



NEXT GENERATION

CAREER > PATHWAYS: A MANUFACTURING CASE STUDY

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In partnership with:



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EXECUTIVE SUMMARY

There are more than three million open skilled positions and twice as many disconnected youth — young adults neither working nor in school. This skills gap is particularly acute in advanced manufacturing, a growing sector with attractive employment opportunities.

These new technical jobs require critical thinking, creativity, communication and collaboration. They demand a work ethic and reward initiative.

New tools are enabling educators to create personalized learning environments that combine online and face-to-face learning. As with the shift from print to digital, there is a long-term trend away from seat time and toward demonstrated competency resulting in a sequence of certifications.

The rise of anywhere, anytime learning and competency-based approaches has created more time and flexibility to incorporate valuable, work-based learning experiences. Accordingly, students are gaining more access to courses that provide both high school and college credit.

The traditional practice of going to college or work is fading. Few young adults who attend college will get a job in their field of study and work for 40 years. Most careers will include ongoing cycles of working and learning, often accompanied by new market-signaling components including credentials, online profiles, portfolios and references. This is the “show what you know” economy.

New market demands are shaping next generation career and technical education opportunities, ranging from informal and occasional events to robust pathways incorporating work-based learning and college credit opportunities resulting in valuable credentials.

GPS: A Manufacturing Case Study

Nonprofit [GPS Education Partners](#) (GPS) operates 15 eastern Wisconsin education centers where students receive innovative, accelerated technical education that include manufacturing apprenticeships and lead to certification and employment.

GPS contracts with school districts to provide turnkey educational services for high school juniors and seniors. Districts maintain the student’s transcript and diploma and provide a portion of annual funding for each student. This process gives students the opportunity to earn high school and college credits as well as industry certificates.

GPS leverages and leads several important education trends including competency-based, work-based and personalized learning, all with a focus on employability. GPS has an impact particularly in emerging high-wage job clusters including advanced manufacturing. Increasing college costs and high young adult unemployment are boosting interest in career and technical education that has the potential to accelerate employability.

Rather than preclude college, GPS creates postsecondary credit opportunities and prepares young people for careers that combine earning and learning with stackable credentials and advancement opportunities.

GPS Education Partners’ credentialed, competency-based, blended model offers authentic work-based learning experiences that extend throughout the educational continuum from K–12 to postsecondary to employment.

GPS will grow to more than 50 education centers in the next three years. The talented team and committed board are seeking corporate and district partners as well as impact investors.

EMPLOYABILITY GAP

There are about three million unfilled skilled jobs in America. About four in 10 employers struggle to find qualified employees, with the No. 1 reason being shortages in skilled trades.¹ Simultaneously, 15 percent of young adults aged 16 to 24 (roughly 6 million) are not in school or not working.²

This skills mismatch is an economic crisis and an education opportunity. The gap is expected to widen in the next five years, with two-thirds of jobs requiring a postsecondary education by 2020.³

The employability gap is a failure of information and opportunity, particularly in American high schools — students either don't know about lucrative technical careers, don't have access to the training programs or both.

The Manufacturing Gap

Advanced logistics, new manufacturing technologies (such as robotics and 3D printing), and inexpensive energy have resulted in a resurgence of American manufacturing. However, two-thirds of manufacturing companies have had moderate to severe levels of shortages of qualified workers, particularly skilled production workers.⁴ By 2020, the need for workers holding technical certifications and credentials will increase to 5 million.⁵

Industry advocates including the [Manufacturing Institute](#) (MI) have called for a system of [stackable and portable credentials](#) beginning with a basic measure of college and career readiness. The current lack of credentials for these types of employability skills is a challenge, and all the more reason to utilize work-based learning solutions. MI outlines a general career progression as follows:

- General Laborer: \$9 – 12 per hour, National Career Readiness Certificate (NCRC) plus high school
- Computer Numerical Control (CNC) Operator: \$11 – 16 per hour, National Institute for Metalworking Skills (NIMS) Level 1, 1–4 certificates, 12–18 weeks training
- CNC Machinist: \$14 – 22 per hour, 1–2 years training, additional NIMS
- Skilled Technician: \$18 – 28+ per hour, 2 years+ journeyman experience⁶

MANUFACTURING CREDENTIALS AND SKILLS

In manufacturing, the most widely recognized entry credential is the Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) certifications that verify knowledge in Safety, Quality Practices & Measurement, Manufacturing Processes & Production, and Maintenance Awareness.

