MAGNA ONLINE SEMINARS

Transcript

Universal Design for Learning: How to Improve Satisfaction and Retention for Students at All Learning Levels

Presented by:
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Editor's note:

This is a written transcript of an audio recording. Our policy is to edit only the occasional unintelligible phrase. Everything else appears exactly as it was spoken.

Magna Online Seminar   **Universal Design for Learning—How to Improve Satisfaction and** 1 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

Hello and welcome to "Universal Design for Learning—How to Improve Satisfaction and Retention for Students at All Learning Levels," co-sponsored by Magna Publications and *Academic Leader* newsletter. I'm Chris Hill and I'll be the moderator today.

And now I'm pleased to introduce today's presenter. Thomas J. Tobin spent five years as the coordinator of learning technologies in the Center for Teaching and Learning at Northeastern Illinois University in Chicago. Tom's work focuses on using technology to extend the reach of higher education beyond its traditional audience. He advocates for the educational rights of people with disabilities and people from disadvantaged backgrounds. He is currently writing a book*, Reach Everyone Teach Everyone—Reframing Universal Design for Learning in Higher Education*. Welcome, Tom Tobin.

Thank you very much, Chris. And thank you very much to Magna for having me present this seminar for everybody.

Welcome, everybody. We've got a good mix of campus leaders and operation level staff. My promise to you is you'll leave our session today with actions you can take tomorrow in order to be able to increase retention and satisfaction among your students by utilizing the mindset that is universal design for learning.

We're going to be interactive today. So make sure that you have a piece of paper and a pen, because we're going to want you to play along as we go through and answer some questions. So here's that promise that I wanted to start out with. You will definitely come back to your institution knowing how and why universal design for learning helps with core mission values and metrics.

So a little thought exercise to get us started. This is Katie. Katie was a student at my institution, at Northeastern Illinois University. And I got to know Katie from a little bit of an unorthodox way. I worked at our Center for Teaching and Learning. And a faculty member came to me a couple of years ago and said, you know, I have a student whom I know is cheating but I can't tell how.

And I said to the faculty member, well, have you run Katie's work through the usual plagiarism checking software that we have a license for? And the faculty member said, well, yes, of course, I ran it through Turnitin and it came back completely original. So I used that method already.

I said to the faculty member, well, have you just taken some of the phrases from Katie's paper and run them through your favorite search engine? And the faculty member told me, well, yes, of course, you've taught us that, that you can just go Google fishing and see if something comes up. And I can't find any matches there either. And the faculty member said, before you ask me, I also showed Katie's work around to everybody in the department and asked if it sounded like any of the scholars whom we teach or the articles that we ask students to read.

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 2 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

And I said, well, so what's actually the challenge here? And the faculty member told me that Katie had been doing kind of C level, D level work in his course and then suddenly on the latest paper that he had asked Katie to put in, well, she had done A level work. It was splendid, fantastic stuff. And he said people don't just come into the education program and they're doing poorly and then suddenly they're superstars. So I said to the faculty member, sure, I'll help you out.

Now in the back of my mind, a little voice is talking to me. And the little voice says, hey, if this faculty member couldn't figure out how this student was plagiarizing and you figure it out, maybe she's figured out a new way to cheat. And if you find out how to counter that, whoa. You'll be famous, you'll get an article published, and things will go well for that. But what I actually said to the faculty member was, sure, I'll help you.

Now what is the first thing that I did? I called Katie. The best way to go about working on academic integrity is to get a sense from the student about what actually happened. So I called Katie up and I said, Hi, Katie, my name is Tom. I work with faculty members on improving their classes here at our institution. And your faculty member pointed out one of your recent papers in his education course as an example of really good work. I'd like to know how you put that together.

And Katie told me a very different story. She said that ever since she was a little girl, she had wanted to be a teacher. And as she went through her K through 12 schooling, she got good marks, she moved into college prep. And then when she got into college, her freshman year and sophomore year, they went all right but her grades started to slip. She started having problems with time management. She started having challenges just understanding what the professors were asking her to do.

And by the time she was a junior and ended up in the course for which the faculty member had contacted me, she was on academic probation. She was earning D's and F's and she wasn't really sure what was going on. In fact, one of her professors, Katie told me, had taken her aside quietly and said maybe this degree isn't for you. You might want to look at your options. You might want to see whether it might be a good idea to drop out of the university.

Now Katie was just about in tears, because this was the only thing that she had ever wanted to do, was to be a teacher. And so, in desperation, she contacted my colleagues in our learning support center, our writing center. And when the folks at the writing center sat down with Katie, they said, "OK, Katie, here's an assignment from your professor. And here's a keyboard, and a mouse, and a screen. Just type out your ideas about how you would respond to this."

Well, what was in Katie's brain didn't really come out her fingers when she tried to type it in. And when the folks at the learning support center said, "OK, Katie, here's that same assignment from your professor. Here's a piece of paper and a pen. Just write down what you want to say."

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 3 *of 22*
Retention for Students at All Learning Levels

Thomas Tobin, PhD

And the same thing happened. Katie had ideas, but they didn't really come out the right way when she tried to write them down.

Now, my colleagues at the learning support center are not trained psychologists, psychiatrists, diagnosticians of any stripe. But when they sat down with Katie and they said, "all right, well, Katie, let's just read through the assignment together out loud and then you just tell us what you would do," Katie was able to say how she would respond. She was using details, evidence, and examples.

And so without necessarily being trained mental health providers, my colleagues in the learning support center figured out that they could hook Katie up with a piece of software. Many of you know this one. It's called Dragon NaturallySpeaking. After about 45 minutes of training the software to recognize Katie's voice and her cadences, she could put on a headset and she could speak into the microphone. And what she said would be transmitted into a Microsoft Word document.

