



## Moving America's Children Beyond Average

### Imagination and the 21<sup>st</sup> Century Education

***“Imagination is more important than knowledge”  
–Albert Einstein***

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#### **Executive Summary**

***“The future belongs to a very different kind of person with a very different kind of mind – creators and empathizers, pattern recognizers and meaning makers. These people – artists, inventors, designers, storytellers, caregivers, consolers, big picture thinkers – will now reap society’s richest rewards and share its greatest joys.”***

***—Daniel Pink, author of A Whole New Mind***

American schools are failing to teach the skills required for success in the 21<sup>st</sup> century workforce. Industries around the world are hungry for innovation, but an education in the “so-called” basics does not sufficiently prepare our students to meet those demands.

However, in an era of insurmountable progress and discovery, a static foundation of facts and modest skills no longer suffices. A growing population of Americans has come to believe that schools' current focus on the "basic skills" is stifling students' creativity and their potential to perform beyond average.

In a global marketplace that calls for innovation, American schools should be developing skills of the imagination. A large majority of Americans has come to recognize that, in order to foster innovation in the marketplace, we must cultivate the imagination in schools.

A proven and overlooked method for developing the imagination is an education in and through the arts. Research and public opinion support that arts education:

- Fosters mental discipline
- Encourages productivity
- Cultivates the ability to adapt to ever-changing circumstances
- Encourages confidence in individuality, knowledge, competence, and personal potential

The development and use of the imagination is not confined to a single discipline, nor can a single discipline satisfy the other skills that recent national reports deem crucial to the current and future workforce. The role of the arts in integrated, interdisciplinary learning is essential to developing the imagination and meeting the demands of the 21<sup>st</sup> century workforce.

Continuing to venture down a path of learning that limits the potential of all students condemns them to parochialism and average performance in a constantly expanding and evolving world.

## Moving Beyond “the Basics”

***“As America struggles to make education rigorous, meaningful, and relevant once again, we believe that we should fully and strategically integrate 21st century knowledge, skills and assessment. The ultimate goal...of 21st century skills is the same: to prepare students to succeed and prosper in life, in school and on the job and to ensure America remains competitive in today’s global, knowledge-based economy.”***

*--Ken Kay, Executive Director, Partnership for 21st Century Skills*

***"Globally-engaged employers in America are in the fight of their lives for skilled talent."***

*--John Engler, President, National Association of Manufacturers*

The public is increasingly demanding that schools go beyond the current focus on basic competence in reading and mathematics to teach the skills identified in national reports on the economy.

Polling by a variety of bipartisan and independent sources resoundingly confirms that Americans believe an education narrowly focused on the basics encourages children to be average and ill-prepares them for success in the 21<sup>st</sup> century economy.

### Opinion

**88% of Americans** believe that the so-called basics in education alone are not adequate for the 21st Century workforce without the ability to be imaginative, creative, and innovative.

Source: Partnership for 21<sup>st</sup> Century Skills National Poll, fall 2007

**Less than half of Americans** believe that American schools are currently teaching skills of the imagination and creative skills well.

Source: Lake Research Partners Poll, December 2007

**70% of employers** cite deficiencies in high school graduates among applied skills applied workplace skills. At all educational levels, these applied skills trump basic knowledge skills such as reading and mathematics in importance in the view of employers.

Source: Conference Board, “Are They Really Ready to Work?”

In today's age where the basics are not enough, a narrow interpretation and implementation of initiatives such as *No Child Left Behind* can cause significant

hurdles. According to the Center for Education Policy, to accommodate this increased time in ELA [English Language Arts] and math, 44% of districts reported cutting time from one or more other subjects or activities (social studies, science, art and music, physical education, lunch and/or recess) at the elementary level. The decreases reported by these districts total an average 141 minutes per week across these subjects, nearly 30 minutes per day, since 2001-02.

As a result of the unintended consequences of *No Child Left Behind*, the development of creative workforce skills is being inhibited. Learning only in the basics bores, stagnates, and stifles teachers and students alike rather than encouraging them to move beyond average performance. Therefore, Americans are seeking a new approach.

### Opinion

**78% of Parents** believe that the ability to think and the ability to reason are more important than academic achievement.

Source: Frank Luntz, National Conference of State Legislatures 2006 Annual Meeting Presentation

The marketplace's top priority is innovation. To answer that call, educational initiatives, including STEM, that support further emphasis on science, technology, engineering, and mathematics, have emerged to address this problem. They recognize the need for innovation, and, when combined with arts programs to develop imaginative capacity, are taking a significant step towards the realization of an education for the 21<sup>st</sup> century.

