Elementary Technology Skills Matrix

Skill	K	1	2	3	4	5	6	7	8	Assessment*
Online Safety/Digital Citizenship										
Know how to leave a useful comment for a peer	_	I	D	A	A	A	A	A	A	Performance
Practice good netiquette when commenting	_	I	D	D	A	A	A	A	A	Performance
Know how to handle cyberbullies	I	D	D	D	D	A	A	A	A	Test/Quiz
Know how to configure privacy settings	_	_	_	_	I	D	D	D	A	Performance
Have a basic understanding of copyright	_	_	_	I	D	A	A	A	A	Performance & Test/Quiz
Understand and follow copyright rules and guidelines	_	_	_	I	D	D	A	A	A	Performance
Cite sources	_	_	_	_	_	I	D	A	A	Performance
Know what kinds of information you should/shouldn't share online	I	D	D	D	A	A	A	A	A	Test/Quiz
Basic Technology Concepts and Operations										
Log into a computer using a one-word single sign-on	D	A	A	A	A	A	A	A	A	Observation
Log into a computer using your own personal account	I	D	A	A	A	A	A	A	A	Observation
Log into web-based tool accounts	I	D	A	A	A	A	A	A	A	Observation
Find keys on the keyboard to construct sentences and type your name	I	D	A	A	A	A	A	A	A	Performance

1

Skill	K	1	2	3	4	5	6	7	8	Assessment*
Basic Technology Concepts and Operations										
Know how to make a capital letter using Shift	--	I	D	D	A	A	A	A	A	Observation
Type using two hands	--	I	D	A	A	A	A	A	A	Observation
Type at least 15 WPM	--	--	--	A	--	--	--	--	--	Test/Quiz
Type at least 20 WPM	--	--	--	--	A	--	--	--	--	Test/Quiz
Type at least 25 WPM	--	--	--	--	--	A	--	--	--	Test/Quiz
Type at least 30 WPM	--	--	--	--	--	--	A	--	--	Test/Quiz
Type at least 35 WPM	--	--	--	--	--	--	--	A	--	Test/Quiz
Type at least 40 WPM	--	--	--	--	--	--	--	--	A	Test/Quiz
Know some basic keyboard shortcuts	--	I	D	D	D	A	A	A	A	Observation
Know how to copy/paste	--	--	I	D	D	A	A	A	A	Performance
Save a file	I	D	D	A	A	A	A	A	A	Observation
Open a file	I	D	A	A	A	A	A	A	A	Observation
Understand file paths	--	I	D	D	A	A	A	A	A	Performance
Locate files and navigate file paths independently	--	I	D	D	A	A	A	A	A	Performance
Know how to organize files	--	I	I	D	D	D	A	A	A	Performance
Navigate a browser (back, forward buttons and tab)	I	D	D	A	A	A	A	A	A	Observation
Be familiar with basic menus within applications	I	D	D	D	A	A	A	A	A	
Know vocabulary like *Desktop, monitor, CPU, mouse, keyboard, application, program, browse*	I	D	D	A	A	A	A	A	A	Test/Quiz
Be able to synthesize information from one place to another (i.e. graphic organizer to comic)	—	I	D	D	D	A	A	A	A	Performance

Skill	K	1	2	3	4	5	6	7	8	Assessment*
Programming										
Have a basic understanding of programming through software like Scratch	_	_	_	I	D	D	D	D	A	Performance
Digital Storytelling										
Collaborate with peers on digital projects	I	I	I	D	D	D	A	A	A	Performance
Take and edit photos using a webcam	I	D	D	D	A	A	A	A	A	Performance
Insert photos into projects	_	I	D	D	A	A	A	A	A	Performance
Download and upload photos	_	I	D	D	A	A	A	A	A	Performance
Create and edit video	_	I	D	D	D	D	D	D	A	Performance
Independently use a drawing program (like TuxPaint)	I	D	D	A	A	A	A	A	A	Performance
Compose short stories using a web-based tool like Storybird	I	D	D	D	A	A	A	A	A	Performance
Compose and format longer stories using Word Processing software	_	I	D	D	D	A	A	A	A	Performance
Know how to build a website or wiki, including images, citations and video	_	_	_	_	I	D	D	A	A	Performance
Write and maintain a personal blog	_	I	D	D	D	D	A	A	A	Performance
Office Tools										
Create basic presentations using tools like PowerPoint	_	I	D	D	D	A	A	A	A	Performance
Complete graphic organizers using software like Kidspiration	I	D	D	A	A	A	A	A	A	Performance

