What is 21st Century Education?

Possibilities for 21st Century Education

“One can’t believe impossible things.”

“I daresay you haven’t had much practice,” said the Queen. “When I was your age I always did it for half-an-hour a day. Why, sometimes I’ve believed as many as six impossible things before breakfast.”

Lewis Carroll, Alice’s Adventures in Wonderland

Introduction – Education in the 21st Century

Your Assignment, Should You Choose to Accept It . . .

Like Alice, many educators, policy makers and even the general public respond resoundingly with "That's impossible!" when challenged to adopt a new paradigm of education for the 21st century. Most people today adhere to a paradigm of education that is strictly 19th century. But, like the Queen, a growing number of educators are believing in and accomplishing "the impossible".

Scott McLeod, in his blog, Dangerously Irrelevant, recently reminded us of a line from Mission Impossible, and we must apply that challenge to all of society. "Your assignment, should you choose to accept it" is to take education truly into the 21st century. It is not enough to say that we are already living there. Technically it is the 21st century, but our schools are not there, and our challenge now is to reinvent schools for the 21st century - for the sake of our children, our students and the welfare of our world. Making such a paradigm shift is not easy. After all, when any of us thinks of education, we usually think of what we knew as school - the way it has always

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been. That is how parents, policy makers, politicians and many students think of school. But we have to make the paradigm shift to 21st century education.

So what is 21st century education? It is bold. It breaks the mold. It is flexible, creative, challenging, and complex. It addresses a rapidly changing world filled with fantastic new problems as well as exciting new possibilities. Fortunately, there is a growing body of research supporting an increasing number of 21st century schools. We have living proof, inspiring examples to follow, in schools across the United States. These schools vary, but are united in the fundamentals of 21st century education - see Critical Attributes of 21st Century Education and Multiple Literacies for the 21st Century. Scott McLeod has issued the challenge of creating a plan to get us from "here" to "there".

**The 21st Century**

The new millennium was ushered in by a dramatic technological revolution. We now live in an increasingly diverse, globalized, and complex, media-saturated society. According to Dr. Douglas Kellner at UCLA this technological revolution will have a greater impact on society than the transition from an oral to a print culture.¹

Today's kindergarteners will be retiring in the year 2067. We have no idea of what the world will look in five years, much less 60 years, yet we are charged with preparing our students for life in that world. Our students are facing many emerging issues such as global warming, famine, poverty, health issues, a global population explosion and other environmental and social issues. These issues lead to a need for students to be able to communicate, function and create change personally, socially, economically and politically on local, national and global levels.

Even kindergarten children can make a difference in the world by participating in real-life, real-world service learning projects. You're never too young, or too old, to make your voice heard and create change that makes the world a better place.

Emerging technologies and resulting globalization also provide unlimited possibilities for exciting new discoveries and developments such as new forms of energy, medical advances, restoration of environmentally ravaged areas, communications, and exploration into space and into the depths of the oceans. The possibilities are unlimited.

**21st Century Skills**

21st Century Schools, LLC recognizes the critical need for developing 21st century skills. However, we believe that authentic education addresses the "whole child", the "whole person", and does not limit our professional development and curriculum design to workplace readiness.

21st century skills learned through our curriculum, which is interdisciplinary, integrated, project-based, and more, include and are learned within a project-based curriculum by:

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✔ Collaboration – the ability to work in teams
✔ Critical thinking – taking on complex problems
✔ Oral communications – presenting
✔ Written communications – writing
✔ Technology – use technology
✔ Citizenship – take on civic and global issues; service learning
✔ Learn about careers – through internships
✔ Content – conduct research and do all of the above.

Kids in the New Millennium

One of our goals is to help students become iKids and truly global citizens.

In many countries today’s students are referred to as “digital natives”, and today’s educators as “digital immigrants”. Teachers are working with students whose entire lives have been immersed in the 21st century media culture. Today’s students are digital learners – they literally take in the world via the filter of computing devices: the cellular phones, handheld gaming devices, PDAs, and laptops they take everywhere, plus the computers, TVs, and game consoles at home. A survey by the Henry J. Kaiser Family Foundation found that young people (ages 8-18) mainline electronic media for more than six hours a day, on average. Many are multitasking – listening to music while surfing the Web or instant-messaging friends while playing a video game.