Skills in metalworking are validated through the National Institute of Metalworking Skills (NIMS) machining and metal forming certifications. Fifty-two credentials in nine areas ranging from entry to master level are earned through secondary, postsecondary and work-based learning and assessed by performance and theory tests. The American Welding Society's (AWS) Certified Welder Certifications are acquired in postsecondary education. The Society of Manufacturing Engineers (SME) offers two certifications for advanced technical skills.

Some credentials are specific to particular manufacturers (e.g., [FANUC](#), [Yaskawa Motoman](#)) or to an employer. Work-based learning is a common part of credentialing schemes. College credits may be part of a credentialing system, but many college degrees are generic in nature and not widely valued by employers.



Ironically, while there is a sizable employment gap and millions of young adults seeking education experiences that are applied and opportunity-focused, funding for Career and Technical Education (CTE) is on the decline in many states.

Well-intentioned efforts to promote college preparation for all students have, in many regions, resulted in an unfortunate loss of CTE opportunity — often due to challenges with teacher credentialing and equipment costs — while the job market, particularly in manufacturing, has improved. Solutions beyond the classroom can help.

NEXT GENERATION LEARNING

The formal education system is being enveloped by new learning technologies and strategies that make the shift to next-gen learning inevitable rather than optional. Unlike the top-down, policy-driven reforms attempted over the last 20 years, the shift to personal digital learning is fundamental, not cosmetic. While governance oscillations will speed or slow system responses to external factors, it is clear that we are living through a learning revolution—an opportunity for schools—and cities—to improve learning outcomes faster than ever.

Smart Cities that Work for Everyone: 7 Keys to Education and Employment, Tom Vander Ark with Mary Ryerse

Many of today’s schools, particularly high schools, are failing to prepare many students for their future because their basic design is obsolete. Legacy practices include grouping students by birthday, progressing at a uniform rate through a 180-day school year organized around the agrarian calendar, and tracking learning through courses and credits. Teachers work in isolation, instruction is often didactic and theoretical, and assessments mainly reinforce regurgitation skills.

The problem according to Digital Learning Now is that “grade level promotion has historically been dictated by birthdays, attendance and minimum achievement. Instructional pacing, aimed at the middle of the class, may be too fast or too slow for some students who become frustrated, disengaged and unmotivated.”⁷

As Tony Wagner notes in his book, Creating Innovators, there is often a mismatch between what is taught and tested and what is required by the new economy. Wagner suggests the skills required for work, learning and citizenship are converging. “Schools aren’t failing and don’t need reform,” says Wagner. Instead, he says, “We need to re-invent, re-imagine our schools.”⁸

Trends in Secondary and Postsecondary Education

Cheap devices, broadband access and new ways to learn are rapidly changing the education landscape. Following are 10 trends shaping next generation learning:

1. Online	Expanding options, full- and part-time, free and premium
2. Blended	Combining online and face-to-face, new learning models
3. Personalized	Unique path and pace, adaptive learning
4. Competency-based	Credit for prior knowledge, progress on mastery
5. Authentic	Focus on deeper learning, applied learning, work-based learning
6. Broader aims	Mindset, habits of success, social emotional learning
7. Open resources	Free and open resources, informal learning options
8. Dual enrollment	High school and college credit, accelerated pathways
9. Competition	Expanding options and choices: traditional, alternative, informal
10. Market signaling	Credentials in addition to or replacing degrees, portfolios, references and online profiles



