I asked her, 'Oh, have you done this before?' And she responded, 'No, I learned it last night through the video.' When other students see that and hear that, they realize it's attainable for them as well.

Did you know?

LMS integration gives you access to all the tools you need. Connect with Blackboard Learn, Moodle, Canvas, and Brightspace with ease.

There's a misconception that you have to have a 'math brain' to succeed at math. But there's no such thing as a 'math brain.' There is, however, a wall that some students put up to convince themselves that they can't do it. But this approach lets students see that, hey, I can do this too.

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Watch: Creating personalized homework in MyMathLab

Terry Austin

Terry Austin has been a professor of biology at Temple University since 2001, and was the biology chairman for more than a decade. He currently teaches Anatomy & Physiology as well as Microbiology to students headed into Allied Health programs.

Austin holds a BS and MS in Biology from Midwestern State University with an emphasis in Mammalogy and has completed doctoral work in Neuroscience at the University of North Texas.

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The courses that I teach are the intro level, 'weeding out' courses for our nursing and dental hygiene programs. The students going through them are intending for this to be their careers. Many of the students are single parents, and they're building a career for not just themselves, but their children. So, they can get overwhelmed at times: 'my children's future is depending on me succeeding in this.'

I'm finding that the students engage a lot easier online than in the classroom. With online lab discussions, the students are sharing effective ways to study with each other. When someone's slipping, two or three of them will jump in and help them out. It's become a community of learning instead of a single individual trying to battle the material.

Did you know?

Note-taking, highlighting, and a glossary on the go means studying has never been easier. With <u>Revel</u>, your students can study at their own pace.

There's a delusion in the academic world that the current generation of students are completely tech savvy. They kind of are, but getting into a course and using the resources available in an academic setting is not a place of comfort for a whole lot of them.

Did you know?

Classroom stats let you see the forest for the trees.

Revel shows you whether students grades are declining or improving, so you can help your students in meaningful ways.

The key to teaching students online, I think, is 'little bites.' You don't need to build an entire, fully blown-out course, because that can be overwhelming. Start with little pieces, maybe pick a couple of chapters of a single kind of assignment. Once you and your students have gotten used to that assignment, add a piece in. And when that works, add another. In a semester or two, you'll have a robust course. Treat this like your students will be treating it — take little bites. From there, grow and progress.



Watch: Rethinking lecture styles for the virtual classroom

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Sam Sommers & Lisa Shin

Samuel Sommers is a social psychologist and professor of psychology at Tufts University. Since 2011, he's been a fellow at the Society for the Psychological Study of Social Issues (SPSSI). Sommers has received the Gerald R. Gill Professor of the Year Award from Tufts in 2009 and the Saleem Shah Award for Early Career Excellence from the American Psychology-Law Society in 2008.

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Lisa Shin is professor and chair of the Department of Psychology at Tufts University, and has been on the faculty there since 1998. Her research involves examining brain function and cognitive processing in patients with anxiety disorders, especially post-traumatic stress disorder (PTSD).







Sam: Lisa and I team teach Psych 1 together. We try to use digital materials to not replace what's gone on in the classrooms — we want our students to still be engaged in the classes and not be on their computers — but outside the class is where we try to enhance our teaching experience. It allows our students to share journal prompts and shared writing assignments. It allows us to have, embedded into the text, video reenactments of famous psychology experiments, so they can see for themselves how these studies actually looked.

Did you know?

Revel keeps your students engaged with videos, interactives, and assessments worked seamlessly into your lesson.

There's a clip of a study that I always used to show in my social psych class — the Solomon Asch Conformity Study — involving people making judgments about the lengths of lines. The video is 50 years old, black and white, with all white men. With our current ebook, we have a contemporary reenactment of the study, modernized, with both men and women. It looks like today.



"Students scoring at or above the median <u>Revel</u> score earned significantly higher final course scores than students who scored below the median <u>Revel</u> score."

"Revel Educator Study," Clemson University, 2017



"Average exam scores and final grades were significantly higher when <u>Revel</u> was required for 13% of the overall course grade than when Revel was not required."

"Revel Educator Study," Clemson University, 2017

I think it's much easier to get our students to engage with these studies about human nature when they're seeing something that looks familiar, and they're getting it embedded into their actual textbook.

Lisa: There's a slow evolution most instructors have seen. Students have been increasingly getting more and more of their content online. Professors too have been getting more of their news and organizing their lessons online.

What we've found, rolling out the Revel platform in our classes, is that students initially express some wariness before using an eText. But as the semester rolls along, they become more enthusiastic about using that technology.

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Watch: Using technology to boost psychology students' engagement & accessibility



Reimagining how you teach sometimes means taking risks and daring to change. Throwing away the traditional lesson plan can be daunting. Pearson's digital tools take the guesswork out of bringing technology into your classroom. They give students the freedom to confront difficult material at their own pace. Allowing educators to drive the instruction via technology encourages better results for every learner.

Find out more ways digital learning can revolutionize the way your students learn.

