The goal should be to train teachers not to master specific technologies, but instead to design learning environments in which technology helps children learn.

There is a famous story that describes what needs to be done when you want to hang a picture on the wall. You go to the hardware store to buy a drill bit to make the hole for the hook. You don’t really need the drill, you need a hole, but the hardware store doesn’t carry holes, only drill bits. While the drill bit is important, it is two steps removed from what really needs to be done, hanging the picture.

I think much of what we call technology staff development is a lot like buying drill bits; it is one or two steps removed from what really needs to be done. We plan staff development to improve student learning. But we are often too focused on training teachers to use a tool without the clear vision of how we can transform learning for our students.

I used to design and conduct staff development workshops after school so that teachers could master the tool. When there was less than stellar follow up taking place in actual classrooms, I began to wonder about what failed. Initially, I did not think it was the quality of the staff development because teachers showed proficiency with the technology. Why then, the lack of follow up? Was it just that some teachers would not adapt to a new tool? Was it the inconvenience of technology? Or, were there other barriers such as the structure of the curriculum and state mandated tests that just got in the way?

Of course there are many reasons for the lack of follow up from any staff development experience, including very little accountability to apply new skills built into the system. But, even when teachers were using their new skills, the application seemed to be unimaginative. Very often, teachers would be “bolting” the technology on top of what they were already doing. Frustrating, because I know that we can move beyond the current challenges we give students and radically raise expectations.

I began to rethink my original assumptions about the quality of what I thought was a “successful” staff development experience. Rather than focus on the “drill,” technical skills for teachers, I began to think about the “picture on the wall” — students learning. What if the focus of technology training was to shift from how teachers acquire technical skills to how students learn with technology?

This shift in perspective would require a totally different approach to staff development design. Indeed, in this model, immediate facility with the technology would become secondary. Teaching teachers to observe how students learn and to reflect on the value of that kind of learning would become central. The only way to do this well is to involve students in the staff development model.

Each teacher brings two or three kids to the workshop. And, the role of the trainer shifts from training teachers how to use the “boxes” to teaching the students. While the students are learning in small groups, the teachers are asked to make careful observations about the impact that technology has on how students learn. The goal is no longer about technical mastery but about designing learning environments where technology could help children learn, regardless of whether the teacher actually acquired the technical skills.
Once I changed perspectives from technical training to student learning, the results of follow up were much more effective. They really had to be. Once you excite the students about the technology and formally legitimize the notion that students can learn about computers before the teacher, then the staff development experience builds more capacity for follow up. As soon as teachers are free from worrying about the technical details, their minds are more available to think creatively about what their students could achieve. And, chances are the teams of students did acquire the technical skills. Now the students are in a formally sanctioned position to provide technical support back in the classroom.

THERE ARE MANY REASONS TO MOVE TO A STUDENT-CENTERED MODEL OF STAFF DEVELOPMENT IN TECHNOLOGY:

1. We probably do not want to reinforce the old model of the teacher learning something first and returning to class as the expert. Especially, when kids learn this stuff so fast or already know it. We need to do everything we can to honor the knowledge and wisdom of children.

2. Sometimes, some teachers will make decisions that what they are learning is too difficult and students could not possibly use the technology. If kids are in the room doing “it,” these premature judgments never occur.

3. Respond to the need of technical support in the classroom by building capacity within a team of teacher(s) and students to help each other after the training ends. It is also possible to build a level of excitement and expectation on the part of the students that lends energy to follow up.

4. Move from a focus of training - how does the thing work -- to a higher order skill of reflective practice: how do students learn? What challenges can we give students that we would never give before? How can teachers work together while teaching? How can we help students with their questions and their frustrations? At the core of good teaching is the quality of the relationship between teachers and students. This kind of learning environment provides teachers with the opportunity to reflect on how students learn together.

5. Honor the knowledge and wisdom of teachers: After the students have acquired mastery - and they will - allow the students to say goodbye, and ask the teachers to share their observations of how students learned. In this way, teachers can add the value of their wisdom to the quality of the workshop.

6. Collegiality: Challenge teachers during the debriefing to co-design activities for their students. Sometimes, if network infrastructure is available, teachers will design assignments that are shared between classrooms; such as students designing math challenges for one another or teachers sharing the assessment of students from another class.

Not to be underestimated, it tends to be more professionally fulfilling to focus on the primary business of how to help kids learn rather than how to make the computers work.

The actual design of the staff development model includes four phases:

LEARN HOW STUDENTS LEARN:

Teachers are asked to watch how students make use of the technology with each other. Where are they struggling? Where are they delighted? Are they using their imagination - asking “what if” questions? Which students are taking the lead? Are the girls as involved as the boys? The purpose of this phase is for teachers to observe how students learn.

ENGAGE WITH STUDENTS:

Observation is not enough. After the students acquire facility, the role of the teacher is to ask the students to explain what they are doing with the computer. Through dialogue with the kids, teachers can deepen their understanding of what kids think they have learned. Then it becomes natural for the students to teach the teacher what they have learned.
REFLECTIVE COLLEGIALITY:

After the students leave, this is valuable time for teachers to reflect together about their observations and ideas for follow up. It would not be unusual for teachers to plan activities together, especially if there is a network that encourages teachers to share student work.

CONTINUED DIALOGUE:

If the network is built into the reflection, the workshop is building capacity for teachers to continue the dialogue online.

What are we really after: the drill or the picture hanging the wall? It comes down to the qualitative difference between training and education. The technical skill of applying technology to help people learn is necessary. But, compared to the creative work of engaging and challenging students in new ways, technical skills are trivial. What is really important is to focus on new relationships; teacher to students, students to students; students to the world, teachers to teachers. It’s also about how willing we are as educators to shift the control of learning in the classroom from the teacher to the student.

About November Learning

Alan November has been an education technology consultant since 1995. Since then he has helped schools, governments and industry leaders improve the quality of education through technology. In 2004 Alan expanded November Learning to include a team of educational specialists and a wider range of educational materials. The November Learning Team is a highly specialized group of educators. We have a range of expertise in educational issues, with a primary focus on community building and technology integration. The November Learning Team is dedicated towards supporting and challenging teachers and students to expand the boundaries of learning.

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