The next conceptual model is the Rigor/Relevance Framework®. My colleagues and I created the Rigor/Relevance Framework to help teachers increase the level of academic rigor and real-world relevance in their curriculum, instruction, and assessments, thereby raising student achievement.

The Rigor/Relevance Framework is divided into four quadrants. (International Center for Leadership in Education, *Using Rigor and Relevance to Create Effective Instruction*.)

Acquisition (Quadrant A) represents simple recall and basic understanding of knowledge for its own sake. Students gather and store bits of information and are expected to remember or understand this acquired knowledge. Knowing that the world rotates or that Shakespeare wrote *Hamlet* are examples of Quadrant A knowledge.

Application (Quadrant B) represents application of knowledge. Students use acquired knowledge to solve simple problems, design solutions, and complete work. Knowing how to use math skills to make purchases and count change are two examples.

Rigor/Relevance Framework®

Assimilation (Quadrant C) represents more complex thinking than Acquisition, but still knowledge for its own sake. Students extend and refine their acquired knowledge to be able to use it automatically and routinely to analyze and solve problems and organize data. Quadrant C embraces higher levels of knowledge, such as knowing how the U.S. political system works or analyzing the benefits/challenges of cultural diversity.

Adaptation (Quadrant D) represents a high degree of application. Students think in complex ways and apply the knowledge and skills they have acquired across disciplines to solve problems that have multiple possible solutions. When confronted with perplexing unknowns, students are able to use acquired knowledge and skills to devise solutions and take actions that further develop their abilities and understandings.

All four quadrants have value, but Quadrant D brings the greatest value in preparing students for success in life.

In combination, the E/E Framework and the R/R Framework are two powerful and useful models for 21st century visioning, planning, and decision making regarding next practices in an era of economic challenges and rapid change. What we need to do next is to align our thinking and conceptually merge the Evolution of Change Model with the two frameworks.

The multi-layered approach can be a guide to support the types of strategic decisions that education leaders will need to make in facing the challenges ahead. Here is the key question that leaders must answer:

> What incremental and then innovative and transformational changes will ensure that we provide our students with learning that is rigorous, relevant, effective, and efficient—at a time when budgetary pressures limit our options?

Pursuing Next Practices

There continue to be many helpful *incremental* changes, but also some significant and encouraging innovative changes in our schools. These innovations—heading toward transformational changes—are what I consider to be next practices.

As we pursue next practices, we must make sure that everything we do:

- falls in Quadrant D of the E/E Framework—highly effective and highly efficient.

- moves toward Quadrant D of the R/R Framework—high rigor and high relevance.

- will help us move to innovative and transformational practices.
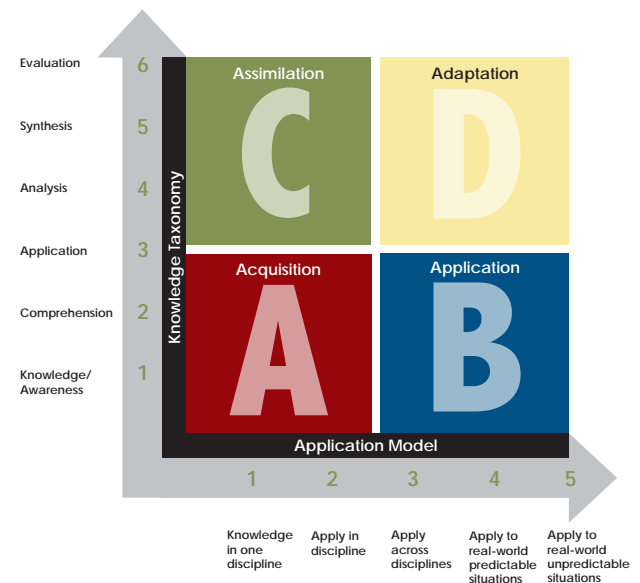
Here are some examples of the three types of change in various areas of responsibility.

Scoring of Essays

1. Incremental Change	Staff are trained in how to improve and standardize their grading of essays across disciplines.
2. Innovative Change	Essays are machine-scored. In 2012, the Hewlett Foundation completed a study of nine different programs using 22,029 student essays and found that all were more accurately and consistently scored than by human scoring. (http://dl.dropbox.com/u/44416236/NCME%202012%20Paper3_29_12.pdf)
3. Transformational Change	Machine-based essay scoring will occur while students are actually writing their essay. Students are shown the errors and how to correct them and are given stylistic and structural suggestions on ways to improve their writing in the future.

Professional Development

1. Incremental Change	Tech-savvy teachers design an assessment that all staff take to measure their competency with common technology applications (Word, Excel, etc.) and instructional technology (smartboards, game-based learning, etc.). Based on performance, staff members are assigned to a beginner, intermediate, or advanced group for a day-long training conducted by students to improve their skills..
2. Innovative Change	After completing the training described above, all educators are assigned a student mentor to assist them. The students receive academic credit for their service.
3. Transformational Change	The staff members identified as "advanced" and tech-savvy students are given an extended period of time to design the instructional delivery system for the following school year, which must be based in Quadrant D of the E/E Framework.

Technology in Schools

1. Incremental Change	Computer labs, where students visit once during the week.
2. Innovative Change	One-to-One Computing, where the school provides each student with access to their own individual computer throughout the day.
3. Transformational Change	Bring Your Own Technology, where each student brings their own personal technology devices to school to assist in their learning.

Change—Systematically

We do need to change our schools and our school systems—before someone changes them for us. And we need to change them to a more transformational model. K-12 education must move past the incremental changes that have already happened and move toward the innovative changes that are currently happening and the transformational changes that will or should happen in the not-too-distant future. To do this, we must systematically reflect on, map out, strategize about, and then align the progression of changes in all aspects of our education system and schools in support of student achievement.
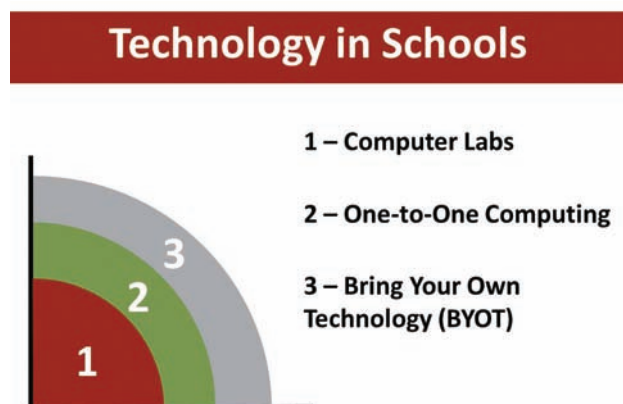

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