Skill	K	1	2	3	4	5	6	7	8	Assessment*
Research										
Know a system for bookmarking/saving sites	_	_	_	I	D	D	A	A	A	Performance
Use a tool like Diigo to compile resources	_	_	_	_	_	D	D	D	D	Performance
Begin to look for solutions to real-world problems through the lens of technology	--	--	I	D	D	D	D	D	D	Performance
Be able to show what you know through a variety of tools	_	_	I	I	D	D	A	A	A	Performance
Be able to evaluate websites for accuracy and bias.	--	--	I	D	D	D	A	A	A	Performance
Be able to choose websites that best fit student research needs.	--	I	I	D	D	A	A	A	A	Performance

* Students will be assessed through either a performance expectation, through observation or through a traditional test or quiz. The performance expectation will be assessed through grade-appropriate, skill-based rubrics.

Middle School Tech Certification

I have already spoken with the creator of a comprehensive and proven assessment program and, as far as I know, it was included in the SchoolWorks paperwork for the renewal. It would be a great way to assess our middle schoolers and provide them with a technology certification when they leave AFPCS. More info here: http://www.genyes.org/programs/techyes/assess

Classroom Teacher Responsibilities

Obviously, not ALL of the tech skills can be taught in the lab due to schedule restraints & time. The instructional team can tie the skills to the existing curriculum and decide which skills can be incorporated into the existing curriculum. Recommendation is for items such as word processing skills (not typing, but word processing) as well as blogging and commenting or showing what you know using a variety of digital tools.

Teacher Growth and Evaluation

Before attempting to help teachers grow in their use of technology in the classroom, it is vital that the instructional team discover where the staff is along the path. This can be done through self-evaluations in conjunction with non-evaluative observations by the instructional team.

Teacher growth must be differentiated and meet teachers where they are. Expectations cannot be one size fits all, though setting specific benchmark expectations is appropriate. It is important to have certain expectations, but it is also important that there is a comprehensive plan for developing teachers that includes modeling, co-teaching, observation (of teachers and by teachers), timely feedback and access to up-to-date resources.

More on coaching teachers here: http://www.edutopia.org/blog/mentoring-coaching-tech-integration-mary-beth-hertz

On effective tech PD http://www.edutopia.org/blog/technology-integration-teacher-development-mary-beth-hertz

As for how to evaluate teachers, there are a variety of tools used by schools. These tools are used both for evaluation by leadership and by teachers to help them grow. It is also important that, if teachers are expected to meet particular benchmarks, that they are provided with the tools necessary to meet these benchmarks. It may occur that a particular benchmark or area of a rubric may not be applicable to a teacher's classroom should they be missing the necessary tools. Here are some examples of rubrics and evaluation tools used by schools and districts.

School Readiness Rubric (this is a wonderful tool to gauge where we stand as a school)

http://school.discoveryeducation.com/schrockguide/pdf/schooltechrubric.pdf

Arizona Tech Integration Matrix

http://www.azk12.org/documents/AZK1031_Matrix_Print.pdf

Tech Integration Rubric

This is a rubric I developed. Our teachers will not be able to be held to the seamless level until our students are given access to technology the same way they are given access to pencils and paper.

http://www.edutopia.org/blog/meaning-tech-integration-elementary-mary-beth-hertz

The assessment of the program should include a setting of benchmarks for the entire staff (i.e. percentages of the staff reaching a particular benchmark/goal) and these benchmarks should be set by the administrative team before school starts and re-visited at least three times a year.

Assessment of the effectiveness of the program should also include teacher-set goals and reflections,

Moving forward, the instructional team should also begin to look deeply at the curriculum to begin to see how technology can support and enhance instruction and learning. This can be done in conjunction with the teachers and will aid in the process of meeting technology integration benchmarks of the program and those set by teachers.