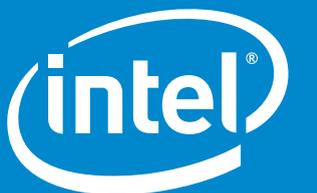




Collaborative learning in K–12 education:
Unleashing productive interaction in the classroom

DELL EMC



Many accomplishments in our societies and cultures were achieved by people working together productively and creatively to solve a specific problem—the essence of collaboration. It is more and more seen as a critically important skill. Libbey Kitten, a K–12 science STEM specialist at Powhatan County Public Schools in Virginia, says, “Beyond content knowledge, we need our students to learn how to collaborate, communicate respectfully with each other, take constructive criticism and engage in discourse in a way that doesn’t lead to a fight. In the era of standardized testing, we moved away from skills like collaboration and perseverance. But businesses are telling us that’s what they need.”



Empowering today to innovate for tomorrow

Click play to watch the video and learn how Dell EMC is working with Powhatan County Schools to encourage collaboration in learning





Transforming classrooms to develop collaboration

Collaboration in the classroom is not merely a lesson or added activity, but requires a thoughtful, transformative effort. Challenges that teachers face in bringing collaboration into their classrooms begin with how to initiate a collaborative learning culture where it did not exist before. They also need to acquire the skills and best practices that enable them to structure efficiently all the required activities and interactions that are part of collaborative learning.

Creative teachers find their own ways of guiding students into collaboration and see its opportunities for themselves. LaChaka Tatum, a science teacher at Cobb County Schools in Georgia, says, “At the very beginning of the school year, I gave my class a collaborative challenge. They had to build a tower out of a number of cups, and they could not touch the cups but only some strings that were connected to them. I watched and listened to how they collaborated and communicated with one another. Would people rise as leaders on their own or would they sit back?”

When collaborative learning becomes rooted in classrooms, teachers’ roles change. Eric Jones, superintendent of schools at Powhatan County Public Schools, says, “For me, it’s almost turning the teachers into scientists who observe, gather feedback and constantly modify their practice to keep pushing their students in that direction where they want them to go.”



Many benefits of collaboration skills

The ability to collaborate may be a great asset in the workplace, but that’s not its only advantage. Collaboration exposes students to a diversity of ideas and styles, so they can become comfortable learning and socializing with people of varying backgrounds and attitudes. It fosters leadership skills, higher-level thinking and interdisciplinary skills development.

How do you create a collaborative learning environment? Many K–12 educators find that collaboration is not a single skill but rather a combination of skills and abilities they need to help students recognize and grow. Although a collaborative classroom does not necessarily require significant investments, the right resources and technology tools can help develop it.



Fostering creativity and innovation in the classroom

Click play to watch the video and learn how students are discovering and collaborating thanks to teachers utilizing Dell EMC technology in the classroom



Collaborative learning in K-12 education



The journey toward collaborative education

Classroom collaboration requires the right framework of protocols and processes to result in learning. Before students work on projects together, educators need to help them acquire the skills of addressing disagreements respectfully, organizing projects, reaching consensus on which content items should be included, and synthesizing ideas and information. Often, small tasks and simple projects present the best opportunities to develop these skills. Highly successful educators may use a variety of collaborative approaches over many months to hone their students' collaboration skills.

Classroom collaboration helps students become comfortable in stepping outside of their customary social roles and expanding their horizons. That requires teachers to become creative in identifying and balancing such patterned roles as leaders, bullies, hard workers and noisy disruptors in collaborative efforts. In effective collaboration projects, everybody contributes toward a shared learning objective as much as possible. Individual students neither dominate nor remain passive, but share their unique insight and skills in a way that collaborative projects can be successful. Educators can use small practice projects to help students understand and practice appropriate behaviors. The results can be highly rewarding, as a 12th-grade student at Powhatan reports: "I enjoy leadership

positions and practicing my leadership skills, but in a collaborative classroom setting, I can also practice being a team member who works well with others. I feel like that gives you many more opportunities to better yourself, not just in school but in almost any social setting."

Fostering student voice and choice can make a vast difference in transforming learning to become both collaborative and individualized. If students understand the learning outcomes they need to achieve, they should have their choice of how exactly they can achieve them. For some learners, that may mean intense collaboration all the time, while others may prefer to mix individual studying with collaborative projects they are comfortable with.