And so contrary to what the faculty member thought, Katie was not cheating, but she had figured out that there was a way around one of the challenges that she had. And the improvement in her work was so great that her faculty member thought she was cheating.

Now you're probably thinking, "that's a really inspiring story, that now Katie has gotten her problem in hand." And I have to say, it is an inspiring story. Katie is now a fifth grade social studies teacher in the Schaumburg school districts here outside Chicago. And she likes what she does. And I felt honored to play even a small part in Katie's story.

But I also have to apologize to all of you here on this seminar. Because this is how most presentations on universal design for learning start. People will talk about an inspiring story of someone overcoming a barrier or a challenge and then we're expected to take the lesson away from that, and generalize it to our campuses, and see if we can draw lessons for everybody.

Well, I have to say what happened for Katie is actually the opposite end of the telescope. We are looking at one person in Katie when we should be trying to design the interactions that we have with our learners so that we're reaching out to everybody and making things easier for everyone—not just individual accommodations for one person like Katie, but designing the interactions that we have so that people have flexibility and choice. And those are the two things that we have 30 years of data that tell us that those things increase student retention and student satisfaction.

So as a thought experiment, think for yourself, when's the last time one of your colleagues who's a leader on your campus said any of these words? So things like retention, student persistence— are the students who are there on day 1 still there to take the final examination. Time to degree— how many of us who teach in two year colleges, how many of our students actually graduate

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 4 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

with an associate's degree in two years? At four year institutions, how many of our undergraduates actually walk across that stage after four years? And so on and so on.

Satisfaction. Are students feeling that they get value out of the time, and money, and energy that they're spending at our institutions? And the one that I love the best, grit—are our students up to the challenge of time management, taking on responsibilities for their learning and also for their family responsibilities, work responsibilities. We have active duty military learners. People have an overloaded plate these days and oftentimes.

So how do we actually start thinking about universal design for learning and how do we either talk to our fellow campus leaders? Or, if you're in an operations level role at your campus, how do you talk to your campus leaders in order to help convince them that this is a mindset worth adopting?

Because most people, when we say universal design for learning, they think about students with disabilities. I want to make the overall argument that universal design for learning—and we'll talk about what that actually means in a second—but first I want to say that it means access no matter what the reason.

So whether you have a student who is in a wheelchair, a student with a visual disability, a student with hearing loss, or you have a student with a mobile phone, or an odd work schedule, or who is deployed overseas temporarily in military service, I take the end of the word "accessibility" off and just talk about access. And that's what we're really talking about.

We're not talking about doing a bunch of work that benefits only a small percentage of our learners—those people with disabilities. We're actually talking about doing the work so that everyone benefits and everyone has improved access, like this law student who's outside the library and checking in on his online course on his mobile phone at 11 o'clock at night.

One of the areas that you'll want to know about is the Center for Applied Special Technology, or CAST. They're a unit out of Boston. And they are the neuroscientists who have shown why universal design for learning actually works.

And Sam Johnston, she is one of those neuroscientists—I talked with her a couple of years ago. And she said something that really stuck with me. And she said, we want a situation that's good for everybody. It's thinking about what has to happen at the level of design that makes accommodation less necessary.

And that's the reason that I apologize to you for telling you Katie's story upfront. Katie's story is the story of one person and the institution making changes that benefit just that one person.

Now, we often have disability services areas on our campuses that do exactly that. And so what I want to show you is how can we engage the rest of the campus, the rest of the institutional

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 5 *of 22*
Retention for Students at All Learning Levels

Thomas Tobin, PhD

community in order to do design changes that are easy to do—you can implement them quickly—and which will have an impact for giving people greater ranges of choices.

Now those of you who know me know that I'm a big Star Wars fan. So you'll probably see a theme as we go along. And for those of you who know that Greedo shot first, I'm in your camp here.

But from the original Star Wars movie, Han Solo—the pirate and smuggler who owns the Millennium Falcon—he always has a quote in every movie in which he appears. He just says, "I got a bad feeling about this." And here's one of the reasons why.

On our campuses in North America—in the United States and Canada, particularly—that research shows us that just about 10% of faculty members have adopted some kind of universal design for learning strategies. And it's this—emotions. So if Han Solo has that bad feeling about it—when I say universal design for learning, most faculty members, most administrators, most leaders think about students with disabilities.

And what's our experience of working with students with disabilities? Well, as faculty members, many faculty members think about the student who comes to them at the end of the second week of class with a piece of paper from the disability services office that says give this student time and a half on the test and give this students somebody to sit in the room while the test is taking place so that if the student has questions, that person can read things aloud from the screen, or other kinds of accommodations. And typically, even if the faculty member responds by saying, yes, I'll do that, OK, it brings up negative emotions.

Now in some cases, it can be anger, as in—I don't know if this student is just trying to get an advantage over other students or it's not fair to the other students to give one student a perceived advantage. It can be confusion—where do I start, whom do I call. It can be frustration—because I thought I had, as a faculty member, all of my work and prep done, but now here comes this student giving me more to do, and at the last second as well, because those pieces of paper never come in on time.

So if you're thinking about the emotional valence—what the neuropsychologists calls *valence*, which is the emotional coloring of a situation or a term—when we say universal design for learning, oftentimes people on our campuses will think about accommodations like Katie instead of a broad design strategy.

And so here is where we have to follow Obi-Wan Kenobi when he says, "Luke, trust your feelings." And in order to trust those feelings, we have to release your anger, as Darth Vader says. So let's get beyond the emotions here and let's start thinking about universal design for learning in a way that doesn't trigger those negative emotions for faculty members and other people who work on our campuses.