Recent survey data and issues raised in publications such as *A Whole New Mind: Why Right-Brainers Will Rule the Future*, *Critical Links: Learning in the Arts and Student Academic and Social Development*, and *Third Space: When Learning Matters* indicate that, while reading, math, science, engineering, and technology are disciplines in which innovation is critical, it is the imagination that will ultimately be the measure of achieving innovation. Or, as some people would indicate, when you add imaginative learning through the arts "A" to STEM, you have the STEAM to propel learning for the 21st Century.

### Opinion

**88% of Americans** support a nationwide innovation effort. "The public definition of innovation may vary, but the concept, objective, mission, and result of innovation has incredibly broad, universal support. In these days of political polarization, innovation is the one initiative that is applauded and embraced by everyone."

Source: Frank Luntz for the National Governors Association

In today's competitive society, we cannot afford to narrow the scope of learning at a time when richer learning experiences for deeper and more well-rounded knowledge are demanded.

## Imagination: The Key to Innovation

***“Imagination is a cognitive capacity, and, when it is applied, it becomes innovation, a result.”***

—Richard Deasy, Arts Education Partnership

***“In this increasingly flat world, the most important attributes you can have are adaptability and a creative imagination, the ability to be the first on your block to figure out how all these enabling tools, which are now available to so many more people, can be put together in new and exciting profits.”***

— Thomas Friedman, author of *The World Is Flat*

**“U.S. leadership depends on creativity and innovation and not technology alone in order to compete in the global marketplace. Strong skills in the arts are essential qualities needed for success in the workplace: creative and innovative; self-disciplined and well organized; team players who are flexible and adaptable to change; facility with the use of ideas and abstractions.”**

*--Tough Choices or Tough Times: The Report on the New Commission on the Skills of the American Workforce (National Center on Education and the Economy, 2006)*

Calls for prompting innovation through education echo loudly. As globalization and advancements in technology obsolesce what we know now, success will depend not on knowledge but on the ability to create, to innovate, and to think beyond the “so called” basics.

Polling from many sources demonstrate that a large majority of Americans feel we must start with the imagination, the capacity to visualize new possibilities – a capacity available to all human beings. Though innate, imagination must be nurtured and channeled by discipline and hard work to enable it to make the advances in human knowledge and behavior we envision.

### Opinion

**98% of Americans** believe that imagination, that is, the ability to visualize new possibilities for thought and action, is critical to innovation and an individual’s success in a global knowledge-based economy.

Source: Partnership for 21<sup>st</sup> Century Skills National Poll, fall 2007

**Nearly three-fourths of Americans** ranked “creativity/innovation” as among the top five applied skills projected to increase in importance for future graduates.

Source: National Conference Board 2006

We watch as nations in Asia and Europe adapt to imaginative learning methods and utilize the arts as a mechanism to drive innovation. Neglecting the capacities of the imagination creates deficiencies in the national marketplace and thwarts the quest for innovation in our schools.

## Opinion

**Only 35% of Americans** believe that Americans pay as much attention to developing the imagination and creative workforce skills as nations who compete with the United States.

Source: Partnership for 21<sup>st</sup> Century Skills National Poll, fall 2007

**86% of voters** believe that encouraging children to be creative and develop their imagination is necessary to maintain our competitive edge and ensure we do not fall behind other countries.

Source: Lake Research Partners, December 2007

Because imagination can be incorporated across the curriculum, does not add any additional time to the school day, and rejuvenates both students and teachers, innovation through the cultivation of the imagination is a sound educational investment. Increased attention to developing the imagination serves as a cost effective model to achieve innovation, and innovation responds to the demands of industry.

## Imagination & Arts Education

*“‘Imagine’ is the most powerful word in the English language...Imagination is powerful because it is personal and individual because people are looking and desperately want someone who understands them, listens to them, imagines their dreams and make them possible.”*

--Frank Luntz, (title) National Conference of State Legislatures 2006 Annual Meeting Presentation

### Opinion

**88% of voters** believe that an education in and through the arts is essential to cultivating the imagination.

**83% of voters** believe that a greater focus on the arts alongside science, technology, and math would better address the demands of the 21<sup>st</sup> century.

Source: Lake Research Partners, December 2007

Business leaders and analysts tell us that imagination, innovation, and creativity are the primary skills that will keep America competitive in the global economy. But the school subjects that best teach these skills – the arts – are still considered the frills in the curriculum.

The arts are a premier training ground in what noted educational researcher Dr. John Bransford refers to as “adaptive expertise.” When engaged in the arts, students have to put their imaginations to work through the techniques of the form: music, visual arts, theater, and dance. Engagement in the arts is hard work – hard physically, emotionally, and, above all, mentally. It requires and develops the mental “muscles” of discipline, persistence, and commitment to quality.

