Celia Williamson, Deputy Provost
University of North Texas

1155 Union Circle #311190
Denton, Texas 76203-5017
(940) 565-4961
celia@unt.edu

Dr. Celia Williamson is the Deputy Provost at the University of North Texas. She holds a doctorate in Social Work from UT Arlington. She is a Licensed Clinical Social Worker and a Certified Rehabilitation Counselor. She worked for a decade as a professional social worker before joining the faculty at UNT in 1988.

While at UNT, Dr. Williamson has worked as a professional staff member, faculty member, and department chair. In addition to receiving "top prof" recognition, She has received and administered more than a dozen federal and state grants. One state grant, funding through tobacco settlement dollars, developed in an award-winning interactive CD for middle school students, aimed at smoking prevention and cessation. This CD was distributed free to every public middle school in Texas.

For the last six years she has served in the Provost's office, first as Special Assistant and now Deputy Provost. She serves on the THECB Undergraduate Education Advisory Committee and is currently an active member of a team re-designing a large-enrollment undergraduate class.

Testimony to the Texas Senate Higher Education Committee
Regarding use of Technology in Higher Education

Celia Williamson, Deputy Provost, University of North Texas

1155 Union Circle #311190
Denton, Texas 76203-5017
(940) 565-4961
celia@unt.edu

Submitted via email on 9/17/10

Panel 5: *Study and make recommendations regarding more effective means of using technology, including digital textbooks, and online degree programs, to improve access, enhance quality, and reduce the cost of higher education while preserving excellence.*

Testimony:

Good morning. I am Celia Williamson, Deputy Provost at UNT. I've been asked to speak to you about how UNT uses technology to make big classes better without increasing costs. We have some standing in this conversation, as UNT has been a leader in online education in Texas for well over a decade, receiving federal and state funding and SACS recognition for those efforts.

Two very important points at the outset:
1. The goal is learning - the kind of learning that creates a future, for our students and for our state. Technology provides some exciting tools to help us get there, but we need to be careful not to confuse the means with the end.
2. We are talking about more than simple access to information. One look at Google and you know that access to information is not the issue. We need to leverage technology to engage students in the kind of learning that comes from encountering problems and building solutions within complex environments – because that is what we will be asking them to do for us into the future.

Have you ever watched a grade school teacher giving a lesson on, say, turtles? What happens? The kids crowd in as close as they can. They want to touch, to poke, to prod. They are excited about learning. They want to find out what it feels like and how it moves and what it eats.

Now what do you see in a typical large university course? The 150 to 300 students in the room may be passively taking notes, but they are not, for the most part, poking, prodding or exploring

1

the information. Without that engagement, the learning is tedious. It is dead information until students see the applications and realize its implications.

Now, big classes are not going away. Texas needs to educate hundreds of thousands of additional students in the next few years. So how do we make those big classes better? At UNT, we leverage technology in a way that blends online work with face-to-face interaction, all focused on using knowledge to solve problems. Our work has garnered acclaim from our accrediting body and funding from state and federal sources, including the THECB.

Does it make a difference? You bet it does. A number of years ago I observed a large lecture class – a literature class with about 200 students. I made a rough count of the number of heads that were oriented in an appropriate direction – toward the teacher, or taking notes. It turned out to be about half the class. The others? Their heads were leaning toward a cell phone or oriented toward the ceiling or . . . positioned on the top of the desk. More recently, I attended a redesigned literature course. It was a breakout session of about 30 students – who had the chance to meet in a smaller section because part of the course was delivered in the online, interactive format. It was a debate about Shakespeare's work. Every single student in the room spoke up and actively participated in the preparation or presentation of their side's case.

Lets try this on for just a moment: Take a look at this picture. What do you see? . . . They say that if you are a right-brain visual genius you can see the face in about 15 seconds. Very few folks do that. The rest of us, though, pretty quickly move from just staring to some systematic way of discovering the answer. With a system in hand, we can perform at near-genius levels. That kind of education – one that gives you habits of mind and systems of thought that take you farther and faster down the path of discovery – that kind of education drives the future.

So, what we are talking about is careful course design, built around clear learning outcomes and problem-based learning, leveraged by technology. These courses can be delivered as cost-effectively, and often more cost effectively, than standard large enrollment classes.

Across all our classes at UNT, students assess teaching effectiveness in relation to three factors:
1. Does the teacher present the material in a clear and organized manner?
2. Does the teacher create an environment that is conducive to learning?
3. Does the teacher help the student become a self-regulated learner?

Technology can help us out on all three of those dimensions.

1. Carefully designed online materials can build a consistent, clear, organized presentation of content – enhanced with exercises, web links and visual illustration that a student can go back and review as often as they like.
2. The technology that supports student interaction on the web has become easier to use and more stimulating – using shared screen technologies and video linkages, as well as discussion boards. It also saves precious face-to-face time for debates, simulations and experiments where students get to engage with faculty in the exciting work of applying the content to complex problems.
3. It is that very application process that moves the student toward ownership of the learning process and sets the stage for life-long learning and knowledge application in their future careers. The problems they grapple with in class prepare them for the challenges they will face as citizens and as a part of the state's economic engine.

