Key Takeaways: What to Teach Today To Prepare Student for Tomorrow’s Workplace

Thank you to those who joined us for this event, which took place on Wednesday, Feb. 26, 2020. Below, you can read the reporter wrap-up our journalists wrote for you.

More than half of the educators who responded to a survey by the Education Week Research Center—51 percent—said that updating curriculum to get students ready for the jobs of the future is a top priority.

- But what exactly are those skills and how are schools changing their curricular offerings to meet them?
- How do they address the tension between traditional academics and businesses’ demands?
- How are they overcoming entrenched ideas about what school should look like?

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What Are Schools Doing Now to Bridge the Gap Between Career and the Classroom?

In Education Week’s survey, 39 percent of respondents said their districts were already taking steps to better connect students to future careers. Learn more about these and other survey findings and the challenges schools face as they reshape their curricula.

Moderators
Here are a few takeaways from our discussion:

**Mark Lieberman**

- It’s important to keep fundamental skills in mind. The connotation of the term “future of work” includes notions of technological advancement, but employers still want people who are proficient at interpersonal communication, navigating conflict, thinking outside the box, and other abstract skills that need to be embedded throughout a curriculum—as do the most basic academic skills of all, including reading, writing, and math. Annie H.’s comment sums it up well: “As a retired middle-school-level reading specialist, this was such an urgent question for me...'future of work'...when the students I worked with were still struggling to read proficiently. Their ‘future work’ prospects could be [greatly] narrowed, regardless of what that future looked like, if they couldn't read well. I just worked toward turning them on to the excitement of learning hoping that would at least lead them to thinking about their future selves.”

- Career coaches might help teachers orient instruction to prepare students for a changing work world. Many schools lack the resources for the kinds of radical curriculum shifts that often come up during future-of-work discussions. During the discussion, Karen L. summarized the duties of a career coach: “provide job shadowing opportunities, assure all students are meeting the career standards, arrange career-related events and field trips, assist in creating resumes, working on soft skills, career choices, education requirements, etc.” In an ideal world, some participants said, every teacher would have a dedicated career coach on hand to help emphasize the practical components of lessons. Prescribing students’ career paths too early can be a hindrance to creativity, but students could benefit from more exposure to the types of jobs and pursuits that will be at their disposal once they’re done with school.

- If you don’t know where to start, ask around. Our survey results indicate that most school districts are at least thinking about how to better prepare students for the future of work, but that doesn’t always translate into curriculum reshaping, thanks to minimal resources and differing enthusiasm among parents, teachers, and administrators. One effort in Massachusetts stands out, via Paula G.: “We created a partnership among 4 public school districts, a community college, a state university, workforce board to gather insights and data in North Central MA (no large metropolitan or industrial centers) over the next several months as we improve and/or redesign current school programming: Interviewing high school alumni from across 7 schools; running staff, parent, community and college focus groups; meeting with current high school students; examining post-hs work and college-related data; meeting with business and workforce leaders re: what they need in the workforce.” This kind of cross-institutional study promises to provide valuable insights that can inform decision-making, and perhaps even suggest models other schools and districts can follow. It’s a reminder that no district exists in a vacuum, and that there’s always more information and guidance available if you know where to look.

**Holly Kurtz**
• Future workers may increasingly interact with voice-activated technologies but so far schools are shying away from embracing this kind of A.I. An EdWeek Research Center survey found that most school and district leaders are not using tools like Amazon’s Alex. Like parents, educators may have privacy concerns, according to Annie H, who wrote: “There is such a concern in homes with being listened to! How is this being handled in the classroom? Do you have to have parental permission like you do for photography?”

• Businesses also say they value creativity but most district and school leaders say they have not yet fully embraced teaching this trait as an explicit skill, the EdWeek Research Center survey found. “Society seems to judge creativity and lacks support for innovation and change- this is a hard one!” wrote Carrie R. Here’s how she advises integrating creativity into the curriculum: “[Encourage] [d]ifferent ways to demonstrate mastery of skills (outcomes). Rather than just turn in a paper and have it graded, seeking how students would solve a problem or answer questions through creative mechanisms.” The survey did find that private school administrators were more likely than their public school counterparts to report that their schools placed a lot of emphasis on teaching creativity.

