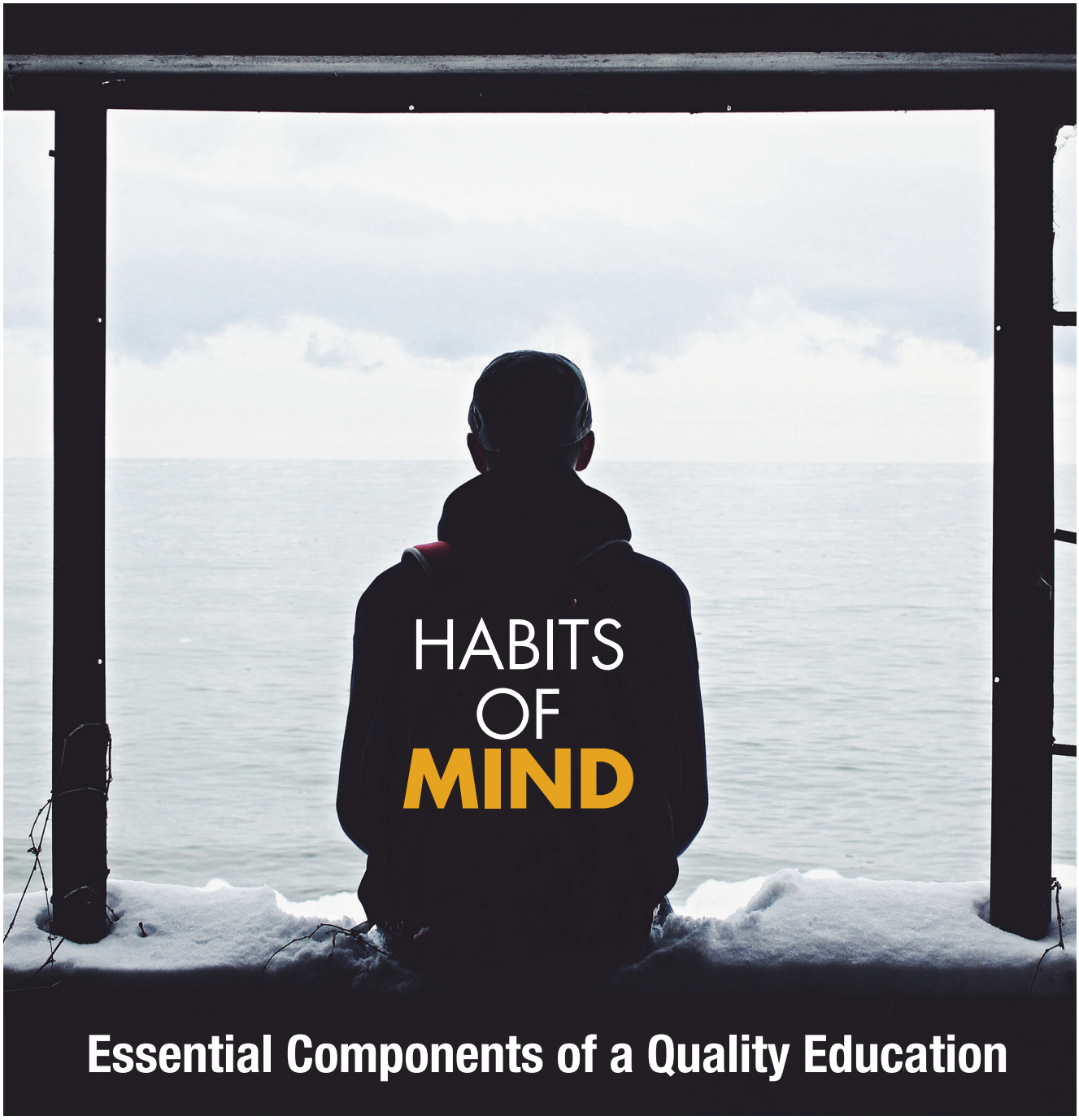

HABITS OF MIND

Essential Components of a Quality Education

HAMBURG AREA SCHOOL DISTRICT

PREPARED FOR THE BOARD OF SCHOOL DIRECTORS,
FACULTY AND STAFF, COMMUNITY, PARENTS AND STUDENTS
AT HAMBURG AREA SCHOOL DISTRICT

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EXECUTIVE SUMMARY

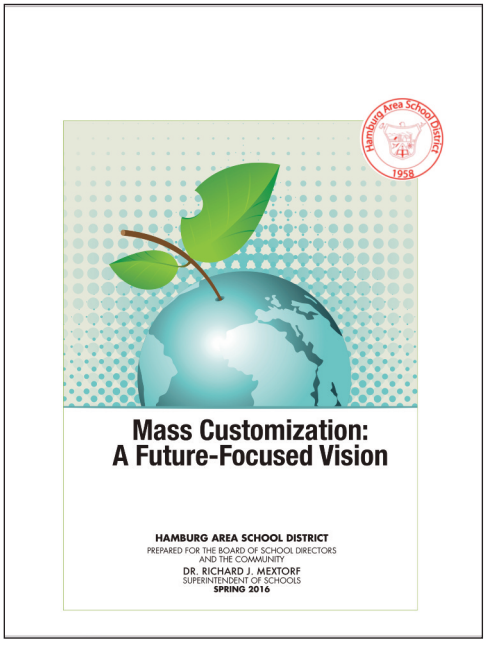
This essay is about the essential *Habits of Mind* our kids need to be successful in modern day work and life. Part one, *The New World of Work*, investigates essential skills for workplace success and provides a crosswalk of anecdotal information from recent literature and the 21st century skills that have emerged from the literature over the past decade.

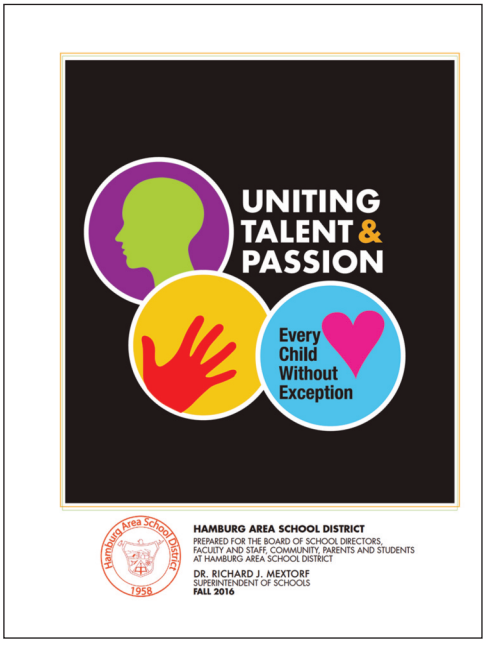
Part two investigates the disconnect between the world of school and the world of work, highlighting the critical differences in what schools reinforce and what modern day employers identify as essential for success in the modern workplace.