Broader Aims

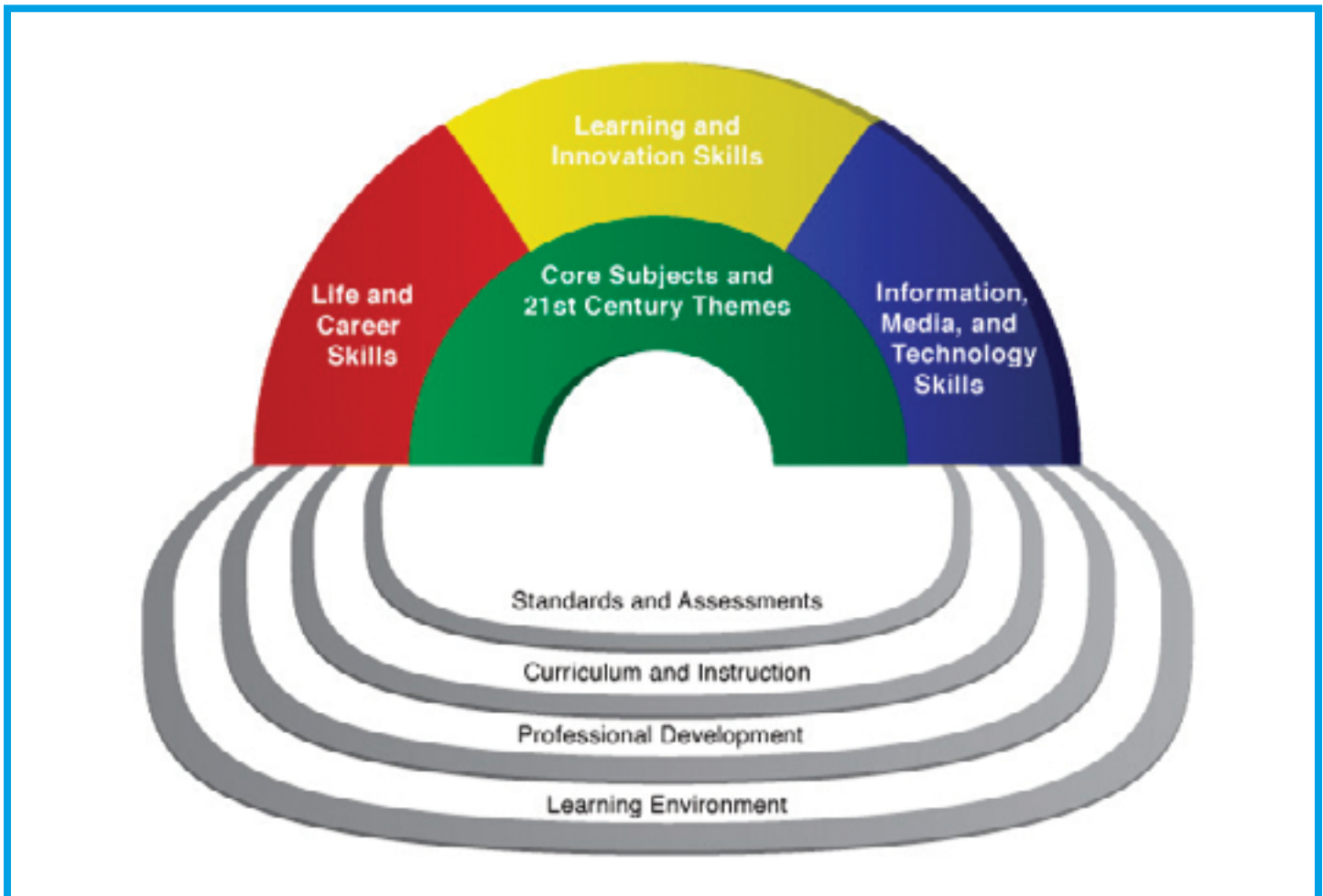
“College and career readiness” is front and center in the U.S. education dialog, but the focus remains on the reading, writing and math skills to gain college acceptance. Beyond the basics, the most important aspect of career readiness is developing a productive mindset — an appreciation of work ethic, self-direction and a commitment to add value in every circumstance.

According to University of Pennsylvania professor Angela Lee Duckworth, two traits predict success in life: grit and self-control.¹⁰ Stanford University professor Carol Dweck uncovered the importance of a “growth mindset,” the belief that abilities can be developed through dedication and hard work; Dweck says that people with a growth mindset “believe that their most basic abilities can be developed through dedication and hard work.”¹¹ This stands in contrast to talents that are fixed traits. Both Duckworth and Dweck’s research findings were applied to education in 2013 in Paul Tough’s book, *How Children Succeed: Grit, Curiosity, and the Hidden Power of Character*.

At a time when society is becoming increasingly global and complex and learning is powered by technology and the Internet, the need to engage students in deeper learning experiences has never been greater. These deeper experiences need to be guided by a set of broader aims. It is no longer enough for students to master reading, writing and math. They need to also develop knowledge, skills and dispositions in areas such as critical thinking, collaboration, social emotional learning, and problem solving in order to succeed in a global economy.

P21 Framework for 21st Century Learning

For more than a decade the Partnership for 21st Century Skills has been advocating for a broad definition of career readiness focused on the four Cs: critical thinking, creativity, communication and collaboration. The Partnership for 21st Century Learning has outlined a career preparation framework intended to capture these broader aims.