I was at a recent meeting where an official from Boeing was encouraging us to train more engineers. He said he could hire a number of foreign trained engineers who could take the very best golf club and duplicate it so well that you could not tell the difference . . . but that is not what he was looking for. He wants the engineer who will build a better golf club – who will stretch us forward to the next great discovery. I think that's what we all want – including our students.

And that's where college learning is different from kindergarten. Poking at turtles is different from poking at ideas. As education progresses we move from things to facts to formulas to concepts to analysis and on to discovery. In college classes, it is the analysis and discovery that rev the engine and fuel the mind. There's a real art and a real science to creating the kind of learning experiences needed in this generation and into the next. At UNT we talk a lot about discovering the power of ideas. These powerful courses lead the way.

So how can the legislature help to leverage technology in order to *"reduce the cost of higher education while preserving excellence?"* You certainly don't want to dictate what technology to use – it changes too fast. The same holds true for telling folks what and how to teach – classes would soon go stale. It would also undercut the quality of engagement – no one listens well to a speech that's simply read. A college education doesn't come in a can. Nor do the kinds of courses that result in the engineers and scientists and artists and professionals we need for our shared future.

You *can* resource the institutions that are building that future. You *can* fund the formula and shield the institutions from cuts at the very time you are asking them to increase enrollments by hundreds of thousands of students across this state.

3

You *can* step back from some of the old measures of education – like "seat-time" and let the accrediting agencies monitor quality through achievement of learning outcomes. SACS already carries the load – and expense – for doing that.

You *can* encourage the use of sites like Connexion or the Texas Learning Object Repository where faculty can freely exchange the exercises, simulations and interactive tools that undergird these courses.

You *can* give creative faculty the resources and flexibility to take learning forward with the new tools of technology. That will make a real difference for our students and our state.

Testimony for the
Senate Higher Education Subcommittee
9/23/2010   Panel 5

Celia Williamson, Deputy Provost
University of North Texas

1155 Union Circle #311190
Denton, Texas 76203-5017
(940) 565-4961
celia@unt.edu

1
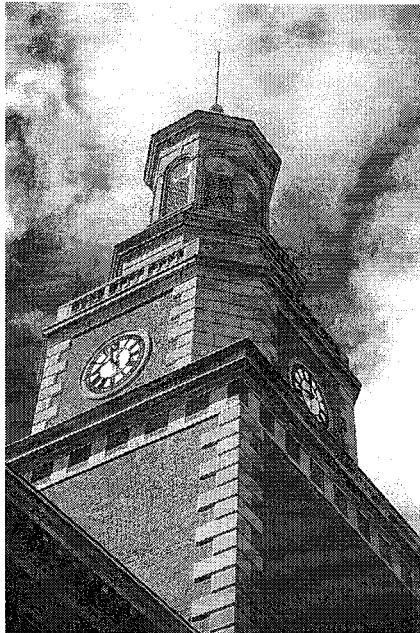
UNT

Leading Texas Public
Institution in Online
Delivery

State and Nationally
Funded Programs

SACS QEP Exemplar

2

5

3

Leveraging Technology for Cost-Effective Advanced Learning

Learning is the goal – technology is the tool
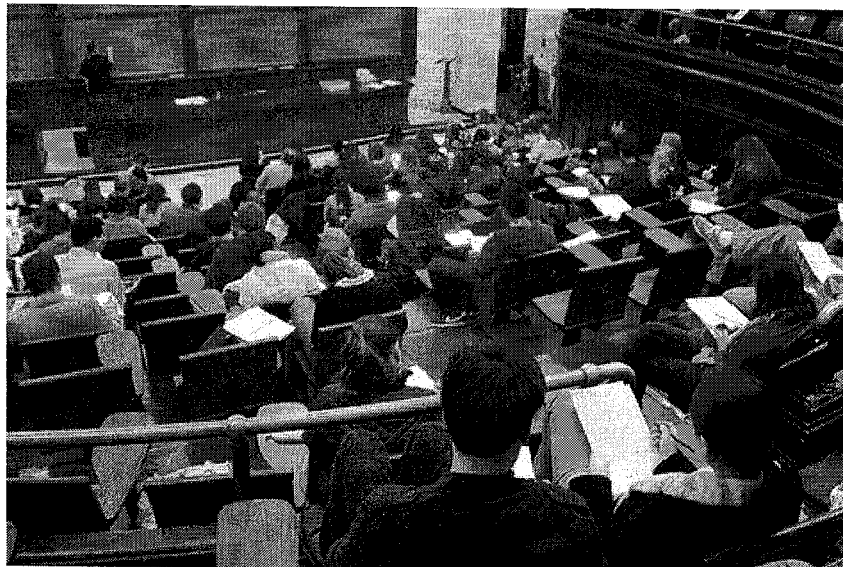More than information access – knowledge building

