SCHOOLS

FOR THIS

CENTURY BEYOND

5 Practical Approaches to Produce Future-Ready Students



SHAWN L. DILLY, PH.D

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I wish to dedicate this book to my three children and my wife.

My three children continue to inspire me and my work. They
highlight the need to steward tomorrow for my children and the
students under my supervision. I encourage them to be world
changers and not allow the limitations of their environment to
hold them back from their purpose and need to make the world a
better place. May this book inspire each of you to know that you
are capable of making a difference. Allow your purpose to shine
and inspire others during your journeys.

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About the author

Dr. Shawn L. Dilly is the Director General of Emirates National School (ENS) in the United Arab Emirates. Before starting with ENS in July of 2021, Dr. Dilly spent over 21 years working in education in the United States. Those years included serving as the superintendent of Mineral County Schools for five years. During those five years, the district achieved a 96% average graduation rate and a PK-12 attendance rate of 94%. Dr. Dilly also served during his career as a Deputy Superintendent, Assistant Superintendent, Director of Secondary Curriculum & Instruction, Facilities Director, Transportation Director, Career & Technical Director, Administrative Director at a Multi-County Career & Technical Center, Principal, Assistant Principal, Health Science Technology Academy (HSTA) Teacher, Cross Country Coach, Track Coach, and Art Teacher over his 21-plus years in public education.

Dr. Dilly also managed and supported over US \$30 million in school renovations and construction during his tenure, along with successfully soliciting over \$500,000 in educational grants and donations. Dr. Dilly also achieved a designation of an Innovation Zone in 2011 and received the APEX Award (recognizing innovative partnerships between the school

districts and the community colleges) for the 2017-18 school year.

Dr. Dilly achieved his Ph.D. in Education specializing in Leadership, Policy, and Change in Education from Walden University in 2021. Dr. Dilly completed his Administrative Certificate from Salem International University in 2006 and achieved his master's degree from West Virginia University in 2004 in Curriculum and Instruction focused on Secondary Education. Dr. Dilly received his bachelor's degree in Art Education in 1995 from Fairmont State University.

Dr. Dilly was also engaged in several organizations and affiliations. Dr. Dilly was a member of the Greater Cumberland Committee (economic development partnership for Maryland, Pennsylvania, and West Virginia), the District Consortium for Economic Development, West Virginia (WV) Association of School Administrators, American Association of School Administrators, WV Association of School Human Resource Officers, and the Mineral County Chamber of Commerce. Dr. Dilly has previously served on the WV Home Builders Foundation and the WV School Leader Research Alliance. Dr. Dilly was also appointed to the Board of Governors for Eastern WV Community and Technical College in 2018.

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Introduction

Gabriela Mistral, the Chilean poet-diplomat, educator, and humanist, said, "Many things can wait. Children cannot. Today, their bones are being formed, their blood is being made, their senses are being developed. To them we cannot say 'tomorrow.' Their name is today." Today invokes us to be conscious of the need for economic, social, and environmental stewardship. Our roles as **Stewards of Tomorrow** compel us to seek out new solutions to the challenges facing us today and in the future. Our personal stewardship and roles as educators and leaders place us in the noble position of providing guidance and focus for those that succeed us. As educators and leaders, we have the responsibility to our students to embody an ethos that prepares students for fiscal, environmental, intellectual, and personal health management in a sustainable and economically viable manner that ensures the long-term success of our communities and nations. We must personify the role of "steward" and ensure that other generations experience the prosperity and potential for success they deserve.

We must remain diligent and foster innovation and success by promoting an approach that encompasses the necessary skills and knowledge to allow all students to succeed now and in the future. It is imperative that we, as educators and leaders, be reminded of the fundamental roles we assume when we participate in the lives of our students. We must be willing to break away from tradition and seek out the necessary instructional practices, knowledge, and resources that enable our students to find a prosperous future. We must be willing to reflect on our roles, our practices, and our decisions, and redirect ourselves towards creating an environment of success. We cannot assume completing the same old rituals will progress us to the ever-changing target that is success in the 21st century or beyond.

An evolution or perhaps a revolution must occur. We must examine and then reexamine ourselves, our practices, and our beliefs, and cast aside the premise that practices that were effective will remain effective into the future. We must also question how we determine what is effective. Our target continues to change, and our audience is transforming, and traditional knowledge and instructional practices must be reevaluated for their efficacy and relevance. We need to look at a broad spectrum of assessments to better understand students' true growth. Our children and society cannot afford to wait. The costs of complacency are only growing for our young people. Schools must refocus on evolving targets that embrace current and future demands. Some may disagree with this assertion, but a world void of students with the necessary skills and knowledge to solve increasingly complex and challenging problems will only hasten the advancement of the many threats now facing our world.

I have written this book to share the conclusions I have reached from having over 20 years of experience in education, conducting my own research, and analyzing what other researchers, business leaders, and industry leaders are saying about what skills students need to be successful after they graduate. It is my hope that this book will open your eyes to the real threat facing our children and how we can steward a more prosperous tomorrow for our students.

