

# **The New Inquiry in Education: Reshaping the Skill Demands of Today's Students**

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## **ABSTRACT**

**Trends, research, and governmental mandates have caused school districts to direct their focus on the realization that the traditional curriculum is no longer a means to a desirable end. The challenge is to provide students with an educational base that goes beyond what has been considered essential. An examination of the curriculum today causes much deliberation and questions concerning what constitutes those skills, competencies and the common core of information needed to become educated, productive, well-rounded and prepared to live in an environment that is rapidly changing.**

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This new era has brought about a dynamic, exciting, frustrating, and complex assessment of how to best prepare students for the changing skills set needed to be successful. With the abnormal becoming the normal and the method of inquiry being adapted to the changing norm, the variables needed to realistically and accurately study in order to determine the relevance of meaningful existence have become somewhat difficult to identify. The reconfigured design in curriculum development tends to point to the connection between how traditional knowledge is becoming obsolete and being retooled based on specific driving forces.

## Theoretical Framework

The notion of change usually bring about a plethora of emotions and behaviors in terms of projecting anticipated outcomes. In their analogy of change in the twenty-first century, Johnson, Musial, Hall, Gollnick, and Dupuis (2008,) maintain that “there is no escaping change in today's world. One of the biggest challenges for twenty-first century teachers is to respond to societal change intelligently” (p.461).

Without knowing what the world will look like in six to ten years, schools, school systems, educators, state departments of education, and all stakeholders will have to change and broaden their view of how to prepare students for life in that world. Students are facing emerging issues that have never had such an influence or impact as are being witnessed today (Jerald, 2009). Both within and outside of the United States, governmental collaboration, territorial walls being torn down in discovering new possibilities and truths calling for new directions and expansions in the workforce, the evolving economy, environmental concerns, queries, and divergent thinking, all have formed a paradigm shift in where the skills lines should be drawn.

In an "ever-evolving" essay, as described by the author Anne Shaw (2008) entitled “What is 21st Century Education”, critical attributes of the new, futuristic curriculum were identified.

It is interdisciplinary, project-based, research-driven, relevant, rigorous and real-world. There is a connection to the community; it incorporates higher order thinking skills; multiple intelligences; technology and multimedia; the multiple literacies; and authentic assessments. Students are self-directed, and work both independently and interdependently. The curriculum and instruction are designed to challenge all students, and provides for differentiation. The curriculum is not textbook-driven or fragmented, but is thematic, project-based and integrated. Skills and content are not taught as an end in themselves, but students learn them through their research and application in their projects. Textbooks are but one of many resources. Knowledge is not memorization of facts and figures, but is constructed through research and application, and connected to previous knowledge, personal experience, interests, talents and passions. The skills and content become relevant and needed as students require this information to complete their projects. Assessment moves from regurgitation of memorized facts and disconnected processes to demonstration of understanding through application in a variety of context. (¶ 1-5)

In advancing the notion of revamping our schools, according to Erik Palmer (2010), at the least, ten years into the 21st century not much has changed in schools because we have had the wrong approach in teaching about 21st century tools. Hargreaves (2010) wrote, “Twenty-first century skills require 21st century schools” (p. 340). When it comes to closely analyzing the educational structure of our schools in view of curriculum and instruction for the upcoming skills renewal, the emerging thought is "there is a gap between the compass and the clock – between what's deeply important to us and the way we spend our time" (Covey, Merrill, & Merrill, 1994, p. 16).

An example of the new way of thinking relative to teaching and learning is the old and new version of Blooms Taxonomy. The illustration demonstrates and affirms that mechanisms have been and are being put into place to bring to the forefront the idea that teaching and learning must be reanalyzed in light of the current transformation taking place in education and our society. According to Forehand (2005), the intent is to add relevance for 21st century students and teachers (See Figure 1).

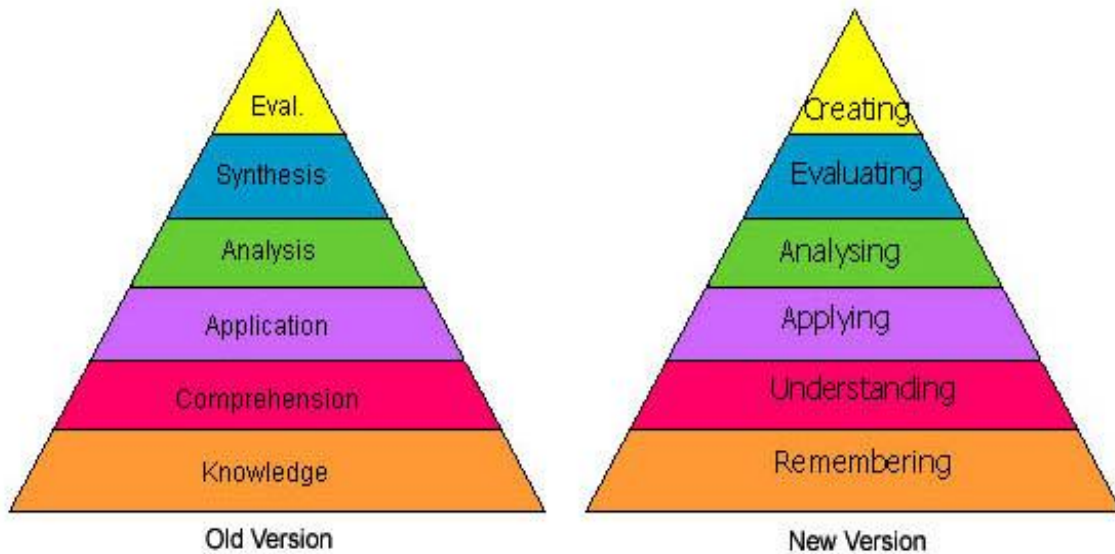


Figure 1. Old and new versions of Blooms Taxonomy.