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 6 *of 22*
Retention for Students at All Learning Levels

Thomas Tobin, PhD

So as Yoda says, "no different, only different in your mind." You must unlearn what you have learned. And so this entire webinar is predicated on the idea that we're going to reframe universal design for learning.

Let's actually get into what it is briefly. And then I'll share with you some thoughts on how to implement it on your campus. And that's where we're going to get interactive.

So from the Star Wars movies, Princess Leia had some plans for the Death Star. And she was interrupted in delivering those plans by Darth Vader. And so she put the plans on what in 1974 curiously looked like a compact disk, into the Droid R2-D2. And she says, "I have placed information vital to the survival of the rebellion into the memory systems of this R2 unit." And she sends the droid off into the ether. And buy a series of happy coincidences, R2-D2 and C-3PO end up on the planet where Obi-Wan Kenobi happens to be the recipient of the message.

Now many of you out there are thinking, yes, that's called The Force. And I'll say that's just poor scriptwriting, actually. But I'm a critic and I'm a fan, so I hope I can be critical about that.

Now if Princess Leia can put information into her droid and send that information out there into the world, I can also reach into my pocket and pull out my droid phone and think about it in the same way. So think about the students at your campus, your institution. How many of them have a smartphone, a phone that has web capability and a data plan?

If you're following along with the latest Pearson survey of college students in North America, it's close to 86% of all of our students have a smartphone. If you move down the socioeconomic ladder, that percentage grows. And for folks at the very bottom of the economic ladder, it's more like 94% of college students have a smartphone.

And that makes sense, because if the choice is between buying a desktop PC for your home or buying phones for your family, the phones are going to win every time. They do more for your life, they allow you to keep in touch, and they allow you to keep connected to the wider world more easily.

And so if almost all of our students have smartphones, it makes sense for us to design the interactions that we have with our students so that our students with the smartphones can gain access to them. And this is why universal design for learning is such a powerful concept on campus. Because if we can give the active duty military learner, this single mother with two kids, the person on the sports team who's going to an away game on the bus, if we can give those students just 20 more minutes, 40 more minutes for studying during the day that they didn't have before, that is the difference between I'm struggling and I'm keeping up.

So here's a good place to ask a quick question. Then we'll highlight a few of the responses that come in. How can our campuses connect to students who are on their mobile devices? So what's

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 7 *of 22*
Retention for Students at All Learning Levels

Thomas Tobin, PhD

one strategy where we could adopt—or even replace—supplementing face-to-face teaching and student services?

So take a minute and think, are you doing something like this already on your campuses? Are you doing mobile outreach? Or what's one way that your faculty members, or your folks in your registrar's office, or in your financial aid office, or your accounts payable office could do outreach to students on their mobile devices?

So here from Brescia University, online tutoring with the use of digitizers and Adobe Connect. Absolutely. So our tutoring services don't have to be place-based anymore. We've got ask questions on students' phones. So give students information directly if you have their mobile numbers. Provide materials on the LMS so students can gain access anytime anyplace. Giving students 24/7 access even to your face-to-face course materials means that they have better access for studying. That's fantastic.

And let's see—mobile notifications. So if you have students' mobile numbers, being able to push out information to them by text message. Having a university mobile app, that's a big one. Making online workshops mobile-friendly. And I'll talk a little bit about that some more, so thank you University of Minnesota for that.

And Northern Arizona is naming some specific software, like Kahoot, so that there's a platform that everybody logs into and you can have a conversation and quizzing. And security alerts. And how about academic ones? So good one from University of Oregon. So we do send out alerts when there's bad weather across campus or something bad has happened. We could also send out alerts using that same system.

And asking people to create discussion groups. The library, they are always the folks on our campus who are usually out front on this. Librarians, typically they've had reference services available remotely for 10, 15 years now.

And a couple more specific pieces of information here. Some people using Top Hat, EDpuzzle, Blackboard mobile, Snapchatting homework reminders and video, online academic advisers doing student advisement through the phone or Skype. So being able to reach out to students where they are and when they are. So fantastic suggestions here.

And you'll see, as we look through here, there's a common thread, and it is that the electronic tools—like somebody just mentioned using remind.com so that students don't necessarily need to see your mobile number or you see theirs—using these electronic tools to supplement or replace face-to-face teaching or student services give students a choice in how they interact. It doesn't replace the face-to-face interactions that we have.

So for example, somebody mentioned tutoring. It doesn't mean that our tutoring center closes down face-to-face and we hire people only to sit there with a headset on in front of their screens

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 8 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

and wait for people to request tutoring. No, we still have face-to-face tutoring. And the fact that we're offering students the choice—they can come in to do face-to-face tutoring or they can do remote tutoring.

One of the studies from a couple of universities in Canada from over the past three years have found that the majority of people who are getting access to their online tutoring services are people who are living on campus, the people who are in the dorms, your students who are very close to campus. And they're electing to use those remote tutoring services out of convenience. And so just offering the choice increases retention and increases satisfaction with all of the services that we're talking about. So you folks are on a good path here.

Let's dive in a little deeper. If you've seen the latest Star Wars movie—and I'm excited for the next one to come out—but the latest one, Han Solo says, "it's true, all of it is true." And he's talking about The Force.

And what we're talking about is when the folks at CAST—the Center for Applied Special Technology—they figured out that there are three different brain networks that are stimulated when we do universal design for learning well. And it's all about giving students more than one way to stay engaged. So if you're reaching out to learners and giving them the way to go message, do that as text and do that as a quick video or a quick audio. Give students mileposts for here's what you should have done by now, here's what you should be doing, and here's what's coming up, and here's those things are connected. And do that in multiple ways.