1 The milestone

A question to focus my leadership journey

In everyone's life, there are moments when events, past experiences, and uncertainty culminate into considerable focus towards one's purpose. These experiences often emerge during times of transition, self-reflection, or unexpected/disruptive events that challenge the way we see our world. Our world is often a blur of daily routines that include personal and professional interactions, mundane tasks, and physiological demands that dull our focus on the essential things in our lives. Too often, we find ourselves lost in an actionless void for weeks, months, and even years, not fully conceiving where the time has gone. Although I wish I could advise you on how to avoid so much lost time, my best advice is to hang on to these moments of clarity and

use them to achieve your purpose or make strides towards attaining your goals.

I want to share one such culmination that led me to write this book. In the fall of 2015, I reached a significant milestone as a parent. This milestone involved my eldest child entering her first year of college. Although this milestone is a common occurrence affecting parents by the thousands annually, it doesn't make the anxiety or trepidation surrounding this critical life change of leaving one's child any easier. This event was noteworthy as it led me to a powerful question and guided me to the focus and advocacy of my current journey. The events of that day were ordinary, starting with the backbreaking, Tetris-inspired chore of packing the car, then being forced to park blocks away, and fighting to get access to the elevator, only to be challenged to find a place for way too many belongings in a tiny dorm room. The culminating event was the emotional goodbyes at the end of the day. The strong emotions that I experienced largely inspired the beginning of this educational journey and, ultimately, this book.

As the day concluded and we began to say our final goodbyes, the realization of leaving my daughter away from home for the first time started to be felt in the bottom of my stomach. It was time for her to take her first significant steps as a young adult. The final hugs and tears were challenging as the reality began to set in that our incredibly kind and beautiful daughter was no longer under our direct protection and guidance, and she would be facing a new and challenging environment. As the car pulled away from my daughter, I looked up into the rearview mirror and saw her wiping the tears from her face with her sleeves and watched her fade into the distance as we drove from the campus. My heart sank, and the reality of the day set in for both my wife and me.

As we began our drive home, we attempted to ease our heartache by discussing the events of the day. As the drive continued, the silence grew and overwhelmed us both, forcing us to retreat into the depths of our thoughts. For the rest of the journey, virtually not a word was shared between us as we both remained worried and uncertain about what the future may bring. The image of my daughter in the rearview mirror continued to replay over and over in my mind. Dozens of scenarios manifested in my thoughts, and I continued to land on the same questions. "Was she ready?" "Did we do enough as parents, and did her education prepare her for success in this new adult world?" Hundreds of situations filled my head, and the apprehension of not knowing if she would be safe and successful was nearly all I could think about.

Then my thoughts transferred to my other two children and their preparation. I knew if things continued, I would be uncertain if they, too, would be ready. Ultimately, I knew only time could provide me with that answer. I can share that all three of my children have exceeded any expectations for their college years. They are just beginning their work careers, but all signs are positive that they will find success in their chosen fields.

I imagine this description of events is familiar to many parents who reach this crucial milestone in their children's lives. However, these events did prompt me to ask an essential question that has led me to so much of my work the past few years: "Was she ready?" I imagine this simple question is often asked but seldom explored to the extent that leads to meaningful change.

A year before this milestone, I started my tenure as a school superintendent. The superintendency involved 12 schools and just under 4,200 students. The responsibility of ensuring students were successful after leaving the schools

was paramount. However, it wasn't until the events with my daughter and the subsequent weeks of retrospection and worry that I really focused on the seemingly simple question: "Was she ready?" In turn, this prompted me to consider the essential question for all school leaders: "ARE THEY READY?" This straightforward but powerful question has compelled me these past few years to research, evaluate, and seek solutions for educators, my school system, community, and our nation. This question is essential no matter where you are from across this world, and it demands that you ask whether your school system's teaching, coursework, activities, and experiences adequately prepare students for today's and tomorrow's knowledge economy. If we are to steward a prosperous tomorrow, education should ensure our students are ready for their futures.

Even though this milestone unearthed an essential and fundamental question that continues to guide and focus my work, after reflecting on preparations for this book, I realized that my journey began long before my 2015 milestone and that my work truly began in high school. I was a student who did well in school but often saw little value in the daily tasks and seldom found explanations of why we needed to learn the material in front of us. Math was a great example, as I often had nearly perfect scores on the tests and my report cards but found myself hating the subject because I could see little to no value in what we were doing in the classroom. Tasks focused on memorization and process instead of application and context.

College was not much of an improvement, and it came with little explanation of why we were being asked to jump through the academic hoops to achieve a degree. Why and how what we were doing connected to our adult lives, or even the postsecondary educational path I was beginning, was rarely discussed. Even after graduation, I continued to see friends

and acquaintances struggle with the many responsibilities of adulthood due to minimal preparation during their educational experiences.

This reality led me to ask hundreds of adults over several years what from their high school experiences helped them in their adult lives (especially if they eliminated vocational education). In those hundreds of conversations, I only ever found two positives. Some mentioned driver's education, and one individual felt that their high school experience benefited them. When I explored the reasons with this individual, I found she was a teacher, and, therefore, she believed school had adequately prepared her for her occupation. Nonetheless, all except this individual felt little to none of their high school experiences benefited them in their adult lives. These conversations confirmed my disillusionment with my past school experience was shared by many others. Unfortunately, I couldn't understand why schools had not addressed this seemingly glaring issue of a misalignment of educational outcomes with the societal demands of becoming an adult.

