

Education researchers at Pearson teamed up with the Partnership for 21st Century Learning (P21) to conduct a review of the research literature on the importance of collaboration skills for employers, as well as how to teach and assess these skills in K-12 and higher-education classrooms. The ability to work in teams is one of the most sought-after skills among new hires, yet research suggests that students may not be graduating with the level of skills needed to succeed on the job. What follows is a summary of the most significant findings.

### SUMMARY HIGHLIGHTS

» Collaboration skills are too important for college, career, and life success to leave them to chance.

### KEY FINDINGS

- » Employers say job applicants must have teamwork skills.
- » Those with better collaboration skills earn more and have more success on the job.
- » Better collaborators also learn more in cooperative academic settings and are more committed to civic participation.
- » Collaboration skills, like interpersonal communication, conflict resolution, and task management, do not develop on their own but must be explicitly taught.
- » Many educators are not currently teaching collaboration skills in this way.

### KEY RECOMMENDATIONS

- » Incorporate collaboration into K-12 standards—so it's taught.
- » K-12 educators need professional development, administrative support, and technology for teaching collaboration.
- » Institutions of higher education (IHEs) need to include teamwork skills in institutional learning outcomes, to provide training for faculty, and to fund grants that encourage teaching of collaboration and teamwork skills.
- » Employers need to establish relationships with K-12 schools and IHEs to help infuse authentic, real-world collaboration experiences (e.g., internships and apprenticeships) into the curriculum.

## Why Is Collaboration Important?

The ability to collaborate is increasingly identified as an important educational outcome in and of itself rather than a means of organizing instruction to teach other subjects. The P21 Framework for 21st Century Learning includes collaboration as one of the four Cs, along with creativity, critical thinking, and communication. Research indicates that a focus on developing collaboration skill is important for at least three reasons:

1. Teaching young learners how to work with others within a community on social issues can improve students' commitment to civic participation.
2. Strengthening students' collaboration skills can also enhance their prospects for employment and job advancement once they leave school. In particular, people who know more about collaborating go on to enjoy higher performance in team settings, and employees with better collaboration skills earn higher performance ratings on the job, better salaries, and bigger bonuses.
3. Those with more developed collaboration skills enjoy better in-school group performance, and teaching students to work together can enhance the effectiveness of collaborative approaches to teaching other concepts.

## Is There a Skills Gap?

Due to changes in the workplace, we have seen companies move to greater emphasis on new organizational structures that encourage and facilitate team-based work. At times, this teamwork is carried out virtually by remote employees who are not co-located. Accordingly, recent large-scale surveys of employers reveal that collaboration and teamwork are among the most important employability skills for new hires, with as many as 94 percent of companies in one survey identifying the ability to work in teams as either "very important" or "absolutely essential."

Despite the importance of teamwork and collaboration skills, there is a long-standing concern that IHEs are not producing graduates with the collaboration skills needed to succeed on the job. On one employer survey, only 37 percent of companies felt new graduates were well prepared to work in teams.

## What Collaboration Skills Do Learners Need?

Many frameworks for collaboration and teamwork exist, but the elements that are common across multiple frameworks include:

- interpersonal communication;
- conflict resolution;
- task management.

Individual skill in collaboration varies, depending on a person's willingness and ability to consider the views of others, to coordinate ideas and problem-solving processes with those of teammates, to forge consensus, and to use negotiation strategies to compromise and resolve conflicts.

## What Supports Do Educators Need?

Like any skill, collaboration must be taught explicitly. We can no longer assume that simply putting students into groups is enough to support learning. Rather, instructors must engage in some amount of direct instruction, teaching students what good collaboration looks like as well as strategies for working together. Students must also have opportunities to practice their collaboration skills under instructor supervision and to receive feedback on their performance.

At the K-12 level, this suggests that collaboration skills should be explicitly addressed within educational standards, alongside literacy, mathematics, and science. This will also require a commitment on the part of states and districts to encourage teachers to spend class time teaching collaboration skills, which may mean that they are not able to cover the same breadth of subject-matter content

in a school year. In addition, educators will need professional development to learn how to help their students become better collaborators. Finally, because recent advancements in technology can support real-time capturing and automated scoring of aspects of verbal communication and group decision-making, some amount of funding for technology may be required.

At the higher-education level, this suggests that university accreditation agencies that receive federal funding should emphasize the importance of including learning outcomes for skills like collaboration and teamwork which will hold IHEs accountable for teaching them and encourage departments to assess the collaboration skills of their graduates. University faculty may also need training in how to teach collaboration, since for many this is not a traditional part of their formal academic training. In addition, teaching and technology grants may help spur more widespread adoption of innovative teaching practices that support the development of teamwork skills.

Finally, to ensure coherent and consistent implementation of education for collaboration and teamwork skills that are relevant in the workplace, stronger alignment is needed between K-12, higher education, and employer stakeholders. Thus, federal funding for partnerships that help build bridges between K-12 and college educators and business leaders should be considered.