Even toddlers utilize multimedia devices and the Internet with tools such as handheld video games like Leapster and web sites such as www.PBSkids.org and www.Nick.com. Preschoolers (including my 2-year-old grandson) easily navigate these electronic, multimedia resources on games in which they learn colors, numbers, letters, spelling, and more complex tasks such as mixing basic colors to create new colors, problem-solving activities, and reading.

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However, as Dr. Michael Wesch points out, although today’s students understand how to access and utilize these tools, many of them are used for entertainment purposes only, and the students are not really media literate. Read the section below on Web 2.0 and new social communities. Dr. Wesch shows us how to use the tools to make our students truly media literate as they function in an online collaborative, research-based environment – researching, analyzing, synthesizing, critiquing, evaluating and creating new knowledge!

Web 2.0 and new Social Communities

Dr. Michael Wesch, a member of the Advisory Board for 21st Century Schools, made a global impact on August 2, 2008 when his presentation at the American Library of Congress on June 28, *An Anthropological Introduction to YouTube*, was featured on. In this presentation Dr. Wesch opens our eyes to the phenomenon of new social communities and to the classroom use of many recently developed Web 2.0 tools such as Jott, Twitter, YouTube (there is also TeacherTube, SchoolTube, and StudentTube), Diigo, Google Earth, and many more.

Dr. Wesch demonstrates how media production and Web 2.0 applications are important tools in education. These tools are important for the study of new social communities as well as learning authentic, 21st century media literacy. He takes the tools of Web 2.0 beyond the common use of entertainment to important understandings of the world. It is the 21st century way to learn and apply important 21st century skills.

See an example of Dr. Wesch’s class in their World Systems Simulation, then view the video, A Portal to Media Literacy, in which Dr. Wesch describes how they applied these various technologies in this course.

Also see the work of another 21st century leader and educator, Dr. Scott McLeod. His video Did You Know 2.0 on YouTube has been viewed over 2 million times. Two of his blogs were named in the Top Ten Blogs of 2007 by the George Lucas Education Foundation. Visit his blog, Dangerously Irrelevant, for a wealth of information and ideas related to education, technology, the 21st century, leadership, staff development and more.

For additional examples of real-life applications of technologies please read Building Schools for the Future in Tameside – the use of ICT (Information and Communications Technologies)

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for an example of A Day in the Life of a Student and A Day in the Life of a Future Teacher, written by Ian Smith, Manchester, England.

For examples of how this type of curriculum can be structured and used in a European country please see the Tameside Entitlement Curriculum developed by one of our consultants, Ian Smith. This curriculum is being implemented at this time in England.

“School”, “Teacher”, “Learner” and “Curriculum” for the 21st Century

How should education be structured to meet the needs of students in this 21st century world? How do we now define “School”, “Teacher” “Learner” and “Curriculum”?

Schools in the 21st century will be laced with a project-based curriculum for life aimed at engaging students in addressing real-world problems, issues important to humanity, and questions that matter.

This is a dramatic departure from the factory-model education of the past. It is abandonment, finally, of textbook-driven, teacher-centered, paper and pencil schooling. It means a new way of understanding the concept of “knowledge”, a new definition of the “educated person”. A new way of designing and delivering the curriculum is required.

We offer the following new definitions for “School”, “Teacher” and “Learner” appropriate for the 21st century:

“Schools” will go “from ‘buildings’ to nerve centers, with walls that are porous and transparent, connecting teachers, students and the community to the wealth of knowledge that exists in the world.”

“Teacher” - From primary role as a dispenser of information to orchestrator of learning and helping students turn information into knowledge, and knowledge into wisdom.

The 21st century will require knowledge generation, not just information delivery, and schools will need to create a “culture of inquiry”.

“Learner” - In the past a learner was a young person who went to school, spent a specified amount of time in certain courses, received passing grades and graduated. Today we must see learners in a new context:

“First – we must maintain student interest by helping them see how what they are learning prepares them for life in the real world.

“Second – we must instill curiosity, which is fundamental to lifelong learning.

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“Third – we must be flexible in how we teach.

“Fourth – we must excite learners to become even more resourceful so that they will continue to learn outside the formal school day.”

So what will schools look like, exactly? What will the curriculum look like? How will this 21st century curriculum be organized, and how will it impact the way we design and build schools, how we assess students, how we purchase resources, how we acquire and utilize the new technologies, and what does all this mean for us in an era of standardized testing and accountability?