This framework was developed with input from teachers, education experts and business leaders to define the skills and knowledge outcomes students need to succeed in work and life (as represented by the arches of the rainbow), as well as the support systems necessary for 21st century learning outcomes (as represented by the pools at the bottom).

Looking more closely at the broader aims for student outcomes, the framework emphasizes:

- 1. Content Knowledge and 21st Century Themes.** In addition to English, world languages, math, economics, science and geography, there are interdisciplinary themes identified including global awareness, financial, economic, business and entrepreneurial literacy, civic literacy, health literacy and environmental literacy.
- 2. Learning & Innovation Skills.** These skills, also known as “the 4cs” are critical for thriving in increasingly complex life and work environments: critical thinking and problem solving; creativity and innovation; communication; and collaboration.
- 3. Information, Media and Technology Skills** - including information literacy, media literacy, and information and communication technology (ICT) literacy.
- 4. Life and Career Skills:** flexibility and adaptability; initiative and self-direction; social and cross-cultural skills; productivity and accountability.



Next Generation Learning Opportunities

Next-Gen learning opportunities for students continue to increase. For example, Next Generation Learning Challenges (NGLC) is a series of secondary and postsecondary grant programs funded by the Bill & Melinda Gates Foundation and administered by EDUCAUSE. These programs provide examples of how many are seeking to define and accelerate educational innovation through applied technology to improve college and career readiness. Director Andy Calkins describes next generation learning as blended, personalized, and competency-based. Here is a deeper look at related definitions:

- › **Blended Learning:** Students learn in part through online delivery of content and instruction with some element of student control over time, place, path and pace.¹²
- › **Personalized Learning:** Learning is tailored to each student's strengths, needs and interests, including enabling the student's voice and choice in determining what, how, when and where the learning occurs — providing flexibility and support to ensure mastery of the highest standards possible.¹³
- › **Competency-Based Learning:** 1) Students advance upon demonstrated mastery. 2) Competencies include explicit, measurable, transferable learning objectives that empower students. 3) Assessment is a meaningful and positive learning experience for students. 4) Students receive timely, differentiated support based on their individual learning needs. 5) Learning outcomes emphasize competencies that include application and creation of knowledge along with the development of important skills and dispositions.¹⁴

Next-Gen Learning: Student Description

- › Personalized to the ways I learn best.
- › Flexible so I can try different ways to learn.
- › Interactive and engaging so I participate in the learning.
- › Relevant to the life I'd like to lead.
- › Organized around my own progress against goals I understand.
- › Constantly informed by different ways of demonstrating and measuring my progress.
- › Collaborative with teachers and peers, unlimited by proximity.
- › Agile and supportive when I need extra help.
- › Challenging but achievable with opportunities to become an expert in an area of interest.
- › As available to me as it is to every other student.¹⁵

The next-gen concepts therein are applicable in a career and technical education environment as well.

NEXT GENERATION CAREER AND TECHNICAL EDUCATION

One system that has often been overlooked in conversations about competency-based pathways has been that of career and technical education (CTE). CTE has promoted personalized learning and real-world application – both fundamental tenets of a competency-based approach – yet it has rarely been intentionally integrated into states’ Competency-Based Pathway (CBP) approaches.

Integrating Career Technical Education with Competency-Based Education, Carri Schneider

Career and technical education is the best field to pilot next generation learning because it starts with a clear competency map – a definition of what workers need to know and be able to do. According to Allisa Peltzman, Achieve’s Vice-President of State Policy & Implementation Support, technical education programs are particularly ripe for modeling and implementing strong competency-based education (CBE) programs. There’s much to learn from CTE that can inform and act as an entry point to competency-based systems in both K-12 and higher education systems.¹⁶

Technical career pathways, particularly those surrounding advanced manufacturing (including production, engineering, sales and more), offer family wage employment with advancement opportunities tied to learning and performance. The old model of finish high school, get a degree or some job training and work for 40 years is dead. Most technical careers require ongoing professional development, likely reflected in a sequence of credentials that verify skills and signal potential employers.

Project-based learning and computer simulations are making many degree programs more engaging and applied – but that only goes so far. Real workplace experience is important not only for the development of technical skills but also work skills: reading and listening to technical instructions, problem solving, punctuality, and collaboration in diverse settings.

By 2020, the on-the-job training category of occupations incorporating apprenticeships is expected to grow by more than 22 percent – faster than any other.

