



INNOVATION ABSTRACTS

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Technology in the Classroom? Instructional Technology Certification Program Increases Engagement

When I began teaching, which was initially in K-12, my school was not rich in resources. More times than not, I had to purchase copies of handouts for my English classes, and occasionally also purchase books that I assigned to my students. At the time, I did everything I could to help my students become better readers, writers, and thinkers. However, I did not realize at the time that the definition of literacy was evolving to meet 21st-century needs.

Now, literacy is no longer defined by the ability to read, write, think, and speak. Literacy today involves more complex skills—skills that are all connected to technology. According to the definition of 21st-century literacy by the **National Convention for Teachers of English (NCTE)**, students are now expected to “develop proficiency and fluency with tools of technology” and “create, critique, analyze, and evaluate multimedia texts.” When I first learned about these new literacy skills, I was not in a position to help my students develop them. The extent to which I could use technology in the classroom was limited, primarily because the necessary equipment was not available. Teachers at my institution did not have classroom computers, nor did we have projectors or even a reliable internet connection. I did have an overhead projector, so the most high-tech tools I used were transparencies printed from my inkjet printer. I also used the one computer lab on campus, but could only reserve it at times when students had to write their academic essays. While I wanted to include more technology in my classroom, especially as I came to understand that I wasn’t fully preparing my students to be literate according to 21st-century standards, most of my “extra money” was spent on classroom essentials, and technology was a luxury that I just couldn’t afford.

When I later moved to Texas, I had the opposite teaching experience. Not only was there a copy center available for teachers and rooms filled with many sets of books I could use for my students, but also the district in which I worked was beginning a technological movement. Classrooms were equipped with computers for teachers, interactive whiteboards, document cameras, and software to support all of these technologies. By my second year, my school was a one-to-one campus, meaning every student had a laptop. Furthermore, my school had two campus instructional technology specialists (CITS), who were teachers with an

additional certification in technology. CITS had to learn how to use the technology that was then becoming part of the classroom. Additionally, because they had experience teaching, CITS helped teach teachers and students how to use classroom technology in a way that enhanced learning. Technology became a priority for the district—the expectation was that all teachers who had technology would use that technology. Personally, when I began to integrate technology into the curriculum, I found that my students were more attentive, engaged, and performed better. Their success motivated me to continue searching for new ways to include technology in the classroom, beyond what I was learning through my campus professional development. Soon, teaching with technology became instinctive.

Eventually, I left K-12 and entered the college classroom where I had access to some technology. Teacher computers, projectors, document cameras, and computer labs were available to students and me. Yet, though technology was in every classroom, I discovered that instructors did not always use technology effectively or to its fullest potential. Moreover, many of the students coming from K-12 districts, much like the district I came from, were still ill-equipped to handle the technological demands put upon them. As a result, students lacked 21st-century literacy skills and were underprepared to enter a workforce that now expects them to have certain abilities and competencies related to technology. Instructors struggled to help students gain these skills because they were also unfamiliar with instructional technology, and our campus did not have CITS to help faculty learn how to effectively integrate technology into the classroom. Our campus did have instructional technologists who could help teach certain technological applications like Microsoft Office, or who could help faculty with our Learning Management System (LMS) and software programs used for online instruction. However, faculty wanted easy-to-use instructional technology tools that we could simply integrate into our current curriculum for online *and* face-to-face classes.

My Quest for Instructional Technology

It became my own personal mission to find technology I could use for presentations and assessments. On my quest for technology, I found many applications, websites, and programs, but not all of them found their way into my classroom. Because I am an instructor, I do not have the money nor the time to try to figure out how to use the latest technology. On my search for technology that I could integrate into my classes, I wanted to find tools that were free (or very inexpensive) and easy to use. And I found them—many of them.

As I began to use the discovered technologies in my classes, they quickly became a part of the learning process and not just a cool new thing for me to use. My students were engaged, the content was more accessible, and students were learning. Students began to appreciate using technology, and they wanted more. They wondered why other instructors did not teach using the same techniques; so, because I wanted all students to benefit from this way of learning, I began sharing my ideas with other faculty. Every time I learned something new, I shared it with my fellow faculty. Each month, it seemed that I found a new way to present content or assess student learning with technology. A colleague of mine suggested that I put together a method by which I could teach other faculty what I was learning. This brief conversation turned into the Instructional Technology Teaching Certification Program, or ITCP, at Lone Star College-Tomball.

What is the Instructional Technology Certification Program?

Over the course of one summer, I put together a 10-session program that teaches higher education faculty how to create technology-rich lessons, learning activities, assessments, and teaching materials. The first nine sessions of the program are instructional and, in each session, participants learn about several tools that they can integrate into their current classes.