Imagine a school in which the students – all of them – are so excited about school that they can hardly wait to get there. Imagine having little or no “discipline problems” because the students are so engaged in their studies that those problems disappear? Imagine having parents calling, sending notes, or coming up to the school to tell you about the dramatic changes they are witnessing in their children: newly found enthusiasm and excitement for school, a desire to work on projects, research and write after school and on weekends. Imagine your students making nearly exponential growth in their basic skills of reading, writing, speaking, listening, researching, scientific explorations, math, multimedia skills and more!

It is possible. It has happened, and is happening, in schools across the country. I have seen this first-hand with my classes, and I have seen it at other schools with whom I have worked. And there is growing evidence of schools everywhere having the same results when they implement a 21st century curriculum.

### 20th Century Classroom vs. the 21st Century Classroom

<table>
<thead>
<tr>
<th>Time-based</th>
<th>Outcome-based</th>
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<tbody>
<tr>
<td>USA 1960’s typical classroom – teacher-centered, fragmented curriculum, students working in isolation, memorizing facts.</td>
<td>A San Francisco architectural firm establishes an alternative school providing internships for high school students. A perfect example of real-life, relevant, project-based 21st century education.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Focus: memorization of discrete facts</th>
<th>Focus: what students Know, Can Do and Are Like after all the details are forgotten.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lessons focus on the lower level of Bloom’s Taxonomy – knowledge, comprehension and application.</td>
<td>Learning is designed on upper levels of Blooms’ – synthesis, analysis and evaluation (and include lower levels as curriculum is designed down from the top.)</td>
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<tr>
<td>Textbook-driven</td>
<td>Research-driven</td>
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<tr>
<td>Passive learning</td>
<td>Active Learning</td>
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<tr>
<td>Learners work in isolation – classroom within 4 walls</td>
<td>Learners work collaboratively with classmates and others around the world – the Global Classroom</td>
</tr>
<tr>
<td>Teacher-centered: teacher is center of attention and provider of information</td>
<td>Student-centered: teacher is facilitator/coach</td>
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<tr>
<td>Little to no student freedom</td>
<td>Great deal of student freedom</td>
</tr>
<tr>
<td>“Discipline problems – educators do not trust students and vice versa. No student motivation.</td>
<td>No “discipline problems” – students and teaches have mutually respectful relationship as co-learners; students are highly motivated.</td>
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<tr>
<td>Fragmented curriculum</td>
<td>Integrated and Interdisciplinary curriculum</td>
</tr>
<tr>
<td>Grades averaged</td>
<td>Grades based on what was learned</td>
</tr>
<tr>
<td>Low expectations</td>
<td>High expectations – “If it isn’t good it isn’t done.” We expect, and ensure, that all students succeed in learning at high levels. Some may go higher – we get out of their way to let them do that.</td>
</tr>
<tr>
<td>Teacher is judge. No one else sees student work.</td>
<td>Self, Peer and Other assessments. Public audience, authentic assessments.</td>
</tr>
<tr>
<td>Curriculum/School is irrelevant and meaningless to the students.</td>
<td>Curriculum is connected to students’ interests, experiences, talents and the real world.</td>
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<tr>
<td>Print is the primary vehicle of learning and assessment.</td>
<td>Performances, projects and multiple forms of media are used for learning and assessment</td>
</tr>
<tr>
<td>Diversity in students is ignored.</td>
<td>Curriculum and instruction address student diversity</td>
</tr>
<tr>
<td>Literacy is the 3 R’s – reading, writing and</td>
<td>Multiple literacies of the 21st century – aligned to</td>
</tr>
</tbody>
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math living and working in a globalized new millennium.

Factory model, based upon the needs of employers for the Industrial Age of the 19th century. Scientific management.

Driven by the NCLB and standardized testing mania.

**What is 21st century curriculum?**

Twenty-first century curriculum has certain critical attributes. It is interdisciplinary, project-based, and research-driven. It is connected to the community – local, state, national and global. Sometimes students are collaborating with people around the world in various projects. The curriculum incorporates higher order thinking skills, multiple intelligences, technology and multimedia, the multiple literacies of the 21st century, and authentic assessments. Service learning is an important component.

The classroom is expanded to include the greater community. 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, if they have them, are just one of many resources.

