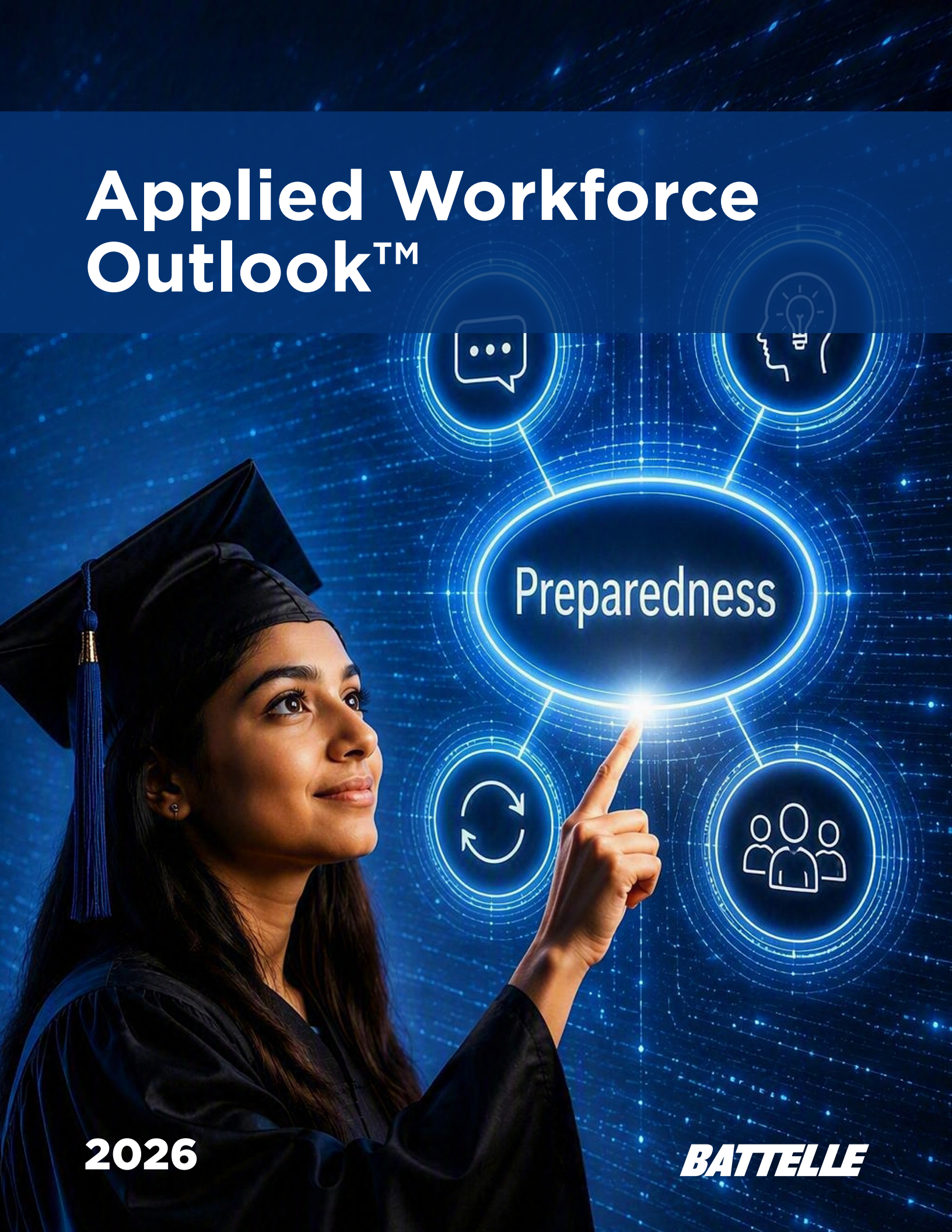


# Applied Workforce Outlook™



The image features a young woman with long dark hair, wearing a black graduation cap with a blue tassel and a black graduation gown. She is looking upwards and to the right, pointing her right index finger at a glowing blue oval icon labeled 'Preparedness'. The background is a dark blue digital space with a network of glowing lines and nodes. Surrounding the central 'Preparedness' icon are four other glowing circular icons: a speech bubble with three dots, a lightbulb inside a head profile, a circular arrow indicating a cycle, and a group of three stylized human figures. The overall aesthetic is high-tech and futuristic.

