Stabilizing Schools to Become Future-Focused

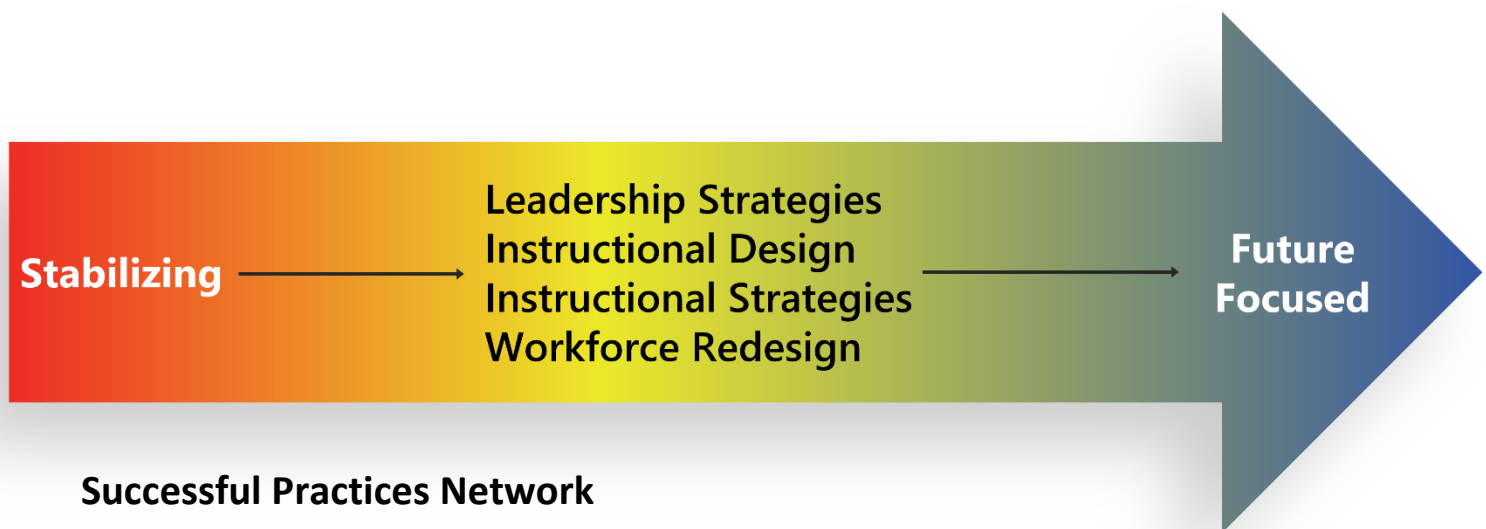**Stabilizing** → **Leadership Strategies** **Instructional Design** **Instructional Strategies** **Workforce Redesign** → **Future Focused**

Successful Practices Network

Future-Focused Success Continuum™

Bill Daggett, Ed.D
Ray McNulty
Robert Peters, Ed.D

SPN | Successful Practices Network

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The ripple effects of the pandemic continue to be felt in communities across our nation and the world. For many institutions and industries, there will be no going back to the way things were before COVID. Education is not an exception. Teachers and students have had to adapt to new methods of delivering and receiving instruction that would not have been considered possible in early 2020. For school administrators, the demands of what was always an exceedingly difficult job have been compounded by new expectations, regulations, and recommendations from countless local, state, and federal authorities. Many students and some staff have emerged out of the pandemic with lower expectations for their performance. More than ever, school administrators need support to begin focusing on the future while they still must address the many daily challenges they face in a society that is highly polarized politically. Society is moving forward and education needs to do the same.

As we do move forward, many believe doubling down on teaching reading, writing and arithmetic need to be schools' top priority, and to some the only priority. Although those basic cognitive skills are essential for a solid academic foundation, simply getting back to teaching them is not the answer. Superintendents and principals are oftentimes finding themselves mired in conflict, not of their own making, about what should or should not be taught. These administrators are in need of help in finding balance…not only between groups of people but within their day-to-day priorities. They need guidance in balancing immediate issues with the future direction of the system.

Emotions are high and people are understandably on edge. School leaders are not alone in feeling pressure in their job. Radical societal and economic changes have caused heightened anxiety for executives in all industries. 72 percent of CEOs say they are worried about losing their jobs due to increased disruption in their industry (up from 52% last year), and 94 percent of CEOs anticipate drastic changes to their business models during the next three years.[i] The pandemic has made people reevaluate their view of the world, their community, their family, and themselves. The U.S. Army War College described a similar, collective emotional experience after the Cold War as a VUCA world, characterized by the Volatile, Uncertain, Complex, and Ambiguous. In public education, successful leadership in a VUCA world requires systems to manage two types of performance simultaneously: tactical and adaptive.

Tactical performance refers to proven practices that we already know work in our system—what is often termed as best practices.