Part three, *The Link Between Education and the Workforce*, revisits the genesis of the entanglement between the primary purpose of school as preparation for the workforce, and how that entanglement has led to the emergence of the SAT-ocracy. Part three also juxtaposes the SAT-ocracy, educational inflation, and college debt against current reality in the job market.

Part Four, *Revisiting the Purpose of Education*, discusses the original purposes of education in this country and re-introduces the *Spheres of Living* that are essential for living a life of significance and meaning. Part five examines the importance of cultivating *Habits of Mind*, with the final section doing a "deeper dive" into the unique function of subjects and how each contributes to a quality liberal arts education.

As with every essay, this is meant as a framework for dialogue. Its purpose is to help us become intentional about teaching things that matter a great deal in the development of young people, but are often overlooked because they are not easy to measure. The ultimate test, however, is how our young people embrace the challenges and opportunities that await them and use their talents, passions, and humanity to improve their "little corner of the world" and, ultimately, the human condition.





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INTRODUCTION

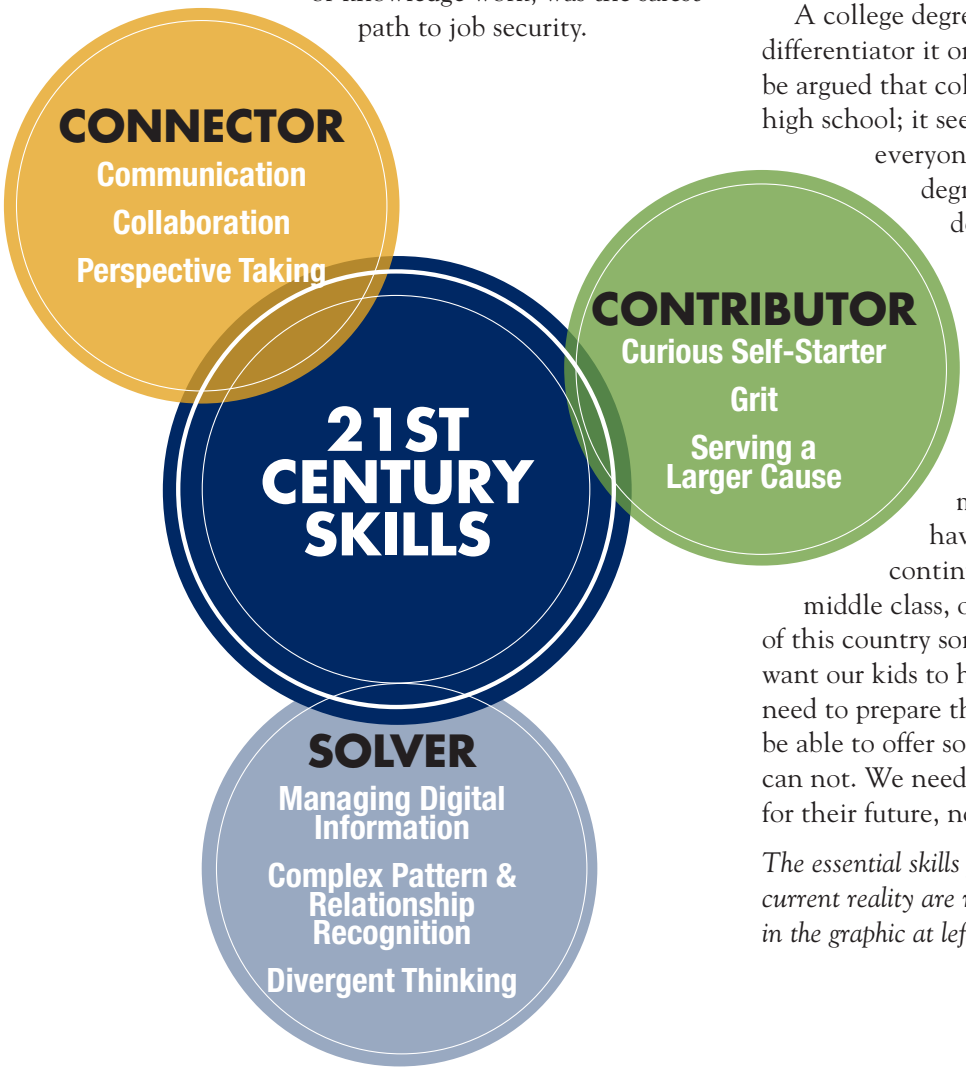
As time marches on, we continue to see the effects of automation, outsourcing and off shoring on the global economy. The disappearance of unionized blue-collar jobs is nothing new. We can trace the impact of these forces back to the early 1800s, when Ned Ludd inspired the Luddite movement in England by sabotaging machinery that was meant to replace the textile workers of the day. While the loss of blue-collar jobs to these forces became accepted, it was generally accepted that white collar, or knowledge work, was the safest path to job security.

Digitization changed all that…

The advent of digitization has made it possible for knowledge work to be performed anywhere in the world. Consequently, as it has with blue-collar jobs, the work has gone to where it can be done the cheapest. The impact on the American job market has been profound. Jobs that were once considered "safe" from the forces of globalization: engineers; architects; software code writers; technical support; customer service representatives; accountants; etc., are now available on the global market.

A college degree is not the differentiator it once was. It could be argued that college is the new high school; it seems that nearly everyone has a college degree (and the crushing debt that accompanies it). Factor in that our kids are in a globally competitive market, with millions of people willing to work for much less, and you have a recipe for the continued erosion of the middle class, on which the success of this country sorely depends. If we want our kids to have a chance, we need to prepare them to stand out; to be able to offer something that others can not. We need to educate them for their future, not for our past.

The essential skills for our current reality are represented in the graphic at left.