Preparedness

**2026**

**BATTELLE**

# Preparing America's Workforce for an AI-Driven Economy

For decades, workforce readiness was defined by what people knew: their education, credentials and technical expertise. In an AI-enabled economy, that is no longer enough. As information becomes abundant and intelligent tools grow more powerful, America's competitive advantage will depend on what workers can do with that knowledge: how effectively they can apply technology, exercise judgment and solve consequential real-world problems.

That imperative is becoming more urgent as investment accelerates across advanced manufacturing, energy, healthcare, and critical infrastructure. These sectors do not need digital talent or traditional technical expertise in isolation. They need people who can operate at the intersection of both, combining technological fluency with practical experience, adaptability, collaboration and sound decision-making.

The result is a new model of workforce readiness: an applied workforce equipped not only to understand complex technologies, but to translate them into stronger industries, more resilient systems, and tangible economic progress.



## Defining the Applied Workforce

The new applied workforce turns knowledge into action. Across industries, these workers combine technical expertise with human skills, including judgment, adaptability and collaboration to solve complex problems and create real-world value.

Developing this workforce requires more than classroom instruction. It depends on practical experience, continuous learning and meaningful opportunities to apply knowledge.

Building this new applied workforce requires a clearer understanding of where readiness stands today and where gaps remain. America's ability to innovate and compete will depend not only on the technologies it develops, but on its capacity to prepare people to apply them.

To understand and establish that baseline, Battelle gathered perspectives from educators, employers, students, parents, and opinion leaders across the United States. The research reveals broad agreement that workforce readiness is changing, alongside meaningful differences in how preparedness is defined and where the greatest challenges lie.

Drawing on these findings and Battelle's century-long work across science, technology, education, and industry, the Applied Workforce Outlook examines where greater alignment is needed and what it will take to build a competitive workforce that's ready for what comes next.

### About the Research

The Applied Workforce Outlook draws on the findings of an online survey conducted from April 21 to May 1, 2026, of 3,629 U.S. educators, employers, students, parents, and opinion leaders.

The research examined how perceptions of workforce readiness are changing in an AI-enabled economy, including the skills that matter most, where preparation falls short, who shares responsibility for developing the workforce, and what actions can strengthen America's long-term competitiveness.

*Research conducted by Morning Consult on behalf of Battelle*



# Redefining Workforce Readiness

“We’re entering a period where global economic strength and technological leadership will be determined as much by our ability to develop the applied workforce as our ability to develop new technologies. Those that succeed will invest in both.”

— Lou Von Thaer, President and CEO, Battelle

Degrees, certifications and technical expertise have long shaped how employers assess workforce readiness. They still matter. But in an AI-enabled economy, they no longer tell the whole story.

As AI takes on more routine tasks and makes information more readily available, employers are placing greater emphasis on how people apply what they know. The ability to solve problems, collaborate effectively, and make informed decisions is becoming increasingly important.

These capabilities are not new, but AI is making them more consequential and urgent. As technological fluency becomes more common, greater value lies in knowing when to trust, question or adapt what technology produces.

The survey findings show that employers are already evolving the way they evaluate talent. Corporate and HR decision-makers rank adaptability, continuous learning, communication, critical thinking and collaboration among the most important capabilities in today’s workforce. In fact, they place nearly as much value on these foundational skills as they do on job-specific expertise.

Further, employers place greater importance on understanding how AI works (and where its limitations lie) than on simply using AI tools efficiently. Only about one-third consider effective AI tool use alone a defining measure of job readiness.