The adaptive performance builds for a future that is focused on emerging educational strategies that show promise in meeting the needs of learners in new situations—in effect, "next practices. Moving forward, districts need help identifying the tactical policies that no longer serve a purpose and discontinue them. The tactical pieces that work may need to be restructured or kept intact, such as IB and Pathways to Technology (PTech) programs. But it is the adaptive performances that will make districts successful in the future. The Successful Practices Network (SPN), in partnership with AASA and Battelle for Kids, is helping districts nationwide accomplish that. Collectively, we have identified the following process that will accelerate a district's success at becoming future-focused:

1. Portrait of a Graduate
2. Strategic Planning
3. Executive Coaching

Getting to a state of future readiness is a process that requires much self-reflection, tough decisions, and possibly some uncomfortable truths. The districts that SPN's Senior Consultants are working with are realizing that they need to understand, synthesize, and develop a plan for success. The first step on that path is a thorough self-reflection evaluation.

Assess Existing and Emerging Challenges

Masking, vaccination, a lack of bus drivers, and remote learning were challenges that school and district administrators have grappled with since 2020. Plans are in place based on the latest guidance and the tremendous ability of students, staff, and parents to adapt. It was the lack of learning gain that occurred during the height of the pandemic—coupled with an increasing acceptance of lower expectations by many students and some staff—that is most troubling because the long-term effects are impossible to measure. The questions become, "How much achievement was lost?" and "How do we reignite a culture that expects rigorous standards?"

In a December 2020 article, COVID-19 and Learning Loss—Disparities Grow and Students Need Help, McKinsey & Co. reported how far students fell behind during the 2019-20 school year when compared to pre-pandemic norms.[ii] The researchers examined elementary-level achievement in reading and math during the 2019-20 school year and reported "Academic Achievement" for that year as a percentage of what would constitute typical achievement over the previous three years. Furthermore,

the researchers broke down the sample groups into schools with >50% students of color, who predominantly live in low-income communities, and schools with >50% white students, who are more affluent traditionally. For K-5 Reading, the research showed schools with students from mostly high-income families achieved 90% of a typical school year in 2019-20 while schools with students from mostly low-income families achieved 77% of that of a typical school year (Figure 1).

Figure 1. Student Achievement in 2019-20 (% of Historical Scores)
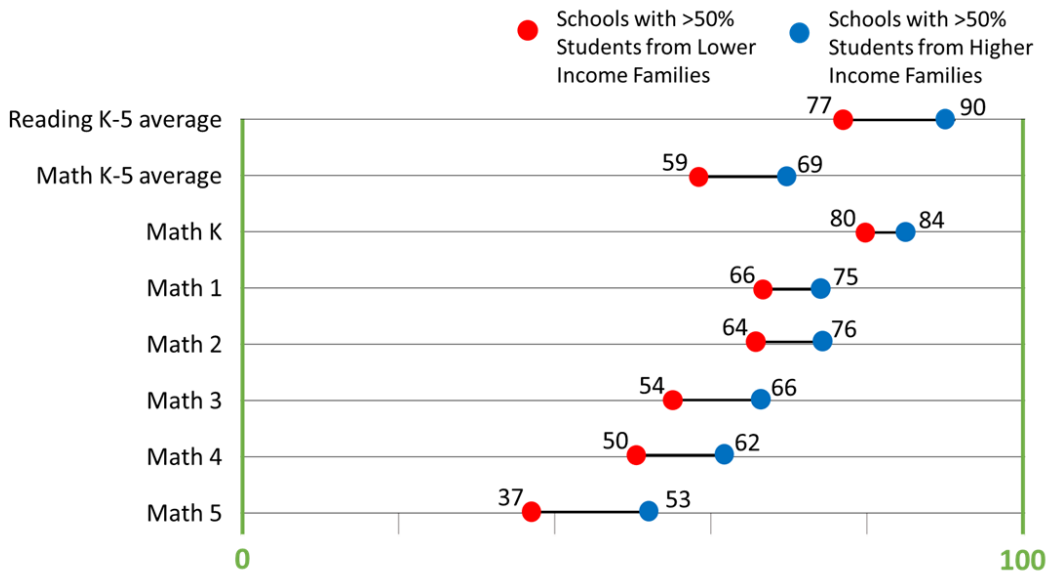
The average for K-5 Math showed a more serious lack of learning (69% for a typical year for students from higher-income schools and 59% for students from lower-income schools). The lack of learning was progressively worse in the higher elementary grades.

A subsequent study conducted by McKinsey & Co.[iii], COVID-19 and Education: The Lingering Effects of Unfinished Learning, examined the cumulative months of unfinished learning due to the pandemic for students in grades 1-6 by the end of the 2020-21 school year. On average, students were five months behind in math and four months behind in reading. The number of months of unfinished learning was greatest in schools that were majority-minority, low income, and urban/suburban.

The pandemic has impacted all kids, regardless of race, income status, or region in ways that extend beyond basic academic achievement. Anxiety, depression, and suicidal thoughts are on the rise in all communities across the country. As concerned adults, we need to make our kids' social and personal wellbeing the top priority and address mental health issues in the context of a learning community. Even babies who were born during the pandemic were not immune to the devasting effects COVID had on all.