Even in my early teaching career, I struggled with so many requirements that offered little value to our students. Don't get me wrong. I see value in the course offerings, but the instructional approach and sometimes the desired outcomes have me still pondering the same questions I had in high school. Even as I witnessed students advancing through the school, I learned that many of them struggled with the same doubts I had when I walked the halls of my high school. Too much of what they did daily had no connection to what they wanted to do after schooling. Instead, the intent was aimed at a summative state assessment and preparation for college entry. I often struggled to know how to respond to their questions or find ways to encourage them, as I knew they would be confronted with the same realities even in their postsecondary education.

How could I change as a teacher to address this glaring reality? I grappled with this question throughout my time in the classroom.

I was an art teacher in high school, and I was determined to improve my art program. However, I struggled to promote value in the art curriculum as I had never seen any real examples of how to do this during my student or early educational career to emulate. Of course, I understood the importance of art. It transformed the way I saw the world and made me see beyond other aspects not necessarily visible to others, making me a better problem-solver among many valuable outcomes. Problem-solving is a skill that has proven very useful in my adult life. Nonetheless, I was determined to find concrete ways to help students utilize art to make them problem-solvers and critical thinkers. Unfortunately, I never achieved my desired goal.

I faltered in achieving my goals for the classroom due to being the high school's dumping ground, having minimal administrative support, and working with only a \$200 annual budget for the 165-180 students that stepped into my room each day. In addition, during my third year of teaching, the implementation of No Child Left Behind (NCLB) eroded any real hope of evolving the art curriculum and instruction towards my goals. Suddenly, everyone was forced to support student achievement on a high-stakes test. This reprioritization meant I felt like I could no longer continue the efforts I knew were best for my students. Ultimately, this new initiative, an unfit budget, and a deemphasis on the value of art led me to begin considering leaving education.

I was negotiating for another role when my brother (who also was in education) asked if I would think of an assistant principal position. At first, I was very reluctant to apply despite having my administrative certificate. Still, I felt

like this might be my opportunity to address the school's shortcomings and push to make positive changes on behalf of the students.

I was given that opportunity to support the leadership of the school. A part of my new role was leading career and technical education (CTE), which is vocational education. I found a new passion with CTE, as I observed nontraditional teachers achieving unparalleled progress with their students, who were outperforming their school peers. These teachers utilized project-based learning, storytelling, and real-world approaches to achieve their instructional goals. Students could clearly see the connection between what they were doing in the classrooms and their upcoming adult lives.

This exposure led me to attempt to find ways to include the elements I had observed as being so successful in the CTE classrooms throughout the school. Much of my enthusiasm was extinguished as I continued to be confronted with the inaccurately perceived value of CTE. Even as a student, I was denied access to CTE due to my plans to go to college. Decades later, this inaccurate perception resonates in the halls of too many schools and perpetuates the "everyone needs to go to college" myth. Everyone needs postsecondary education, but that doesn't mean everyone needs a four-year degree. CTE was also the other place I began to make greater connections to the welfare of the economy and society through preparation in our schools. My leadership in CTE permitted me to work with several economic development groups, policymakers, business and industry leaders, community leaders, and thought leaders. This work continued to sharpen my understanding of how student preparation must support the realities students face when they enter the world of work.

Eventually, I found myself recruited out for an assistant superintendent position in another district. There, too, I

began to work to evolve the desired outcomes of our schools. It took time to build the understanding for the need to change. However, we had some wonderful partners and a superintendent that supported my vision. The previous year, the state started an Innovation Zone grant program. I felt like this was my opportunity to find funding and a platform to advance the vision to better prepare students for their postsecondary journeys. I was awarded the grant with the support of the high school and central office staff.

This status of an Innovation Zone allowed me to shift some of the high school's requirements outside of the state's mandates. The results permitted us to build accelerated pathways for students to get their associate degrees along with their high school diplomas. Additionally, the status permitted students to work towards more specific career paths that didn't involve four-year institutions. The new courses focused on higher levels of integrated career preparation. The most notable change was an English course that shifted from a strong literature foundation into a more technical writing and career-based literature program. The second notable shift was a math course focused less on college preparation and more on actual life applications.

These two courses became popular with the students and the teachers. Teachers loved the opportunity to create new instructional goals more aligned with the skills they knew would help their students. This was far different from the state-mandated standards and summative assessments they were accustomed to.

Another important shift was the CTE integration into core classrooms (math, science, English, history). The district's high school was a comprehensive high school. This meant that CTE and core programs were taught in the same building, and this allowed students to easily go between traditional courses

and CTE courses. This proximity permitted collaborative work among some of our core teachers and CTE staff. I observed some of the best instruction I have seen in my career during these collaborations. Together, the teachers developed integrated units and lessons tying core coursework in math, science, English, and history to our CTE programs. This connection allowed students to make important connections between their schoolwork and their postsecondary journey.

This was the first time I truly saw what was possible in schools and knew that students would clearly see the value in what they were doing in school to prepare them for their future. My Innovation Zone application and implementation would eventually be utilized as a model to change state policy. Although I never received formal recognition for this contribution, colleagues at the state's Department of Education confirmed the inclusion of many of my ideas into the latest school requirements policy revision.