Five trends reshaping CTE are summarized below:

High demand skills	Technical reading/writing, applied math, entrepreneurship
Work-based learning	Job shadows, internships, apprenticeships
Blended pathways	Dual enrollment, work and learn, on-the-job training
Maker	Maker and robotics tools, clubs and events
Market signaling	Stackable credentials

These trends are creating new learning opportunities for high school students in some regions. [Project Lead The Way](#) provides science, technology, engineering, and math (STEM) courses for more than 8,000 middle and high schools across the U.S. Their high school manufacturing class is offered in about 800 schools – nearly twice as many as in 2009.¹⁷



Following are recent developments in CTE pathways ranging from informal experiences to full academy models. GPS Education Partners goes further by incorporating an apprenticeship and college credit opportunities.

Program	Description	Example
Informal	After/summer school, club, one time event	Maker Faire , First
Class	Elective or CTE class, dual enrollment	Home grown
Class sequence	3-4 course sequence in STEM or CTE	Project Lead the Way (PLTW)
Career center	Half day program with business partners	Blue Valley CAPS
Career academy	District school-within-a-school	NAF
Bridge program	District/business/college partnership	GPS Education Partners

Interest is growing in programs like GPS that link high school completion, job certificates, college credits and work experience.

“You’re getting paid, you have no debt and you get a job at \$55,000,” says Eric Spiegel, CEO of Siemens USA. “The average liberal arts graduate [from a four-year college] is making less than \$40,000” or can’t find a position in their field. “Meanwhile, we can’t fill these technical jobs.”¹⁸ Siemens and other companies are looking for ways to scale access to technical training.

CASE STUDY: GPS EDUCATION PARTNERS

In 2000, Generac Power Systems started this innovative model in their Waukesha, WI facility as a work-based learning and high school completion program for 5 juniors. Today, with support from Generac and the Kern Family Foundation, GPS, a Wisconsin non-profit organization, has grown into a nationally recognized applied learning model serving over 200 students from 35 school districts throughout the state of Wisconsin.

- › **Mission:** GPS Education Partners is an innovative education model that uniquely prepares students to succeed in technical careers and promotes viability for business.
- › **Vision:** GPS Education Partners aspires to be a nationally recognized, disruptive educational model that revolutionizes how students prepare for a technical career.

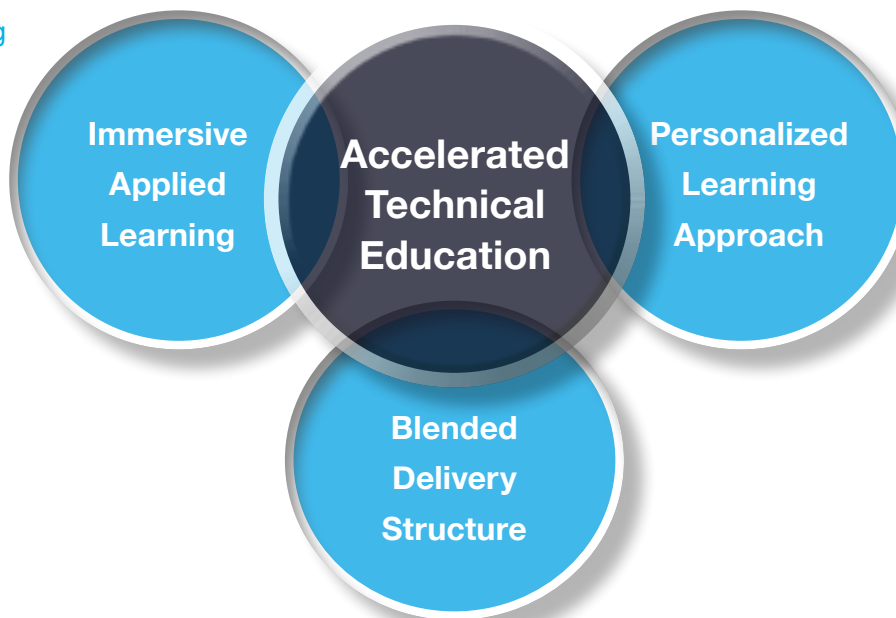


GPS Education Partners provides an accelerated, technical education solution that addresses the manufacturing employability gap and turns it into an education opportunity. The GPS model successfully combines a personalized and blended learning structure with immersive, work-based learning. The accelerated technical education culminates with a high school diploma and industry certificates, college credit, job offers and advanced skills needed for success in today's manufacturing settings. Accordingly, the opportunity extends far beyond entry-level work. For corporate partners, GPS is a talent development model for growing knowledgeable and skilled employees for sustained growth within an organization.