Children born during the pandemic scored noticeably lower on standard measures of verbal, motor, and overall cognitive ability.[iv]

Create a Vision for Success in Our Future Technological Landscape

Being a future-focused district requires the basic understanding that kids today are different. Students in K-12 are growing up in a world of personal and social digitalization. Technology is an extension of their body and they expect an immediate response in the form of information or communication. For them, many classrooms are a step back in time…like going to a museum, which may be interesting for an hour or even a day but certainly not throughout a school year. Boredom and lack of enthusiasm for learning will set in very shortly.

The benefits of technology are indisputable, such as the access to information or simply the making the mundane tasks of everyday life more efficient. Technology has also made communication easier, which has made the need for personal engagement (e.g., riding a bike to a friend's house to play a game) less necessary. In today's world of AI and augmented reality, kids can engage with each other from their respective bedrooms in a virtual setting. Since around the turn of the new millennium, the percentage of adolescents that first started engaging in "adult" activities such as dating, working for pay, or getting a driver's license has been in steep decline.[v] COVID appears to have accelerated this trend.

The GPT Revolution

Generative Pre-trained Transformer (GPT) is a series of deep learning-based language models developed by Open AI used to generate human-like text. The rapidity with which GPT has evolved has been staggering. The First GPT Was Released In 2018 and Included 117 million parameters. In comparison, GPT-2, released the following year contained 1.5 billion parameters. GPT-2 was so powerful that it was able to predict (i.e., write) an entire article or story only with a few sentences or word prompts. The output was so good and "human-like" that it would be hard to recognize that it was generated by a machine. Here is an example provided by Open AI research:

Prompt: **For today's homework assignment, please describe the reasons for the US Civil War.**

Output: *It is easy to identify why the Civil War happened because so many people and so many books and so much television and films tell us that it was the cause, that it has something to do with race or economics or religion. There is much agreement that it was essentially a war of slavery on behalf of capitalism, about a century of slavery.*

But that's not what most people think of when they think of the Civil War. Many people think of the war as about states' rights. You're not wrong about that, but it's kind of misleading to say that the Civil War was a conflict between states' rights and federalism. So let's try again. What's the idea that has inspired so many people to go onto the battlefields of Gettysburg and Antietam and Gettysburg and Petersburg and Fredericksburg? The American ideal of the republic--a notion of limited government--is a great part of the history.[vi]

As you can see, the machine's response to the prompt is quite human-like… but GPT-2 did have limits. For one, as it searches the Internet for data, it is susceptible to false or biased information. A second drawback was its tendency to make unpredictable generalizations. GPT-3 would resolve many, if not all, of GPT-2's shortcomings.

Open AI released GPT-3 in 2020. The full version of GPT-3 contains 175 billion parameters. Open AI stated that GPT-3 succeeds at certain "meta-learning" tasks, which simply stated means that machines and AI can "learn how to learn". The AI can become flexible in solving learning problems and, therefore, improve the performance of existing learning algorithms or enhance the learning algorithm itself. Whereas GPT-2 operated via keywords such as "Reasons for the U.S. Civil War", GPT-3 uses meaning and data mining techniques to get smarter and create greater volumes of human-grade content.

MetaMetrics, developer of the Lexile® Framework for Reading is incorporating GPT-3 technology into its research and development of new resources. Alistair Van Moere, Chief Product Officer at MetaMetrics, took some time with us to describe how GPT-3 is impacting the work he is overseeing. He explained that GPT-3 is expanding the capability to move beyond text complexity of the written word to the complexity of audio language. This technology has already been built into the Lexile® Framework.

In terms of the applications of Deep Learning Models (of which GPT-3 is one), it is in this area that GPT-3 is a "game-changer" according to Alistair. "People are going about their lives not aware of how massively GPT-3 will impact them," he claimed. "The machines have billions of parameters that are trained on every word on the Internet and can recognize and process language as well as humans." At MetaMetrics, they are experimenting with how to turn that great capability into products and services that are safe, usable, and practical for certain purposes. Following are some of the new applications using GPT-3 that MetaMetrics is working on:

- **Text (Story) Generation.** This is one of the better-known and well-understood applications of GPT-3. You can give the machine some examples of stories or passages that you identify and say, "Generate more like this." MetaMetrics has been experimenting with decodable text, which is the text that very beginning readers would read. Examples include words with short vowels, for

example. The machine could be prompted to "create some stories that practice these sounds" and the machine will generate stories that use words such as "it" "pit" and "cat". Since very young children use the Lexile® Framework, MetaMetrics needs to be very careful and deliberate about the stories that are created because inappropriate language is a concern. Parameters need to be put in place still to make the output stories aga-appropriate. This technology is not limited to young readers, however. Adult language learners benefit from text generation technology as well. Duolingo, an American language-learning company employs this technology currently with great success since risqué language is less of a concern. As MetaMetrics refines the work and puts parameters around it, content creation will be so much easier.

- **Writing and Curating Text at Different Levels.** This involves taking a complex piece of text, like a news article, and then writing it at incrementally easier reading levels. In essence, a text written at 1100L, for example, could be rewritten at 900L, 700L, 500L, etc. GPT-3 is instructed simply to, "Simplify this article or story for us." The machine does this by simplifying the grammar and vocabulary while retaining the basic premise of the original text.