PART ONE
THE NEW WORLD OF WORK

Harvard Professor Tony Wagner, author of *The Global Achievement Gap*, reports what leaders of major corporations seek in employees. According to Karen Bruett of Dell Computer Corporation:

> Corporations have changed dramatically in the last twenty years in terms of the way work is organized… work is no longer defined by your specialty; it's defined by the task or problem you and your team want to accomplish. Teams have to figure out the best way to get there – the solution is not prescribed. And so the biggest challenge for our front line employees is having the critical-thinking and problem solving-skills they need to be effective in their teams – because nobody is telling them exactly what to do. They have to figure it out (*Wagner, 2008, pg. 15*).

Ann Marie Neal of Cisco Systems discusses the changing workplace:

> Collaboration is an essential skill for us. Command-and-control leadership style is becoming less and less valued in organizations. People have to understand the importance of working fluidly across boundaries. As organizations become more global, the ability to work fluidly around the world is a competitive advantage; understanding how to leverage the globe, time zones, where the work can best be done, where there are skills that best match the task, either because of the culture or training (*Wagner, 2008, pg. 23*).

Clay Parker of BOC Edwards and Christy Pedra of Siemens Hearing Instruments report seeking employees who can ask good questions and who can engage with others. Ann Marie Neal looks for employees who can take issues and problems to their root components, understand how the problem evolved, look at it from a systemic perspective, and solve it on their own.

Mark Maddux of Unilever Foods North America instructs, "The focus is now on thinking skills and emotional intelligence. Unilever is looking for less linear thinking – people who can conceptualize but also synthesize a lot of data" (*Wagner, 2008, pg. 20*). Maddux also says that "today's employees must be adept to change; they can't be satisfied with the status quo…we have to fight complacency…and so we look for employees who have a passion to embrace new ideas." Consultant Ellen Kumata adds, "You have to be able to take in all sorts of new information, new situations, and be able to operate in ambiguous and unpredictable environments to deliver results" (*Wagner, 2008, pg. 31*).

Christy Pedra of Siemens explains how technology has impacted teamwork:

> Technology has allowed for virtual teams. The way some engineering projects in our company are set up is that you are a part of a virtual team. We have teams working on major infrastructure projects that are all over the U.S. On other projects, you're working with people all around the world on solving a software problem. They don't work in the same room, they don't come to the same office, but every week they're on a variety of conference calls; they're doing web casts; they're doing net meetings (*Wagner, 2008, pg. 22*).

> "The future of the economy, the strength of democracy, and perhaps the health of the planet depend on educating future students in ways very different from how we were schooled."
>
> **t. wagner**

Technology as connector for collaboration is not a new phenomenon. A *New York Times* article from July 2007 reports on the emerging global workforce:

> Today, the company's global workforce is organized in clusters of business expertise and connectedness through high-speed communication links. Project managers can search worldwide for the right people with the right skills for the job… The utility project IBM is doing in Texas offers a glimpse of the global formula. The far-flung work team includes research scientists in Yorktown Heights, N.Y., and Austin, Texas, software developers in Pune and Bangalore, India; engineering equipment and quality control specialists in Miami and New York; and utility experts and software designers … who have come from Philadelphia, San Francisco, Los Angeles, Chicago, Raleigh, N.C., and elsewhere (*July, 2007*).

Wagner (2008) sums up what corporations need:

> Corporations need more young people who are problem solvers – who know how to think critically and how to ask good questions – and sometimes even provocative ones. They also need young people who work effectively with others and understand and respect differences – not just in our own country but around the world. Finally, corporations are increasingly being organized around a very different kind of authority and accountability structure – one that is less hierarchal and more reciprocal and relational. These abilities, in theory, are consistent with the outcomes of a good liberal arts education. Indeed, preparation for the world of work and the role of citizenship in a democracy are not as contradictory as may have been in the past (*pg. 28*).

A summary of the necessary skills described in the preceding paragraphs is included in the following table:

SOLVER	SKILLS	CONNECTOR	SKILLS	CONTRIBUTOR	SKILLS
Manage Digital Information	*Work in global teams*	**Speaking and Writing**	*Tools necessary to be taken seriously*	**Self-Starter**	*Solve problems on your own* *Not satisfied with status quo*
Complex Pattern and Relationship Recognition	*Figure it out as you go* *Take a systems approach* *Synthesize lots of data*	**Collaboration**	*Flat organizational structures* *Working across content boundaries*	**Grit**	*Adapt to change* *Passion to embrace new ideas* *Thrive in ambiguous and unpredictable environments*
Divergent Thinking	*Asking good questions* *Problem identification* *Consider multiple viewpoints without judgement*	**Perspective-Taking**	*Engaging others* *Emotional intelligence* *Understand and respect differences*	**Serving a Larger Cause**	*Accountable to a meaningful goal* *Reciprocal and relational accountability*

PART TWO

THE DISCONNECT BETWEEN SCHOOL AND WORK

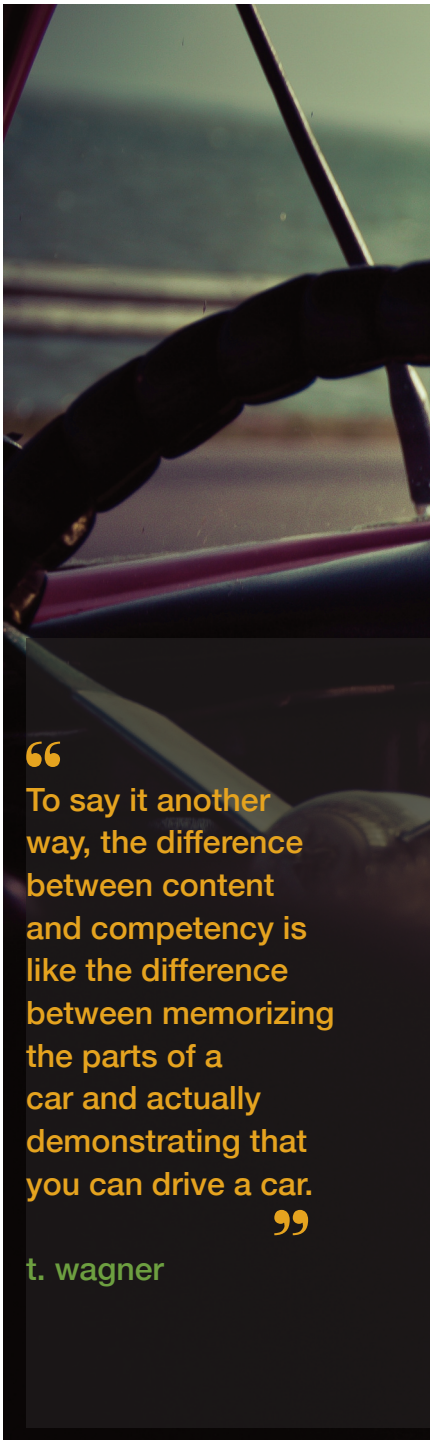
Mike Summers of Dell Computers reports that students are naive regarding the world they are entering. He says that students have a predisposition for believing that everything is clearly outlined, people give directions, and then people execute until there is another set of directions. Summers indicates that students don't understand the complexities of organizations – that boundaries are fluid, and that rarely does a group have everything they need to do the job.