GPS EDUCATIONAL MODEL

The GPS Experience

- › Structured training experiences goes beyond "project-based"
- › Develops employability skills
- › Supports career planning with knowledge and experience



- › Individualizes academic and training plans with Just in Time (JIT) engagement for students

- › Managed by instructional coaches and an adaptive learning management system

GPS EDUCATION PARTNERS: HOW IT WORKS

The target audience for GPS provides opportunities to students interested in technology, hands-on learning and manufacturing. Partnerships with business, community and technical colleges have improved the opportunity to earn college credits and launch a technical career bolstered by continuing education.

Education Centers

Education centers are classrooms located within manufacturing facilities. In current centers, one teacher supports the learning of 20 students utilizing a flex model that includes online curriculum, an individualized course of study and onsite supervision and support. In most new centers, two teachers will work with about 40 students throughout the day.

Local High School

Students remain enrolled at, and graduate from, their home high school. Some even continue to participate in extracurricular activities there. GPS Education Partners receives a portion of the per-pupil funding from the student's school district.

Work Site

Students spend more than half of their day in a business-based education center completing coursework to fulfill graduation requirements (while extending their technical education focus) and the balance of the day in a classroom. A work-based learning coordinator supports the work in cooperation with the corporate partner.

Career Exploration & Dual Credit

Work-based learning and other field training allow students to experience and explore a variety of careers. Throughout their time in the program, students rotate between partner manufacturers and get an opportunity to review and explore many roles and responsibilities within the manufacturing industry. The local colleges may also provide dual enrollment opportunities for advanced students and college credit for apprenticeships.

Partners

Corporate partners provide a sponsorship fee and compensate students for their work on an hourly basis. All manufacturers provide pertinent training, mentoring and supervision, and some manufacturers also serve as education center sites donating classroom space, furniture, and supplies.

Certification

GPS students have the opportunity to complete a Manufacturing Certificate Pathway (MCP) resulting in paid work experience, earned high school (and typically college) credits and certification, as well as NCRC assessment. All together, students begin to aggregate a set of entry-level, stackable credentials.



Realizing the Education Opportunity

We know powerful learning experiences are blended, personalized, adaptive, immersive, applied, work-based and grounded in a competency-based approach. While most next-gen models touch on just one or two of these, GPS Education Partners hits them all across the board.

How the GPS Educational Approach Exemplifies Next-Gen Learning

COMPETENCY BASED LEARNING	Next-Gen Delivery Mechanism	Description	How Supported
	Blended	GPS Education Partners combines the use of online learning and face-to-face experiences to ensure students master knowledge and skills across a variety of subject areas, including core content and manufacturing certification.	<i>Managed, monitored and assessed through coordination between instructional coach and learning advisor.</i>
	Personalized & Adaptive	All learning is tailored to each student's demonstrated strengths, needs and interests, whether in core content areas such as math and reading or in earning industry experience and credentials. Further, students have a voice and choice in their learning and work-based pathways.	<i>Instructional coaches, the adaptive learning management system (Realizeit) and advisors support the personalized process.</i>
	Immersive, Applied Work-based Learning	Structured training experiences develop employability skills and go beyond project-based instruction to support career planning.	<i>A workplace coordinator, an apprenticeship mentor and corresponding supervisor ensure the work-based experience is organized according to industry and employability outcomes.</i>

In the GPS education model, competency is addressed and assessed at all levels, from the classroom to online to work environment as students learn content, apply content, and make it part of their daily disposition. As a simple example, students go beyond knowing that wearing protective glasses is an important part of safety in a manufacturing environment to consistently wearing them and demonstrating other safety practices.

GPS Education Partners' credentialed, competency-based, blended model offers authentic work-based learning experiences that extend throughout the educational continuum, from K–12 to postsecondary to employment.

In addition to the experiences, knowledge and dispositions developed through the GPS education model, students exit with concrete credentials and assets. In addition to their high school diploma, students can earn:

- › Youth Apprenticeship Certification
- › Paid work experience
- › Manufacturing Skills Standards Council (MSSC) National CPT Certificate
- › Mentorship experience
- › Individualized learning plan
- › Articulated pathway
- › Work -based learning credits
- › College credits

ADAPTIVE ASSESMENT

Because GPS focuses on specific job competencies, it is a particularly good case for adaptive learning systems, which quickly diagnose a student's learning levels and queue learning experiences based on a learner profile. GPS works with [Realizeit](#), a platform provider with extensive experience in career education that integrates with a variety of learning management systems.

