

Ten Questions to Improve Teaching, Schools or Districts – and Ultimately Student Learning and Achievement!

**By
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How do we build strong educational programs that meet student needs in this new age of knowledge and data explosion, search engines, social media, technological progress, domestic and global uncertainty, new roles for citizens, and complex, changing jobs and careers? How do we develop programs that are relevant, motivating and customized to each student's needs?

Below are ten sets of questions to consider to help assess teaching and learning, classrooms, schools or districts, and to decide on what might be done differently in the future.

1. MISSION AND BELIEFS ABOUT LEARNING

Every classroom, school, and district should have a clear mission, learning goals and outcomes that derive from students' educational needs in a 21st century world. Every teacher needs to identify the core knowledge, skills, and attitudes that he or she is trying to develop with students. A school or district should explicitly state its mission and be able to define, describe and operationalize educational goals so that all staff members understand how they can contribute to achieving them.

Teachers and schools should also have a clear understanding of the latest research and thinking about and principles of learning.

Questions to consider: *Is my/our mission consistent with what students need to know, be able to do, and have the "habits of mind" that will enable them to live effectively in a 21st century world? Are the mission-outcomes-learning goals coherent, clear, and measurable?*

Are beliefs about learning consistent with the latest learning theory and research? If yes, how do they impact instructional practices?

2. POSITIVE CULTURE AND ORGANIZATIONAL STRUCTURE

Many teachers and schools have created new and different cultures and organizational structures to support 21st century learning. These cultures and organizations often focus on promoting and emphasizing student success and growth rather than failure. They provide multiple enrichment activities and enable students to complete long-term projects. They break down disciplinary walls and encourage integrated, interdisciplinary learning. Students have multiple opportunities to connect their learning to real world experiences.

Questions to consider: *Does my/our organizational structure/school environment provide positive support for students and encourage their success and achievement? Does my/our organizational structure facilitate collaborative, coherent, 21st century learning? Break down the walls of separate learning compartments? Encourage the development of “seamless” learning environments? Build connections to the outside world? Support long-term projects?*

3. CURRICULUM

Empirical evidence points to a coherent core curriculum as a key factor in high levels of student achievement¹. Standards are often cited as important documents for improving curriculum and instruction, but it is actually the daily, weekly, monthly, yearly curriculum -- goals, questions, activities, assessments -- that, taken together over a long period of time, make a significant difference in how students are educated and their levels of success and achievement.

Questions to consider: *Does the curriculum at every level support the development of key, core knowledge, understandings, skills, attitudes and values as defined by our mission? Am I/are we working with a coherent curriculum that stresses meaningful, understanding-based learning through all the content areas? Does my/our curriculum encourage interdisciplinary, integrated learning rather than rigidly organized separate subjects? Do we have a process to address changes to the curriculum and provide adequate resources that support the curriculum?*

4. SKILL DEVELOPMENT

Teachers and schools need to make careful, intentional decisions as to what skills will be emphasized, taught and learned, and to what degree at what

levels. Here are five key skill sets that might be given priority for students to learn in a 21st century world:

- *Curiosity*: Ask questions, define problems and challenges;
- *Information literacy*: Search for and process information and data;
- *Thoughtfulness*: Think deeply and flexibly;
- *Application*: Draw conclusions and apply learning; and
- *Communication*: Communicate effectively through writing, oral discussions and presentations, argument, multi-media avenues, and the like.

Schools with strong 21st century programs have defined their own key skill goals, such as the ability to develop concepts, inquire, conduct research, solve problems effectively, think critically and creatively, and communicate effectively. They make sure that students develop and grow critically identified skills over time, both within and across subjects.

Questions to consider: *Am I/are we clear about which skills are important to develop in order to help students achieve success in a 21st century world. Am I/are we embedding the learning of identified skills into ongoing curricular and instructional practice? Do we work hard to improve the development of identified skills over time, both within individual classrooms and across grade levels?*

5. ASSESSMENTS AND ACCOUNTABILITY

Traditional exams, quizzes and standardized tests, with multiple choice-short answer questions, are the most frequent types of measures used to determine achievement and accountability, due to the No Child Left Behind law, past practices, and ease of implementation. Unfortunately, in a 21st century world, “traditional” assessments are limited in their ability to assess, among other things, student writing, communication coherence, individual “voice”, research skills, problem finding and question asking, application of learning to new situations, scientific investigation skills, and creative thinking.

Assessments more in line with 21st century achievement goals include performance tasks, writing assignments, research projects and papers, the results of creative thinking, and self-reflections, organized into collections of student work (portfolios) that provide evidence of understanding, skill development, and individual learning, strengths and interests. Often these assessments together become culminating portfolios that are used to

determine “accountability” of learning and demonstrate the expected level of student work for graduation.

Questions to consider: *Do I/we assess students using multiple types of assessments that go beyond traditional exams and quizzes, including written products, research results, science experiments, problem solving tasks, original creations, presentations, self-reflections, and authentic tasks? Does our school/district require students to develop collections of student work into portfolios, including a final, culminating portfolio of student work that is used to help determine individual achievement upon graduation?*

6. INSTRUCTION

Much instruction today is focused around discrete skill development, often in the form of worksheets; passive learning; recitation and lecture; coverage of content; and textbook driven learning. Some schools emphasize alternative forms of instruction better suited to learning key knowledge and skills for a 21st century world, such as concept based learning and thinking strategies; inquiry, research, problem and project based learning activities; creative problem solving activities, interactive, collaborate learning strategies; the use of understanding based notebooks; and application of learning strategies.