Knowledge is not memorization of facts and figures, but is constructed through research and application, and connected to previous knowledge and personal experience. The skills and content become relevant and needed as students require this information to complete their projects. The content and basic skills are applied within the context of the curriculum, and are not ends in themselves.

Assessment moves from regurgitation of memorized facts and disconnected processes to demonstration of understanding through application in a variety of contexts. Real-world audiences are an important part of the assessment process, as is self-assessment.

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Media literacy skills are honed as students address real-world issues, from the environment to poverty. Students use the technological and multimedia tools now available to them to design and produce websites, television shows, radio shows, public service announcements, mini-documentaries, how-to DVDs, oral histories, and even films.

Students at the Automotive High School in New York City create how-to DVDs on how to complete various automotive repairs. A student from California created a film on sweatshops that made an international impact.

Students find their voices as they create projects using multimedia and deliver these products to real-world audiences. Students realize that they can make a difference and change the world. They learn what it is to be a contributing citizen, and carry these citizenship skills forward throughout their lives.

As a result, standardized test scores are higher. This is because students have acquired the skills and content in a meaningful, connected way and the understanding is there. They actually KNOW the content on a much higher level of understanding, and they have developed their basic skills by constant application throughout the duration of the unit.

The Global Classroom

Every day students from countries all over the world collaborate on important projects. The website, ePals, is a site where teachers and students can go to join or start a collaborative project.

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with anyone in the world. According to ePals, Inc., “Our Global Community™ is the largest online community of K-12 learners, enabling more than 325,000 educators and 126,000 classrooms in over 200 countries and territories to safely connect, exchange ideas, and learn together. Award winning SchoolBlog™ and SchoolMail™ products are widely used and trusted by schools around the world.”

As we have seen from our own experiences, from the media, from university research, and as it was demonstrated in the Did You Know? video, technologies, especially the Internet, have resulted in a globalized society. The world is now “flat”. Our world has been transformed, and will continue to change at ever-increasing rates.

In order for our students to be prepared to navigate this 21st century world, they must become literate in 21st century literacies, including multicultural, media, information, emotional, ecological, financial and cyber literacies. Collaborating with students from around the world in meaningful, real-life projects is a necessary tool for developing these literacies. Students can learn that through collaboration, not competition, they can work together to make the world a better place. Students will use technologies, including the Internet, and global collaboration to solve critical issues.

Green Education

Our planet and its citizen residents are facing a growing number of issues related to the environment. Education is the key. From environmental awareness to producing scientists, politicians, international relations experts, media producers, and others, our schools will assist students in finding the answers to our environmental problems.

Students will be motivated as they achieve higher levels of learning in all content areas from science and math to cultural studies and nutrition and other areas when they are involved in projects such as The Edible Schoolyard, The Globe Program, Jason Projects, the Global Johnny Appleseed Project and many more global classroom projects focused on the environment. From renewable fuels, to designing “green” buildings (including “green” schools), gardening, nutrition, environmental law, and more, we can teach “green”.

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What does all this mean for how we design and build schools?

As we move forward in the process of creating a world-class, 21st century educational system, the building of new schools and the remodeling of present school facilities will be addressed. 21st Century Schools, LLC, can assist you in utilizing the latest research and technologies to create environmentally friendly, energy efficient, “green” schools. In fact, it is not uncommon for students to apply their knowledge of research, mathematics, science, technologies, and engineering to design real buildings! This is just one example of a relevant, rigorous, 21st century, real-life curriculum project. And think of how good this will look in the students’ portfolios, and the knowledge that they will have created and contributed to the world.

There is much more to consider. There is no “one size fits all”, or “one style fits all” blueprint. Each school should be designed with the students and the goals of the school and community in mind. However, there are some basic things you should consider.

You will want to stay away from the traditional, what I call egg carton, design which has students isolated in small classrooms. Those school facilities were designed for the emerging industrial age of the 19th century, and were based on a factory model and scientific management system. There are many excellent examples of new schools being designed and built which support the kind of curriculum and instruction briefly described above.

First of all, the design takes into account the kind of spaces needed by students and teachers as they conduct their investigations and implement their projects. Spaces will be needed for large groups, small groups and for independent work. There should be plenty of wall space and other areas for displaying student work. This includes a place where the parents and community can gather to watch student performances as well as a place where they can meet for discussions.

What about technology resources?

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First of all, technologies are not an end in themselves; technologies are tools students use to create knowledge and to create personal and social change.