• Suburban districts might want to take a closer look at CTE: The EdWeek Research Center survey found that suburban administrators are significantly more likely than their urban counterparts to say that a major challenge in implementing CTE is the perception that it’s more important to prepare students for postsecondary education. Yet as Julie S. noted, in her suburban Atlanta district, even though most students enroll in college right out of high school, half do not complete a degree. “What are they doing for income?” she wrote. “Most of them are doing trade work and now carry a college loan to pay off. I was shocked by the numbers.” Perhaps suburban parents and educators should reconsider the amount of emphasis placed on preparing students for jobs they can do with or without postsecondary degrees.

Nurturing Creativity in the Classroom

When asked to name the most desirable skill for the workforce of the future, employers inevitably point to creativity. And educators, for their part, give it a lot of lip service. But educators and business experts have different ideas about what creativity looks like.
Guest: Megan Fasules, Research Economist, Georgetown University Center on Education and the Workforce

Moderator: Sarah D. Sparks, Assistant Editor, Education Week

Here are a few takeaways from our discussion:

- Creativity is not a trait, but a process of thinking in which students develop novel ways of approaching or solving a problem by pulling together things they know from a wide array of fields. New research from Georgetown University finds careers from composers to physicists to business CEOs, require “intense creative skills” and pay a higher income premium for those with more creativity.
- Teachers can nurture students’ creativity in any class, through practices such as posing questions and problems that do not have “one right answer,” encouraging students not to fear mistakes; and situating assignments in real-world, complex contexts.
- Higher engagement with performing arts is associated with higher creativity in students, but arts education should not become siloed as the only outlet for students learning or expressing creativity. If arts are being used to promote creativity, they should have explicit learning goals around self-expression and creativity, or they can unintentionally lead students to develop fixed mindsets that they “aren’t creative people.”

Taking School to Work

Internship and job-shadowing and apprenticeship programs proliferate, but a handful of schools and districts are taking these initiatives a step further and bringing classes to business sites. Learn how these new arrangements work.

Moderator: Stephen Sawchuk, Associate Editor, Education Week

Here are a few takeaways from our discussion:

- In our booth, Colleen Viggiano, the deputy superintendent of the Onondaga-Cortland-Madison BOCES, Cortland, N.Y., shared insights into how to establish embedded programs, in which classrooms are located at businesses and industries to facilitate a sophisticated braiding of both academic and technical skills.
• Both partners also need to have a shared idea of what each will get out of the partnerships. For districts, it’s access to authentic learning experiences and up-to-date equipment students can tinker with; for businesses, it’s having a potential pipeline of new hires and a chance to dispel stereotypes about jobs like automotive technology and advanced manufacturing, Viggiano and other attendees shared.

• Participants also pointed out that, counter to popular narrative, it’s often the businesses, not the schools, that are reluctant to enter into these partnerships. One attendee, at a municipal water and energy utility, lamented that within her organization there was resistance to the idea: “I would love to know how businesses who are doing this have been able to sell this to their H.R. and legal departments who are first and foremost concerned with liability issues,” she noted.

• Viggiano and others noted that dealing with those kinds of crucial, nuts-and-bolts questions are an important part of initial conversations. The OCM BOCES handles liability insurance and determines which on-site activities would be too dangerous for students. Another panelist noted: “As I solicit businesses to participate, I’m leading with the shared liability of both the business and workplace,” one attendee shared.

• A partnership needs to work out who will be responsible for teaching components. This can be especially difficult because of differences in vocabulary and standards. “Every industry speaks its own industry language just like the education world has its own. They all have their own compliance issues just as education has its own standards to meet. I have a very difficult time getting decision makers where I am working, to understand ‘the way things work’ and the language and culture of the ed. world, and vice versa,” one industry leader said.

• One way the OCM BOCES handles this is by supplying the academic teacher for the course, while a liaison at the business site helps coordinate the hands-on experiences at each business and make sure that students are paired with workers who can explain the components of their jobs.

**Learning to Wrangle ‘Big Data’**

In California and elsewhere, a few high schools have begun to teach a blend of statistics and computer science that is known as data science. The classes are designed to help students understand and use the “big data” that shapes modern life and position them for a labor market hungry for skilled data wranglers.

**Guests:**
Here are a few takeaways from our discussion:

- Knowing how to collect and analyze big sets of data is increasingly in demand—and well paid—in today’s workforce. Statistics and computer-programming skills are key to this work. Blending those skills into a “data science” course can be an important math option for students.

- Data science courses can be a valuable way to help students see the relevance of math in their daily lives. Using “big data” sets, students have analyzed topics as diverse as bullying, horror movies, crime rates, elections, and teen depression.


Find out if your state or district requirements enable you to use our Certificates of Completion for CEUs and professional development or "clock hours" for attending this year’s event.