Is this any wonder?

The table below illustrates the differences between the new world of work and the world of school.

WORK	SCHOOL
Ask Good Questions	Give Correct Answers
Collaborate	Compete
Work in Teams	Work Individually
Synthesize Information	Recall Information
Adapt to Changes	Conform to System
Fluid Content	Subject taught in Silos
Digital Networking	Isolation
Embrace Ambiguity	Follow Directions

Public education's response to emerging global economic trends has been to ramp-up the SAT-ocracy. The response to calls for more academic rigor has been to cover more content, assign more homework, and memorize more material. Academic content is important, but it should be used as a means to end – a way of developing competencies, instead of being the end goal, as it has been used traditionally. In an age where information is no longer scarce, it is not about how much content you can memorize; it is about what you can do with what you know. To say it another way, the difference between content and competency is like the difference between memorizing the parts of a car and actually demonstrating that you can drive a car (*Wagner, 2008, pg. 148*).



> “So, we are left with a scenario where many jobs will not require a college degree, yet employers will only hire people with a college degree.”
>
> d. ravitch

PART THREE
THE LINK BETWEEN EDUCATION AND THE WORK FORCE

The idea of education as preparation for the workplace emerged between 1880 and 1930, when business and education began working together in response to the concern that Germany and Britain were more productive than the United States in the global marketplace (*Cuban, 2004*). As a result, preparation for the workplace became a goal for secondary schools. Following WWII millions of Americans went to college, from which the SAT-ocracy emerged. Consequently, high school went from a place to prepare students for the workplace to a place to prepare kids for college. Those who didn't attend college could work in unionized blue-collar jobs that earned a family-sustaining wage. College graduates occupied white-collar jobs. Until the 1970s, when Japan threatened the U.S. auto industry with less expensive, better-made cars, both blue-collar and white-collar jobs were abundant in this country. Once blue-collar jobs began disappearing, white-collar jobs became even more valuable.

Presently, we have a public system of education in this country that values preparing students for college above all else. Yet the Bureau of Labor and Statistics forecast that two-thirds of the jobs available between 2008 and 2018 would not need any postsecondary education (*Ravitch, 2013*). According to Ravitch:

> Unless there are unexpected changes in the economic outlook, many of the young people who graduate from two and four-year colleges will not find jobs that require the education they have purchased at a high price. But the demand for college degrees will continue because many employers will hire only college graduates, even for jobs that don't require a college education (*pg. 89*).

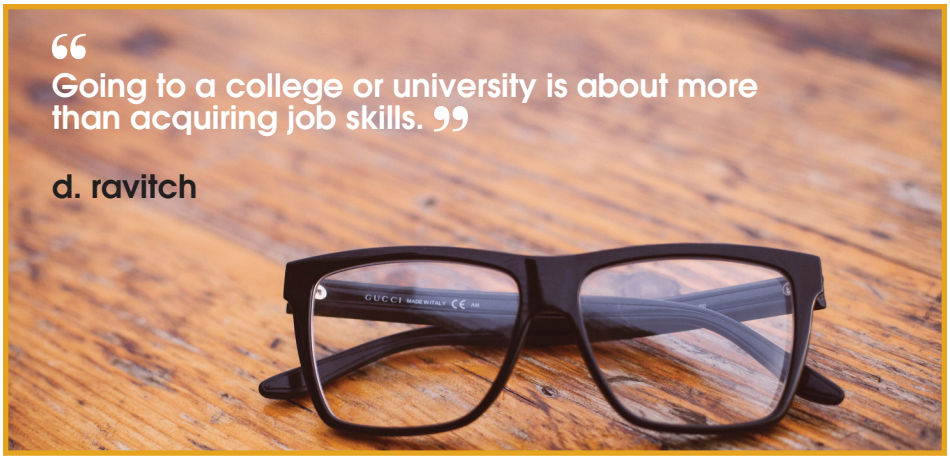
So, we are left with a scenario where many jobs will not require a college degree, yet employers will only hire people with a college degree. Moreover, the things students learn while earning the degree are not the things that will serve them well in the workforce. To make matters worse, those who earn a college degree are likely to be saddled with debt that exceeds their earning capacity as new members of the workforce. To quote a famous historical moment: “*Houston, we have a problem!*”

PART FOUR
REVISITING THE PURPOSE OF EDUCATION

Because of the strong utilitarian connection between education and the economy, the primary purpose of college has become about acquiring job skills (and recruiting more students). The primary function of public schools has become to prepare kids for college. This thinking is short sighted.

Diane Ravitch (*2013*) asserts that the role of higher education is to develop intellectual, political and aesthetic judgments. The author further explains:

Going to a college or university is about more than acquiring job skills. It is a time to study different subjects and fields in depth; to explore one's interests and go give full range to one's curiosity about ideas; to study under the tutelage of scholars who have devoted their lives to their field.



It is a time to develop one's intellectual and cultural life.

