

Creativity in Learning

In the fall of 2018, Gallup conducted 12 school visits across the country to identify the characteristics of creativity in learning and investigate how technology can impact this learning, as well as what barriers are present for its implementation in classrooms. During each visit, researchers observed instruction across a variety of subjects and asked students informal questions about their participation in specific activities. To complement these observations, Gallup also interviewed teachers, parents and administrators about their views of creativity in learning and how technology is utilized in the classroom. Gallup selected schools that were diverse in terms of size, control, geographic location, socioeconomic status and grade-level representation. Eleven of the schools employed “one-to-one” technology models with Apple devices (MacBook or iPad), and one school employed a “one-to-one” technology model using Google Chromebook devices.

Select quotations from the school visits are listed below:

Teachers

- “I see a noticeable impact on student engagement. I don’t know if our assessments have caught up to measuring creativity.”
- “There has to be an environment conducive to creativity and [that] allows students to take risks. If it doesn’t work out, it will be fine. In America, we’re fearful of failure.”
- “Creativity is not discouraged, but test scores matter. It’s hard because I don’t think standardized tests allow them to be creative.”
- “Technology can foster and stifle [creativity] because it’s all what you do with it. Technology is the means, not the end. It can be the means for students to do amazing things like connect with one another or put a different spin on something.”
- “I need to feel more confident in certain aspects of creativity. In the past year, we had innovation days for teachers. It wasn’t a training, but we had opportunities to engage with tools and learn how to use them.”
- “[Students] have to learn that creativity does not look the same and understand that it’s not right or wrong. It’s OK that people, products or processes don’t need to look identical, and it’s more difficult for a higher-achieving student to understand.”
- “[Critical thinking is] something difficult to foster in students. It is much easier to teach facts and formulas as a teacher, but creativity and fostering inquiry are crucial to their success and future.”
- “Creativity is being uncomfortable. If it’s uncomfortable, then it would be a new experience.”
- “My end objective is the standards. I see myself as a facilitator. I do less talking, and they do more talking. I do less doing; they do more doing. It’s hard as I have to anticipate questions, but I don’t intervene. I let them go and check with a partner. Having the option of failure is important.”
- “I emphasize that [technology] is a learning tool and not a game. I have constant conversations that it’s a learning tool.”

- “They need to see us try things and fail. They need to see that it’s a part of learning and growing. Hopefully, they will try themselves and not be afraid.”
- “My class has gone digital. Everything is online including how they submit assignments. They can do a test online and get an immediate score.”
- “There is a battle with classroom management. There is training students on the appropriate ways to use it.”
- “One of the most valuable tools [to assess learning] is very informal — I observe and actually walk around and engage with students ... I know my students.”
- “[Students] designed a project through the scientific inquiry method. They have variables and controls ... I think the process is important to go through and teaches them that it is OK to fail and go back and fix it.”
- “For projects, I’m not evaluating it for a grade. I want them to be successful in life, not just for a grade. I want them to learn the skills ... and attitudes rather than just learn to add or subtract.”
- “It’s not about what they learn necessarily. I want them to eventually be good problem solvers.”
- “I’ve worked with individual teachers and teams with effective rubric writing. That’s the change of the times. It’s the effective way now.”
- “I think a lot of our teachers aren’t scared of doing something different.”
- “I think it’s important for an administration to make the teachers and staff know that if they try something different, they will not be dinged for succeeding in it right away ... Adults are no different than students. If my teachers are afraid to fail, then so are my students.”
- “I’m a Ph.D. student and seek undergraduates who know much more than I do. I use professional resources. I know like Adam Welcome who I follow their Twitter feed and see his retreats. I follow the education commissioner. I like to see what other people are doing.”
- “We have a lot [of professional development] on campus. I get to go every couple of years to a conference to prepare to help teachers get Hispanic students into highly selective schools.”
- “There is tremendous administrative support here. Professional development is huge. The very first year I was here, I went to a training and conferences. My other trainings have been tied to AP training or one-day sessions.”
- “The nice thing is that our schedule affords us [professional development time]. All teachers have a prep period when we can collaborate. On Wednesdays, we have instructional prep time when we can share lessons and ideas. We are teaching each other.”
- “If there are accountability assessments like state or AP tests, then we have time frames to hit. So they have to read certain novels versus something more open-ended. I know specifically what will be looked at in the AP test. I do it the way College Board says, even though I know other ways to teach it. If the teacher can’t express themselves, how can you make students?”