After three years in the district, an opportunity came knocking that offered me a significant pay raise and the ability to focus exclusively on my new passion for CTE. I was offered the chance to lead a multi-county CTE center. This center served three districts and needed a lot of support to address the significant challenges it had faced in the previous five years. It took time to deal with the budget shortfalls, compliance issues, and drop in enrollment. By the second year, many of these elements had been addressed. The enrollment had nearly doubled, and I was working towards innovations to enhance the school.

The first success evolved around a collaborative relationship with a local two-year college. Together, we developed a cosmetology program for the region. This collaboration allowed us to share the costs and operate more cheaply than any surrounding cosmetology programs. The program was located

at my center and required that I build the facility and support the consumables. This was achieved through a state start-up grant. The staff was hired by the college. This partnership worked due to the mandates of the cosmetology certification. A student could not complete the entire program in their high school career. Students could complete around half of the hours while in high school with the ability to stay in the program after they finished high school. This meant that they only paid tuition for the second half of their cosmetology program, making it even more affordable than other postsecondary cosmetology programs. This collaboration was one of the first, or the first in the state, of this kind.

A second initiative was also built upon a collaboration with the same two-year college. It involved entrepreneurship. After the first year in the center, it was evident that most students that participated in the school had other plans than a four-year institution in their future. Despite this reality, many students had desires to lead their own business in their CTE program area of study. Unfortunately, the coursework focused on very specific skills and knowledge to earn industry-recognized certificates—a crucial element to working in these fields, but this offered little in preparations for starting, leading, and operating their own businesses.

I had a vacancy in my business department, and I reworked the schedule and hired a new entrepreneur coach. This position would be responsible for working with all the CTE programs to integrate entrepreneurial efforts in each field. Additionally, this teacher's role would include building career immersion opportunities. I include internships, entry-level jobs, and community-based projects as immersion activities. The teacher and I also worked on the development of new associate degrees with our two-year partner that provided students with additional preparation in business while supporting the

inclusion of their CTE coursework as a component of their degrees. These associate degrees would be less expensive, as some of their requirements were completed in high school and considered dual credit. The degree would provide students with the additional business understanding needed to run their own businesses. These two examples showcased how nontraditional approaches could enrich programs and accelerate the acquisition of much-needed skills for students.

These past experiences and work with CTE culminated with me holding a Transformation Summit during my time as a superintendent. The summit developed from the knowledge that schools remained out of touch with the realities confronting students after graduation. Comprehending the misalignment between schools and entry into the workplace, I began to seek out what skills were truly needed for kids to find success. These critical skills would provide the district with clear targets to ensure students would succeed after graduation.

At the summit, I gathered community, educational, and business leaders to discuss the skills needed when students graduated from the district's high schools. This work led to the development of stakeholder committees advising and holding the group accountable to its planned actions. This work included professional development and sessions on the negative impact of students leaving schools without the proper preparation. Overall, this work did build a stronger relationship with the community but was eventually overshadowed by federal and state changes related to curriculum and accountability. The ensuing disputes and battles over these measures led to two teacher strikes. This disruption ended most of this valuable work, but it did translate into a monthly effort in all classrooms from PK-12 to discuss careers and promote life and employability skills such as financial literacy, organization, time management, food preparation, automobile care, resume writing, etc.

We also shifted away from the "College and Career-ready" rhetoric proliferated by the government to a more appropriate "Career and Postsecondary-ready" focus. The leadership eventually understood that all students need to be career-ready but not all students need to be college-ready. In the state's culture, college-ready meant ready for a four-year college or university. School leaders understood that students need to be ready for postsecondary paths including two-year college, internships, on-the-job training, military, and other options. I was proud of this shift in thinking, but eventually, my time would come to an end in the district. Disappointed I wasn't able to see the plan fully realized, I knew it was time to continue my efforts in another system.

Taking what I had learned in my previous role, and now a deputy superintendent in a larger district, I began to work with building understanding around the work that needed to be completed. With more staff and more schools, a platform for developing critical comprehension around these challenges had to be created. It needed to go beyond just a presentation on the statistics of youth unemployment. Ultimately, discussions and professional development centered on Tony Wagner's work focusing on creating innovators. This book study, evidence from my doctoral work, and subsequent professional development led to some important dialog about the challenging future for our students and the need to focus on skills and knowledge that would equip them to navigate the precarious and unclear future.

Knowing this would be a long journey to transform schools, it was determined that each school would focus on one skill from the identified list and develop 30-, 60-, and 90-day plans for inclusion into their school. Resources and support were aligned to help principals fulfill their plans. Schools were reaching differing levels of success and the implementation was affected greatly by the agency of the school leader.

Progress was slow, and I continued to see the need to expedite the acquisition of these necessary skills by our students. I knew if students continued to graduate schools without the proper skills, we were condemning them to an even more arduous and challenging future. This realization led to the development of a single high school course focusing on life and employability skills that would give students the basics of the skills they would need to thrive.

Unfortunately, just as I was building consensus among the central office leaders and pushing for this course to be a graduation requirement, the global pandemic shut schools down. My plans to present to the board for their final approval were canceled, and all my efforts subsided as schools went into crisis leadership.