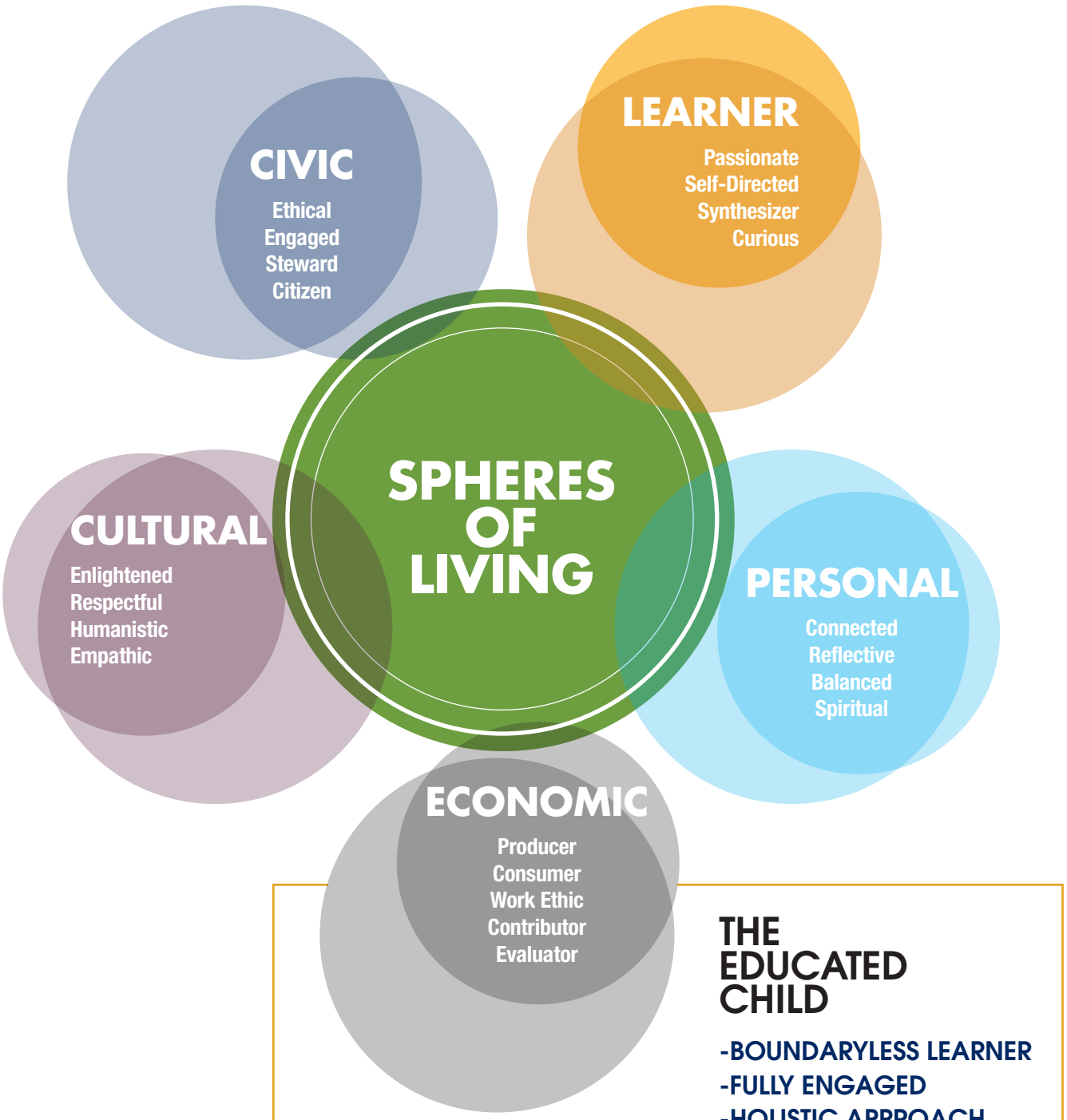
> It is a time in which to gain the political, historical, and economic understanding that was not contained in high school textbooks, to explore issues that were once thought settled, to acquire and exercise the critical perspective that prepares people to become actively involved in civic life and democratic politics (*pg. 82*).

The purpose of public school is *not* to prepare kids for college. The purpose of public school is *not* workforce training. The purpose of public schooling is to prepare everyone to assume the rights and responsibilities of citizenship in a democracy. Ravitch (2013) explains:

> Forgotten is that public schools were created by communities and states for a civic purpose. In the nineteenth century, they were often called "common schools." They were a project of the public commons, the community. They were created to build and sustain democracy, to teach young people how to live and work together with others, and to teach the skills and knowledge needed to participate fully in society. Inherent in the idea of public education was a clear understanding that educating the younger generation was a public responsibility, shared by all, whether or not they had children in the public schools, whether or not they even had children (*pg. 207*).

Accordingly, Ravtich outlines the three essential purposes of public schools:

1. To teach young people the rights and responsibilities of citizenship. As citizens, they will be expected to discuss and deliberate issues, to choose our leaders, to take an active role in their communities, and to participate in civic affairs.
2. To strengthen our economy and our culture by raising the intelligence of our people and preparing them to lead independent lives as managers, workers, producers, consumers, and creators of ideas, products, and services.
3. To endow every individual with the intellectual and ethical power to pursue his or her own interests and to develop the judgment and character to survive life's vicissitudes (*p. 237*).



HASD – UNITING TALENT & PASSION!

We've investigated the essential skills for making a living. *The Educated Child* graphic at left and accompanying narrative describe the areas in which we make a *life*.

- **LEARNER**

  Students must know how to learn. The educated child is *curious* about new things. She has the confidence to be *self-directed* in her approach to learning. The educated child knows how to acquire quality information and is able to *synthesize* information from multiple sources. She uses what she has learned to fuel her *passion* for making a greater contribution in work, personal, and social endeavors.

- **CIVIC**

  Students need to be prepared to contribute as *citizens* within a community. The educated child is *engaged* in community service as a *steward* of community traditions and mores. The educated child upholds positions of authority and influence by embracing the *ethical* high ground. The educated child, because of his contributions, makes his community a better place to live and work.

- **CULTURAL**

  Students need to understand the world and its inhabitants. The educated child is *enlightened* in his understanding of differing worldviews. *Humanistic* in his treatment of others, the educated child demonstrates *respect* for those different from himself by practicing *empathy* and endeavoring to understand multiple points of view. The human condition contains powerful emotions that are not easily represented in words. The educated child explores his understanding of emotion through the aesthetic experience and uses this understanding to build *empathic connections* with those who are different from him.

- **ECONOMIC**

  Students need to be prepared for a life of work. The educated child is a *producer* and is engaged in work about which she is passionate. The educated child demonstrates a *work ethic* and understands the importance of serving the greater good, placing the needs of others before the needs of self. The educated child seeks ways to make significant *contributions* to her field of work. She also has the skills to *evaluate* goods and services in order to make quality economic decisions.