School districts need to support teachers' professional learning about collaboration by giving them opportunities to collaborate among themselves. Teachers can evolve their collaborative skills as they perform tasks that are already part of their duties, such as administrative tasks or curriculum development. Collaboration should become pervasive in everything they do and become a part of the school culture at the same time that it becomes embedded in the classroom.

Many educators, all too aware of the time and resource restrictions in their K–12 environment, often test the waters by low-risk measures that can be controlled and efficient. As THE Journal finds in a survey, the most common collaborative activities are:



Brainstorming



Students choosing their teammates for group efforts



Warmup and icebreaker exercises



The right technology is essential

Click play to watch the video and learn how Powhatan Flat Rock Elementary supports teachers as they integrate technology and redesign classroom space



Unfreezing the classroom

It takes the right tools, space and resources to facilitate a K–12 environment that accommodates a wide span of collaborative projects and approaches.

One of the most affordable and easy practices is changing the physical setup of classrooms. Many educators reconfigure their classrooms to be more flexible, with tables and seating that can easily support student groups and individual learning. Stephanie Howell, a teacher of fourth-grade math, science and social studies at Flat Rock Elementary in Powhatan County, says, “Turning the classroom over to the students and making it a more student-centered space has really shown me how capable they are of making good choices and doing what they need to be successful. Right now, my student teams are working on a social studies project about the western region of the U.S. Their job is to develop an advertisement that

will entice people to visit and relocate to the area.”

In those versatile classrooms, students and teachers need to have the means to express their ideas and share content and projects. Increased access to digital tools has shifted the flow of information, production and creation, enabling a seamless flow of interaction across digital and physical spaces.

Many school districts provide a combination of physical and digital tools for stimulating creativity and collaboration. These can include whiteboards, digital displays, online collaboration tools, writable surfaces on tables, video conference apps and interactive technology that can support a range of collaboration activities, group sizes, physical locations and learning purposes. By using these resources, teachers can engage students in projects that allow them to follow their interests as they access content and information and develop the skills they will need.

While they experiment with and adopt collaborative learning, school districts and teachers also need to meet the challenge of assessing the impact of collaboration on grading students’ accomplishments. To make meaningful grading possible, student collaborators need to learn how to document their thought processes, activities and project outcomes.

Today’s most frequent collaborative grading practices include:



Observation-based grading by teachers of students and student groups



Quizzes and assignments



Students reflecting on their work to grade each other and themselves



Opening the digital world to collaborative learning

Digital tools such as laptop or tablet computers can flexibly support various learning models which can blend with as well as expand the classroom. They can be used in group projects or by students accessing online resources and learning on their own. School districts rely on a variety of cloud applications such as Microsoft Office 365 or Google G Suite to enable individual learners and collaborative teams to develop and share written and multimedia content. Students can also use these applications to perform research and communicate within their group or with their peers in other classrooms and schools, anywhere in the world.

Cobb County Schools and Powhatan County Public Schools use Dell desktop and mobile laptops, tablets and 2-in-1 computers with Intel® processors in their creative classrooms. Cheri Ashman, a teacher at Powhatan High School, says, “Technology has taken the spotlight off the teacher and put it on the students. They will create something that you would never think that they could do. It has truly given them ownership of what they’re doing.”

Cobb County Schools, Powhatan County Public Schools and other school districts also find it advantageous to draw on Dell EMC educational expertise in addition to using Dell devices. Jones says, “We use Dell EMC and some of its partners for a lot of professional development. They work with school districts all over the country and bring a wealth of knowledge with them. As we’re entering terrain that’s new for us, we don’t need to do it by ourselves.”



Student centered. Teacher facilitated.

Click play to watch the video and learn how common, flowing working spaces tend to students different needs.

Collaborative learning in K-12 education



Next steps

Dell EMC is firmly committed to supporting creative, competency-based, student-owned learning that can take place anywhere, anytime. To explore how we can help you transform classrooms into collaborative learning environments:

- Contact us and find out more about Dell EMC educational solutions at www.dell EMC.com/k12
- Learn more about Dell EMC Professional Learning Services at www.dell.com/professionallearning
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