Also, give students information in more than one way. We know that the law in the United States requires us to take any multimedia that's on a publicly facing website and have captions or a transcript for that. That impulse also helps when we're behind a username and a login in our course environment or in the interactions that we have with students with our student services area. So if we're giving students information as a chart, we should also give it to them as plain text. If we're giving welcome video to the dormitories or the housing units on campus, we should also have a text version of that.

And also giving multiple ways for people to take action—and this is one that a lot of us have some opportunity on—so that if we're asking our students to write the traditional three page essay, we might also want to give them the option to create a three to five minute video. Again, think of your students with their mobile phones. Everybody's got a camera now. So turn that selfie camera on and let them do something good with it that is course-related, or related to their studies, or related to the interactions they have with our student services areas.

So when we think about CAST and universal design for learning, this is the heart of what they say UDL is—multiple ways of keeping people engaged, multiple ways of giving information to people, and multiple ways of allowing people to demonstrate their skills.

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and*9 *of 22*
Retention for Students at All Learning Levels

Thomas Tobin, PhD

I'll suggest that we can simplify this even further. I want to put it in your mind as a campus leader that when you talk to other campus leaders and you talk to your faculty members and your staff that you simplify it down and just say universal design for learning is really just plus 1 thinking.

And when I say plus 1 thinking, that's all about if you have content in a particular medium, give it to people one more way. If you make people move through a process in one fashion, give them one more choice for how they do that. If you are asking people to demonstrate something to you, give them just one more way to do that.

What this does is this reduces the amount of panic and work that we have to do. And it also reduces the frustration that faculty members sometimes feel. They'll say, well, I've been on the bleeding edge of things. I've put 86 different two minute videos into my course. Are you telling me I have to caption all 86 of those right now? That's a lot of work. And that faculty member will enter into analysis paralysis and won't do anything. So if you start thinking about where you can start, that's the key here. So plus 1 thinking.

Let me share five strategies for starting universal design for learning at your institution. As we go through, I'm going to ask for you to do a little thinking about how at your institution particularly you might implement each of these five strategies. So these are good places to start.

The first strategy is start with text. Give yourself a little pat on the shoulder, because this one is the one that most of us are already doing. If you think about our student service areas on campus, they probably already have text-based content that they're sharing with students on their websites or handing them out in person.

And so starting with text means that if a faculty member has some lecture notes that are all text-based, then it's easy for that faculty member then to turn around and use that as a basis for creating a quick audio version of part of it or doing a video that is exactly the same words but the faculty member demonstrating the process, or the content, or the like.

So starting with text is the first strategy. And if you're already doing something like this, here's what you ask your faculty and staff members—can they list any current text-based elements of an existing student interaction. And that's all universal design for learning is, is a way of expanding the interactions that students have with materials, with each other, with faculty members, with staff members, and with the wider world.

So take a second and what are one or two of the text-based elements that go into existing interaction that your students have with people at your institution? You can think about faculty members, you can think about staff members, you can think about different areas who serves students directly or indirectly.

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 10 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

So we've got a couple of folks typing in. The syllabus is a great place to start. And we'll talk a little bit about doing accessible syllabi in a couple of seconds here. Emails, discussion forums, case studies in the classroom.

Emails from anybody. If your email goes out from your provost, or your chancellor, or your president, just providing the content of that email in a different format can be really huge for students who are on their mobile devices. You're going to have some students who want to watch your provost giving a welcome to the semester for two minutes. And some students are going to be on a 3g connection while they're on the bus on the way to that away softball game and they're going to read the text version of it. So, splendid there.

Interactions in the learning management system, Dropboxes, course websites, directions for exams, directions for assignments—these are all great examples that we're getting in our conversation here.

I also want to challenge you to move beyond thinking about the text just in terms of inside courses. Think about at your institution where are the places where students offer the most complaints that they can't get something done or they don't understand a process.

If you think about where students always have trouble—you have a particular process that you have to go through for students to be able to register for classes and it involves four separate steps, let's say—that's a great place to start doing universal design for learning. You have perhaps those four pieces of the process already in a text file.

And then when you create a little screencast video that just says the exact same thing as in the text but shows students click by click how to navigate through the system to take part in those four steps and then they'll have their classes assigned, you're going to cut down on the number of complaints, the number of questions, and you're going to increase student satisfaction and retention as well.

Because if students feel that they are supported through the processes of getting from one class to the next, they're much more likely to see that their classes are satisfying and worth the money as well. So we've got lots of research that tells us that. So fantastic discussion on this one so far.

Strategy one was start with text. Strategy number two is make some alternatives. Here we see a chemistry professor in her lab. And she is on her computer. And on the computer screen is the text of an article that she has published just recently in a prestigious journal. She has two of her student workers in the chemistry lab with her.

And the first gentleman here is giving a thumbs-up because we can see that the PDF of that article, we can take that out and share that in a lot of different ways. We can share it as a text file. If it is a real PDF—by which I mean you can actually select the words inside it, you can click and drag—then that's something that a screen reader can read and it's something that we can turn

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and*11 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

into a plain text file very easily as well. So this student worker is giving the thumbs-up that we're going to have that as an output of this little interaction that the students are having with the chemistry professor.

The second student worker who's in the room has a video camera. And he's taking video of the chemistry professor talking about the article that she has just published in a prestigious chemistry journal. And on the back of his camera, we have an image of a still camera. Because this student worker knows that not only with the video, we can also create a study guide or a synopsis that has still images from the video and then some text that go along with it.

