

Three Keys to Successful ICT Implementation

by Nancy Knowlton

In the last few years, the rate of classroom technology adoption has accelerated around the world. Increasingly, administrators, teachers, government officials and community leaders consider information and communication technology (ICT) not just nice to have, but essential for 21st-century learning environments. They believe it can improve education outcomes and, by extension, positively affect their communities, economy and prosperity.

Over the past sixteen years, we have had a great opportunity to witness firsthand which ICT adoption strategies have worked. These learnings come from direct observation and involvement, and thousands of conversations with those behind large- and small-scale adoptions. Below are the three factors that we consider critical for successful ICT adoption, regardless of scale.



Vision

How an education system articulates its vision for ICT use in the education process is of paramount importance. That vision must be expressed from the top of the system down through all of its parts. Students and parents also need to understand the importance and role of technology in the learning process, and to that end the vision must be communicated clearly in the central office, the school and the classroom.

An effective vision focuses on how ICT can transform the education process, putting children and their success at the heart of the system. It does not advocate learning about technology, but rather using technology to learn.

A strong vision also addresses the full range of adoption issues – everything from what teaching and learning with technology looks and feels like to how schools access the budgetary resources necessary to bring the vision to life.

Teacher Professional Development

In the thousands of discussions we have about technology integration with teachers every year, we consistently hear that they need one thing to succeed – time outside of class to learn about using technology in their teaching. Some teachers learn best in a hands-on environment while others learn best from reading and exploring. Whatever the learning style, effective ICT use requires

new teaching and learning strategies and a willingness to learn. A well-crafted PD program supported by a coherent vision for ICT can encourage even the most reluctant teacher.

It is simply true that teaching today requires a basic understanding of various technology tools and applications. For those less familiar with ICT, learning these basics* is an essential element of their professional development. However, it takes more time to refine skills than it does to learn the basics, so ICT adoption plans need to include ongoing professional development as an essential strategy. With so many new tools and applications to learn, teachers must have the time to develop technology skills that they can then use to get the most out of teaching and learning in the classroom.

Teachers and administrators tell us that a good rule of thumb is to allocate approximately one third of available technology funds to teacher professional development.

Environment

Administrators often ask if teachers can share classroom technology products. While sharing is always possible, it has not proven to be the best model for adoption. Teachers develop their skills best when they have ICT consistently available to them throughout the day. While this may pose a challenge to administrators determining who should receive products when there aren't enough to go around, it is nonetheless what leads to the best adoption outcomes over the long term. And good adoption consistently leads to the best experience for students.

The Recipe

This recipe has proven itself time and time again. Developing a strong vision for ICT adoption, ensuring adequate PD and providing environments that encourage ICT use can all go a long way toward guaranteeing successful technology integration. When the challenge is to ensure that every child learns and succeeds, there can be no shortcuts on the path to implementation.

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* The product selection process is also critical. Making sure that a product is easy to use at start up is just the first step. It also has to have the power to deliver as teachers develop their skills and demand more from the products. Product reliability also needs to be high to ensure that products are always up and running.