There should be full access to technology. If students do not have computers or access to the Internet at home, together we will find a way to provide them. If we can, we will obtain laptops for every student and teacher. Buildings will need to be wired in such a way that students can access their files, as well as the Internet, from anywhere in the school. Various labs and learning centers should be set up around the campus. Art, music, theatre, television, radio and film studios can be created with relatively small expenditures. All classrooms should have televisions to watch broadcasts created by their school as well as by other schools in the district.

As an example, I recently visited a small school district in western Arkansas that had a technology lab that would be the envy of many universities and corporations. It had half a million dollars worth of equipment and software, absolutely state-of-the-art, and the school did not have to invest any money at all. They were only required to create a space to set up the lab and provide one full-time teacher.

Students use this lab to do everything from architectural design to filmmaking to creating virtual reality programs on various topics. For example, a group of them had made a field trip to NASA in Houston. They filmed what they saw, and when they returned they created a virtual reality program for the other students in the district to use to “visit NASA”!

I was eager to discuss all this with the teacher who ran this lab. These students had some very impressive accomplishments, including successful lobbying to get laws changed. They were making a difference in the world. I expected the teacher to be an expert in these areas, but found that she actually did not know how to use most of the equipment and software. The students had taught themselves using nothing more than some manuals and some online technical assistance. It seemed that the students were naturally inclined to understanding and working with these technologies, and they were highly motivated to learn them. And these were students in a tiny, low-income, rural district!

I believe there are definitely resources available which will allow us to eventually create these opportunities for all schools and children.

Examples of this curriculum design – a teachable moment!

Here are a few examples of integrated, interdisciplinary curriculum designed by Anne Shaw. Although it has been three years since Hurricane Katrina devastated the Gulf Coast of the United States, the impact of the disaster continues to be felt throughout the region.

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States, impacting the entire nation, and even the world, it remains a relevant topic to study. This is a rich theme, which can carry most, if not all, of the content standards; all basic skills can be taught within this theme; it remains current, it is relevant, and the student interest is there. Many critical social issues can be addressed within this theme. It also provides an excellent vehicle for some very important, as well as fun, service learning projects. Service learning is the ultimate 21st century curriculum.

When I design a unit I begin with a theme. Then I brainstorm, or concept map, the theme. I also start outlining my ideas by creating a PowerPoint slide show on the theme. You can see a beginning level concept map as well as my PowerPoint on Hurricane Katrina online at the links listed below. You can also see some ideas for service learning projects connected with the unit. This event is most definitely a teachable moment!

There are many other themes discussed in some detail on our web site. Please see the links below. Our most recently developed theme is a global collaborative classrooms service learning project: the Global Johnny Appleseed Project, which encompasses all the disciplines, and connects to issues from the environment, to scientific developments, to philanthropy, medical advances, media literacy and more! Go to that link and view the PowerPoint presentation for more ideas!

Curriculum Links: Please view the following video/slideshows at the links below:

- The Global Johnny Appleseed Project – an interdisciplinary unit;
- Also see www.GlobalJohnnyAppleseedProject.org – contains everything from science careers to the environment to service learning, and more!
- Hurricane Katrina – a powerful 3-part video series on how to teach the standards through this very relevant theme.
- Hurricane Katrina Unit
- Service Learning Projects for Hurricane Katrina

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Lest anyone doubt the reach of America's after-school woes -- more than 14 million K-12 students, including 40,000 kindergartners and almost 4 million middle school students, take care of themselves after school -- it appears even the economy is suffering: A new study by Catalyst and the Women's Studies Research Center, at Brandeis University, shows that the workplace productivity of U.S. parents suffers when they are worried about what their kids are doing after school.\(^2\)

We need more after school programs. We need after school programs that meet the needs of the 21\(^{st}\) century student. What are those needs? What possibilities exist for designing such programs? How can we create programs that are fun, motivational and educational?

"No one believes that when the bell rings at the end of the school day, children stop learning. Curiosity bubbles inside the minds of children from the moment they wake in the morning to when they go to bed at night."\(^3\)

Our challenge is to encourage, connect, and foster learning throughout a child’s day. How do we help children make sense of all the information and experiences in their lives? How do we ensure that all children have opportunities to reach their full potential in a competitive world where thinking skills are the most important asset of a society?