One of the things that is really powerful is being able to take something that was moving—like a video—and turned it into a series of snapshots. What that does is it reduces the cognitive load. By watching a video, we don't always know where the important information is going to come, so we scan everywhere in the video. It's one of the reasons why some people see inconsistencies in movies.

So for example, Bruce Willis is in Die Hard and he's supposed to be in New York City. And he goes to a telephone and he picks up a Pacific Bell telephone. Well, that's an inconsistency in the movie. But not everybody spots that, because we don't know to look in the background for those kind of things.

By reducing the cognitive load, by turning video information into a series of still images, we provide students with the video and with the study guide—or the shorter version. And so students can choose which one they prefer to use or both. So making alternatives, that's the heart of plus 1 thinking.

So strategy two is making alternatives. So when you ask your faculty members and staff members to think about and do based on what they talked about in terms of their list of text-only elements, what alternative formats do you have or could you create?

Now while you're thinking about it, also if we thought about where do students always have complaints or questions, think here about where students always get things wrong. If we're in a course environment, where do students always get things wrong on tests or quizzes? But also where do students always go a different way in the processes that we've already set up for them, such as with financial aid? Where do students always drop the ball or not understand how to get from one step to the next?

So we're talking about things like animated explainers. And you can use avatar programs to create little cartoon versions of things or Flipgrid videos as alternatives to text discussions.

And a number of other people are keying things in. So Lightboard videos—so the update of the traditional whiteboard is having somebody writing on a clear pane of glass that's lit from below so people can look at that. Recording lectures and posting them in the learning management

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 12 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

system after the class. A couple other folks are talking about podcasting, doing audio recordings that have a text transcript along with them. So that's a splendid idea.

And a lot of people are coming on to audio recordings here. And that's actually a very powerful thing to think about when we're talking about alternatives. If you have something that's already text, one of the easiest ways to do plus 1 thinking about that content is not to create a great big series of videos, it's to just turn on the audio recorder on your phone, and talk into your phone, create an audio recording, and then just upload that audio right into your learning management system or upload it onto the web page for your support area. This is something you campus leaders can really get behind because it doesn't take a lot of extra time, a lot of extra resources, or a big learning curve to figure out how to do it.

Someone's also mentioning things like designated note-takers in class. I'll actually call that one out here—and posting the notes from various note-takers after class—that's typically seen as an accommodation for one person in the class and that person has someone doing note-taking. But we're starting to see the research on how having a note-taker without anyone requesting it and then having that person post his or her notes—or even better, having a rotating role of note-taker for the class—frees up cognitive space for other people in class.

So that's actually one way that we can do plus 1 thinking without using technology. It's something that we can easily share around and have somebody paying attention in a face-to-face class for note-taking while other people are rolling through.

And somebody is asking why would it be an accommodation for just one person? Students hear various things. By having various notes, students get more. And you're absolutely right on that one. And research is showing us that even if we don't have somebody who's making an accommodation request in the classroom that having a note-taker is a wonderful way to do some plus 1 thinking. Because students get the experience of the conversation in class and then they have that plus 1 version in the notes that the note-taker gave. So excellent conversation on that.

If strategy one was start with text and strategy two was make some alternatives, here's one that we're not usually particularly involved in. And this is, I think, the most powerful one—let them do it their way.

These little blue bars in the middle of your screen, these are equals signs. And you see three images here. One of them is a traditional paper. The title here is *The Effect of Chocolate and Cocoa Flavonoids on Plasma Lipids and Lipoproteins Associated with Cardiovascular Disease*. And in plain English, that is dark chocolate is good for your heart health.

Now if I'm a professor in class, I could ask my students to give me 40 three page papers. And by the time I'm grading paper number 25 out of those 40, I'm wondering if my university has a policy on whether I can keep a chocolate muffin and a bottle of scotch in my desk drawer.

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 13 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

But by giving students a choice as to how they do assignments—so if these students could choose to do that three page paper, or a three to five minute audio podcast, or to turn the selfie camera on their phone on themselves and report as though they were a television reporter—as long as the students are submitting their work and meeting the same objectives for the assignment, then they're able to do what they need to do and this professor can grade them in the same way.

This is the part of giving students choice that really moves the needle on retention and satisfaction. So you campus leaders out there, if you implement anything first, this is probably a good way to go. Because unless the assignment is the format.

So for example, I teach business writing courses and we still teach people how to do memos. You all remember memos, right? One inch margins, Times New Roman, 10-point font, date, to, from, subject, don't put a greeting, get right to the point, end with a request for action, and don't sign it at the end—memos. Now how can I tell if someone has double spaced and Times New Roman 10-point font in an audio podcast? Well, I can't. So in that case, I wouldn't give students a choice about how they create the final product.

But in terms of giving students choices on the drafts, heck yes I want them to do a podcast about what their resources look like or something like that. And as long as I'm giving students at least one choice—you can do it as a Word document or you can do it as a podcast—just that plus 1 choice means that students are much more likely to choose the way that's going to be most successful for them.

So as we're thinking about let them do it their way, here's what you ask your faculty members and your staff members—well, what interactions do you already, or could you, offer your learners choices about how they complete them. Think about your student services areas as well as your faculty services area. So think about your courses but also think about how folks in the registrar, or accounts payable, or your tutoring center could offer students choices about how they go through processes.

And so here's a piece of feedback. Somebody has already put in perhaps part of the assignment might be a required script to show writing but then finish with a choice of media. Absolutely. So where your assignment requires students to do things in one way, then limit them to that one way. But where they don't, offer them those kinds of choices.