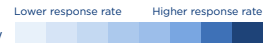
**When asked which skills are most important in today's workforce, employers placed the greatest value on foundational human capabilities, alongside an understanding of AI's limitations.**

*What skills do you think will be most important to have in the workforce one year from now?*

|                                                   | Corporate Decision Makers | Educators (Higher Ed) | Educators (HS) | Gen Z (18-29) | HR Decision Makers | Opinion Elites | Parents | Teens (13-17) |
|---------------------------------------------------|---------------------------|-----------------------|----------------|---------------|--------------------|----------------|---------|---------------|
| Continuous learning / ability to learn new skills | 66%                       | 40%                   | 34%            | 46%           | 64%                | 50%            | 41%     | 52%           |
| Critical thinking and problem-solving             | 64%                       | 37%                   | 37%            | 43%           | 66%                | 49%            | 41%     | 53%           |
| Adapting to change                                | 64%                       | 31%                   | 34%            | 43%           | 66%                | 52%            | 45%     | 55%           |
| Communication skills (written and verbal)         | 60%                       | 43%                   | 37%            | 48%           | 60%                | 51%            | 44%     | 58%           |
| Collaboration and teamwork                        | 55%                       | 29%                   | 38%            | 41%           | 55%                | 49%            | 40%     | 53%           |
| Analytical skills                                 | 53%                       | 34%                   | 34%            | 36%           | 55%                | 44%            | 39%     | 36%           |
| Knowing how AI works and its limitations          | 53%                       | 22%                   | 35%            | 32%           | 54%                | 43%            | 39%     | 36%           |
| Creativity                                        | 50%                       | 22%                   | 31%            | 40%           | 48%                | 40%            | 37%     | 56%           |
| Using AI tools to complete tasks efficiently      | 45%                       | 22%                   | 29%            | 28%           | 51%                | 35%            | 32%     | 23%           |
| Data fluency                                      | 43%                       | 17%                   | 26%            | 25%           | 42%                | 31%            | 29%     | 25%           |
| Understanding your own and others feelings        | 40%                       | 20%                   | 31%            | 39%           | 35%                | 35%            | 35%     | 45%           |

Source: Battelle Applied Workforce Survey 2026

Shading reflects relative confidence within each topic row



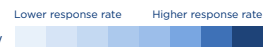
Taken together, these findings point to a new definition of workforce readiness for the AI-enabled economy. Traditional qualifications remain essential, but employers also expect people to apply their expertise to use technology with judgment and translate knowledge into meaningful, real-world results.

**Employers define job readiness broadly: technical expertise, communication and problem-solving skills lead, while adaptability and real-world experience matter far more than AI proficiency alone.**

|                                                                                                  | Corporate Decision Makers | Educators (Higher Ed) | Educators (HS) | Gen Z (18-29) | HR Decision Makers | Opinion Elites | Parents | Teens (13-17) |
|--------------------------------------------------------------------------------------------------|---------------------------|-----------------------|----------------|---------------|--------------------|----------------|---------|---------------|
| Having the specific technical skills needed to do a job from day one                             | 63%                       | 48%                   | 44%            | 33%           | 65%                | 54%            | 40%     | 53%           |
| Having strong foundational skills like communication and problem-solving that apply across roles | 62%                       | 56%                   | 50%            | 49%           | 68%                | 56%            | 40%     | 53%           |
| Being able to quickly learn and adapt to new tools and technologies, including AI                | 53%                       | 46%                   | 51%            | 33%           | 57%                | 46%            | 40%     | 53%           |
| Having real-world experience (e.g., internships, projects, or prior work experience)             | 52%                       | 48%                   | 48%            | 40%           | 55%                | 48%            | 40%     | 53%           |
| Knowing how to effectively use AI tools in your work                                             | 29%                       | 36%                   | 38%            | 23%           | 33%                | 36%            | 40%     | 53%           |

Source: Battelle Applied Workforce Survey 2026

Shading reflects relative confidence within each topic row



This broader standard of readiness will shape not only individual opportunity, but America's ability to advance new technologies, strengthen critical industries, and compete in a rapidly changing global economy.