The use of technology can enhance instruction, but only if it is used as a tool towards more efficient and effective mission based learning. Technology can easily get in the way of effective teaching and learning, such as when students use technology to fill out more sophisticated worksheets, or when technology increases the glitziness of a poor lecture. On the other hand, technology can be a powerful tool for improving the ability to inquire, for information searches, for improving writing, for simulations, for improving student presentations, or for increasing connections to the outside world.

Questions to consider: *Is my/our instruction designed to facilitate the learning of key knowledge and skills for a 21st century world? Does my/our learning enable students to “dig deeper” into their learning? Is my/our instruction interactive, engaging, and motivating? Does my/our instruction provide students with the opportunity to apply their learning to real world situations?*

Is technology being used to enhance instruction that supports the learning of key knowledge and skills for a 21st century world? Does technology improve my/our ability to reach powerful learning goals? Is technology used as a

tool that fosters more active/interactive learning? Greater connections to the outside world? Deeper learning of subject matter? Project based learning?

7. “CUSTOMIZATION” AND INDIVIDUALIZATION OF LEARNING

The increasing variety and complexity of career, education, and leisure options and choices makes it increasingly important for students to have the opportunity to discover and develop their interests, to broaden and reflect on their experiences, and to develop their talents and skills. In order to help students self-develop, grow, and understand themselves, the preK-12 educational program should give students the opportunity to choose areas of interest and enable them to practice using and growing their diverse talents. Teachers and schools should support student self-development through classroom choice, elective courses and programs, multiple enrichment activities, and support systems.

Questions to consider: *Does my/our program enable students to find their individual strengths, talents, and interests? Are my/our students provided with many choices and options during class and after school, or is the program rigid, standardized and required, with few extra-curricular options? Do many activities and programs exist in both individual classrooms and throughout the grade levels that help students discover, develop, and apply their talents and interests?*

8. HELP AND SUPPORT

Many students today live in a world of personal change and uncertainty. They often require help, support, counseling, mentoring, tutoring and other services to help them deal with the social, emotional and academic problems and challenges that they face. School programs should also enable students to have flexibility in how they meet requirements and when they graduate.

Questions to consider: *Is student help and support available when needed? Do classrooms and schools have both professional and voluntary support personnel to handle the demands of student social, emotional and cognitive support needs? Do students have flexibility in how they are able to meet course requirements, options for part-time schooling, graduation options?*

9. OUTSIDE CONNECTIONS

In this complex 21st century world that we live in, students need to see the connections between their schoolwork and the “real” world outside of school and classroom. Too frequently, the world of K-12 schools and the outside world are kept separate, divorced from each other. Many activities can help students make these connections, such as interviews with people with diverse job experiences, internships, field trips, visits to colleges and universities, authentic performance tasks, and service learning experiences.

Questions to consider: *Are there many opportunities for students to make connections from their learning to the outside world? Do outside world experiences impact teaching and learning? Are there many opportunities for students to apply their learning through authentic situations and tasks?*

10. PROFESSIONAL GROWTH AND CURRICULUM RENEWAL

Too frequently, individual teachers, schools, and districts do not have adequate opportunities to adapt educational programs and activities to a changing 21st century world. Sometimes seemingly arbitrary educational changes are mandated that are seen by staff as irrelevant or unimportant, require too much time and effort to implement, or place additional burdens on an already overworked and overcrowded program. In too many instances, “this year’s new thing” replaces “last year’s new thing”. There is little continuity between new changes and previously developed programs and activities. And changes and adaptations are not developed out of a consensus on what problems need to be solved to increase learning and achievement and move classroom and school programs into the 21st century.

Questions to consider: *Is continuous and meaningful professional growth for all part of my/our educational equation? Do I/my school or district frequently find and adapt new and meaningful ways to meet 21st century goals, identify strong curricular programs, provide student enrichment programs, teach meaningful content and skills? Do professional development programs arise out of the need to solve identified problems of teaching and learning and move our program forward into the 21st century?*

These ten sets of questions are designed to help teachers, administrators, or anyone interested in educational excellence better assess a current learning situation. The answers to these questions should encourage reflection on the

issues that promote student success and achievement. These questions may also be explored collaboratively by teachers, school or district staff.

An analysis of the answers to these questions should help educators make decisions on what needs to be done to improve student learning and classroom, school or district programs. Does the school mission/classroom goals need to be more explicit and outcomes-based? Are there outcomes that need greater emphasis, such as innovative thinking, writing, reading for understanding, meaningful learning in all subjects? Do current beliefs about learning match the latest thinking and research about how children learn? Do I/we need to learn and implement new curricular programs or instructional strategies? Do I/we need to provide students with more choices, options and connections to the outside world? How do we best motivate and engage students in an Era 3 world?

What's working well? What needs change? Where can you begin both as an individual and/or as an organization to make key changes that will make a difference and support students as they learn for living in a new age? Begin with what might make the most difference, what will be easiest to implement, what will work best. Be proactive! Small changes can often make a big difference. Think about the cumulative effect of changes over a long period of time.

A broader set of questions that might come from this review is the following: Do we need to rethink our organizational structure and educational roles in order to better be able to meet our mission and goals and help students learn what they need to know and be able to do in an Era 3 world?

And remember what Albert Einstein said:

“Insanity is doing the same thing over and over again and expecting different results.”

¹ See Robert Marzano (2003) *What Works in Schools: Translating Research into Action*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD), pp. 22-34.