Technology Ambassadors

The job of a classroom teacher requires an ability to play a range of different roles to educate, inspire, and challenge students to become successful adults. And now you can add one more role to that list: technology ambassador.

One popular initiative is one-to-one computing, a program in which every student is given an electronic device. While the goals of these programs vary, at the heart of each is the idea that computer use can better prepare students for the world of tomorrow.

Of greatest importance, districts are finding that providing professional development to teachers is critical to the success of these programs.

WEIGHING THE RISKS AND RETURNS

For some districts, the adoption of one-to-one programs is not seen as an "if" but a "when" and "how."

Futuresource Consulting estimates that 70 million mobile computing devices were used in 2014 in the pre-K-12 setting, not including those devices students brought from home. The consulting group also believes that this number could roughly double in the next five years.

technology ambassadors

This growth has been buoyed by the paradigm shift toward preparing students for the 21st century workplace. This workplace requires us to adapt every day, one that requires collaboration across networks, entrepreneurialism, and accessing and analyzing information.

Over the past 15 years, school districts across the country have seen varying benefits of implementing one-to-one programs. Results include improvements in writing, exam scores, literacy, GPAs, and computer proficiency.

However, if the implementation of these technologies were without pitfalls, they would have quickly become the new standard by now. One of the most frequently cited problems is its costs. Beyond the huge upfront costs, schools often pay high ongoing maintenance fees.

Even if districts can out-maneuver the prohibitive costs of the program, successfully integrating laptops into the curriculum still remains a hurdle.

IMPORTANCE OF TEACHERS

There are a variety of reasons why a one-to-one program might succeed or fail. At the crux of a successful program stand teachers. Their perception, attitudes, and knowledge of technology are the factors that decide how these devices will be used, if at all. Their willingness to buy into the usefulness of the device will dictate the extent to which a classroom is exposed to technology.

Even teachers with the most positive attitude toward classroom devices are limited by their experience. To have any expectation of a fruitful return on this investment, a priority must be made to educate teachers on how to use this technology within their curriculum. Simply giving devices to students will not increase their achievement or enhance the instructional process.

Teachers need a variety of support systems for an extended period of time. Successful professional development and planning will take at least six months or more, not just a couple of workshops. Mastery will require a supportive administration, collaboration among colleagues, and techniques for weaving technology into the curriculum.

ADMINISTRATIVE SUPPORT

A supportive administration is also essential in preparing teachers for a one-to-one rollout. Without strong leadership and a clear vision of the program's expectations, schools' investment in technology cannot be maximized.

Professional development is the most important tool administrators can provide teachers. One of the biggest obstacles teachers face when adapting these programs is the lack of time to research software programs, the devices, and new pedagogy. Preparing teachers through workshops before these rollouts, sometimes years in advance, gives programs the best chance to have impactful results.

Providing a technology specialist in the classroom can offer on-demand enhancements of the equipment's capabilities. The presence of this expert reassures less-experienced teachers and offers tailored, on-the-spot assistance as well. In instances where specialists weren't available, schools found lower levels of technology integration into lessons.

SUPPORTIVE COHORT

The presence of an organized group of teachers is a critical resource. These groups allow for teachers to share their successes and failures, along with lessons learned. In cases where mentoring is possible, not only is knowledge shared, but an atmosphere of collaboration is created among staff. The ideal end result is a critical mass of teachers with the practical knowledge of how to best integrate technology into the classroom.

These cohorts can go beyond just providing support to becoming a source of specialized training. Teachers with greater experience are able to bridge the gap for those who are not by offering specialized lessons. The most effective way to accomplish this is through a content-based approach, where a teacher can see the connection between the technology in use and the lesson being taught.

Eventually, collaborative environments can branch into shared lessons gained from seminars, articles, and electronic discussions. In the most collaborative environment, teachers are able to work together on team assignments, transitioning from learning about these pedagogies to designing them in practice.

Monty Jarecke (mjarecke@programmanagers.com) is a project analyst with Brailsford & Dunlavey, a program management firm in Washington, D.C.