- **PERSONAL**

  The educated child has a strong sense of self. She maintains a sense of overall *wellness* by nourishing herself mentally, physically, socially, and emotionally. The educated child develops and maintains healthy relationships through empathic *connections*. She is *reflective* and *balanced* in her approach to life and realizes that her talents are gifts that come with responsibility. In this sense, the educated child is *spiritual*.

If we are truly to prepare students for modern life and work, we must revisit what kids are learning in school and use content not as an end unto itself, but as a means to teach kids the right habits of mind. We must investigate *why* we teach *what* we teach in schools, ensuring that each subject serves its unique function in the overall development of our young people.

“If we are truly to prepare students for modern life and work, we must revisit what kids are learning in school and use content not as an end unto itself, but as a means to teach kids the right habits of mind.”

r. mextorf

PART FIVE
CULTIVATING HABITS OF MIND

According to Sir Ken Robinson (*2011*), education is not only preparation for something that happens later, it is also about engaging young people with the present. Young people live their lives in the here and now. The first eighteen years of a person's life are not a rehearsal. The evolution of young people's lives depends on the quality of their experiences in the present.

If we are to capture the full potential of our young people, we must provide them with a rigorous, liberal arts education, an education that challenges students' thinking through a variety of academic disciplines. According to Robinson (*2011*):

> If we fail to promote a full sense of people's abilities through education and training, some, perhaps most, will never discover what their real capacities are. To that extent they do not really know who they are or what they might become (*pg. 123*).

According to Robinson (*2011*), the problem with the current model of curriculum is that subjects seem to be divided into two categories: the important subjects and the useless subjects. Among the subjects considered useful are mathematics, science, social studies, and language. Among the useless subjects are art, music, drama, and physical education. In the modern era of standardized testing and tight budgets, subjects that are considered useless are constantly on the budgetary chopping block. This is both shortsighted and harmful to students.

Psychologist Robert Glaser (*1987*) discussed the shortcomings of standardized testing in assessing the goals of public education:

> They represent neither the humanistic nor the aesthetic and moral aims of education that cannot be measured. …Those personal qualities that we hold dear – resilience and courage in the face of stress, a sense of craft in our work, a commitment to justice and caring in our social relationships, a dedication to advancing the public good in our communal life – are exceedingly difficult to assess. And so, unfortunately, we are apt to measure what we can, and eventually come to value what is measured over what is left unmeasured (*pg. 51*).

Diane Ravitch (*2010*) asserts the value of skills that are difficult to measure:

> What is tested may ultimately be less important that what is untested, such as a student's ability to seek alternative explanations, to raise questions, to pursue knowledge on its own, to think differently. If we do not treasure our individualists, we will lose the spirit of innovation, inquiry, imagination, and dissent that has contributed powerfully to the success of our society in many different fields of endeavor (pg. 226).

To develop the proper habits of mind, schools must have an explicit curriculum, including student learning objectives, that values content that is easy to measure *and* difficult to measure. Children crave opportunities to do important, relevant work. We must engage them in projects that make learning lively.

Finally, we must see to it that students gain the knowledge and skills needed to understand politics, scientific phenomena, aesthetics, human introspection and interaction, world events, civic matters. We must provide education for the head, heart, and hands of all learners.

According to Ravitch (2010) we need a renaissance that seeks to teach the best that has been thought and known and done in every field of endeavor (*pg. 224*). The author explains:

> Schools need to prepare students to design new technologies, achieve scientific breakthroughs, and accomplish feats of engineering skill. Graduates need to be able to appreciate and add to our society's cultural achievements or to understand and strengthen its democratic heritage. Without a comprehensive liberal arts education, our students will not be prepared for the responsibilities of citizenship in a democracy, nor will they be equipped to make decisions based on knowledge, thoughtful debate, and reason (*pg. 226*).

Each subject can contribute more than simply preparing for the next exam, the next grade level, or the next step in one's educational career. Each subject can serve a unique function in preparing students to live full, rich lives.

SCIENCE

The main process of science is explanation. Scientists are concerned with understanding *how* the world works. Science aims to produce systematic explanations of events, which can be verified by evidence (*Robinson, 2011*).

“Without a comprehensive liberal arts education, our students will not be prepared for the responsibilities of citizenship in a democracy, nor will they be equipped to make decisions based on knowledge, thoughtful debate, and reason.”

