FACULTY SPOTLIGHT

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MY JOURNEY TO TECHNO SAVVY TEACHING & LEARNING

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In 2008 our DSU Education Department received two SMART Boards, which are interactive whiteboards, through a grant written by one of our faculty members. The next year most of our faculty members attended two SMART Board workshops. The workshops were mostly passive, with little hands-on practical use of the SMART Board, so after the workshops no one felt prepared to actually use the boards. For two years the SMART Boards hung on our two classroom walls with very little use. Then the faculty member who had written the grant retired and I took over the science methods course she had taught. I felt in this course I needed to both use technology in my teaching and to prepare our students to use new technologies in their future classrooms. When the SMART Board representative contacted me to coordinate another training session, I told him what we really needed was to train two or three faculty members at a time how to actually use the SMART Board. I told him the past workshops had not even taught the faculty members how to turn the SMART Board on or align it with the projector. We needed to learn how to do these basic things and then learn simple application of the board in classroom instruction. The representative agreed to provide the training as I requested. So, in 2010 one colleague and I participated in the SMART Board hands-on training. We learned how to turn it on and troubleshoot issues with the board. We learned practical and simple applications for our classroom instruction. This was a turning point for me in using innovation technologies in my teaching.

After this training I committed to my students and colleagues to integrate new technologies and methodologies in my courses. At first I was overwhelmed when I considered the amount of information and skills I needed to learn to catch up with cutting edge technologies used in the public schools. Other than the two SMART Boards, our department didn't have any devices or funds to purchase technology for our classrooms or students. So like my retired colleague, I found a grant to help. Soon we had NASA grant funds for a class set of SMART Clickers to use with the SMART Boards. I used these clickers for engagement and quick response assessments. Since then I have continued to build my skills and my students’ use of technology in their learning and practicum classroom instruction. In 2011, I hosted a one-on-one SMART
Board training for 10 of our students. Each student became proficient on the SMART Board. In 2012 I learned how to flip my classes using Canvas. I fully flipped two of the four courses I teach.

At that point I felt prepared to move forward with a fully integrated active learning technology program with my students. In 2013, with funds from our department and the NASA grant we purchased 30 iPads, so we could pilot a one-to-one device program. Each student in our Elementary Education cohort was issued an iPad for the entire semester. I also had two Apple TVs installed and connected to the projectors in our classrooms. Now we are in the third semester of the one-to-one iPad program. I have learned a lot and made many improvements along the way. Through this program our students now use these iPads to do the following:

- Read their textbooks and conduct research related to class topics
- Use Canvas
- Participate in class engagement activities and quick response assessments
- Prepare and share presentations through the Apple TV
- Participate in and create WebQuests
- View and create screencasts
- View and create video lessons
- Record their own lessons for self evaluation and reflection assignments
- Do their homework.

Our department also purchased 12 Chromebooks, which we keep in the classroom for student use. This gives our students experience in using both Apple and Google applications and educational programs.

In 2014 I wrote and was awarded a $15,000 grant from the Miner Foundation, a private foundation. With this grant we purchased iPad covers with keypads to improve typing function. We also have a set of 20 iPads that our students can check out to use in their practicum lessons. This semester we will use grant funds to purchase 12 more Chromebooks so we have a full class set. I hope to continue doing innovative things in my courses and hope to use very effective new technologies and methods to promote engaging and active learning.

Some benefits I’ve experienced:

- I helped design a training program for SMART Technology.
- I get visits from Apple Education every semester.
- I’ve been invited to the Executive Briefing Center at Cupertino and the Leadership in Education Training in San Diego with Apple Computers Company.
- My students are more active in the learning process and are better prepared to teach with new technologies in their future classrooms.

Some challenges I have faced:

- The log-ins for Chromebooks and iPad Apple accounts and conducting device updates and upgrades have been challenges at times. This is why I feel a one-to-one program is best.
- We have found iPads are better with keyboards so we replaced plain covers with keyboard covers.
- We had to create a device issue contract to protect us from device theft.
• The Apple TV upgrades and DSU firewalls can only be initiated and serviced by IT staff members. Because of this sometimes they don’t work.
• Some students are tech challenged, have fear and need a lot of help with the devices.
• The biggest challenge is the amount of time it takes.