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How can we extend the learning throughout the day for all children? Part of our task in collaborating with the steering committee, parents, students and community members will be to work toward designing some programs which will meet these needs. There are many possibilities: internships, various clubs such as photography, gardening, writing, bicycle building, computer repairs, the arts, sports, culinary arts, creating student-run businesses (entrepreneurships), and many more.

CSTEM - Sea Turtles, Robotics, and Art?

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CSTEM - Computers, Science, Technology, Engineering and Mathematics. An excellent program, CSTEM is headquartered in Houston. It was the brain child of their founder and director, Dr. Reagan Flowers. CSTEM offers educational support services in communication, science, technology, engineering and mathematics. Their mission is to close achievement gaps in areas of CSTEM in grades P-16. C-STEM accomplishes its mission by developing, implementing, facilitating and/or sustaining hands-on, project-based learning experiences that further develop student's interest and ability to perform and compete at the highest levels. The vision is to eliminate barriers schools face with STEM teaching and learning, such as development of project-based learning curriculum, training, exposure to STEM opportunities, and building community partnerships that work.

Last year CSTEM completed their first Sea Turtles Robotics Challenge, which was an enormous success with students and teachers from more than 60 schools participating. This fabulous project is will repeated annually, spreading across the United States and the globe. Combining everything from science, math, engineering, computers, robotics, art, cultural studies, writing and more, this project is an excellent example of what CAN be accomplished.

Getting from "Here" to "There" - What's the Plan and How do We Implement It?

See Scott McLeod's developing plan on getting from here to there at [Dangerously Irrelevant](#).

My thoughts are that in order to create change in education all stakeholders must be on board. One of the main obstacles as I see it is the enormous resistance to change among educators, policy makers, industry leaders, parents, and even many students. There have been many movements to create change in our educational system, all fraught with conflict. Some of the current efforts are trying to create change without actually changing - they are trying to take attributes of the 21st century and force fit them into the 19th and 20th century ways of designing and delivering education. It won't work!

One dismal failure, and I believe that most educators will agree with me on this, is the NCLB. In one interesting reference I encountered the author stated that "the light at the end of the tunnel is actually the NCLB locomotive".

Listed below are some suggestions and thoughts regarding how to get from "here" to "there". They are not listed in any particular order as yet, and the list is under development. Please send your suggestions to mailto:Director@21stCenturySchools.com?subject=Suggestions for getting from "here" to "there"

The Purpose of Education

Some years ago, when working toward a doctorate in curriculum and instruction at the University of Texas at Austin, I was very focused on changing education. In fact, it was my fierce desire to find a way to create change that led me back to school. One of my professors, Dr. John Martin Rich, introduced me to the concept of Critical Pedagogy. Through that research I discovered Douglas Kellner, who at that time was the Chair of the Philosophy Department at UT. He became my teacher and advisor, and it was Dr. Kellner who led me toward multiple literacies, media literacy, and the use of new technologies to design and deliver a 21st century curriculum.

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During that time I wrote a paper on the Purpose of Education. It is a beginning analysis I had to do in order to begin to understand critical pedagogy. It requires much development, but perhaps it has some points we can use to begin to build a vision for education in the 21st century. I studied critical pedagogy for a long time, and necessarily had to conduct a great deal of research into the history of education, the philosophy of education, and the evolution of critical pedagogy, which led me to backtrack philosophy all the way back to Aristotle and Plato. It also required a look into history, the evolution of countries, their economies, governments, and industries. See also Philosophical Foundations.

We must realize, and our students must understand, that we cannot move toward a vision of the future until we understand the socio-historical context of where we are now. Where are we? What events led us to be where we are? How can this inform our development of a vision for the future and how we want to get there?

A clear articulation of the purpose of education for the 21st century is the place to begin. Creating a vision of where we want to go requires us to ask the question - why? What is the purpose of education? What do we need to do to accomplish that purpose?

Teaching the Elephant to Dance

I believe that when many parents and educators are introduced to the paradigm of education in the 21st century that it is so foreign to them that they automatically reject it - automatically and angrily! We are attempting to create a huge change in our society. This effort brings to mind the title of book I read many years ago in my Master's Degree program at the University of Houston at Victoria (Texas); the book was Teaching the Elephant to Dance, by James A. Belasco, Ph.D. It was a book about creating change in organizations (business and industry) in order to cope with the changing world of the 1990's. When I think of the enormous task before us - revamping and reinventing the educational system in the United States - the image of a "slow, ponderous pachyderm" comes to mind. Dr. Belasco explains that elephants are trained to stay in one place, through conditioning, with nothing more than a bracelet around one ankle - attached to nothing. However, if the tent catches fire, and the elephant smells the smoke and sees the flames, the conditioned response is overcome and the elephant moves. He recommends that we find a way to get people to smell the smoke and see the flames - without actually burning down the tent.