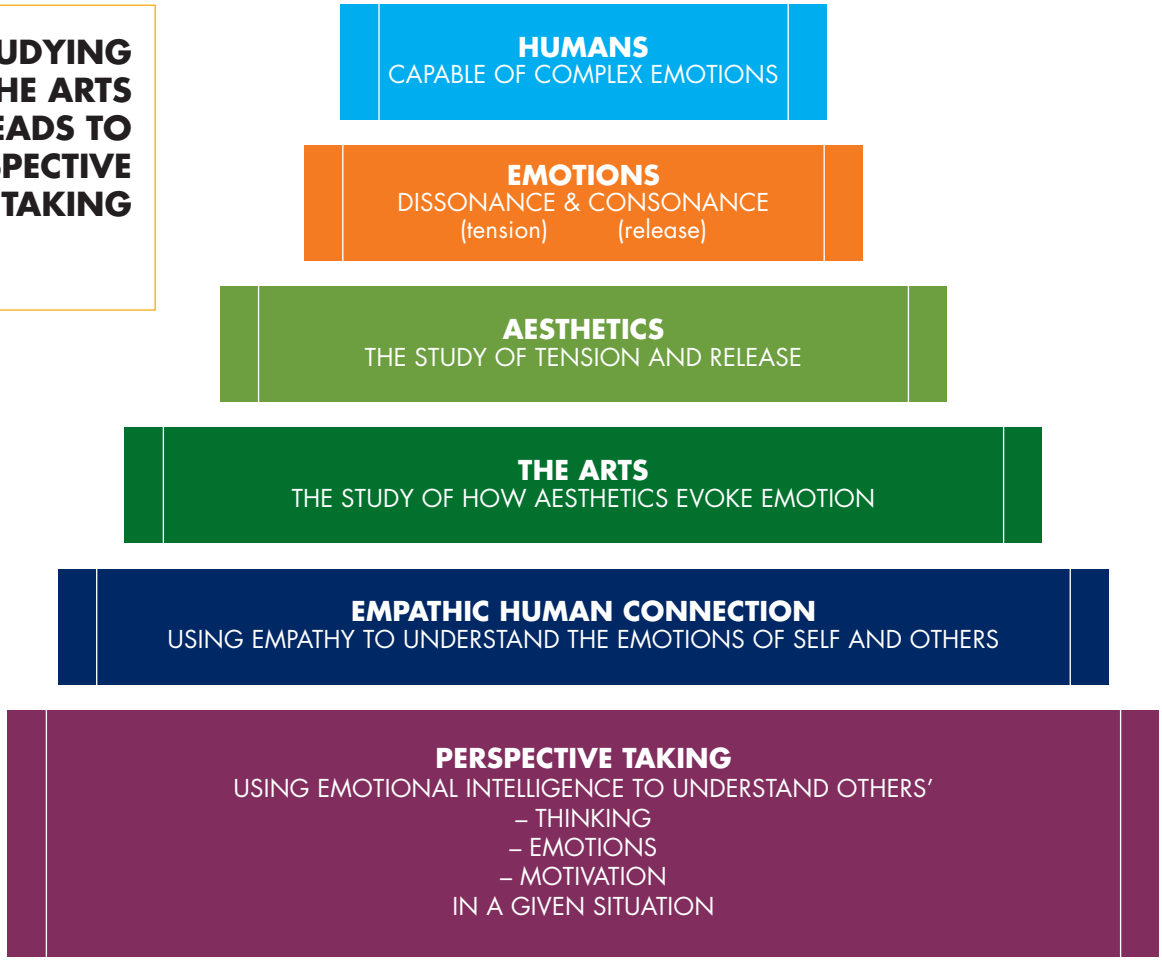
d. ravitch

The main tool of the scientist is the process of *inquiry*. Scientists develop hypotheses and follow the evidence to lead them to conclusions, which are measured against standards of objectivity.

Diane Ravitch (*2013*) explains how this connects to daily living:

> As citizens, our students will be expected to come to judgments about complex scientific issues. They need to understand science and to bring their critical judgment to bear on questions such as global warming, cloning, evolution, the effects of smoking or sugar, regulations for drilling for natural gas and oil, and debates about maintaining clean air and clean water. As candidates debate these issues, voters must be informed and ready to make their own judgments. They must know how to research the issues and assess contesting claims. As advocates for industry advance their interests, citizens must be able to weigh their assertions. Their knowledge of science will prepare them to reach their own judgments in matters of public dispute (*pg. 239*).

STUDYING THE ARTS LEADS TO PERSPECTIVE TAKING



THE ARTS

As humans, we are capable of complex emotions. The arts, including music, dance, art, and drama, are a study in aesthetics. Aesthetic experiences generate complex emotions. A study of aesthetics is the study of how tension (dissonance) and release (consonance) create the aesthetic experience.

The arts, then, are a study of how aesthetics evoke emotion. Understanding emotion helps us to develop empathy. Developing empathic connections is the key to perspective taking, which allows us to connect with the thoughts, feeling and motivations of those with whom we live and work. To put it another way, the arts are a disciplined study of what it means to be human.

The chart at left represents how studying the arts leads to perspective taking.

MATH

If you took trigonometry or calculus in high school, it was probably the last time you used trigonometry or calculus. Engineers will tell you that they use mostly algebra II in their work. So why do we have students study math that they we will never need or use in daily living?

Mathematics teaches logical and abstract thinking. All those signs and symbols are abstractions that carry meaning; and thanks to the process of transfer in learning theory (*Mextorf, February, 2012*), we know that what we learn about logical and abstract thinking in math class will carry over into other areas of our lives. To summarize a passage from Chip and Dan Heath (*2007*), math is a tool for disciplining the mind to handle problems that will arise in everyday life using logical thinking and abstract concepts. In short, math helps prepare learners to be better thinkers in whatever they choose to do in life.

SOCIAL STUDIES

Social studies is the analytical and contextual study of the human condition.

I like to think of the broad field of social studies (history, geography, civics, government, economics, psychology, sociology, etc.) as the "connective tissue" of the educational program. Social studies allows us to embrace ambiguity, investigate the humanity of historical figures, understand the similarities of humans throughout history, and learn about the consequences, both intended and unintended, of choice.

Diane Ravitch (*2013*) asserts:

> To come to a thoughtful judgment about political affairs, citizens need a solid grounding in history, economics, and statistics. … Citizens need to understand the great issues in American and world history. …To know the evil and goodness of which people are capable, they must study history. To know the mechanisms that have been created to protect our rights and freedoms, they must study the Constitution and other founding documents. … To be prepared to judge issues on the world scene, they need to study world history and world geography to learn about other forms of government and other ways of organizing society than the one that is most familiar to us (*pp. 238-239*).

"Social studies allows us to embrace ambiguity, investigate the humanity of historical figures, understand the similarities of humans throughout history, and learn about the consequences, both intended and unintended, of choice."

d. ravitch

> We must know why we teach what we teach, and the unique function each curricular area serves in preparing our kids to make both a living and a life.
>
> r. mextorf

LANGUAGE

How well a person reads, writes, and speaks is directly related to how seriously they are taken in the world. Accordingly, students must learn to read critically, write simply and powerfully, speak clearly and listen intently.

Literature is important because it allows us to experience the human condition through the prism of historical and fictional characters. Literature provides students with the opportunity to experience life through the eyes of other people in other times and other places.

How much better did we understand the holocaust after reading *The Diary of Anne Frank*? The *New York Times* bestseller *Unbroken* brought us into the life of Louis Zamperini, the Olympic track star and WWII prisoner of war who fought so heroically to stay alive and then to forgive his captors. How many of us waited with anticipation for the next installment of the fictional *Harry Potter*? Literature helps us gain insight into the worldview of characters.

Regarding foreign language, Diane Ravitch (*2013*) instructs:

> To function effectively in the world of the twenty-first century, students should learn a foreign language. They should use their language skills to learn about the culture, literature, history, and arts of other societies. They should broaden their knowledge of the world so that they recognize that other people think differently; by doing so, they may abandon narrow provincialism and get a clearer understanding of other cultures (*pg. 239*).