# The Workforce Readiness Gap

“Education has always been about imparting knowledge. Today’s challenge is helping people put that knowledge into practice. When learning reflects the realities of work, students don’t just leave with stronger skills, they leave better prepared to contribute from the start.”

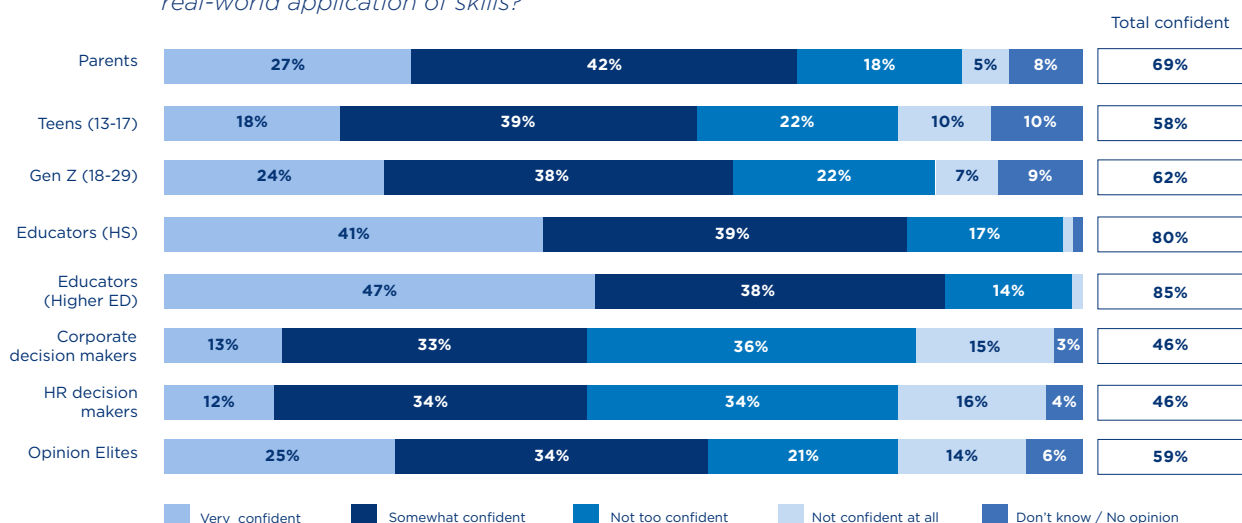
— Wes Hall, Senior Vice President, Philanthropy and Education, Battelle

As the definition of workforce readiness evolves, the way people are prepared to meet it must evolve as well. Yet the survey findings reveal a disconnect. Educators and employers do not always see effective preparation in the same way, while emerging workers report lower confidence in their own readiness.

The clearest divide appears in how stakeholders assess real-world preparation. High school and higher education educators are significantly more likely than corporate and HR decision-makers to believe current curricula effectively prepares students to apply their skills in workplace settings. Meanwhile, Gen Z respondents report lower confidence in their own preparedness across many of the capabilities employers value most.

## Confidence in whether today’s curriculum prepares students for real-world application varies widely across survey respondents.

*How confident are you in the current curriculum preparing students for real-world application of skills?*

