

Curriculum Standards Critique: Technology Education
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Peter Brown
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Nova Southeastern University

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State content standards, which include generic knowledge standards, specific benchmarks and observable performance indicators, have been written and continuously revised since the 1990's political movements demanding educational reform by making schools accountable for what they teach and how they document actual student learning. (Airasian & Russell, 2008). States formed committees with representatives from school districts, educational institutions and educator organizations, all contributing information critical to each content area that is addressed in public school curricula. The Florida Sunshine State Standards, representative of many states, currently address the following content areas: reading/language arts, mathematics, science, social studies, physical education, world languages, fine arts, health, workforce education, and pre-kindergarten. (Florida Department of Education). In Florida, as well as in other states, technology education goals are found in the workforce education content area. While these benchmarks and indicators are critical in technology career paths, technology education cannot be limited to an isolated context.

Identifying content knowledge in state standards guarantees equity in school systems, universally mandating what teachers should teach. Representatives of all shareholders in the public school system have the opportunity to be involved in the development process. The published standards are available to every teacher, as well as to parents. You can expect that students in every classroom from any school will have been exposed to the same content knowledge. The political foundation of the standards, along with the publicity surrounding the annual school accountability process and the focus of individual teacher evaluations based on state assessments, put a great amount of pressure on teachers. They must make sure their

students are able to perform on the given test day. The temptation to teach by practicing the test may take valuable time away from more meaningful learning activities.

State content standards allow for individual teaching skills. While the standards prescribe what content knowledge is taught in the curriculum, it is still left to teachers to choose how they will teach. It is often called the 'art of teaching' because skilled and sensitive professionals still are required to assess the learning environment, the student's personalities, learning styles and prior knowledge; and be able to design content units and plan learning activities that are meaningful and relevant. (Smith & Ragan, 2005). A potential weakness is that textbooks and classroom resources may not be aligned with the state standards. Teachers must be aware of missing content, benchmarks and performance indicators and be able to plan activities that will include all mandated instructional objectives.

It has been over 30 years since computer technology has been introduced into school systems. Technology skills have been used in classrooms in a variety of ways: to save time for teachers, for skill practice, to document assessments, to engage and motivate students, even to impress parents and administrators. No longer can these reasons alone be used to justify the use of technology in the curriculum. (Hofstetter, 2006). The strength of state standards is that professionals create a specific and complete list of critical knowledge. But state content standards have not defined exactly where and how technology fits in with other curricular areas. Students who will be prepared for successful lives into the 21st century must be able to draw upon technological skills as if by second nature. Technology and other content area standards can meet student needs only when they are integrated with, and support each other. (Roblyer, 2007). ISTE, The International Society for Technology in Education, recognized this point when they created National Educational Technology Standards. NETS are the technology education

standards most used by teachers and educational leaders today. Their website asserts that “it is critical to situate NETS for Students in content-area curriculum in ways that support both the subject area content and the technology skills.” (ISTE). Even if educational leaders recognize the need to interject technology throughout the curriculum, it is difficult to devise a workable solution. The federal Department of Education, partnering with ISTE, has authored a National Education Technology Plan with the stated goal of reaching a new “Golden Age in American Education.” The seven goals and recommendations they list do not include revising the national or state standards to include specific technological skills in all content areas. (U. S. Department of Education, 2007).

Technology standards must be totally and irrevocably incorporated into each content area, just as technology is and will continue to be incorporated into every aspect of modern life.

The Sunshine State Standards are currently under revision by the State Board of Education to review and adopt World Class Education Standards that prepare Florida’s students to effectively engage, communicate, and compete globally with students around the world. Florida’s standards will incorporate important skills such as critical thinking, problem-solving, creativity, innovation, collaboration and communication. (Florida Department of Education).

Total immersion of technology standards into all content areas is the only feasible way to accomplish this critical goal.

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