## Opinion

**87% of Americans** believe that an education focused only on the “so-called” basics may not be providing students with the essential skills to succeed in the 21<sup>st</sup> century. Americans expect new results from education that build both basic skills and the ability to be imaginative, creative and innovative. Being innovative and creative, require applying imagination to solve problems, think critically, and make judgments about quality.

Developing the imagination will provide students with the workforce skills necessary to compete in a global economy and to enrich the quality of our personal and civic lives.

One way of developing skills of the imagination is an education in and through the arts, which stimulate creativity, develops the mind and provides motivation for student productivity and the ability to adapt to ever changing circumstances.

Source: Partnership for 21<sup>st</sup> Century Skills National Poll, fall 2007

An education in and through the arts develops the cognitive, personal, and social skills, as well as the values and attitudes desired key sectors of society.

In the 21<sup>st</sup> century economy, an explicit purpose of an education in and through the arts is the development and application of the imagination – defined as the capacity to visualize new possibilities for human thought, behavior, and the use of materials.

The purpose for teaching the arts is to enable students to develop the capacities to create, perform, and respond with understanding, critical judgment, and appreciation of works of art. Mind, heart, and body are challenged in doing so: the human being is fully engaged.

## Opinion

**88% of voters** believe that education should not just prepare students for the workforce, it should also help them succeed and be fulfilled in their lives, including being active members of their communities and our democracy. Students who develop their imaginations and creative skills will be rewarded throughout their lives and strengthen our community and democracy.

**86% of voters** believe that, often today, education is stifling and losing children. Arts, music and similar courses can engage a number of children who will be missed otherwise in learning and in school. Through these courses, we can help a number of children stay in school and learn a variety of skills and habits they need for life.

Source: Lake Research Partners, December 2007

But which cognitive, personal, and social skills are required? What habits of mind and personal dispositions are developed as the learner grows more competent? Compilations of more than 60 peer-reviewed independent studies published in recent years by the Arts Education Partnership have begun to provide research-based answers to these questions. From an education in and through the arts, students improve in:

- Symbolic understanding: understanding and using multiple modes to represent and communicate ideas and feelings.
- Imagination: visualizing new possibilities for human thought and action and the use of materials
- Creativity: originality, flexibility, and elaboration in making what was imagined
- Conditional reasoning: theorizing about actions, outcomes, and consequences; defining and generating optional approaches and solutions to problems and conditions
- Critical thinking: developing and applying criteria and standards for making judgments about quality
- Collaborative learning and action: participating as a contributing member in a group process of acquiring and manifesting knowledge and skills; supporting the conditions for openness and risk taking

The studies identify habits of mind and dispositions nurtured by the arts, and, while these do not appear as frequently in national reports, they resonate with administrators and teachers as crucial to student learning as well as to success in school and as members of the workforce.

- Persistence: sustaining concentration and attention to a task
- Resilience: managing challenges; overcoming frustration and failure
- Achievement motivation: the desire to succeed in fulfilling goals and expectations
- Engagement: absorption in the content, processes and pleasures of learning

## **imagine nation** **Identifying the Affinity Group**

The imagine nation is a population of self-identified supporters who feel particularly intensely about prompting innovation in the marketplace by developing capacities of the imagination in schools.

There is new and growing concern and dialogue in America that the historic promise of public education is being muted and that we are not offering the opportunity to our young people to move beyond average in their achievement and expectations. This national discussion is broad with support for moving beyond standardization that has settled on minimum levels of performance. Answering a strengthening call from the business and political sectors of American society, the imagine nation is a population of Americans who will readily and strongly support public education to meet the new demands of the 21<sup>st</sup> century.

**The imagine nation constituency:** With a national poll conducted in December 2007, Lake Research Partners confirm that there is an imagination constituency comprised of 30% of American voters. The imagination constituency represents voters who, when asked initially, say that incorporating building the capacities of the imagination into core courses is extremely critical. They are men and women, live on the coasts and in the heartlands, and are all ages and education levels. They are engaged voters and over half are swing voters, not identifying as strong Republicans or Democrats.

As more and more people recognize that they identify with the imagine nation, the population will develop its collective voice with policy and education leaders.

### **Opinion**

**81% of voters** believe that building capacities of the imagination that lead to innovation into core courses is critical.

**57% of voters** would be more likely to vote for a candidate who came out in support of building the capacities of the imagination among students in public schools.

**57% of voters** would be less likely to vote for a candidate who has voted to cut funding for building capacities of the imagination in schools.

Source: Lake Research Partners, December 2007

Across the nation, leaders are looking for ways to build these essential skills. In Dallas, Texas, an entire city witnesses how the arts are transforming education.