Each module of content has assessment items embedded, associated, or instructor-created from a variety of templates. The platform calculates a probability distribution for each content module from a zero to 100 percent assurance of knowledge. The system navigates students through the content based on the probabilities to serve precise learning at the point of need. Data from each student interacting with the system provides the instructor with an understanding of how the course is running and how effective the content is. Student and educator dashboards track competencies.

A distinguisher of GPS Education Partners is the accelerated technical education model in which theory and application are delivered in real-time to support a fast-track to career employment and postsecondary education.

GPS IN ACTION: KETTLE MORAINÉ SCHOOL DISTRICT

The Kettle Moraine School District, a member of the prestigious League of Innovative Schools, sees the GPS education model as a key component to its overall district approach. As a district recognized for and committed to demonstrating, evaluating and scaling innovation, Kettle Moraine's board has set a vision of learning without boundaries.

A key part of that is offering a variety of ways for students to prepare for their future, gain valuable experience and earn credits. The GPS education model provides Kettle Moraine students with more opportunity and provides the district with a cost-effective approach to providing real world experience. Superintendent Pat Deklotz stresses the importance of real work experience for students and says, "Just talking about education and career pathways isn't very useful. Instead, providing articulated options for students to gain college credit, certification and paid work experience is quite useful."

Superintendent Deklotz is on the GPS Education Partners board and understands employability gaps and global competitiveness. Deklotz says, "Our results are generally high, but compared to whom?" They have positioned themselves to be compared to some of the highest performing education systems on the planet. Their students performed much better than the rest of the United States on the [OECD Test for Schools](#); If Kettle Moraine were a country it would be among the top performers in the world.





Transformative Partnerships

In *Smart Cities*, Greg Butler, Founder and Partner in *Collaborative Impact*, noted, “Innovation and partnership are words often used and less often deeply understood (and applied). Education systems can no longer be counted on to ‘fix’ education in isolation or at a superficial level. The challenge requires multiple stakeholders working across organizational and sectorial boundaries to collaborate and innovate at a deeper level for continual inquiry based cycles of improvement.” The GPS Education Partners Model offers an excellent example of transformative partnerships. Butler continues, “Deeper innovation partnerships are critical for both innovation and partnership to flourish, at the system, school and classroom levels.”¹⁹

The type of innovation and collaboration needed to address today’s bigger challenges requires transformative partnerships — and GPS Education Partners is an example.



ALL PARTNERS BENEFIT

Students earn while they learn in a hands-on environment and gain work experience as a pathway to meaningful employment.

Corporate Partners find this as a resource-effective approach to workforce development while positively impacting culture through mentorships and competency focus.

School Districts can offer an innovative, blended CTE program that boosts graduation and work-readiness rates.

Community Technical Colleges build networks with students and employers to create a pipeline of prepared and interested students.

Cities and Funders invest in a blended, personalized, and competency-based approach that results in employability to fuel the local economy.

Early Outcomes

There is strong evidence of impact in terms of both student outcomes and partner engagement. Currently, GPS' more than 200 students come from 35 partner districts across 12 Wisconsin counties. They are served in 15 education centers and work with more than 115 corporate partners and more than 100 community partners.

“ Student Perspective

When I walked across the stage at graduation I felt the most amazing sense of accomplishment I had ever felt. In the GPS Education Partners program I worked for Generac Power Systems. Two years later I still work for the company in the engineering lab, I have received promotions and in addition to that I am pursuing higher education goals. This would not have been possible without GPS.”

– Collin Jung, former student

Historically the program's student attendance rate is 95 percent with a graduation rate of 90 percent. Close to 60 percent of program graduates enter full-time careers in manufacturing, with 80 percent of those working for the employers under which they were trained. As of 2015, 94 percent of all GPS students earned the Certified Production Technician certificate prior to graduating as compared to a national average of 40%.

“ Partner Perspective

Our partnership with GPS is a mission critical step to ensure we have the trained, skilled workforce necessary to remain competitive on a global stage. In addition to providing an excellent opportunity for the students involved, it is also a very cost effective way for the company to engage our workforce; to offer opportunities for our employees self-actualization; and to begin to change the perception of manufacturing from a 'fallback' position to a career path of choice.”