The titles and descriptions of the nine instructional sessions of ITCP are listed below:

1. ***What is Instructional Technology?*** Participants begin with an overview of instructional technology and an introduction to the technological tools available on campus.
2. ***Beefing Up Your Current Learning Materials:*** Participants learn ways to enhance learning materials through pre-created PowerPoint presentations and Word handouts. By making learning materials look more professional, students can better and more easily understand the content.
3. ***Creating Engaging and Interactive Presentations:*** Instructors now begin to step out of their comfort zone and learn about presentation software beyond PowerPoint.
4. ***Keeping Up in the 21st Century:*** This session presents technology that helps instructors manage their lessons, their students, and students' progress.
5. ***Using Video to Enhance Instruction Part 1:*** Participants learn about the video tools available for enhancing discussion and lectures, promoting interaction, and receiving student feedback.
6. ***Using Video to Enhance Instruction Part 2:*** This session helps participants learn about tools to create instructional videos.

7. ***Let's Get Visual!*** Instructors learn how to create infographics and incorporate graphic organizers into their lessons.
8. ***All About Google:*** Participants learn different ways that Google can be used to facilitate learning.
9. ***How to Handle Social Media and Networking in the Classroom:*** Participants learn about websites and applications that allow students to capture what they are learning and express what they learn socially.

Each session is three hours and, at the end of each session, participants receive a homework assignment to apply one or two of the tools presented in their classrooms.

In order to become ITCP-certified, instructors must participate in all instructional sessions and complete a portfolio, which is a collection of all homework assignments, as well as anything created during the sessions. In the tenth and final session, participants showcase their portfolios to their colleagues. Through ITCP, instructors earn 30 hours of professional development for the academic year and a certificate that cannot be earned at any other higher education institution.

In addition to these tangible outcomes, participants walk away with other benefits, including:

- Exposure to new and emerging teaching techniques;
- Cross-disciplinary relationships, and enhanced relationships between full-time and adjunct faculty; and,
- Opportunities to think about instruction in a new framework.

Who are ITCP Participants?

We launched the pilot program during the 2016-2017 academic year. In the initial cohort of participants, there were 17 faculty—6 adjunct faculty, 10 full-time faculty, and 1 continuing education instructor—and one librarian who taught a range of courses. Participants had varying levels of experience using technology in and out of the classroom. It was important to me that this program did not exclude any faculty member based on their current technological skill.

The program was designed for full-time and adjunct faculty in any discipline, and for individuals with varying levels of experience with technology. However, the program can also be implemented for K-12 instructors. At the college level, adjunct faculty should have at least a year's worth of teaching experience at the college, and each person must receive a letter of support from his/her department chair.

Observations

- ***The tools are easy to use.*** Participants are able to complete the assignments with little to no further direction. This speaks to the intuitiveness of the topics introduced.
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- ***There is something for all disciplines.*** While not every participant is able to incorporate every tool into their lessons, there is at least one tool per session that is useful for each participant. Additionally, everyone learns at least one thing new during each session.
 - ***Students notice!*** I had a student who told me that she had noticed a change in her instructor's PowerPoint presentations. The presentations were more engaging because he began using more color and visuals; overall, his presentations were more interactive. Other participants have said that their students prefer the new instructional technology to the traditional PowerPoint presentations. Additionally, after being exposed to more technology through instruction, some students have started implementing the tools for class assignments and presentations.
 - ***Participants are getting more than they imagined.*** Most participants had their own definition of instructional technology upon entering the program. Many expected ITCP to focus on online instruction and our institution's LMS, and some also became skeptical of the program when they learned during the information session that this was not only for online classes, but for face-to-face classrooms as well. Participants quickly learned that the information presented in this program could help enhance *all* instruction regardless of modality.
 - ***The technology can be used anywhere.*** Our college is privileged when it comes to having technology; we have several computer labs, a few collaboration classrooms, and even an Instructional Media Assistance Center on campus. However, ITCP participants learn techniques that can be used in any classroom and in any setting. In other words, most of the tools presented in the sessions simply require the instructor's computer and students' mobile devices.

Latoya Lewis, Professor and Faculty Fellow, Center for Organizational and Teaching Excellence

For more information, contact the author at Lone Star College-Tomball, 30555 Tomball Parkway, Tomball, Texas, 77375-4036. Email: latoya.h.lewis@lonestar.edu

Conclusion

In an increasingly technological world, we have to acknowledge that sometimes technology is lacking in our classrooms. Unfortunately, even if our institutions and classrooms have an abundance of technology, there are still teachers and students who do not use them because they don't know what's possible when instructional technology is incorporated into a learning environment. The Instructional Technology Certification Program is unique in that it does not require admission into a graduate program or the need to study for a comprehensive exam. Instead, ITCP provides participants with the time to focus and develop their skills using instructional technology. Those who complete the program are equipped to transform their classrooms into spaces where students can acquire the literacy skills that are expected of them in *this* century.

Do you have experience integrating technology into the classroom? Share your ideas with us in the comment section or on [Facebook!](#)