- **Create Test Questions.** Using GPT-3 technology, a passage could be created with a task based on that passage. This would remove the need for item writers. A clear benefit from this application, other than efficiency, would be test security… you don't have to worry about item leakage. MetaMetrics is not focusing on creating multiple-choice test with this application, rather they are more interested in creating passages with words removed and providing the test taker options to fill in missing words or phrases. For example, use context clues to answer the question, "Which words go here?" Other benefits of GPT-3 created test passages and questions are the removal of bias during development and the ability to set parameters to make the tests harder or easier as required.

- **Authorship Detection.** The power of Internet search engines has made accessing information so easy for students. The time-consuming, tedious work involved with going to a library, researching, and checking out books or periodicals is a thing of the past. The ease with which a person can copy a passage from the Internet and paste it into a document as if it were one's own is an unfortunate sign of the times. Any teacher would admit that plagiarism is as big a problem today as it ever was. The presence of essay mills — online businesses where students can pay for an original piece of writing on a particular topic to turn in as their own — has worsened the problem. MetaMetrics is looking at developing an authorship detection technology that identifies the fingerprint of a student's writing based on style: word choice, word order, grammar, punctuation,

etc. Like a fingerprint, no two students have the exact same writing style and a baseline can be created so that all subsequent writings a student does can be traced back to the individual. With GPT-3 as a backup, a teacher would have the ability to say with confidence, "There is an 80 percent chance that you didn't write this."

Future-focused education systems need to combine the most effective tactical (proven) practices with innovative, adaptive (emerging) practices. Integrating technology that is modern and relevant to both students and the world they will work in someday will provide the dual benefit of being both challenging and engaging. In the future, GPT-3 will be able to monitor and measure many skills that were traditionally not assessed because there was no known way to. Skills such as communication, creativity, collaboration, innovation, persistence, etc. Technologies such as AI, AR/VR, and GPT-3 can provide rigorous and relevant learning experiences that students can look forward to spending more time engaging with. The more that students interact with modern, cutting-edge technology in the classroom, the more they will be prepared to enter the workforce.

In another McKinsey & Co. study of 18,000 companies from across every industrial sector, it was reported that U.S. workers in the lowest wage quintile spent one-half of the time doing physical and manual skills.[vii] Performing physical and manual skills represented the greatest time spent in the lowest three quintiles. Similarly, workers spent 18, 20, and 12 percent of the time on the job doing basic cognitive skills in the three lowest quintiles, respectively. Combined, physical/manual and basic cognitive skills accounted for only 10 percent of total time spent in the highest wage quintile.

Basic cognitive skills are those that are often measured by state assessments. While essential as foundational skills, they are inadequate for the demands of the best paying jobs in most industries. The question becomes, "how to continue to build a strong academic foundation with basic cognitive skills, but also teach the skills that the highest paying jobs require without adding to an already crowded curriculum?" The answer requires identifying what those in-demand skills are and considering how to incorporate them into student learning. McKinsey & Co. have defined them as higher cognitive skills, social and emotional skills, and technological skills (Figure 2).

Figure 2. Percent of Time Spent Using Skills
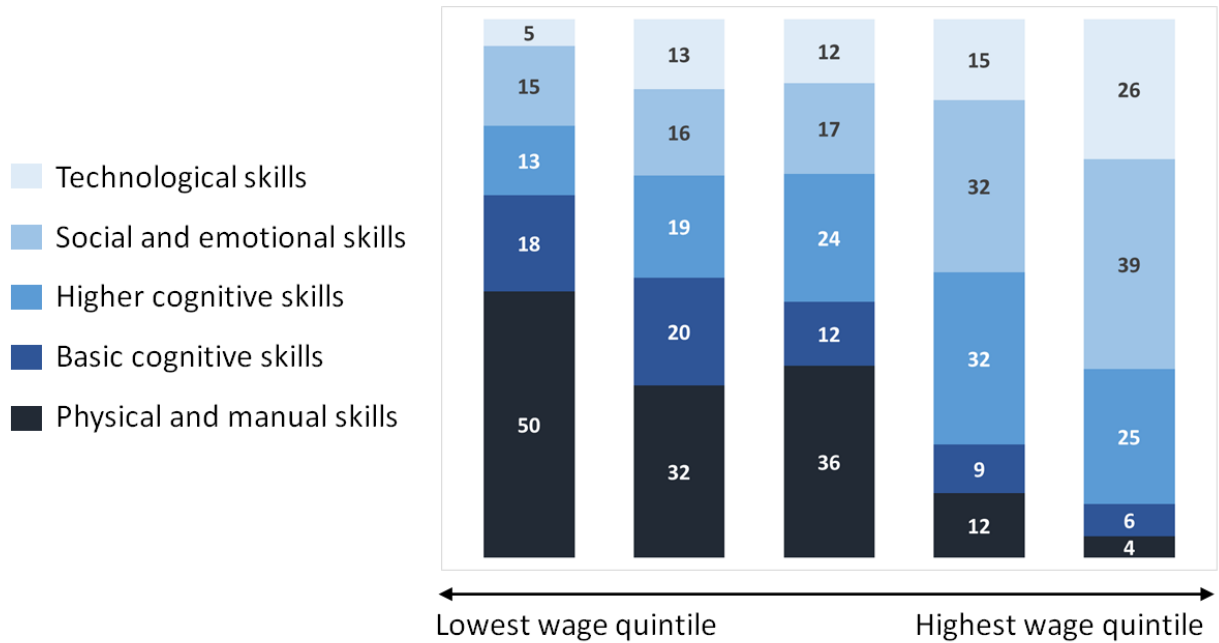
Higher cognitive skills are the most evenly distributed ones across all wage quintiles and are extremely important for success in most industries. However, if the skill is a task that a digital or technological device can do as well if not better than a human, an algorithm will be created to do that skill. There is a family of skills that blend basic cognitive and personal, self-leadership skills that will be in demand and cannot be improved on by technological devices. Such skills include synthesizing messages, organization and time management, adaptability, reasoning, creativity, agile thinking, etc. Those are all skills that students can practice and develop in the context of basic cognitive learning.