WELLNESS

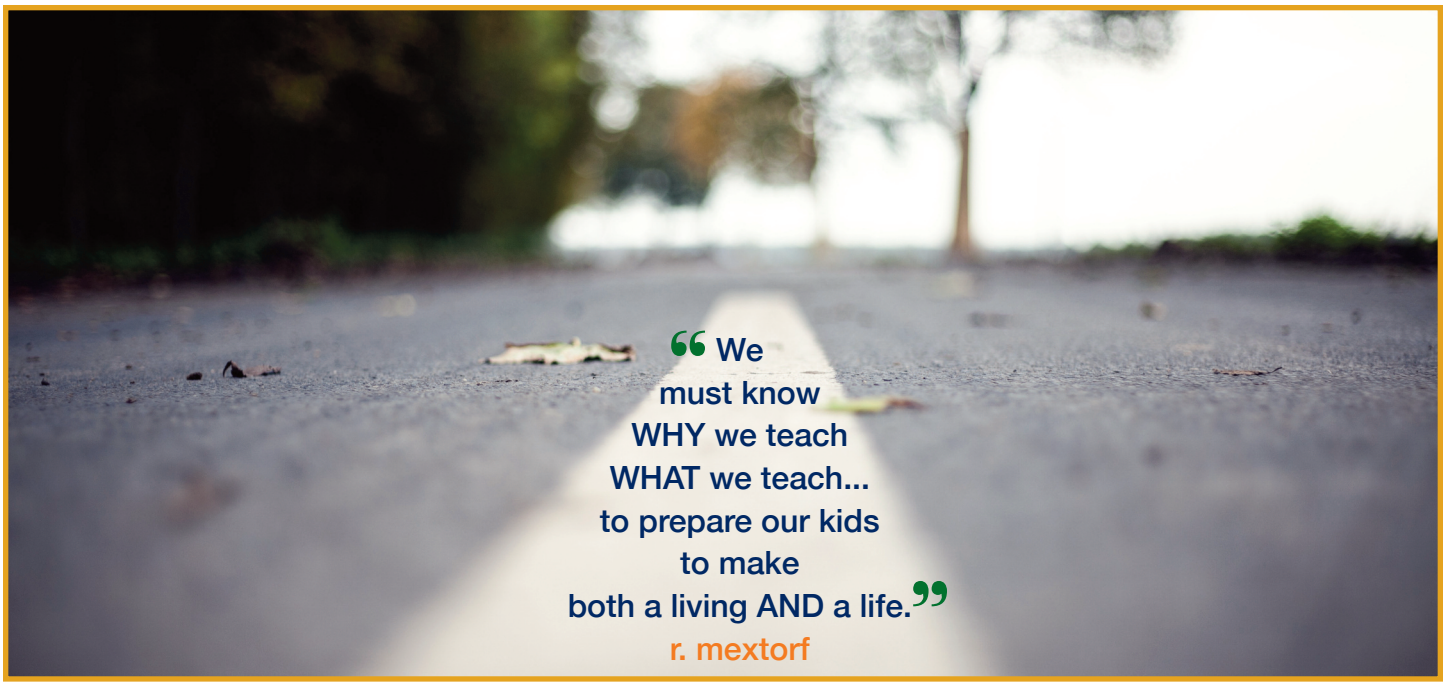
Gone are the days of "roll out the ball," where the confident, athletic kids participate in team games and the kids that need exercise the most sit on the sidelines during physical education class. Wellness education includes physical, mental, emotional, and social wellness.

Students need to develop a healthy body image through the appropriate diet and exercise program. They need to understand the roll stress plays on the system. They need to develop self-awareness and self-regulation strategies. Additionally, they need to understand how to manage and maintain healthy relationships. Wellness education is critical for helping students maintain the dynamics of physical, mental, social, and emotional wellness by establishing boundaries and maintaining balance in all areas.

TECHNOLOGY & ENGINEERING

This is not your father's "shop" class. Technology and engineering in today's classroom is used to teach kids design thinking.

Tom Kelly, executive fellow at UC Berkley's Haas School of Business, and David Kelly, founder of the d.school at Stanford University, describe design thinking in their book, *Creative Confidence* (*2013*): "Design thinking is a way of finding human needs and creating new solutions using the tools and mindsets of design practitioners (*pg. 24*). The authors further explain that "design thinking relies on the natural – and coachable – human ability to be intuitive, to recognize patterns, and to construct ideas that



are emotionally meaningful as well as functional” (*pg. 25*).

While it is still important for kids to learn how to “measure twice, cut once,” the learning in this discipline focuses on digital and tactile design principles using computer assisted design (CAD) systems, robotics, digital media, prototyping, and nanotechnology. Modern technology and engineering coursework enables kids to develop skills that will help them consider options that do not yet exist in the world.

GLOBAL PARTICIPATION SYSTEMS (GPS)

As we have seen, learners will be expected to participate fully in a world that has become both *flat* (*Friedman, 2006*) and *small*. The old category of “business,” which was created originally to prepare secretaries, and later served to introduce learners to accounting and management, has evolved as an area to prepare learners for the modern expectation of global participation.

Experiences in this category are in four broad areas: Entrepreneurship, managing the virtual environment, career development, and skill development in using web 2.0 (virtual collaboration) tools. Additionally, learners move beyond accounting and management into capstone experiences including leadership, supply chaining, logistics, analytics, and global business. These experiences will help our learners become citizens of the world.

CONCLUSION

As a public good, a shared responsibility, and a sacred trust, public education must evolve to meet the current reality of the learners it is charged with educating. We must acknowledge that the world has changed, and that our kids require a very different kind of education than merely following the well-worn path of the SAT-ocracy. We must resist our Compelling Purpose being washed away in the tidal wave of standardized testing and the narrow focus on what can be measured easily.

A solid liberal arts education, steeped in the proper essential skills and habits of mind, will allow our kids to see the big picture, connect the intellectual dots, glean insight, embrace multiple perspectives, encourage divergent thinking, and make empathic connections. We must know *why* we teach *what* we teach, and the unique function each curricular area serves in preparing our kids to make both a living *and* a life.

Our kids deserve it and our nation is depending on it!

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This is the third in a series of essays designed to provide a framework for dialogue as, together, we craft the future of public education in Hamburg. Each essay is designed to highlight a particular aspect of education, and discuss how we can move forward to provide a future-focused, personalized learning plan for **every child, without exception**. We are fully committed to helping our kids become the best version of themselves, so that they may make their contributions to the world and live lives of significance and meaning.

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