

**An Overview:  
Teaching the Right Skills for a New Age:  
By  
Elliott Seif\***

Let's stop believing that standardized tests, factual coverage, a focus on discrete skills, traditional multiple choice end of course tests, a teach-test-move on mentality, even AP courses, can prepare most students for this new age we are now living in. This new era, with its qualitatively different dimensions -- information overload, instant search engines, cheap worldwide communication, Netflix, Twitter, and Facebook, rapid technological innovation, job restructuring, uncertainty and change, and new, complex political, economic and social challenges -- requires a very different educational approach.

In the face of these societal changes, all students need to be prepared with critical knowledge, skills, and attitudes and behaviors that allow for continued learning and growth beyond high school, critical and creative thinking, and the skills necessary for finding and processing huge amounts of information. Even with the Common Core standards, our current educational emphases aren't adequately preparing most students for learning beyond high school -- for college, career, military or other future endeavors.

While a critical knowledge base and positive attitudes and behaviors are important for future living, this blog focuses on the skills students must develop if they are to adapt to this new world. Five key skill areas should be given a laser-like focus in order to prepare students for continuous learning in this new age:

**1. Curiosity: *Ask questions, formulate problems and challenges.***

It is a rare school or program that enables students to examine and develop profound questions, solve complex problems on a regular basis, or work from/develop challenges that are worthy of critical study. Imagine studying the American Revolution by enabling students to brainstorm questions and choose (with the teacher's input) to examine some profound and critical questions, such as "Why revolution, not evolution?" "Did they really have to revolt?" or "Is war ever justified?"

**2. Information Literacy: *Search for and process information and data***

Information processing enables students to learn a broad variety of skills appropriate for a world of information overload and instant access. These series of skills assure that students can search for information from many sources, sort and select for importance, evaluate information for reliability, read for understanding, and summarize, categorize, and conceptualize from texts.

**3. Thoughtfulness: *Think deeply and flexibly***

Students are provided with the opportunity to extend their thinking -- for example, to compare and contrast, interpret, apply, infer, analyze, synthesize, and think creatively.

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#### **4. Application: *Draw conclusions, applying learning***

Students draw conclusions, solve problems, make decisions, answer key questions. They are often asked to apply learning to new and novel situations, problems, and issues.

#### **5. Communication: *Communicate effectively.***

Students communicate effectively in a number of ways, such as through writing a persuasive essay, demonstrating how to solve a math problem, creating a powerpoint presentation in order to explain the results of a science experiment, or developing a graphic organizer that helps to explain a theory.

These five skill areas create a relatively simple approach to thinking about skills teaching. Taken together, they provide students with powerful tools for learning and living. They can be taught separately. Or, together, they can form an “Inquiry” or “Research Based” Instruction model for teaching and learning, and provide the common threads for unit design and powerful project development. They suggest a curriculum that concentrates on working from important, essential questions, provides students with opportunities to frequently collect and process information, encourages students to extend their thinking, builds in opportunities for students to draw conclusions and apply learning, and enables students to frequently and effectively communicate. All subjects and content areas, such as literature, history, science, engineering, mathematics, health and physical education, the arts, and foreign languages, become the vehicle through which these skills are continuously taught, learned, and developed in their complexity over time.

The teaching of these skills starts in pre-school, as students are encouraged to ask questions about the world around them, observe pictures, discuss books that are read to them, play in ways that encourage analysis, and so on. As students progress through the grades, they focus learning around critical and essential questions. Textbooks are treated as searchable texts. Research opportunities help students find and evaluate new resources, process information, and read for understanding. As appropriate, students analyze data, draw conclusions, apply learning to new and novel situations, make presentations, and write, write, write and do more writing. Discipline based and interdisciplinary thematic projects are a core part of the learning process. As they use these skills, they also learn the attitudes and behaviors they will need for future learning, such as curiosity, collaboration, perseverance, learning from failure, risk-taking, striving for accuracy, and learning how to improve their work.

This relatively simple approach to teaching and learning is what students need to be prepared for the continual learning they will have to face in an ever changing, uncertain, high skills world. Let’s hope that our National and state laws, curriculum frameworks, teacher preparation institutions, educational leaders, and classroom teachers can move in this direction in the near future.