Examples of Candidates’ Use of Technology Integration

*Elementary, Secondary, and Advanced Candidates*

Elementary and Secondary candidates regularly use the equipment in the SMART classrooms, including Promethean boards, for teaching demonstrations, activities, and presentations. They also regularly prepare PowerPoint presentations.

*Elementary Candidates*

iPads are used in several courses (e.g., Language Arts Methods and Reading Methods), Kindles in the EL230 Children’s Literature course and reading methods course, and SMART tablets and clickers in Elementary Math Methods.

Elementary candidates create a wiki, blog, photostory, glog, Prezi, and a website. They also utilize Edmodo, an online learning community for educators. In addition, backchanneling, social bookmarking and document sharing are technologies integrated into instruction.

Classroom activities (e.g., online survey) require candidates use their smartphones.

*Secondary Candidates*

Biology candidates in GB584 Teaching Biology in Secondary and Middle Schools have to demonstrate use of a microprojector, which is a microscope for teaching.

In BE473 Business Curriculum & Teaching Methods, Business Education candidates
- create learning modules for students in computer applications courses (or other courses) by using the Jing program.
- teach a variety of technology in the computer methods course
- demonstrate the use of specific software
- use Dragon Naturally Speaking and integrate its use into lesson plans for computer applications
- use writing tablets and pens
- use smart phones in the classroom
- use Pinapto to record themselves teaching and use it to capture a lecture.

In PS516 Teaching Physical Science in Middle/High School, chemistry, physics, and earth and space science candidates design a minimum of three inquiry-oriented activities for a middle or high school science class that uses the data-loggers and one or more of the available probes and then teach one of the activities. Data-loggers are hand-held devices based on personal data assistant platforms that are equipped with probes to measure a variety of physical/chemical parameters (e.g., temperature, pH).

Health and Physical Education candidates use myfitnesspal.com to track energy balance. Students are asked to submit screenshots weekly of their progress. Myfitnesspal.com can be accessed on a computer, smartphone or iPad/iPod device. Students access it in various ways.
Methods candidates take GPSs to students at the local middle and high schools and teach them how to use the GPS.

History and Government candidates have to find teaching resources on the Internet and use the Filamentality website to create a hotlist of websites they can use when teaching geography.

Journalism candidates use digital photo, video, and web design. They also complete a computer-assisted reporting assignment which requires them to gather information from an online electronic database and write a story based on what they find.

Mathematics candidates learn to use and teach with TI Nspire calculators, graphing calculators, and Equation Editor to write mathematics in Word. In Calculus lab, they learn to use Maple, a mathematics computer algebra system that focuses on real-world application of calculus. Candidates use Geometers sketch pad or GeoGebra, and for data analysis, SAS or Fathom. In MA470 Teaching Middle/Secondary Mathematics, candidates teach with internet applications, graphic calculators, and smart tablets.

In PY506 Methods for Teaching Psychology, candidates are required to demonstrate the seamless integration of a PowerPoint presentation and a website into the content of a 60 minute teaching lesson.

Candidates in SP470 Teaching of Speech and Theatre must use PowerPoint and embed videos, YouTube clips, etc. in the PowerPoint. Candidates also do an extensive bibliography of Internet and Internet accessed resources for teaching speech, theatre, forensics, and radio/television

*Advanced Candidates*

School Counselor candidates use Panopto lecture capture system to record counseling sessions with clients confidentially and post them on the web via a HIPAA-compliant server.