### **Forces Shaping New Millennium Systems Thinking About Student Learning**

After compiling a significant body of research on schooling for relevance that would be beneficial to today's students, Jerald (2009) posited that automation, globalization, corporate change, demographics, personal risk and responsibility are the forces shaping the new millennium systems thinking in education. Kellner (2000) concurred that a new skills set must be included in the schools of the 21st century.

#### **Automation**

Automation has impacted everyone's life. It began to take the place of humans to the degree that increased emphasis on training the future workforce to prepare for this phenomena is imminent. The New Commission on the Skills of the American Workforce (National Center on Education and the Economy, 2006) states in the report, the challenge:

This is a world in which a very high level of preparation in reading, writing, speaking, mathematics, science, literature, history and the arts will be an indispensable foundation for everything that comes after for most members of the workforce. It is a world in which comfort with ideas and abstractions is the passport to a good job, in which creativity and innovation are the key to a good life, in which high levels of education -- a very different kind of education than most of us have had -- are going to be the only security there is. (pp. 6-7)

## **Globalization**

In preparing students to accept and embrace globalization as a fact of life, schools and the new curriculum must emphasize that the best plan for strengthening the workforce of the future is to understand and strategically analyze the challenges facing today's workers (Bernstein, 2005). The future workforce has to come to the realization that geographical borders are no longer a consideration in job selection and advancement. Toward that end, reference will center around a set of economic outcomes that have evolved over the past few decades, as our economy has become more global. Craig Jerald (2009) notes that advances in digital technology and telecommunications enable companies to carve up work and send tasks to be done wherever they can be completed best and cheapest.

Globalization is clearly influencing skill demands in several ways. First, because they will face a job market in which Americans no longer have such a large "home court" job advantage, students will need to ensure that they have sufficient skills and enough education to compete for good jobs in a truly global economy. And "sufficient" increasingly means much more than basic. Lower skilled jobs are the first to be outsourced, but higher skilled work is increasingly vulnerable—especially as other nations catch up to and surpass the U.S. in K-12 and higher education. Globalization also is affecting the types of knowledge and skills students will need to thrive. Since they will be collaborating with people around the world, they will need to have greater "global literacy"—knowledge about the people and cultures outside the U.S. (p.10-11).

Richard Mundane and Frank Levy (1996) conducted extensive studies of successful businesses and found that the hard skills which include mathematics and problem solving abilities were at levels much higher than many high school graduates now attain. Soft skills, the ability to work in groups and to make effective oral and written presentation are skills that many high schools do not teach. They concluded that schools are failing because they are not teaching children the new basic skills that must be mastered to earn a middle-class income.

## **Corporate Change**

The nature of the workplace is constantly changing primarily because of the economy which impacts corporations. According to Jerald (2009), workplace and corporate change are having a significant impact on skill demands. Individuals need to be able to act independently to identify opportunities and to delineate and solve problems on their own. Schools should be able to incorporate increased independent problem-solving opportunities in classroom instruction, activities, and assessments. From the standpoint of school reform in the corporate change arena, Michael L. Eskew (2007), Chairman and CEO, UPS, at States Institute on International Education in the Schools takes a different position on addressing this matter. He supports the contention that "fresh thinking is needed. Boldness is needed. New goals are needed. New coalitions are needed. Risk-takers are needed. Private foundations, a critically important source of innovations, must think more creatively about how their grants could stimulate bolder educational reforms" (p. 178).

## **Demographics**

America is becoming more and more diverse based on its population pattern. It is a known fact that the majority is quickly becoming the minority. Bruder (1992) indicated that by the year 2010, California, Florida Texas, and New York will contain one-third of all United States youth. With this occurring at a rapid rate, changes in teaching the various racial and ethnic groups are an instructional reality. Classrooms of today are reflective of the diversity in U. S. society. Students may look similar but come from different cultural backgrounds and experiences.

Changing demographics in the United States have often been cited as reasons to mandate training in multiculturalism (Garcia & Pugh, 1992; Dunn, 1993; Banks, 1991). As one considers the changing landscape, this view is inclusive of diversity, culture, socioeconomic status, poverty, language diversity, dialectal diversity, gender differences, and exceptionalities within the population.

## **Personal Risk and Responsibility**

As the world becomes more complex, so will the challenges. With the human capital being the greatest asset a country can have, personal responsibilities become paramount. Jerald (2009) notes in his research that "students will need strong skills to navigate a world where personal choices are fraught with greater risk. They will need to be able to use what they learn in school to understand critical information including numerical health and financial information in order to make sound decisions to ensure their well-being" (p.20).

## Conclusion

Schools today are at a pivotal point in curricula design. More and more emphasis is placed on what is now known as 21st century skills. These skills far exceed what is commonly referred to as those within the traditional curriculum. Skill sets now include global awareness, financial and economic literacy, automation, critical thinking skills, problem solving ability, communication skills, collaboration skills, and the ability to make rational and logical decisions. Our schools are built for an era that has superseded them. In order to get to where we need to be in preparing students for the 21st century challenges, this can be accomplished by changing the educational system and the mindset of those who are responsible for structuring meaningful life skills and competencies for our students.

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