About one year later, and, again, disappointed with not fully realizing my goals, I received communication from a recruiter to consider a position outside the country. At first, I was reluctant, but my optimism towards this progressively forward-thinking country gave me the confidence to bring these ideas I had been struggling to bring to fruition for many different reasons elsewhere. I knew that this work was valuable as the implications went well beyond the borders of the United States. The difficulties facing young people are a global challenge. My past attempts have evolved into realizing that schools and districts need options. They are not all the same, and each has its own barriers and limitations to traverse.

Even though I am just beginning my international educational journey, I continue my work on this critical issue facing students all over the world. I have failed to understand how such a serious issue can be causing so much harm and talked about extensively in economic and business circles while education remains largely uninvolved in the discussion and curiously silent on solutions. To my knowledge, only a few

notable educational researchers are working on this issue. It is worth noting there are individual schools and districts making strides, but education is far from pervasively addressing these shortcomings. Nonetheless, these shortcomings need real solutions now on how to address this growing challenge facing students all over the world.

It is in this void of comprehension, shortage of understanding, and lack of solutions that I write this book. The work in this book has been built upon a foundation of over 20 years of experience in the educational field; years of research; professional development; local, state, and national presentations; work with higher education; partnerships with economic development organizations; and countless conversations with local, national, and international business and industry leaders.

If you have ever had any of these conversations with business leaders or read any articles on the skills gap, youth unemployment, youth underemployment, or employment trends, then you will realize that our young people are in desperate trouble. Increasingly, they face uncertain futures that may preclude them from the prosperous lifestyle that we desire for them. Unless we are willing to confront the economic, societal, and personal costs that students face with the current approach to preparation, then we condemn our students to an even more challenging and arduous postsecondary journey in the years to come.

As you will see in the next chapter, the numbers and predictions are bleak for today's youth. We must begin to tackle the harsh reality students face to provide them with the skills and knowledge necessary to thrive in the future. This book offers a path forward for those school leaders looking to address this growing challenge for today's youth and evolve their schools to be ready for this century and beyond through practical approaches that produce future-ready students.

2 The threat

The accountability movement is overshadowing the real threat to our students

The World Economic Forum presented that 65% of children entering primary school will be employed in jobs that don't yet exist.¹ The question then becomes, "How do we prepare students for an unknown future?" I have wrestled with this question since my 2015 parental milestone. This very quest to seek answers ("Are they ready?") has led me to my work and writing this book. This chapter will discuss the real threat to our students and share some of the compelling evidence that justifies the need for change. Finally, I will

¹ World Economic Forum. (2016). The future of jobs: Employment, skills and workforce strategy for the fourth industrial revolution.

introduce five approaches to address this threat towards future-readiness, which will be discussed in further detail in subsequent chapters.

It is difficult to find a school leader, teacher, policymaker, parent, or student that does not agree there is a need for change in education. This realization has led educational systems worldwide to promote greater levels of accountability. Regrettably, these very efforts to improve education now are, in my opinion, the most significant contributor to the demise of adequate preparation for students. The accountability movement is the most noteworthy threat to the welfare of our students. I recognize that many people may disagree with this assertion, but please allow me to provide you with an explanation for why I have come to believe this so fervently.

When it comes to evaluating performance, we value what we assess. When a test, quiz, or formative assessment is developed, we only include the components from the instruction/lesson/ unit we believe are the most important for children to master before moving on to the next steps of their instruction. We also see this in a broader context when summative assessments are developed at the classroom, school, or district levels. The same assertion could be made for state and/or national assessments as they represent the priorities and expectations of policymakers. These values translate into many forms of influence on schools and the classrooms.

One of the most significant efforts in US history, the *No Child Left Behind Act* (NCLB) marked the beginning of many changes in the country's education. The emphasis on high-stakes testing advanced significantly with the introduction of this act in 2002. NCLB forced states to accept a strong focus on end-of-year testing to ensure schools met minimum levels of proficiency. Ultimately, this forced states to accept high-stakes

testing policies to receive federal dollars, and this focus on testing has continued to this day.

Although US schools have moved away from NCLB, the primary emphasis for accountability remains on an end-of-year assessment. The disappointing reality is that research has shown high-stakes testing efforts like NCLB have produced little to no change in student proficiency. NCLB was the first of many steps in what is now labeled the Accountability Movement. I would assert that the Accountability Movement, or accountability pressure, has narrowed the conversations on how to improve our schools. Research has shown high-stakes testing has led to many adverse unintended outcomes, such as curriculum narrowing (where schools only emphasize subjects that are tested), gaming of the system to achieve better results, demoralization of teachers. and many negative impacts on students (especially minorities and special education students). These are only a few of the outcomes of accountability pressure of which most, if not nearly all, have been negative—a far cry from the intended outcome.

Nevertheless, the conversations surrounding accountability have dominated school improvement for over two decades. These conversations have pushed schools into emphasizing test performance and college entry. The result of this practice has been detrimental for today's youth and has hidden the real threat to their futures. A growing epidemic has mainly gone unnoticed while schools continue to debate test scores and other accountability measures. This epidemic does not just affect our communities or our nation; it is a global epidemic surrounding youth unemployment and underemployment. Too many students are exiting schools without the necessary skills to thrive as adults. Despite over 20 years of educational experience, I have never fully understood how education has arrived with such a well-intended but misguided prioritization

of student outcomes. Education has had the primary goal of preparing students for successful entry into society since its inception.