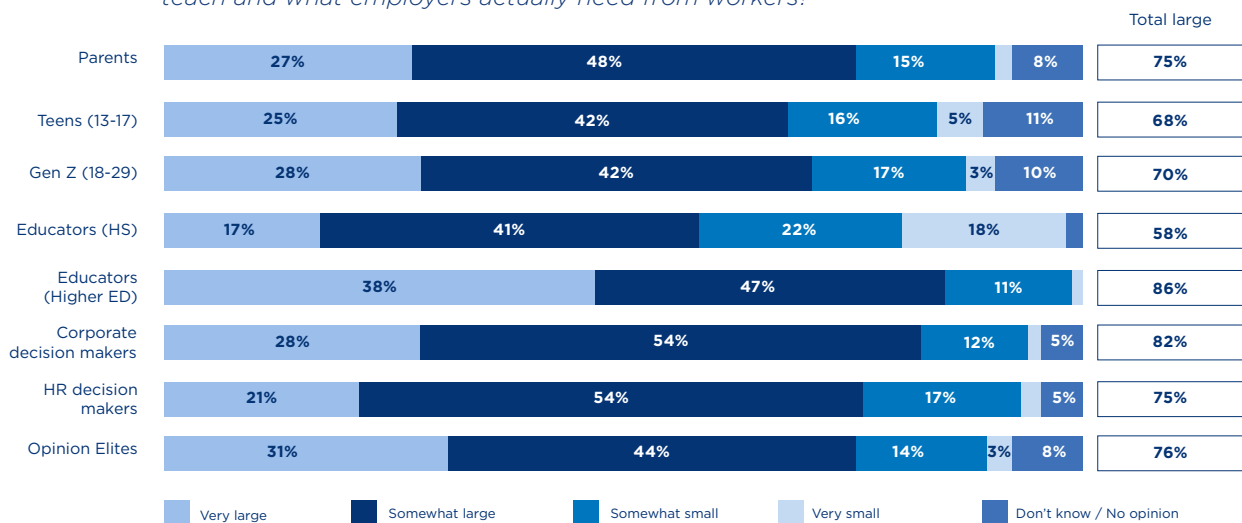


Source: Battelle Applied Workforce Survey 2026

These perspectives differ, but they point to a shared challenge. Educators and employers agree that the preparation of today’s workforce is not fully aligned with workplace needs. The survey findings suggest the gap is less about access to technical knowledge or AI instruction than about opportunities to use that knowledge in practice.

## Both educators and employers see a persistent gap between the skills students develop and those that employers need.

*In your opinion, how large is the gap between what schools currently teach and what employers actually need from workers?*



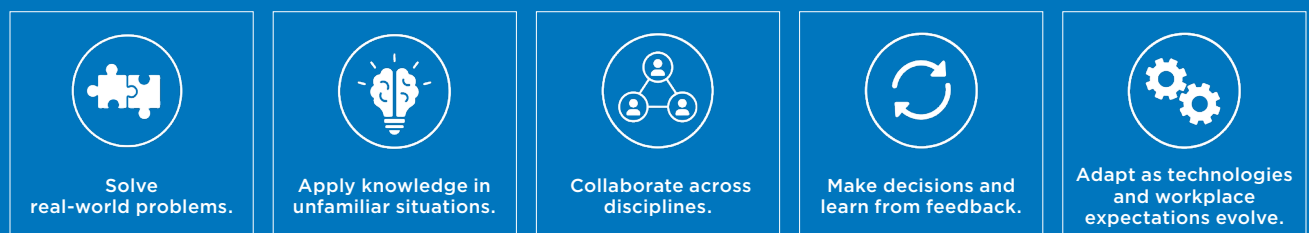
Source: Battelle Applied Workforce Survey 2026

When asked where younger workers struggle most, employers point most often to critical thinking and problem-solving, applying knowledge in real-world situations and communication. Among employers who see a significant gap between education and workforce needs, limited hands-on experience and insufficient emphasis on workplace skills are cited more frequently than inadequate AI instruction.

Closing the perception gap will require more opportunities to connect learning with practice. Classroom instruction and credentials remain essential, but they are most effective when paired with experiences that ask people to use their knowledge, skills and technology together — working through real constraints, weighing imperfect information, learning from feedback and adapting their approach. The goal is not to replace classroom learning, but instead to give people meaningful opportunities to develop and demonstrate the broader readiness today's AI-enabled workplace requires.

## Practice Is the New Prerequisite

The survey findings suggest that workforce readiness is demonstrated through application, not knowledge alone. People build readiness when they have opportunities to:



Learning provides the foundation. Practice builds the experience and confidence to put it to work.