3

4

5

5

6

6

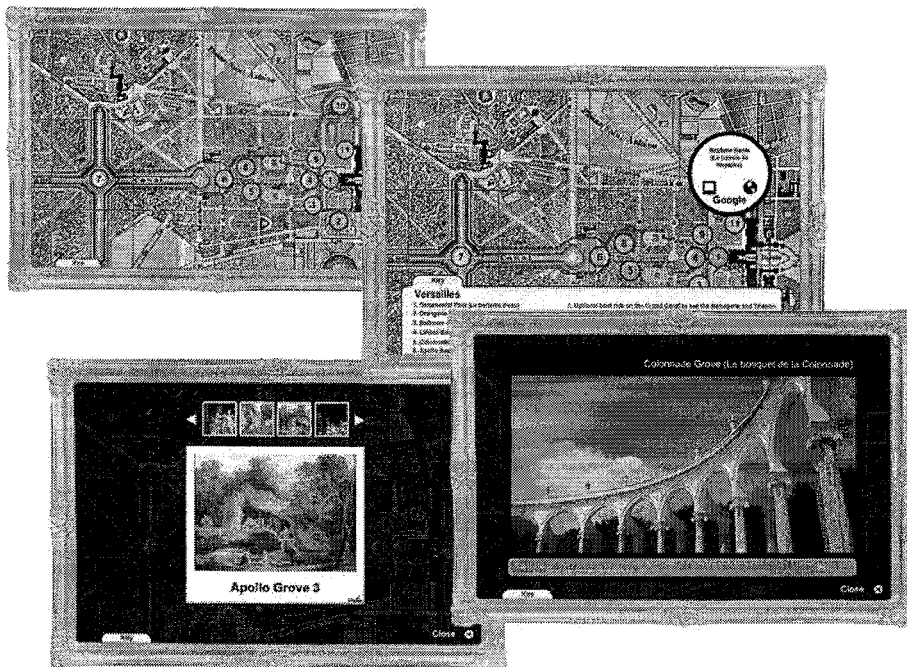7

8

What Makes for Effective Teaching?

Presenting material in a clear and organized manner

Creating an environment conducive to learning

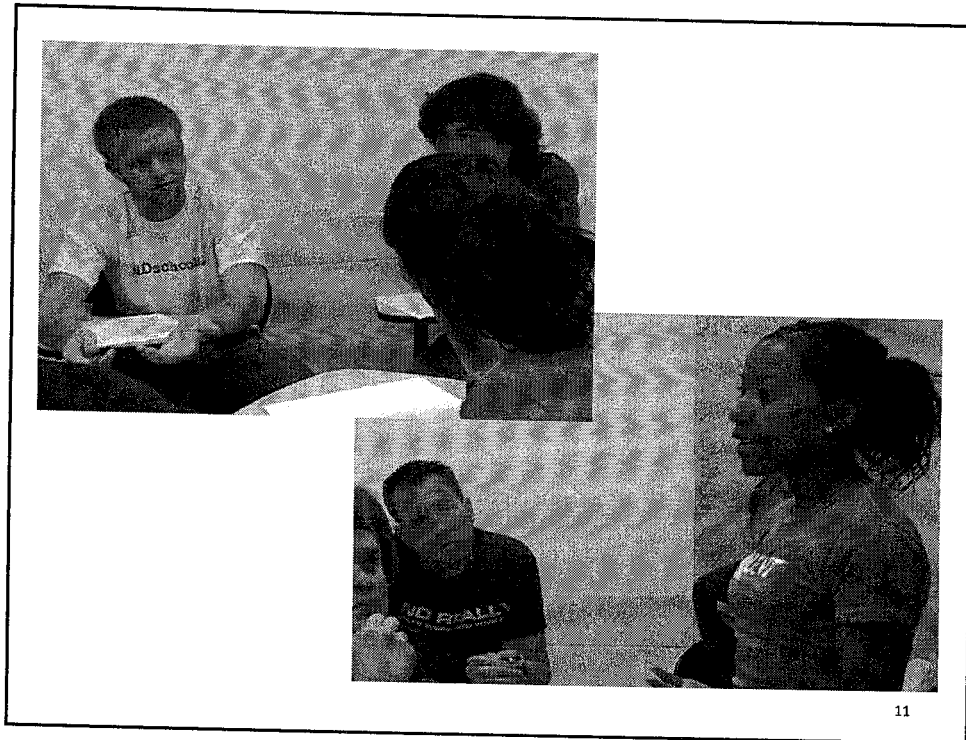Helping the student become a self-regulated learner

9

9

10

10

9

11

11

12

How Can You Help?

Leave room for innovation and creativity

Fully fund the formula

Don't cut funding at a time of tremendous growth

Move away from old measures

Encourage sharing of ideas / innovations

12

10