Education is faced with numerous fads, agendas, and efforts annually to improve outcomes towards these misguided goals. These approaches will never achieve the true foundational goal of education (societal preparation) because they are focused on the wrong targets. Many of them remain focused on improving college preparation and test scores. Until the accountability movement refocuses on the correct targets, students will remain condemned to be ill-prepared for the realities of the future.

McKinsey & Company suggested in a 2012 article that by the year 2020, there would be a shortage of 45 million workers with vocational and secondary training, 40 million college-educated workers, and approximately 95 million lacking advanced economy workplace skills.² The pandemic prevented the ability to determine if these predictions were accurate, but all indicators suggest an even larger shortage of talent globally. Other researchers have shared similar concerns and highlight schools failing to address basic employability requirements.

The path forward for education remains unclear, but predictions and research have given us clues about how to proceed onward to help students navigate the perilous and turbulent future awaiting them. Researchers have suggested that the past decade has become increasingly complex and progressively turbulent, and it has taken longer for young people to transition, even expressing young people "are three times less likely to find employment than adults." ³

² Dobbs et al. (2012, November). Talent tensions ahead: a CEO briefing.

Wukovićetal. (2015). The Necessity of Solving the Youth Unemployment. *Ekonomika*, 61(1), 173–182.

The Organization for Economic Co-operation and Development (OECD) suggested young people have trouble transitioning from one world to the other when the labor market and education coexist as two separate worlds. It remains imperative for schools to bridge these two worlds or students will remain facing the harsh consequences of inadequate preparation. The unfortunate reality is most educators are not even aware of the precarious nature of what is happening in the world of work and how our young people across the globe are facing unprecedented challenges in achieving a prosperous future for themselves.

Current approaches have generated many harsh realities for young people, and the significance of the inadequacy of these approaches is showcased during times of economic upheaval. The Great Recession produced a substantial income loss and widened the gap in poverty risk between youth and adults in an increasing number of nations.⁵ These adverse outcomes have remained for more than a decade and continue to hinder labor force participation rates,⁶ create an underutilization and underemployment of youth,⁷ and trap people in involuntary part-time employment.⁸ These realities have continued to promote greater numbers of young people facing unemployment and underemployment.

The International Labor Organization's 2020 report presented the global youth unemployment rate as 13.6%.

⁴ OCED. (2015). OECD skills outlook 2015: Youth, skills and employability.

⁵ OCED. (2015). OECD skills outlook 2015: Youth, skills and employability.

⁶ Bullard. (2014). The rise and fall of the labor force participation rate in the United States.

⁷ Abel et al. (2014). Are recent college graduates finding good jobs? *Current Issues in Economics and Finance, 20.*

⁸ Cajner et al. (2014, April). Why is involuntary part-time work elevated? Board of Governors of the Federal Reserve System.

This rate involved more than 64 million unemployed youth worldwide, with an estimated 145 million living in poverty. The report further shared that 267 million were recognized as having NEET (Not in Employment, Education, or Training) status among the approximately 1.3 billion young people (ages 15-24).9

The OECD presented averages for 38 member countries. Of 18-24-year-olds, 53.2% were in education, while 46.8% were not in education. An average of 38.1% were in work, while 15.1% were unemployed or inactive (holding NEET status).¹⁰ These numbers showcase a significant loss of opportunities for today's students and do not fully express the full costs of inadequate preparation.

The realities of youth unemployment are dire and result in economic, social, and personal costs.¹¹ These economic and social costs were quantified in a 2012 study utilizing 2011 US dollar calculations. The authors divided youth into two categories: opportunity and under-attached. Opportunity youth largely abandoned school and work after the age of 16, and under-attached youth were those with limited school and work experience beyond the age of 16. The authors calculated that the US's 6.7 million opportunity youth (16-24 years old) would inflict a 4.75-trillion-dollar social burden and represent a 1.56-trillion-dollar tax burden. The 3.3 million under-attached youth would generate 1.96 trillion dollars in social loss and 707 billion dollars in fiscal loss.¹² Another study suggested that altering the course of one 18-year-old disconnected youth from

⁹ International Labor Organization. (2020). *Global employment trends for youth 2020: Technology and the future of jobs.*

¹⁰ OECD. (2020). Share of population by education and labour force status 2020.

¹¹ Belfield et al., 2012; Chancer et al., 2019; Institute for the Future, 2014; OECD, 2015; Virtanen et al., 2016.

¹² Belfield et al. (2012). The economic value of opportunity youth.

criminal and violent activities would save society between 2.6 and 5.3 million dollars.¹³

Not all costs can be quantified in dollar amounts, and one such cost is that disconnected youth are disappointingly underrepresented in civic life. Many youths feel that their voices are not being heard, and this reduces civic activity participation. This decline in participation is believed to perpetuate gaps in civic participation across generations. ¹⁴ So, we are not just talking about this generation of students, but potentially several generations of students affected by our choices.