# Mobilizing the Applied Workforce

“America’s competitive advantage has always come from turning discovery into impact. As technology evolves, that advantage will depend on a workforce that can adapt, solve problems, and apply new ideas with sound judgment.”  
— Lou Von Thaer, President and CEO, Battelle

Preparing the next generation of talent is a system-wide, shared responsibility. Schools, employers, government, families, and individuals each shape workforce readiness in different ways. But shared responsibility only works when those roles are clear and when the institutions involved operate as parts of a connected system.

Without that coordination, emerging talent can receive conflicting signals about what matters, educators may have limited visibility into changing workplace needs and employers may continue to struggle to find people prepared to contribute. The challenge is not a lack of stakeholders willing to play a role. It’s ensuring that their efforts reinforce one another.

The survey findings illustrate how responsibility is currently distributed across the workforce ecosystem. Respondents most often look to K-12 schools to build foundational digital skills, communication, critical thinking and effective AI use. Parents are more closely associated with emotional and social development, while individuals are seen as primarily responsible for creativity and continuous learning.

## Workforce preparedness is fragmented across educators, families and individuals, underscoring the need for a more connected system of skills development.

Who do you think is primarily responsible for preparing younger generations with the following skills?

|                                                             | K-12 teachers and schools | Colleges and universities | Employers and companies | Parents or guardians | Individuals themselves | Government and policymakers |
|-------------------------------------------------------------|---------------------------|---------------------------|-------------------------|----------------------|------------------------|-----------------------------|
| Basic digital skills                                        | 52%                       | 13%                       | 6%                      | 8%                   | 18%                    | 3%                          |
| Communication skills (speaking and writing)                 | 44%                       | 9%                        | 4%                      | 23%                  | 16%                    | 4%                          |
| Critical thinking and problem-solving                       | 33%                       | 17%                       | 5%                      | 21%                  | 20%                    | 3%                          |
| Using AI tools effectively                                  | 30%                       | 22%                       | 17%                     | 3%                   | 22%                    | 6%                          |
| Working well with others                                    | 27%                       | 5%                        | 8%                      | 34%                  | 23%                    | 3%                          |
| Ability to learn new skills over time                       | 26%                       | 10%                       | 12%                     | 16%                  | 33%                    | 3%                          |
| Creativity and idea generation                              | 26%                       | 11%                       | 5%                      | 19%                  | 37%                    | 2%                          |
| Emotional and social skills (e.g., empathy, self-awareness) | 10%                       | 4%                        | 5%                      | 57%                  | 21%                    | 3%                          |

Source: Battelle Applied Workforce Survey 2026

Shading reflects relative confidence within each topic row

Lower response rate      Higher response rate

These findings can provide the foundation for clearer, more defined ownership. But no capability develops in isolation, and no institution can carry its responsibility without support from others. Educators need insight into how work is changing. Employers need to help translate evolving demands into meaningful learning and experience. Government and community institutions can expand access, coordinate investment, and help ensure that opportunities reach more people.

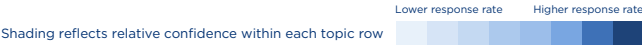
The survey findings also reveal meaningful agreement on where collective action can begin. Corporate and HR decision-makers identify apprenticeships and school-connected, work-based learning among the most important ways to strengthen the talent pipeline. High school educators likewise prioritize work-based learning, along with expanded career and technical education and stronger partnerships between schools and employers.

**A clear point of common ground: educators and employers see hands-on, work-connected experiences as among the most effective ways to strengthen workforce readiness.**

*Which of the following, if any, would be most helpful in improving the supply of talent that is ready to do real-world, applied work?*