- “Reading is the easiest to incorporate [creativity]. You have more flexibility with passages, writings and public speaking ... I would say that it is more difficult to incorporate into math ... When you look at the curriculum, it’s a lot of math processes. It’s just hard with time constraints. It’s a lot of curriculum.”
- “I teach them to fail. There is a display in my room that says, ‘Every time we fail, we learn.’ For me, I model that all the time. Patience is a part of it.”
- “This is more of a complication than barrier, but most of us are on iTunes U, some of us are on Canvas, some use Google classroom. It can get confusing during the year.”
- “As a teacher now, a lot of what we’re trying to do is standards-based and rubrics. A lot of students have trouble with that. I have students who ask me what they need to do, and they’ll do it.”
- “If we don’t like it, we can change it. We’re not the same program from when we started. [Principal] listens. He has the last say on what happens, but he listens to ideas when it comes. Every year, we add something new to help the kids.”
- “I like activities with more than one answer. This allows the students to debate it and tells them that they need to provide the evidence to support their argument. You can see the kids rise to the occasion and look at problems in different ways.”

Technology Integration Specialists

- “From our experience, it gives students a voice. As middle school students, no one listens to them. But here, they have the power to influence at any level.”
- “By allowing [students] to be creative, you see a new level of learning take place. They are more invested in whatever they are learning.”
- “Knowledge gathering is important in the creative process. More creative solutions come from a pool of different knowledges.”

Principals

- “I think it’s a common misunderstanding that [creativity] is innate. Developing creativity in the classroom lends itself to self-expression, and students can use creative thinking as an avenue for problem solving.”
- “[Technology] is a tool, not the focus. It’s a tool to reinforce what you’re learning.”
- “I don’t think iPads are an end all, be all. A creative or innovative lesson doesn’t always use technology in it.”
- “We were very strategic and intentional with the rollout of the whole technology program. [The technology specialist] and I worked together and had a vision scoped out several years in advance. But there had to be buy-in. We had to get faculty acclimated before students could get their devices.”
- “I think [technology] has allowed our teachers to differentiate easier. Without course management software, you can have kids move at different levels.”

Counselors

- “If you don’t change it, it’s no longer creativity. It may be creative the first time out, but it’s not later.”
- “Kids are bound by their grades or GPA ... We need to try to get the kids here to loosen up — it’s not all about the grades.”
- “There are different ways to get to the same end goal. You don’t have to take the same path. Kids are at different levels.”

Instructional Coaches

- “I will help support teachers one by one. We do a lot of hands-on training ... Sometimes, we’ll have a newsletter on what is upcoming. I’ll put out challenges to teachers, and it’s up to the teacher on whether they take on the challenge. We don’t make teachers do anything.”
- “The grading system is archaic. This is a discussion that we have as a staff and within the district on how to fairly assess kids. Parents are focused on [the grade], but we’re focused on formative assessment and growth.”
- “We’re lower-middle SES. Technology levels the playing field a little bit. Kids get to develop the soft skills and learn the critical thinking skills. It’s not an assessment we can give to measure something for, like cooperation. It’s a conundrum. But creativity and technology develop those critical thinking skills.”
- “[Technology] provides individualized learning. You can set up three different classrooms with math, and I could send out what each group can be doing. They immediately have what they need. I think it’s helped switch from instruction to facilitation.”
- “The personalized learning will continue to increase. We’ve had some schools in our district that are getting rid of traditional grade levels ... You got kids moving at all different levels. Some kids can master something with one or two lessons, while others may take seven or eight and others who will take 12 or 13.”

Students

- “Students actually learn rather than just doing busy work. If we’re given the time to be creative, then we’re more willing to learn and put effort into it.”
- “With the absence of fear, creativity can flourish.”
- “It’s a part of the education system to be stressed about the SAT and be good enough for universities, which limits our creativity and puts it to a test.”
- “In English, everything is on the iPad. I don’t like to read on the iPad. Sometimes, I wish I had a paper book.”
- “I wouldn’t say [technology] contributes much to creativity. It comes from us more.”
- “My parents are old school and use traditional paper and pen. I tell them that I prefer a screen. They try to limit my access, but we’re at an age where everything is on a screen.”

- “We’re an Apple Distinguished School. We get iPads, and the teachers and administration make the most out of that. It’s really helpful that we get digital copies of what we get done. We’re able to have clear instructions and evidence for it. It helps us to be more responsible too.”
- “What I like is ‘the ability to imagine new ways’ because, at this school, every teacher gives a lesson differently, even in the same subject. You can see a new approach and see things in a new light.”