These burdens continue to grow globally, but they don't represent the total costs of youth unemployment. Youth unemployment also incurs personal costs, with many social implications involving alienation, isolation, or exclusion, and loss of hope for the future, which fosters increased crime, violence, drug-taking, conflicts, and mental health problems. The mental health concerns may remain beyond the cycle of unemployment and result in enduring health costs. With the enormous economic, societal, and personal costs associated with youth unemployment, we must begin to understand how to avoid these implications by understanding the causes of youth unemployment.

The record levels of youth unemployment have created disproportionate opportunities to ascend the social ladder.

¹³ Cohen and Piquero. (2009). New evidence on the monetary value of saving a high-risk youth. *Journal of Quantitative Criminology*, 25, 25-49.

¹⁴ Zaff et al. (2014). Reconnecting disconnected youth: Examining the development of productive engagement. *Journal of Research on Adolescence*, 24(3), 526-540.

¹⁵ Chancer et al., 2019; Institute for the Future, 2014; OECD, 2015.

¹⁶ Virtanen et al. (2016). Children of boom and recession and the scars of to the mental health – a comparative study on the long-term effects of youth unemployment. *International Journal for Equity in Health.* 15:14.

Addressing socioeconomic mobility faces several crucial obstacles, including access to early childhood education, funding and quality of secondary schools, levels of adolescent peer support, skills development, and young adult job matching. To Some researchers are seeing this economic inequality as one of the most significant problems confronting society today. The decline of social mobility has also been met with stark shifts in the number of children out-earning their parents.

In the US during 1940, 90% of children out-earned their parents, but this figure fell to only 50% in 1980.¹⁹ Predictions suggest this may be the first generation in US history to not out-earn their parents. This troubling shift in children's earnings is further compounded by a documented rise in wage inequality beginning in the 1980s for advanced nations (including the US) due to technological skill-based changes.²⁰

Growing inequality levels and greater difficulties accessing high-skill, high-wage jobs have only eroded young people's opportunities and force us to confront the primary causes of youth unemployment. Business and industry connected the discrepancy between education and the demands of the economy as one the largest contributors to youth unemployment.²¹ Soulé and Warrick promoted a well-known consensus about the US's education system failing to adequately

¹⁷ Hanna. (2015). Socio-economic mobility of youth: Factors, obstacles, and potential solutions. *Journal of Youth Development*, (1), 72.

¹⁸ Alabdulkareem et al. (2018). Unpacking the polarization of workplace skills. *Science Advances*, 4(7).

¹⁹ Kochhar et al. (2015). The American middle class is losing ground.

²⁰ Autor & Dorn. (2013). The growth of low-skill service jobs and the polarization of us labor market. *American Economic Review103*(5), 1553-1597.

²¹ Vukovićet al. (2015). The Necessity of Solving the Youth Unemployment. *Ekonomika*, 61(1), 173–182.

prepare today's youth for the essential 21st-century knowledge and skill demands.²² The OECD reaffirmed the world's schools' shortcomings by stating that too many young people were leaving education without the proper skills, resulting in difficulties in finding work.²³

In 2015, Achieve reported 40% of recent US high school graduates were unable to fulfill the demands of the college classroom or the workplace.²⁴ The International Assessment of Adult Competencies reported that 14% of new graduates have poor numeracy skills and 10% demonstrate poor literacy skills, while 40% of those leaving before the completion of secondary education suffer from low numeracy and literacy skills, affecting their ability to get a high-quality job.²⁵ Another study found 70% of high school graduates lacked practical real-world experience.²⁶

The deficiencies go beyond K-12 education and extend into postsecondary education. As much as 45% of recent college graduates find themselves underemployed and lack basic employability skills.²⁷ A 2016 college survey found 60%

²² Soulé & Warrick. (2015). Defining 21st century readiness for all students: What we know and how to get there. *Psychology of Aesthetics, Creativity & the Arts*, 9(2), 178–186.

²³ OECD. (2015). OECD skills outlook 2015: Youth, skills and employability.

²⁴ Achieve. (2015). Closing the expectations gap: 2014 annual report on the alignment of state K-12 policies and practice with the demands of college and careers.

²⁵ Virtanen et al. (2016). Children of boom and recession and the scars of to the mental health – a comparative study on the long-term effects of youth unemployment. *International Journal for Equity in Health. 15*:14.

²⁶ Cornelius. (2011). The education and skills gap: A global crisis. *Techniques: Connecting Education and Careers (J1), 86*(4), 50-55.

²⁷ Wyman. (2015). The new employability: Steering our students toward rewarding careers. *Techniques: Connecting Education & Careers*, 90(6), 22-25.

of college seniors felt their college failed to prepare them for a career.²⁸ Another survey indicated that only 50% of college alumni strongly agreed that their university education was not worth the cost,²⁹ a powerful condemnation and further justification for needed changes.