|                                                            | Educators (HS) | Educators (Higher Ed) | Corporate Decision Makers | HR Decision Makers |
|------------------------------------------------------------|----------------|-----------------------|---------------------------|--------------------|
| Apprenticeships and work-based learning tied to school     | 42%            | 29%                   | 52%                       | 57%                |
| Expanded career and technical education (CTE) in K-12      | 39%            | 27%                   | 41%                       | 37%                |
| Competency-based credentials focused on real-world skills  | 35%            | 25%                   | 50%                       | 59%                |
| Increased public funding for applied and hands-on learning | 33%            | 30%                   | 40%                       | 42%                |
| Stronger partnerships between employers and schools        | 32%            | 29%                   | 44%                       | 44%                |
| Required capstone or applied projects before graduation    | 30%            | 22%                   | 23%                       | 26%                |
| Teacher and faculty externships in industry                | 28%            | 48%                   | 27%                       | 24%                |
| Stackable credentials linking education to workforce entry | 27%            | 29%                   | 36%                       | 36%                |
| All literacy certifications in school curricula            | 21%            | 22%                   | 44%                       | 43%                |
| None of the above                                          | 2%             | 1%                    | 2%                        | 3%                 |

Source: Battelle Applied Workforce Survey 2026



The opportunity is not simply to assign responsibility, but to design stronger connections among the stakeholders - like employers, the education system, parents, and individuals - that are responsible. Clearer roles, shared outcomes, sustained employer engagement, and better coordination across education and workforce systems can help turn separate efforts into coherent pathways.

Those pathways must also extend beyond the transition from school to work. As technology and industries continue to evolve, readiness cannot be treated as a milestone reached at graduation or upon entering a career. Individuals will need opportunities to continue learning, applying new capabilities, and adapting throughout their professional lives.

America's ability to mobilize the applied workforce will ultimately depend on how well its institutions work together, aligning preparation with opportunity and giving people the support to turn knowledge into impact at every stage of their careers.

## A Roadmap for Shared Action

Preparing the applied workforce will require coordinated action across the people and institutions shaping the future of work.

|  |                                  |                                                                                                                                                                                                                                                                                                             |
|--|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Clarify responsibilities:</b> | Educators build foundational and technical capabilities; employers define workplace needs and work with educators to provide early applied experience; government and community partners expand access and align investment; students and families make informed choices and prioritize continued learning. |
|  | <b>Connect pathways:</b>         | Educators and employers jointly develop applied projects, internships, apprenticeships, and other experiences that reflect workplace realities.                                                                                                                                                             |
|  | <b>Create a feedback loop:</b>   | Employers, educators, and students share changing needs, outcomes, and experiences so programs can evolve alongside technology and work.                                                                                                                                                                    |

# The Applied Workforce Advantage

“The most durable workforce investments are sustained over a lifetime. When people have opportunities to keep applying what they know, refining their skills, and learning as technologies change, workforce readiness becomes an enduring advantage.”

— Wes Hall, Senior Vice President, Philanthropy and Education, Battelle

The applied workforce will be one of America’s most important advantages in the AI-enabled economy. That advantage comes from combining technical expertise and AI fluency with the enduring human capabilities needed to apply them effectively. And it grows stronger when people have ongoing opportunities to practice and develop those capabilities as technology and work evolve.

Sustaining that advantage at scale will require clearer pathways between learning and work, continued opportunities for development, and coordinated action across education, employers, government, communities, families, and individuals.

Together, these efforts can build a workforce that grows alongside technology — one prepared to adopt new tools, accelerate discovery, solve complex challenges, and translate innovation into economic and societal value.

|                                                            |                                                                                                                                                        |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| A Framework for the Applied Workforce Advantage            | Across the workforce system, three questions can help stakeholders assess whether preparation is keeping pace with the needs of an AI-enabled economy: |
| Are people gaining opportunities to apply what they learn? | Knowledge and credentials remain essential, but readiness also requires practical experience.                                                          |
| Is preparation evolving alongside technology and work?     | Education and training must continue to reflect changing tools, roles, and workplace demands.                                                          |
| Are stakeholders working toward shared outcomes?           | Distinct responsibilities must be supported by clear expectations, regular feedback, and sustained coordination.                                       |



# A Call for Coordinated Action

The choices made today about education, workforce development and talent investment will shape America's capacity to innovate for decades to come. Through the Applied Workforce Outlook, Battelle seeks to help educators, employers, policymakers, community leaders, students and families clarify their roles, expand applied learning and strengthen the coordination needed to prepare a workforce that can advance innovation and America's competitiveness.