– Steve Dyer, President & CEO of Trostel, Inc

Going forward, GPS Education Partners will further track graduates to assess employment, enrollment, earnings and satisfaction. For example, data reflecting cost savings due to acceleration and dual credit, credentialing benefits, employment status and overall expansion of work-based learning opportunities will all be tracked and expected to drive results including postsecondary completion, certification and employment.



THE OPPORTUNITY



Over the next three years, GPS will grow to more than 50 education centers. In addition to opening more centers in Wisconsin, GPS Education Partners has prioritized urban and industrial areas of the Midwest as targets for future expansion.

GPS has benefited from leadership support from the Kern Family Foundation and Generac Power Systems. Expansion will be supported by national funders, local foundations and a network of corporate partners.

There is an employability and skills gap that focused education solutions such as GPS can close. School districts seeking to close the preparation gap can boost graduation rates by partnering with business and organizations such as GPS to provide more technical career pathways.

A distinguisher of GPS Education Partners is its comprehensive solution. It is not solely job placement, a period in the day or a one-time career plan. It takes the best of next-gen learning and CTE and ties them together to make it transformative.

For those seeking to capitalize on education opportunities to close the employability gap, the GPS model successfully combines immersive applied learning, a personalized learning approach, and a blended delivery structure to uniquely prepare students for success in technical careers while promoting viability for business.

GPS EDUCATION PARTNERS

GOAL

GPS Education Partners has shown how education opportunity can close the employability gap. GPS seeks to extend impact beyond Wisconsin and become a national leader in implementing competency-based, work-based, and personalized approaches to accelerated technical education.

OVERVIEW

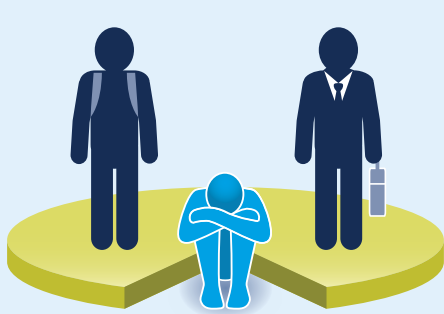
GPS Education Partners' credentialed, competency-based, blended technical education model offers authentic work-based learning experiences that extend throughout the educational continuum, thereby bridging K-12, postsecondary and employment experiences.

Applying Effective Next-Gen Learning in Technical Career Education

Implementing a competency-based program that is:

- 1. Blended.** Online and face-to-face approach to core content and manufacturing expertise.
- 2. Personalized & Adaptive.** Learning is tailored to each student's demonstrated strengths, interests, and needs.
- 3. Immersive & Applied Work-based Learning.** Hands-on experiences in an immersive applied work-based learning environment.

ADDRESSING THE EMPLOYABILITY GAP



15% of those ages 16 to 24 (**6 million**) are not in school or working.



39% of employers struggle to find qualified employees in skilled trades.



2/3 of manufacturing companies have significant shortages of qualified workers.

FOUNDATION

Mission: GPS Education Partners is an innovative education model that uniquely prepares students to succeed in technical careers and promotes viability for businesses.

Vision: GPS Education Partners aspires to be a nationally recognized, disruptive educational model that revolutionizes how students prepare for a technical career.

HOW IT WORKS

- 15** Education Centers
- 43** School Partners in
- 35** School Districts
- more than **115** Corporate Partners



Accelerated technical education model

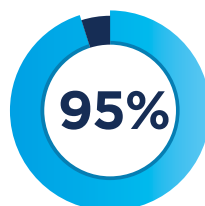
GPS EDUCATIONAL MODEL "The GPS Experience"

- Structured training experiences goes beyond "project-based"
 - Develops employability skills
 - Supports career planning with knowledge and experience
 - Individualizes academic and training plans with Just in Time (JIT) engagement for students
-
- Managed by instructional coaches and an adaptive learning management system

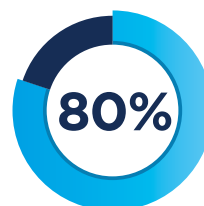
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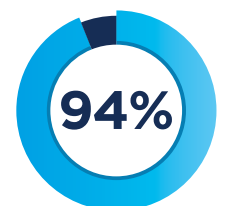
graduation rate



attendance rate



of students that pursued manufacturing careers were hired by employers under which they were trained.



of all graduates earned the Certified Production Technician certificate.

ENDNOTES

- ¹ A. Kim, “Are Apprenticeships the Answer for Struggling Millennials?” (Republic 3.0, March 2014)
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