There's verbal versus written exams. That might work out pretty well in certain subjects. And so if you have your students able to demonstrate their skills by just talking it out to you, and then recording that, and sending in the recording, that would work. If the assignment measures concepts, either one could work. Absolutely. And even assignments that measure concrete skills work out pretty well here. So it's either type up your lab report for your biology lab or record your lab partner doing the experiment, and showing the results, and then talking about how that happened, and then turn the camera on each other as well.

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 14 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

As you see, you're starting to hear some common themes here that as we give students choices about how they interact, they'll take those choices. And the flipside of that is also true. Here's somebody talking about mind mapping, where students are asked to demonstrate knowledge of experiments—a written paper, or a video. So while I was saying, you were typing. We had the same idea. Splendid.

So you'll hear a theme here. And the other benefit that you get from adopting this strategy of let them do it their way is that you'll have fewer students who need to ask for special treatment, who need to ask for the accommodation. Because you're already designing the interactions in a way that students can choose. So, splendid. So you've got complete assignments in pairs or alone, engage in real-world assignments to produce something that can apply in their world, allow the choice of the topic. These are all good ways to go.

So if that first strategy was start with text, if the second one was make some alternatives, and this third one was let them do it their way, the fourth strategy is go step by step. And this is something that a number of you campus leaders have been asking for for a long time. Here's the ammunition for actually making it work.

So if a faculty member posts up a one hour lecture-captured video from face-to-face course and says, anybody who missed class, just watch this video and you'll be caught up, what percentage of students do you think are going to watch that whole 60-minute video? If you answered zero, you are correct. No one will make it through a full 60-minute video in one sitting.

In fact, what percentage of students will make it through half of that and make it to 30 minutes? Well, that's just about 10% or 15% of the students according to the research. And it gets higher as we go down, and down, and down. And the time length when 100% of your students will watch the whole video hovers between five minutes and seven minutes.

So the way to go in thinking about the interactions that you have with your learners to think about how I went through driver's education. If you took driver's education to learn how to drive a car, they may have told you to put your hands at 10 o'clock and 2 o'clock on the steering wheel.

Now these days they, tell the 14- and 15-year-olds who are in drivers ed to put their hands at 9 o'clock and 3 o'clock. And that change is because of airbags. If you have your hands up high on the steering wheel and the airbag deploys, it'll push your hands right into your forehead, you'll give yourself a concussion, and knock yourself out. If you have your hands on the sides of the steering wheel and the airbag deploys, it just pushes your arms out to the sides, maybe you get a bruise. So there is your driver safety tip for when we're done with the webinar.

So why am I talking about "10 and 2" and driver's education? Well, "10 and 2" is also a good way to remember how to chunk up information. Give people information for no more than 10 minutes and then spend at least two minutes asking them to take some kind of action. So you see

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 15 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

on the screen here—watch a three-minute video, and then read a case study, and then do something, post your case study response in the learning management system to our discussion. After that, go read a scholarly article, and watch another video, and then go find an example out on the internet as part of a scavenger hunt.

So as you're designing the interactions that your students have even for student services, this is important. Even when you're talking about something like a tutoring center or you're talking about registration processes, don't just give information and give information. Have some information about how to register. And then after about 10 minutes worth of reading or seeing, ask the people who are on your website to take a quick quiz and see if they remember what they just read.

Just the act of stopping to read the quiz actually cements that information better in their mind. And this really helps after you've already implemented starting with text, making alternatives, letting them do it their way.

So where in your interactions could your learners chunk up their attention using that 10 and 2 principle? Remember that 10 and 2 is not a hard and fast rule. It's more like, as they say in the Pirates of the Caribbean movies, it's more a set of guidelines. And so if you have some information for five minutes and then a one minute interaction where students have to do something or take an action, that's all right too.

And we have some people keying in here. So talking about during face-to-face classes using that 10 and 2 principle.

By the way, you'll notice we're actually doing that here too. I'm giving you a little bit of information and then allowing you to do some reflection, some action—writing something down, or keying something in, or at least writing down on pen and paper your ideas and processes.

And in languages, it's not a choice, it's a way of life. Yeah, absolutely. Those of us who teach foreign language courses know that that's the route to success, is give information and then have practice.

And a couple other folks are keying things in like in our learning management system we ask students to come back and get away from the screen, lecture for 10 then a couple of questions for a quiz. Let's see, here's some more. Review a quick situation relevant to the topic in discussion. If by review you mean review by the students, yes absolutely. Give introduction to a topic and have a student go out and find another resource to share with no repeats—so you can't do what other students have done.

By the way, let them do it their way. If they find a resource that's an article in a database in your library, also say fair game is your library database that has video content in it as well. Doing things like think-pair-share, collaborative assignments, discussions, those kinds of things.

Magna Online Seminar   ***Universal Design for Learning—How to Improve Satisfaction and*** 16 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

You can also tell that universal design for learning is not a series of specific tasks or processes—and you guys are all giving really good processes and tasks—but it's really a mindset about that plus 1 thinking.

Someone just wrote in—you can have short videos reviewed outside of class and come to class ready to discuss or have learners create questions for other learners. Splendid.

The last strategy. If strategy number one was start with text, then it was create some alternatives, let them do it their way, and go step by step, the fifth strategy, somebody already mentioned this one—set content free. And so for those of you under the age of 20, that is a clock. It has two sticks on it that help you to tell the time. And that's where the 10 and 2 comes in.

But we want to set content free from the clock. Even if you have face-to-face courses at your institution or your registrar's office is open only Monday through Friday until 5: 00 p.m., you want students to be able to get to the information they need and have the interactions they need, regardless of when they can do it. Think of the single mother who has to put her kids to bed at 10 o'clock at night but still wants to watch the videos for a course. If there are captions for those videos, she can turn the sound off and she's got 20 more minutes in the day for studying that she didn't have before.

