

North Carolina Professional Teaching Standards

Importance:

“The NCPTS are the basis for teacher preparation, teacher evaluation, and professional development.” -- These standards are to develop well-rounded, competent professionals in the classroom with a focus on 21st century skills and global awareness.

Overview of Standards:

1. Demonstration of leadership - Teachers should be leaders in all aspects of the profession
 1. Engaging in a professional learning community within the school
 2. Working to improve the profession of education with their colleagues
 3. Taking an active role in advocating positive changes to policy
 4. Demonstrating high ethical standards by upholding the Code of Ethics and Standards for the Professional Conduct
2. Respect for a diverse population of students
 1. Demonstrating knowledge of diversity, recognizing the influence of diversity in the classroom/community/world, and striving to understand how diversity influences students' performance
 2. Recognizing that the education of each individual child is a shared responsibility between classroom and home - communication and collaboration are paramount
3. Knowledge of the content
 1. Aligning instruction with the NCSCOS
 2. Striving to create in all of their students a deep understanding of the content beyond what is required
 3. Recognizing how their subject interconnects with other subjects in the school as well as how it promotes global awareness
4. Facilitation of learning for their students
 1. Understanding how students think and learning and applying differentiated instruction when appropriate
 2. Planning appropriate instruction for students through teacher collaboration
 3. Utilizing a variety of effective instructional and assessment methods that meet the needs of the students in a diverse way
 4. Integrating technology for the purpose of learning content, thinking critically, solving problems, etc.
 5. Promoting crucial higher-level thinking skills in their students
 6. Highlighting the importance of cooperation and collaboration among students
 7. Communicating clearly and effectively
5. Reflection on their practice
 1. Analyzing student learning and adapting to the available research
 2. Linking professional growth to professional goals while adapting their practice in a complex, dynamic environment

Compare to NBPTS:

1. Teachers are committed to students and their learning
2. Teachers know the subjects they teach and how to teach those subjects to students
3. Teachers are responsible for managing and monitoring student learning
4. Teachers think systematically about their practice and learn from experience
5. Teachers are members of learning communities

The NCPTS and NBPTS are very similar but with different wording. The NBPTS focus more on practice and teaching in the classroom while the NCPTS has a greater focus on 21st century skills and roles in a broader context.

NETS Teachers

1. Facilitate and Inspire Student Learning and Creativity
Integrate content area and technology in a way in which encourages creativity
Student created Facebook page for Abraham Lincoln.
2. Design and Develop Digital-Age Learning Experiences and Assessments
Use technology to create interactive learning activities
Virtual fieldtrip to ancient Athens to study architecture
3. Model Digital Age Work and Learning
Teachers are able to use technology themselves
Create a class website with weekly updates
4. Promote and Model Digital Citizenship and Responsibility
Ensure teachers abide by ethical and legal guidelines to model appropriate behavior to a diverse student body
Proper documentation of source material used in class
5. Engage in Professional Growth and Leadership
Teachers should continuously keep updated on emerging research and technology
Participate in workshops about iPad usage at the Apple Store

National Educational Technology Standards for Students

Standard 1 – Creativity and Innovation

- Students use prior knowledge and concepts to generate new ideas and original works.
- Example: Have students create a demonstration that shows their understanding of gravity.

Standard 2 – Communication and Collaboration

- Students use technology and media to share work and interact with others, including at distances.
- Example: Students submit video projects of acceleration calculations by dropping random household objects into a digital drop-box.

Standard 3 – Research and Information Fluency

- Students use and understand digital resources in order to inquire, evaluate, and report information.
- Example: The use of the internet to find a lab about Bernoulli's Principle.

Standard 4 – Critical Thinking, Problem Solving, and Decision Making

- Students use cognitive skills to solve problems, conduct research, identify problems for investigation, and collect data.
- Example: Identify a local energy issue and propose a potential solution.

Standard 5 – Digital Citizenship

- Students understand cultural and societal issues related to the legal and ethical use of technology.
- Example: Create a digital community to promote scientific inquiry (blog, forum, etc.).

Standard 6 – Technology Operations and Concepts

- Students have a sound understanding of technological systems and concepts.
- Example: The posting of students’ current research onto a website.

Brian Wood and Carson Dobrin

21st Century skills framework

These were set up with the goal of providing students with the “21st century” framework needed to negotiate a 21st century world. They were developed in 2002 by a partnership involving the US Department of Education, several organizations including Microsoft and Apple and some private individuals. 16 states, including North Carolina, have adopted these standards.

4 sets of standards:

1. Core Subjects and 21st Century Themes: In addition to the common/basic subjects, students should be provided instruction in global awareness, financial, economic, business and entrepreneurial, civic health and environmental literacy.

This is important because it reflects themes that are important in the current world.

2. Learning and Innovation Skills: Three important skills that students need in addition to traditional academic schools. These are:

Creativity and Innovation
Critical Thinking and Problem Solving
Communication and Collaboration

These are important because they are skills needed in the 21st century, especially in working environments.

