

Yesterday & Today...

Moving to 21st Century Thinking Skills

Emphasis was on memorization of facts.

Teacher was the primary source of information.

Any source of written information was considered valid.

Emphasis was on finding, remembering, listing, describing, explaining, and naming.

Students were expected to supply the right answer.

Teacher questions focused more on what and when.

Primary classroom tools were textbooks, chalkboards, and paper and pencils.

Students sat in straight rows, focused on the teacher, and talking was limited.

Teachers often planned their lessons, based on teacher's manuals and program guides.

Teachers had limited resources for planning engaging lessons.

Students worked more independently and projects were mostly completed outside of class.

Emphasis is on evidence-based responses and the development of skills.

Students use a wide variety of sources.

Students are expected to evaluate the reliability of sources.

Students are challenged to invent, create, justify, critique, deconstruct, interrogate, assess, and convince.

Students are asked to explain the thinking behind their answers.

Questioning requires students to respond to why and how.

Tools include paper and pencils plus digital devices, interactive technology, and human resources.

Students are involved in social learning using applications such as **Edmodo**, **Skype**, **EduBlogs** (fee), **Wikispaces**, and **GoogleDocs**.

Standards and authentic performance-based tasks drive instructional planning.

Teachers now have access to sources like **Khan Academy**, **The Teaching Channel**, and **MrNussbaum.com**.

Students interact in **Socratic Seminars**, **Reciprocal Teaching**, and **Project-Based Learning (PBL)**, etc.

Whole-class instruction with all students using the same resources was often the norm.

In class, students listened to teacher lectures and took notes, watched demonstrations, and, then, completed homework outside of class.

Homework was often preparation (read a chapter) and practice (complete a worksheet).

The primary audience for student work was the teacher's inbox.

Students often focused on four C's: **Capture** the lecture, **Color code** the notes, **Cram** for the test, and **Cross** your fingers that you can remember the facts.

Assessment of learning was completed primarily by the teacher.

Students often worked in Levels 1 and 2 of **Webb's Depth of Knowledge (DOK)**.

In Daggett's **Rigor and Relevance Framework**[®], students operated almost exclusively in Quadrants A and B.

Students learning was measured primarily with paper and pencil assessments.

Students received a grade on assessment and the next learning segment was introduced no matter the level of mastery.

The use of scaffolding and parallel texts ensures all students can tackle complex concepts and do rigorous thinking.

In flipped classrooms, input of information occurs outside of class and classtime is devoted to interactive group learning.

Homework is often extension or creative and requires application of new learning.

Students design products for a variety of audiences, including classmates.

Students are assessed on the four C's of the 21st Century Skills: **Communication**, **Collaboration**, **Critical Thinking**, and **Creativity** and **Innovation**.

Students are asked to self-assess to determine and set learning goals.

Students are asked to complete more tasks at Levels 3 and 4 of **DOK**.

Students move quickly through Quadrants A and B and delve more thoroughly into Quadrants C and D.

Student learning is measured in multiple ways, including paper and pencil assessments.

Students are provided growth-producing feedback and are expected to react to that feedback in ways that promote further learning.