In Oklahoma, a statewide creativity initiative links the arts to relevant workforce skills. In Ohio, the State Superintendent of Public Instruction has launched a Committee on the Arts and Innovative Thinking.

The proliferation of these initiatives and trends in education indicates growing interest and accumulated evidence to support strengthening the imagination through comprehensive arts education that can lead to innovation. Supported by organizations ranging from the National Association of Manufacturers to the National Education Association to projects entitled the Dallas Arts Learning Initiative (DALI) and Oklahoma A+ schools, this trend will create a developing dialogue that better connects the arts to learning's intended outcomes.

Providing clear and convincing messages that highlight the critical role imagination plays in reinforcing the goals and values of this population is of paramount importance. As these messages travel throughout the country, the imagine nation is growing.

### **For Educators and Policy-Makers: 5 Ways to Help Students Become Imaginative and Innovative**

1. Implement innovative teaching styles and instruction to build capacities of the imagination.
2. Build capacities of the imagination by supporting time and resources for an education in and through the arts.
3. Support integrated and interdisciplinary processes and approaches. Save money and time by organizing discrete subjects around a thematic interdisciplinary process.
4. Relate to learner lifestyles. Know your learner audiences and adjust to contemporary methods.
5. Teach beyond assessment. Move beyond average and scoring that focuses on the minimum, which ultimately stifles students and educators alike.

### **For Chronic Supporters: 5 Strategies to Empowerment**

For a core group of chronic supporters, 5 key empowerment strategies will feed the initiative to develop the imagination in and through the arts:

1. Convene the arts education community and host discussions on the role that the imagination plays in their community and in each of their lives.
2. Provide communities with messages that demonstrate the imagination's critical role in shaping the 21st century. Seek out key initiatives, projects, or policies to serve as vehicles of support.
3. Create speaking engagements and outreach opportunities to reach the public.
4. Utilize comprehensive print and electronic media strategies to increase news coverage and to educate the public about the importance of the

imagination.

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## **Supplementary Reading**

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## Recommended Links

Arts Education Partnership: [www.aep-arts.org](http://www.aep-arts.org)

Big Thought: [www.bigthought.org](http://www.bigthought.org)

Business Roundtable, Education and the Workforce Initiative:  
[www.businessroundtable.org](http://www.businessroundtable.org)

Center on Education Policy: [www.cep-dc.org](http://www.cep-dc.org)

Compete America; [www.competeamerica.org](http://www.competeamerica.org)

Conference Board, The: [www.conference-board.org](http://www.conference-board.org)

Council on Competitiveness: [www.compete.org](http://www.compete.org)

Creative Economy: [www.creativeeconmy.org](http://www.creativeeconmy.org)

Creativity Matters: [www.creativitymatters.com](http://www.creativitymatters.com)

Dallas Arts Learning Initiative: [www.fyifamily.net](http://www.fyifamily.net)

Future of Innovation: [www.futureofinnovation.org](http://www.futureofinnovation.org)

George Gund Foundation, The: [www.gundfdn.org](http://www.gundfdn.org)

Innovate America: [www.innovateamerica.org](http://www.innovateamerica.org)

International Music Products Association: [www.namm.org](http://www.namm.org)

Kirkpatrick Foundation, The: [www.kirkpatrickfoundation.com](http://www.kirkpatrickfoundation.com)

National Association of Manufacturers: [www.nam.org](http://www.nam.org)

National Education Association: [www.nea.org](http://www.nea.org)

National Governors Association Innovation Initiative: [www.nga.org](http://www.nga.org)

Ohio Department of Education: [www.ode.state.oh.us](http://www.ode.state.oh.us)

Ohio STEM Initiative: [www.stem.ohio.gov](http://www.stem.ohio.gov)

Oklahoma Creativity Project: [www.stateofcreativity.com](http://www.stateofcreativity.com)

Partnership for 21<sup>st</sup> Century Skills: [www.21stcenturyskills.org](http://www.21stcenturyskills.org)

Tapping America's Potential: [www.tap2015.org](http://www.tap2015.org)

Task Force on the Future of American Innovation: [www.futureofinnovation.org](http://www.futureofinnovation.org)

United States Council for International Business: [www.uscib.org](http://www.uscib.org)

US Chamber of Commerce: [www.uschamber.com](http://www.uschamber.com)

US Innovation: [www.usinnovation.org](http://www.usinnovation.org)

**This project is made possible through the major support of:**

National Education Association

**Additional generous support is provided by:**

The George Gund Foundation  
NAMM, the International Music Products Association

**In-kind support is provided by:**

The Cleveland Foundation  
Dallas Learning Initiative  
The Kirkpatrick Foundation  
National Association of Manufacturers  
Ohio Department of Education  
Oklahoma Creativity Project

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