Teaching this elephant to dance is going to be a major endeavor, and it will have to encompass everything from teacher education and administrative education programs at universities to inservice and continuing professional development for educators, to educating everyone else.

Public Service Announcements - Our task is to change the way people think about education. I think about previous efforts to create change across our entire society. Many movements have grown and succeeded in creating change in how people think. In other words, a paradigm shift occurred! When I was a child (I was born in 1954) most cars did not come equipped with seat belts, and there were certainly no seat belt laws. Someone decided that it would be better if Americans wore seat belts. Part of the process of getting people into that mind set was a series of public service announcements. I can still hear the little jingle: "Buckle up for safety, buckle up! Buckle up for safety, always buckle up! Show the world you care by the belt you wear. Buckle up for safety, everybody, buckle up!" Today the message is "Click it or ticket!"

Disclaimer: The research materials are collated from web based resources.
Another major change accomplished with a lot of help from PSAs was the movement to stop littering. There was a time in our country when littering was a terrible problem. I remember particularly the PSA with the Crying Indian, Iron Eyes Cody, in the Keep America Beautiful campaign in 1971. We had Woodsy Owl telling us "Give a hoot, don't pollute!"

Smokey Bear reminded us to help prevent forest fires. (It was later changed to Smokey the Bear to fit a new jingle.) See samples of PSAs from the Crying Indian, Smokey the Bear and Woodsy Owl [here](https://example.com).

These PSAs worked! I have thought for years that we need an ongoing, comprehensive program of public service announcements to teach people about education in the 21st century.

The Ad Council has been creating public service announcements since 1942. Today's campaigns range from community issues, education issues, and health and safety issues such as the environment, adoption, financial literacy, cyberbullying prevention and much more.

In addition to being a great tool for creating change, the development and production of public service announcements is a wonderful way for students to learn about technologies, art, social service, service learning, multimedia production, the power of the Internet and media to create change, and much more. I recommend student-produced PSAs for the Internet and television. It will cost a lot of money, but it is an effective tool; the government as well as nonprofit foundations and industry leaders should all share the cost of getting these PSAs developed and broadcast.

**Web 2.0 the Problem**

As Michael Wesch pointed out in his brilliant presentation to the Library of Congress this summer (June 23, 2008), *An Anthropological Introduction to YouTube*, the new social media tools can create massive movements and change. Dr. Wesch provides many examples of global movements resulting from YouTube videos. If done well, and creatively, the same could occur with respect to change in education. Of course, Dr. Wesch and his [Digital Ethnography Working](https://example.com)
The Group at Kansas State University are already on that road, beginning with a wonderful video they created entitled A Vision of Students Today. Imagine the possibilities of organizing a global conversation and movement to create change through the design and implementation of truly 21st century schools! More to come . . .

Identify and Enlist Stakeholders and Supporters in the US and abroad - education is global now.

- Students K-16+
- State legislatures
- Colleges of education
- School districts
- Nonprofits and foundations
- Industry leaders
- Media producers
- Community support groups - form, lead and sustain.
- Individuals with clout - for example, see Top Fifteen Green Grist Lists
- more to come here . . .

Supporting Research for 21st Century Education

The most recent research supporting the purpose, methods and critical attributes of 21st century education are:

1. Classroom News, October 2008 - several articles in this issue cite important research studies.
2. Much more to come! We're working on it as you read!

References:

1) Kellner, Douglas; New Media and New Literacies: Reconstructing Education for the New Millennium

2) Grant, Jodi, Director of the After School Alliance; Fourteen Million Kids, Unsupervised

Disclaimer: The research materials are collated from web based resources.
3) McLeod, Scott, *Dangerously Irrelevant*

4) Time, Learning and Afterschool Task Force, *A New Day for Learning*


6) Wesch, Michael, Ph. D. See his works at [Digital Ethnography](#). (separate footnotes to be added for each web page and video cited)

*Disclaimer: The research materials are collated from web based resources.*