Also, set content free from format. And this is something you can do tomorrow. If your faculty members or your student service areas have content that's in video format or they have a PowerPoint presentation, take that thing that is in a particular piece of software—so if you have on a registrar's website here's a PowerPoint that outlines our process, have those folks take that PowerPoint, put it on their screen, and record it using screen recording software like Screencast-O-Matic, or Jing, or Camtasia, and then post that video up on YouTube.

What you've just done is you've allowed your students with mobile phones to be able to better gain access to that content and information. Because they might not have PowerPoint installed on their phone, but they definitely have a video player. So if you can set content free from the need to use a specific piece of software, all the better on that one.

Let's take a couple of seconds. And here is the last question to ask you. What concepts in those interactions could your campus share by creating format-agnostic content?

Think about all of the kinds of information that you share with students or they share with you that has to take place in a certain format or a certain piece of software. I'm thinking about my math professors who use LaTeX, or who use Maple or SPSS for statistics. It's a specific piece of software, it costs a couple hundred bucks. And so if you want your students to see an example of that software in action, don't give them a Maple or SPSS file. Give them a video of you as the professor doing the work in Maple or SPSS, so they can follow along even if they don't have the software on the device that they're working on right now.

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 17 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

And somebody's mentioned here Just-in-Time Teaching. Remember those five pieces, though— start with text, make alternatives, let them do it their way, go step-by-step, and the fifth one, set content free, both from the clock and from format. These are things that campus leaders can advocate for. And let's think also about how to put a nice little bow around things. Here's all those things—start with text, create alternatives, design alternative ways, break them up into chunks, and expand things beyond the clock.

Before we get going, though, we have to listen to Yoda. Told you I was a Star Wars guy. "No more training you require. Already know you that which you need."

So now that you have Yoda's blessing, I want to give you an example to end with here. The need to make changes in not always this obvious.

My wife and I were going grocery shopping in the wintertime last year and she continued on into the store and I stopped and I took a picture. Because here you see the cart return—or for those of you in the south, the buggy return—is sitting in the space for people with disabilities to park.

So here's the power of social media—I tweeted to the grocery chain, I said, "hi, this is @thomasjtobin. Dear name of grocery store, this is not cool. I'm at your River Forest, Illinois location." And I sent it off.

Here's the power of social media. Five minutes later—I hadn't even gotten the bananas and the oranges yet—I get a tweet back that said, dear @thomasjtobin, indeed not cool, we're calling the store manager right now. And so when we came out, I was pretty happy. There was somebody parked in the spot for people with disabilities. But then I realized that they had moved the cart return into the stripey part that allows people to open their doors and get out of their cars.

What's the moral of the story here? Go for progress and not for perfection. All of the colleges and universities that have been sued recently by the National Association of the Blind and the National Association of the Deaf, those organizations won those lawsuits for accessibility primarily because those colleges and universities didn't have a plan in place for making things accessible to people with disabilities. And if you start by putting together a plan and making small steps, just doing one thing, one more thing—that's why I like talking about plus 1 thinking—then you're on a good road.

One last thing—and I've been talking about this the whole way through—don't just expect your faculty members to do universal design for learning. Train the people in your IT department, your media services area, all of your students services area so that when a faculty member comes to your media services people and says I want to do lecture capture, their response is, oh, yeah, we can help you with that. And we'll help you chunk it up into small pieces and we'll help you with the captioning.

Magna Online Seminar   **Universal Design for Learning—How to Improve Satisfaction and** 18 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

And here's a last hint. I mentioned these as we went through. I want to collect them together now.

Think about when you start on your campus where do you make your push, senior leaders. Where do you put your resources? Well, where do students always ask questions about the content? Where do they need more than one explanation? Where do they get things wrong, either on a test in a class or in a process that you want them to go through? And where do they always ask for alternate explanations? Gee, that's really great, but could you tell it to me a different way? Those are the places to start doing plus 1 thinking. And you get your biggest return on investment for focusing on those kinds of places.

So here's a last thing—you can get a free book that goes into much more detail about this—it's from David Rose, Anne Meyer, and Dave Gordon—from CAST. And they sell this book on Amazon for 50-something dollars. And the physical copy of the book is actually the more useless copy, because they have a free electronic version of it that contains—as you would expect—video, audio, links to different resources.

And if you go to udltheorypractice.cast.org—like you see on your screen—and give them your name and email address, they won't send you spam and you'll get free access to this book that is good reading after a seminar like ours today. So again, udltheorypractice.cast.org.

So we have a couple of seconds here. Please tell me one thing that you're going to take away and bring back to your institution? So here's the University of Oregon saying do you have content-based assessment rubrics for assessing the quality of the work they deliver in different formats? And the folks at CAST, if you go to udl.cast.org—or just cast.org—they actually have assessment rubrics for the design of online content.

Also, if you're a Quality Matters school, standard number eight and all of it's substandards deal with accessibility and access. And they do a really thorough job of it as well. So I'd put you in touch with the folks at CAST and the folks at Quality Matters.

UDL is college-wide, not only in the classroom—great take-away. We're happy to have the blessing from Yoda. And he is very happy to give it to you, thank you. UDL is a mindset, not a strategy for persons with disabilities. Absolutely. Good take-away.

Some other folks are saying UDL is for all. We love the idea of plus 1, plus 1 do one thing differently. These are splendid take-aways.

And if you have ideas, or questions, or comments, I'm very happy to continue the conversation. This is my website—it's thomasjtobin.com. I specialize in issues of quality in distance education—so not only accessibility, but also copyright, academic integrity, and I wrote one of the first books on evaluating online teaching. So I'd be happy to continue that conversation with you. Just pop over to my website if you're interested in more on that.