Additional worldwide trends of globalization, corporate cost-saving initiatives, technological advancement, loss of employee loyalty, and modern skill requirements outpacing education have further hastened the challenges young people face. This discrepancy in skills is often referred to as the skills gap.³⁰ The World Economic Forum (WEF) warned governments, businesses, and individuals must work to prevent talent shortages, growing inequality, and mass unemployment by upskilling and reskilling today's workforce. Moreover, the world could not "weather the current technological revolution by waiting for the next generation's workforce to become better prepared."³¹

Many of these cautions came before the global pandemic and economic fallout of a worldwide closure. These unexpected conditions have hastened three primary trends in the world of work and their impact on students. The first is an increase in working from home. It is estimated that 20-25% of workers in advanced economies and 10% in emerging economies could work from home three to five days a week. A second trend is a growth in the e-commerce and delivery economy occurring two to five times faster than expected in 2020. The final

²⁸ McGraw Hill. (2016). Only 40 percent of college seniors feel their college experience has been very helpful in preparing for a career.

²⁹ Gallup Purdue. (2015). Gallup-Purdue index report 2015.

³⁰ Olson. (2015). A multilateral approach to bridging the global skills gap. *C HR Review.*

³¹ World Economic Forum. (2016). The future of jobs: Employment, skills, and workforce strategy for the fourth industrial revolution.

trend (and most threatening to young people) is the adoption of automation and artificial intelligence to counteract the disruptions of COVID-19 and the anticipated acceleration of adoption in the years ahead.

These trends have major repercussions as they are predicted to displace millions of workers who will be forced to switch occupations by 2030. One such prediction involves eight countries that hold some of the world's largest economies, affecting as many as 100 million workers. This estimate is a 12% increase from before the virus and could impact as many as 25% more in advanced economies.³²

A 2014 study presented predictions associated with the UK's jobs and skills landscape through 2030, and the authors made a number of recommendations. Firstly, education and training providers should collaborate with employers to ensure responsive and forward-looking business and skill objectives for a competitive learning market. Second, education needs to adapt to the marketization of learning due to new business models and income streams. Third, education will need to invest continuously in new developments in technology and comprehend their impact on learning delivery. Fourthly, education should establish systems to offer clear learning metrics to guide learners and employers to make informed investments. Fifthly, education will need to create adaptive interdisciplinary learning program approaches focused on innovation in the workplace and the influence of technology. Finally, modes of education should be developed that support flexible learning pathways and reflect evolving work landscapes.³³ Even though these suggestions were based on the UK's economic forecast, they mirror many global

³² McKinsey Global Institute. (2021). The future of work after covid-19.

³³ Störmer et al. (2014). The Future of Work. Jobs and Skills in 2030.

recommendations and indicate that many changes are needed in education.

These alarming economic, social, and personal costs and economic trends should force education providers to rethink their priorities and focus on the original goal of societal preparation involving a direct pathway for career preparation. I imagine that many of you feel that your schools do this through career and technical education/vocational education, but the reality is that not all students participate in these courses. If they do, they only get exposure for two to four years of their school experience. Now, some systems throughout the world place heavier emphasis on career preparation, but few, if any, can say they fully meet the needs of the current or future workplace. This challenge forces us to look for solutions and instructional targets to overcome these costly realities.

A crucial factor in defining these targets remains the uncertainty surrounding students entering occupations that don't currently exist. Can we find skills and knowledge that cross professions and will remain needed in the future? The need for an answer prompted me to seek out what skills and knowledge would be necessary for the future and would translate across all occupations. These skills are highly debated, and there has not been a consensus reached due to the many contributing factors influencing students' entry into and the diversity of the world of work. Nonetheless, there are common themes and assertions contained within the literature. However, the literature doesn't hold all the current beliefs of business and industry leaders. Therefore, I have created a list of future-ready competencies that include those that are literature-based and those prevalent enough in economic, business, and government reports to warrant inclusion.

The future-ready competencies (FRC) will be discussed in greater detail in the next chapter, but they also have limitations.

Just having a list of competencies does not fully address the challenge. It provides a clear target for what our students need to achieve to be future-ready, but it doesn't offer how they can become priorities and change student outcomes in our schools. In my research, I have found few approaches surrounding future-readiness. In developing the FRC, I realized a one-size-fits-all approach will not work. There are too many school, district, and system capacity limitations, governance and compliance barriers, and strained support and resources for only one approach to achieve the necessary and desired outcomes. Nonetheless, the challenging and precarious future for young people described in this chapter should force schools to realize they cannot afford to wait.

In Chapter 3, I will delve deeper into the FRC and their value for students' future-readiness. In Chapters 4 through 9, I will discuss five practical approaches to implement the FRC in your school. Finally, I will conclude in Chapter 10 with one additional consideration for you to contemplate as you work towards future-readiness.

ARE STUDENTS READY FOR A PRECARIOUS AND CHALLENGING FUTURE?

There is mounting evidence that students are graduating from school ill-prepared for the challenges ahead. The realities of our rapidly-transforming future are quickly outpacing the existing preparation models of schools.

In Schools for this Century and Beyond, Dr. Shawn Dilly explores the crucial future-ready competencies today's students need to face tomorrow's challenges – from adaptability and curiosity, to global dexterity and branding. Recognizing the complex makeup of schools, Dr. Dilly offers five clear, practical approaches for how schools might implement these competencies effectively.

Combining 21-plus years of international educational experience and collaboration with economic development organizations, business and industry, with research on youth underemployment and unemployment, Dr. Dilly has designed compelling pathways to help students graduate future ready.

If you are a school leader willing to embrace new approaches to ensure students are ready for this century and beyond, this book is for you.

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