3. Information, Media and Technology Skills: Three important skills relating to media and technology are needed. These are:

Information Literacy

Media Literacy

ICT (Information, Communications & Technology) LITERACY

These skills are important because they reflect how technology is rapidly changing and there is a lot more information out there and students need to know how to handle it.

4. Life and Career Skills: Several skills are needed in this area. These are:

Adaptability

Initiative, self-direction

Social and cross-cultural skills

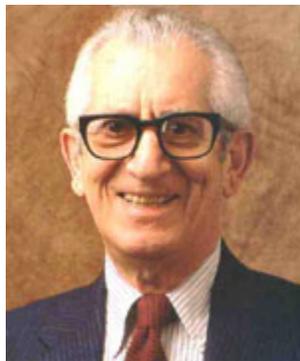
Productivity and accountability

Leadership and responsibility

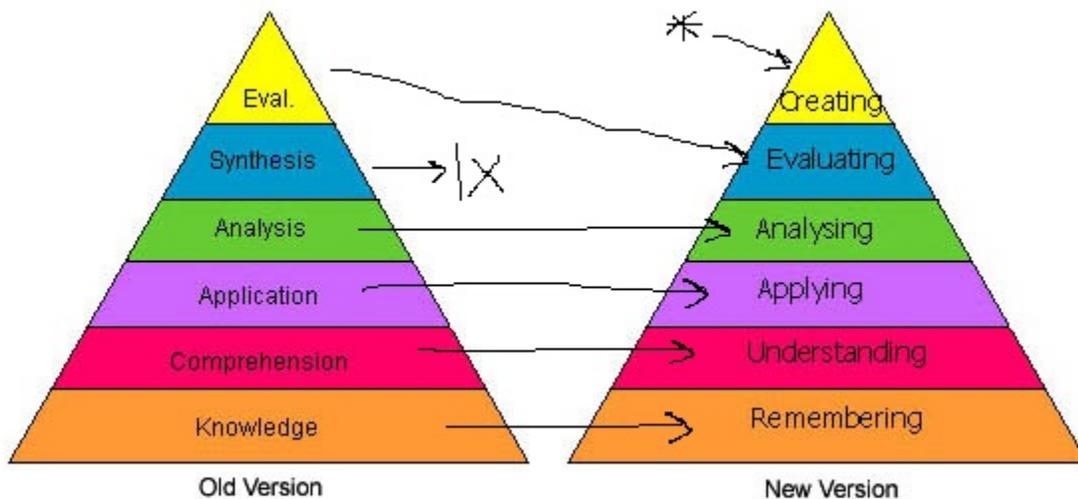
These are important because current work environments require new skills in order for an employee to be successful.

A teacher might integrate these expectations into specific high school content by effectively using technology in the classroom. For example, if a teacher was giving a unit on sustainability in a high school biology classroom, he/she might have students work in groups to present a project relating to global sustainability using new and innovative technological resources of their choosing. This project, while addresses a key concept area while simultaneously incorporating the four standards.

BLOOM'S REVISED TAXONOMY



- “a multi-tiered model of classifying thinking according to six cognitive levels of complexity.”
(http://projects.coe.uga.edu/epltt/index.php?title=Bloom%27s_Taxonomy)
- “Bloom's Taxonomy provided the measurement tool for thinking”
- taxonomy = classification



- **Remembering:** Retrieving, recognizing, and recalling relevant knowledge from long-term memory.
 - define, duplicate, memorize, list, recall
 - memorizing an poem (“Whose woods these are I think I know...”)
 - Reciting an equation ($y=mx+b$)
- **Understanding:** Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.
 - calculate, discuss, explain, identify, outline, restate
 - explaining what that poem means. (“It’s about a guy walking through the woods at night!”)
 - understanding what that equation does (You can find the slope of a line.)
- **Applying:** Carrying out or using a procedure through executing, or implementing.
 - classify, demonstrate, dramatize, illustrate, practice
 - looking at the poem in terms of meter, rhythm, diction, imagery, etc.
 - Finding the slope of a given line
- **Analyzing:** Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.
 - compare, contrast, differentiate, examine, infer
 - Finding themes and relating them to other poems, the self, and the world at large
 - understanding what the individual components of the equation are (‘m’ is the slope of the line, as in 2 up and 3 over)
- **Evaluating:** Making judgments based on criteria and standards through checking and critiquing.
 - defend, dispute, judge, justify, rate, support
 - Determining whether a poem is aesthetically meritorious or not.

- come to the equation through other equations (math people, you know what we're talking about ;)); determining whether a function is linear or not.
- **Creating:** Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.
 - compose, create, change, formulate, invent
 - Writing your own poem!
 - Creating a new equation

To get to the top of the pyramid, you have to go through the processes below it. Ideally, you want to spend as much time on the higher portions of the graph as the lower ones.