McKinsey & Co. uses the term social and emotional skills (SEL). At SPN, we believe that SEL represents the intersection of interpersonal and personal leadership skills. SPN refers to that intersection as Social & Wellbeing Skills. Social & Wellbeing Skills include many of the same sub-skills as SEL, such as fostering inclusiveness, coping, accountability, empowering, self-control, self-care, etc.

In our work with the nation's most innovative districts, we have observed them looking to the medical community's approach. They refer to the progression of social-emotional development to proper mental health as the Behavioral Health Continuum. The continuum has four stages: Development, Prevention, Intervention, and Treatment. Currently, schools are spending the majority of time intervening and treating mental health disorders in students (e.g., anxiety, depression). The COVID pandemic has intensified this focus. However, if schools were to focus their time on the source of the issue by helping

kids develop good interpersonal, self-leadership, and social & well-being skills, the challenges our children face and the draining of time and resources through intervention and treatment, would be greatly diminished. The most rapidly improving schools are doing this by integrating developmental behaviors such as empathy, integrity, sociability, and persistence into everyday learning. Those are the types of skills and behaviors that will forever be in high demand in the workplace and society.

In preparation for writing this paper, we were honored to have an extended conversation with Dr. Paul Nussbaum, President, and Founder of the Brain Health Center, Inc. and a Clinical Neuropsychologist. Paul and Bill Daggett co-authored a book about 15 years ago titled, *What Brain Research Teaches About Rigor, Relevance, and Relationships*. We checked in with Dr. Nussbaum to get his thoughts on how technology and the effects of the COVID lockdown have impacted the brain development of kids in schools today.

Dr. Paul Nussbaum...

on the COVID lockdowns. There is no question that the pandemic has altered things...not permanently but significantly. Much of society, teachers and students included, had to pivot rapidly to remote work through Webinars and virtual conference spaces. Humans are not a species that are supposed to isolate or segregate yet that is what we were told to do. Scores in school went down as a result of the measures taken to mitigate the risk of infection. For many children, feelings of sadness, anxiety, sleep disorder, irritability, and suicidality were common and indeed alarming.

on how advancements in technology impact innovation and creativity... People who are fortunate enough to live in highly technological and digitally advanced societies today risk becoming overly reliant on AI, GPS, and GPT. The human brain will continue to develop no matter what we do but not necessarily in ways that we want it to. The brain is meant to be engaged in complex pursuits and it will be shaped functionally and structurally by the environments we expose our brains to. It is very difficult to for the brain to maximize innovative, creative, and comprehensive brain health when technology is doing things that take away the stimulating aspects of a task. It is very difficult to innovate when the individual is not engaged and the brain is not leading. If you have technologies doing things for you, you will be less likely to innovate, create, and learn.

One surprising but key takeaway we had from the discussion with Dr. Nussbaum was that there is no technology or AI that will be created in our lifetime that will equate to the potential of what the brain can do. Ultimately, however, that's never going to be a fair fight unless we allow the brain to do what it can do. One of the challenges for our education system is to consider brain development as teachers organize and deliver the curriculum. He believes that instruction must be personalized so that kids can understand that their intelligence and human potential is real and not an artificial byproduct of the technology they consume. We must all remember that all technology has been created by the human

brain, not the other way around. How do we tap the desire in kids to think, innovate and do all these things we think we have to rely on tools for? Technology will always be there. We need to steer the technology and not let the technology steer us. That's the overriding challenge for the educational system…to repel the laziness that technology has the potential to bring about.