Magna Online Seminar   ***Universal Design for Learning—How to Improve Satisfaction and*** 19 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

And with that, I want to say thank you very much to all of you and thank you to Chris for being my support here from Magna.

Thank you, Tom, for a really interesting talk today. And thanks to all of you out there who are participating with us today. Complete information about upcoming seminars is available at www.magnapubs.com. Thanks again for joining us, and have a great day.

Your opinion is important to us. Please take the survey at *https: //www.surveymonkey.com/r/120116Tobin*

Magna Online Seminar   *Universal Design for Learning—How to Improve Satisfaction and* 20 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

Adobe Chat Transcript

Thomas Tobin: Welcome to our seminar, everyone! Be sure to have someone near the keyboard: it's going to be an interactive session. Glad to have everyone here!

Brescia University: Online tutoring with the use of digitizers and Adobe Connect

Stuart Goldman: ask questions on students' phones

Bow Valley College: Provide materials on the LMS so students can access anytime, anyplace...

Brescia University: The digitizers are used on our side

Northern Arizona University: Mobile Notifications

Memorial University: University mobile app

University of Minnesota: Online workshops mobile friendly

St. Catherine University: Notificationss and LMS apps

Northern Arizona University: Kahoot

University of Oregon: security alerts, obviously, how about academic ones

David Burrows: You can send discussion questions to students and ask them to create a discussion group

Brescia University: The library will accept questions through text and will respond with texts

Northern Arizona University: Blackboard Mobile ???

Dakota State University: EdPuzzle - video lessons with embedded questions asynchronously

University of Oregon: snapchatted homework reminders and videos?

Brenton Center: Some are using Top Hat

Brescia University: Online academic advisors do student advisement through the phone. Skype can also be used.

Brescia University: Remind.com is used to remind about assignments

Northern Arizona University: Online office hours

Dakota State University: emails

Gerry Hynes: Syllabus

University of Minnesota: Discussion forums

St. Catherine University: Case studies

Brescia University: Announcements on Moodle

Northern Arizona University: Discussions

Stuart Goldman: drop box of course information

Northern Arizona University: Blackboard interactions

Memorial University: Course Websites

Brescia University: Directions for an exam

Grand Valley State University: directions for an assignment

Northern Arizona University: Campus Alerts

Dakota State University: course scheduling

Brescia University: Directions for assignments

Grand Valley State University: FinAid

Northern Arizona University: Applications

Dakota State University: animated explainers

University of Minnesota: Flip Grid videos as alternative to text discussions

Grand Valley State University: Lightboard videos

Magna Online Seminar   ***Universal Design for Learning—How to Improve Satisfaction and*** 21 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

Memorial University: video
Brescia University: Record lectures and post in MLS after class
Brescia University: LMS
Memorial University: podcast
Northern Arizona University: audio recordings
Northern Arizona University: short video clips
Brescia University: Designated note takers in class
Brescia University: With posting the notes from various note takers after class
Brescia University: Why would it be an accommodation for just one person? Students hear different things; by having various notes, students get more
Northern Arizona University: Perhaps part of the assignment might be a "required" script to show writing but then finish with a choice of media.
Brescia University: Oral vs. written exams
Brescia University: If the assignment measures concepts, either one could work
Stuart Goldman: mind mapping
David Burrows: If student is asked to demonstrate knowledge of a particular experiment, it could be in the form of a written paper or a video that demonstrates the experiment
Bow Valley College: Complete an assignment in pairs, or alone
University of Minnesota: Engage in real-world assignments for students to produce something they can apply in their world
Bow Valley College: Allow choice of topic
Bow Valley College: During face-to-face classes
University of Oregon: in languages it's not a choice, it's a way of life
Bow Valley College: Take existing PowerPoint and insert activities
Northern Arizona University: lecture for 10 then a couple of questions (quiz)
Stuart Goldman: review a quick situation relevant to the topic in discussion
Grand Valley State University: Give an introduction to a topic and have student go out and find another resources to share with no repeats
Dakota State University: think-pair-share
University of Minnesota: collaborative assignments, discussions
David Burrows: Could have short videos reviewed outside of class and come to class ready to discuss
Bow Valley College: Have learners create a question for other learners
Bow Valley College: use a one-minute paper
Brescia University: In time teaching
University of Oregon: do you have content-based assessment rubrics for assessing the quality of the work they deliver in different formats? -- you can answer offline; ylc@uoregon.edu. thnx.
Bow Valley College: UDL college-wide, not only in the classroom
Brescia University: We're happy to have the blessing from Yoda!
Dakota State University: UDL is a mindset not a strategy for persons with disabilities
St. Catherine University: We love the idea of "+ 1"
Grand Valley State University: UDL is for all
Bow Valley College: Plus one - do one thing differently
Grand Valley State University: multimodal
University of Minnesota: framing UDL on where students get stuck

Magna Online Seminar   ***Universal Design for Learning—How to Improve Satisfaction and*** 22 of 22
Retention for Students at All Learning Levels

Thomas Tobin, PhD

Brescia University: This whole thing benefits faculty, admin, and students. Things that admin and faculty find irritating with students already can be easily solved with alternatives!
Cathy Kelley: Amazing presentation - thank you!!
Brescia University: Thank you very much! We're having a very vibrant discussion right now!
Grand Valley State University: Thank you for a wonderful session
Jessica: Thank you.
Thomas Tobin: Splendid take-aways! Thanks, everyone--I'm at thomasjtobin.com.
Thomas Tobin: Thanks!