Technology Teacher Preparation

SHARON DUNCAN
AUSTIN COMMUNITY COLLEGE
CENTER FOR TEACHER CERTIFICATION
Does everyone know how to use technology?

Considerations:

- Comfort level with technology
- Horror stories about expectations and mishaps
- Access to dependable technology
- Access to technical help
- Campus or district support and focus
- Limitations in classroom technology
False starts, but progress!

- Initial plan to use ACC faculty on “teaching” how to make spreadsheets, PPTs, etc.
- Ideas for online community collaboration
- Participants design website
- Program documents on CD
- Technology experts
- Saturday School for designing websites
For all beginning teachers:

1. All teachers use technology-related terms, concepts, data input strategies, and ethical practices to make informed decisions about current technologies and their applications.

(Copyright, terms, software, evaluation of urls and other team websites)
2. All teachers identify task requirements, apply search strategies, and use current technology to efficiently acquire, analyze, and evaluate a variety of electronic information.

(Assignments require teamwork and ability to create, analyze, evaluate, and collaborate for best product uploads)
3. All teachers use task-appropriate tools to synthesize knowledge, create and modify solutions, and evaluate results in a way that supports the work of individuals and groups in problem-solving situations.

(planning for all students based on learning styles, special needs, remediation, spreadsheets, case study reports, PPT, scanning documents, screen shots)
4. All teachers communicate information in different formats and for diverse audiences.

(Communication with staff, instructors, mentors, parents, campus teams, students using technology tools, including PPT, reports, student documentation)
5. All teachers know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications TEKS into the curriculum. (lesson planning, remediation, special needs, IPGs, Teacher Project, data analysis, use of technology communication tools)
HOW to teach standards...

Specific instructions and support are given for:

- ACC wireless access
- ACC prescribed email account for all program communication.
- SBEC online account and TEA ID
- ETS site for TExES registration
- Online portfolio requirements
- All program requirements online training website
- Fingerprinting process and...
HOW to teach standards...

- Participants work together in teams and upload assignments to team website 
  (1, 2, 3, 4, 5).

- Flash drives for all participants supply key resources for all student needs, including “best practices” documents and sites 
  (2, 3, 4, 5).
Participants use personal laptops during training so that they have tools ready for work outside the classroom and pertinent to job performance (1, 2, 3, 5).
HOW to teach standards...

- Participants share files with team members and evaluate each other’s work (1, 2, 3, 4, 5).

- **Integration of technology into all coursework, internship planning and implementation, SBEC and ETS requirements, lesson planning based on TEKS and TAKS (1, 2, 3, 4, 5).**
team and personal websites

http://sites.google.com/site/acctcp720102011/austin-community-college-tcp-7-2010-2011

- Initial team website is set up by program. First team leader volunteers for website duty due to experience and enthusiasm and makes practical and design revisions. Other team members are assisted as they take on the technology role.

- First assignment is a compilation of the best team work and uploaded to the site.

- Facilitation with program staff with comments added to website
The Texas Teacher STaR Chart Will Help Teachers Answer Critical Questions:

1) What is my current educational technology profile in the areas of Teaching and Learning and Educator Preparation and Development?

2) What is my knowledge of online learning, technology resources, instructional support, and planning on my campus?

3) What evidence can be provided to demonstrate my progress in meeting the goals of the Long Range Plan for Technology and No Child Left Behind, Title II, Part D?

4) In what areas can I improve my level of technology integration to ensure the best possible teaching and learning for my students?

5) What are the technology standards required of all beginning teachers and recommended for all current Texas teachers?

Sample Performance Descriptions (pp. 4-5) indicate objectives for Early Tech, Developing, Advanced, Target levels of expertise. Study the list to understand what can be done NOW to help you prepare for next year’s classroom and subsequent years.
The Texas Teacher STaR Chart May Be Used to:

- Assist teachers in determining professional development needs based on a current educational technology profile.
- Provide data that feeds into the Texas Campus STaR Chart so that more accurate school information is gained and documented.
- Determine funding priorities based on teacher and classroom needs.
- Provide data that can support the need for grants or other resources.
- Help conceptualize the campus or district vision of technology.
- Assist campuses in documenting the use of No Child Left Behind, Title II, Part D formula and discretionary funds.

Texas teachers should complete the survey online and use the profile annually to gauge their progress in integrating technology into teaching and learning. Campus and district summary data can be reported to school boards, community groups, and technology planning committees as it is aligned with state and local goals. Statewide summary data is reported to state and federal policymakers.
Technology integration is occurring if:

- teachers are trained in a full range of technology uses and in the determination of their appropriate roles and applications;
- teachers and students routinely turn to technology when needed (website creation and maintenance and online assessment);
- teachers and students are empowered and supported in carrying out those choices;
- A framework is in place that guides expectations for the independence of students in various ways, including the degree of student independence in deciding how and when to use technology in their learning activities.
1. Frequency of student participation in planning for uses of technology
2. Degree of student independence
3. Variety of uses & connection to curricular goals and objectives
4. Duality of goals - Learning tech skills as well as content
5. Frequency of use of technology per student in a day or week
Formative Assessment for Technology Integration

- How did you use the TEKS to determine WHEN to use this site?
- How will you sell this activity and technology to your mentor or principal?
- What do you have to know before planning its use?
This last course for teacher certification involves:

- Data analysis
- Student remediation
- Case studies for academic and social needs
- Electronic project available on student website
EDTC 3005 Teacher Project is based on teacher research with students

1. Identifying of Areas of Strength/Needed Improvement
2. Collecting Student Data
3. Student Intervention
   - Identifying Areas for Intervention
   - Monitoring Student Progress
   - Using Student Work to Document Progress (Case Studies)
4. Final Teacher Project & Reflection

Teacher Research facilitates meaningful reflection about strategies and interventions. One of the best ways to grow and develop as a professional is to conduct a teacher research project and share your inquiry with others. Other teachers can offer support and be a forum for sharing questions, concerns, ideas, and results. Part of the Teacher Induction Process involves working directly with your mentor, so consider him/her part of your team.
Using intern work to share and document technology integration

Force and Motion Review: Jeopardy!

Mrs. Field, Middle School Science
In 1990, how many games were won by the boys basketball team?
Tips, etc.

- Work with your college or university for the best technology you can use
- Provide support to participants all through the program process
- Design meaningful, engaging assignments and assessments
- Let participants shine when they excel on technology
- Learn from participants and students!
Works Cited

- TEA STaR Chart with Technology Standards
- Texas Education Agency - http://www.tea.state.tx.us/index2.aspx?id=6148
- Lesson Planet – must register at http://www.lessonplanet.com/search?grade=All&keywords=project+based+learning+plans&media=lesson&rating=3&search_type=narrow
- Participatory webs - http://learningaloud.com/participatoryweb
- ACC Teacher Certification Program - http://www.austincc.edu/teacher

Sharon Duncan
sduncan@austincc.edu