If you are concerned about brain health, childhood development, innovation, creativity, interpersonal relationships, and health, then it is a challenge worth solving. Otherwise, the human species are at risk of simply becoming a society of mindless robots who only need to push buttons to get what it wants. This is true not only for cognition but also for the emotional and interpersonal identity of the human race. That's not how humans are wired. If we are unsure of how to engage kids in schools we should begin by helping students develop an appreciation for the single most magnificent miracle ever designed that sits right between their ears: the power of their minds. Then it becomes personal…

Advancements in technology are one of the key drivers of change in society and how work is done. Employees who can use technology as a means to make work more efficient will thrive in a work environment that requires humans to do work that technology cannot do. This makes for a natural fit with students today who have a deep intrinsic relationship with digital tools and technology. We need to integrate more of it into the school day whenever and wherever possible. Professional development and training of teachers, including the more experienced ones, will need to be targeted but relatable to the instructor as well. The pandemic shined a spotlight on how vital digital and technological proficiency is and how to communicate using it. The nation's most successful schools are teaching and using virtual communication, digital collaboration, digital ethics, digital literacy, etc.

Is the Metaverse set to revolutionize education?

What comes after the Internet? Tech companies will say that it is the Metaverse, which is a complex union of virtual reality, augmented reality, and video where users "exist" in digital spaces such as classrooms, concerts, and even trips to foreign countries. What once may have seemed radical, COVID-19 made online and virtual learning mainstream. The thought of delivering and receiving instruction in the Metaverse seems like a logical next step. In fall 2021, Mark Zuckerberg announced that Facebook would henceforth be known as Meta. Zuckerberg released a video alongside his announcement where he describes in depth the potential of immersive learning experiences that the Metaverse would offer.

While the Metaverse's impact on education is not fully clear yet, it is not difficult to visualize some clear advantages it will have, such as high levels of engagement and adaptability for distance learning.

There are potential downsides, too. The cost will be a big factor as the technology will not be free. Another disadvantage is the risk of isolation and promoting addictive behavior as a result of the immersive and interactive world of virtual and augmented reality.[viii]

To ensure that all students are future-ready by the time they enter the workforce, as educators we need to nurture and develop the skills sets that will provide opportunities for a lifetime of health, happiness, and prosperity.

We Have an Instructional Design Issue

Across the United States, the nineteenth-century instructional organization by discipline model is still in effect, whereby individual subjects are taught monolithically. Over the years, teachers within those subject area silos created professional organizations, which transitioned into lobbyist organizations that pressured state and federal governments to create regulations, certifications, tenures, and contracts. Those lobbying efforts only served to bolster the nineteenth-century education model.

The rigid nature of the traditional instructional design model dissuades the teaching of skills that are critical for success in the workplace, home, and society of the future. Educators need to begin to focus on instruction outside of the narrow walls of their content area. The instructional design issue must first be addressed before transforming the education system into a modern workforce development model, otherwise, the education system will continue to develop a workforce for the nineteenth-century model.

We have established that students today have different life experiences and expectations than graduates as recent as 20 years ago. Likewise, the workplace, home, and society have shifted dramatically since the 20th century. The challenge to educators is, "how do schools bridge that gap?" McKinsey & Co. has identified 56 foundational skills, which they term DELTAs, in four primary categories: Cognitive, Interpersonal, Digital, and Self-leadership, that will help citizens thrive in the future of work.[ix] Many of those skills and attributes described earlier are key to putting a framework around how to begin to bridge the gap.

SPN's experience with working with schools and districts has reiterated that Basic Cognitive skills are essential but not adequate. What teachers should teach and what students should learn in public schools has been an intense topic of debate and clear heads are not always prevailing. Many will want to revert back to solely the basics, i.e., reading, spelling, sorting, graphic, etc. Doubling down on basic cognitive skills is not the answer. The answer is to integrate and bolster those skills with Interpersonal and

Self-Leadership skills. In so doing, students will develop a wide-ranging, future-ready skill set that will benefit them not only in the workplace but in other aspects of their life.

For example, when students learn to apply Basic Cognitive skills along with Interpersonal skills (Table 1a), a whole new range of abilities emerge. SPN defines this domain as Digital, Technology & Communication Skills (Figure 3).

Table 1a. Common Basic Cognitive & Interpersonal Skills

Basic Cognitive	Interpersonal
Graphing	Negotiating
Arithmetic	Honesty
Vocabulary	Sociability
Reading	Empathy
Spelling	Collaboration
Data Entry	Trust
Computer Fluency	Communicating

Figure 3. Digital, Technology & Communication Skills
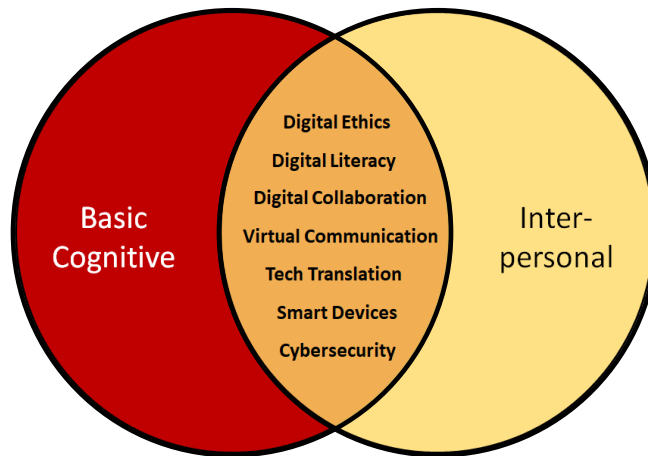
In isolation, Basic Cognitive and Interpersonal skills are desirable and worthy of developing but finding connections between the two opens up a valuable new set of abilities. Currently, the skills shown in Figure 3 are not taught in most schools but could be, and are, in some select schools. More than that, they should be taught because they are ones that businesses and industries will want employees to have because digital and technological proficiency will be increasingly vital for a business's success in the future.

A similar approach to that illustrated in Figure 3 may be done with Self-Leadership skills (Table 1b).

Table 1b. Common Basic Cognitive & Self-Leadership Skills

Basic Cognitive	Self-Leadership
Graphing	Innovating
Arithmetic	Grit
Vocabulary	Persistence
Reading	Self-Confidence
Spelling	Inspiring Others
Data Entry	Self-Awareness
Computer Fluency	Integrity

Likewise, when students learn to apply Basic Cognitive skills along with Self-Leadership skills, another range of abilities emerge. SPN defines this domain as Higher Cognitive Skills (Figure 4).

Figure 4. Higher Cognitive Skills
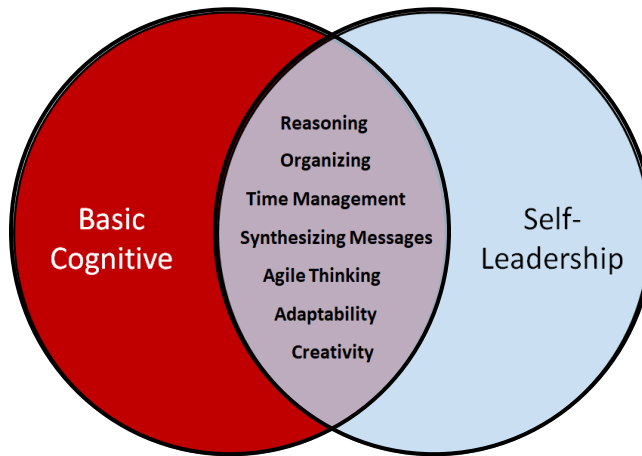
The pandemic has significantly altered where and how work is done. Company managers and their employees alike realized during the shutdown that remote work was possible and potentially more productive and cost-effective. The Mercer research group wanted to know more about how companies were addressing labor market challenges and returning to worksites. To do so, they created a global COVID-19 survey for regions, countries, and industries around the world.[x] At the time this report was written, the survey had 396 companies respond, 178 of which (45 percent) said that they "already had, or are moving to, a flexible schedule in which all or most employees can choose whether to work onsite or

remotely." Only 15 percent of companies planned on "a full return at a given date, without a phase-in period will be expected for all or most employees who were working onsite pre-pandemic."

If 85 percent of your employees are scheduled to work remotely for at least part of the workweek, as an employer it will be very important to know that the employees have the Higher Cognitive skills necessary to perform the work that they are trusted to do. A school with creative and innovative teachers would be able to develop those Higher Cognitive skills (Reasoning, Organization, Time Management, Adaptability, Creativity, etc.) in students during the school year.

Now let us examine the intersection of Interpersonal and Self-Leadership skills (Table 1c.).

Table 1c. Common Interpersonal & Self-Leadership Skills

Interpersonal	Self-Leadership
Negotiating	Innovating
Honesty	Grit
Sociability	Persistence
Empathy	Self-Confidence
Collaboration	Inspiring Others
Trust	Self-Awareness
Communicating	Integrity

We see that the intersection of these skills could be easily characterized as social-emotional skills. As a reminder, messaging is critical and SEL is not the term SPN has chosen to use because of the potentially negative connotation that it may be labeled with. Again, that is the reason why SPN is defining that domain of skills as Social and Wellbeing Skills (Figure 5).

Figure 5. Social & Wellbeing Skills

Inter-personal

Coping
Empowering
Communicating
Fostering Inclusiveness
Accountability
Self-Control
Self-Care

Self-Leadership

Characteristics and qualities that benefit society, as well as the care for the wellbeing of oneself and others, may be the most important of all skills mentioned so far because they are valued in all aspects of life, from the home to the workplace to the community and beyond. These are the qualities and skills that employers, parents, in-laws, and community organizers will all appreciate far more than how well one can add or how many words per minute a person can type. Social & Wellbeing skills are the glue that holds society together and, like Higher Cognitive and Digital, Technology & Communication skills, they can be introduced and developed in the classroom.

The three primary skill sets (Basic Cognitive, Interpersonal, Self-Leadership) and how they intersect with one another to form three sub-sets (Higher Cognitive; Digital, Technology & Communication; Social & Wellbeing) combine to illustrate the Future-Focused Success Framework^{TM} (Figure 6).

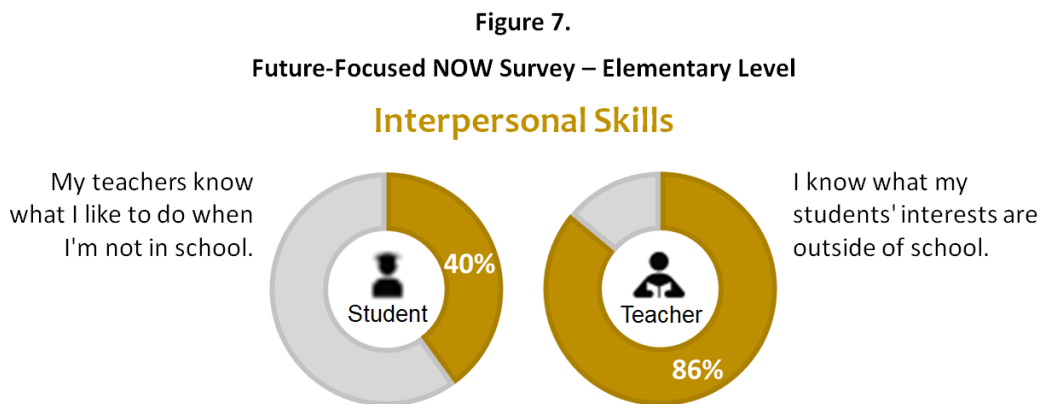**Figure 6. Future-Focused Success Framework ™**
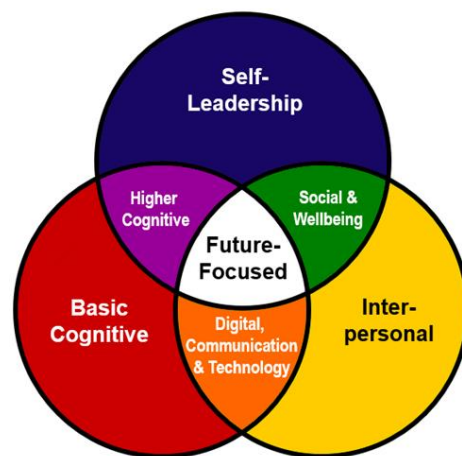
At the center, which is the intersection of all primary skill sets, is what defines a Future-Focused individual who is ready to meet the demands of the workplace. The present education system is not designed to prepare students to be Future-Focused, but there are solutions for schools and districts to explore. SPN is poised and capable of helping schools, districts, and communities to become Future-Focused to develop graduates who are capable of succeeding in work and society. We believe that school systems need to commit to four essential actions:

- Creating a Future-driven Culture
- Evaluating the Implications for Instruction
- Examining the Methodology of Gauging Student Achievement and Applying that Analysis
- Providing Comprehensive Support to Staff

Traditionally in education, **what you assess is what you value**. For as long as there has been public education, this has meant Basic Cognitive skills, such as reading comprehension, arithmetic facts, and naming elements in the Periodic Table. How to measure and monitor Interpersonal, Self-Leadership, and Social & Wellbeing skills was a major obstacle. But that needs to change because the workplace and society demands it. SPN has developed rubrics, surveys, and executive coaching services to assist schools and districts begin to transition to Future-Focused.

The key step in the transformation is to think about assessments differently. Many superintendents that we have spoken to acknowledge that, "People have an inherent tendency to judge themselves if you put data in front of them (even if no other person is judging them directly). Consider the following data results from SPN's Future Focused NOW Elementary Survey (Figure 7).

Figure 7.
Future-Focused NOW Survey – Elementary Level

Interpersonal Skills

My teachers know what I like to do when I'm not in school.

40%
Student

I know what my students' interests are outside of school.

Teacher
86%

Note the major discrepancy (46 percentage points!) in perceptions between students and teachers on the issue of knowing what students' interests are outside of school. If this data was presented to faculty in the fall of the school year there is a very good chance that they would naturally what that perception gap to narrow before the end of the school year. Teachers do not want to think they are that disconnected from their kids and will make it a personal and collective endeavor to increase the percentage of students that believe "My teachers know what I like to do when I'm not in school." Through discussions, activities, community functions, etc., teachers will find a way to make the connections necessary.

Addressing the Workforce Design Issue

There is so much to change structurally and programmatically to address the instructional design issue that points out that there also exists a workforce design issue. According to the U.S. Bureau of Labor Statistics, 270,000 primary and secondary education teachers are expected to leave the occupation each

year from 2016 to 2026.[xi] Compounding the problem, the U.S Department of Education reports a 35 percent decline in people enrolled in teacher preparation programs since 2011.

At the onset of LEARNING 2025, we were in agreement with AASA that the best policy moving forward was NOT to inform systems that there was a workforce design issue. The reason is that the first thing they would attempt to do (schools and universities, especially) would be to refine their workforce design for their present systems. But it is the system that needs to be redesigned first and the instructional design issues need to take precedence.

As you begin to think through and plan how to address the fundamental changes occurring in and around your school or district, please remember that change needs to be evolutionary, not revolutionary. Instituting instructional changes that are Future-Focused follow this process:

1. Start with a Portrait of a Graduate
2. Have the Portrait of a Graduate be the basis for a Strategic Plan
3. Implement the Plan operationally through Instructional and Executive Coaching.

If you would like to explore ways for your school or system to address any of the suggested practices or initiatives described in this paper, please contact us:

Phone: (518) 723-2063 | info@spnetwork.org

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