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Technology Update - Linking Technology and School Reform: A Role for Local Education Funds

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TECHNOLOGY UPDATE

Linking Technology and School Reform:
A Role for Local Education Funds

BY ANNE L. HIRD

T he following discussion is excerpted from a booklet published by the Public Education Network in Washington D.C. by and written by Anne L. Hird, an Assistant Professor in the Department of Secondary Education and Professional Programs. She is also the author of a recent book on *Learning From Cyber Savvy Students: How Internet Age Kids Impact Classroom Teaching*.

Any attempt to increase student access to technology challenges established school practices and policies. In the wake of nationwide efforts to "wire every school," the increasing availability of classroom computers raises an important question. What are the possibilities for this technology to spur school change?

Information technology can support collaboration, hands-on learning, complex problem solving, and many other learning strategies advocated by reformers. Meaningful change, however, does not automatically follow the introduction of computers into a school. Attention must be turned to how technology is used in the classroom and the fundamental assumptions upon which schools base their interactions with students.

Local education funds (LEFs) are well positioned to lead efforts to link technology initiatives and school

reform by focusing school technology planning on the larger, complex questions of what children need to know and how they can best learn. Using technology as a catalyst for school reform, however, requires an accurate understanding of the conditions under which teachers and students use technology. Careful consideration of the factors that have shaped past and present school technology use is essential to developing successful strategies for future action.

GUIDING PRINCIPLES FOR LEF'S

Local education funds best serve their communities by "asking the tough questions" surrounding school technology. LEFs, by leading community conversations around these questions, are well positioned to support the coupling of technology initiatives and school reform. The necessary conversation is moral and philosophical, not technical. The critical issues are what students need to learn and how they best learn, not the special features of any particular technology. Careful consideration of the underlying assumptions upon which teaching and learning are based, not the technology itself, leads to school change. By engaging schools and their communities in deliberate self examination, LEFs

can prevent school technology from becoming a distraction from meaningful school change.

LEFs may help stimulate schools to use information technology in ways that significantly change teaching and learning by:

1. Proceeding with the understanding that the technology itself will not change schools. The LEF should use technology initiatives to engage constituents in discussion of critical school reform questions. Any LEF engagement in school technology initiatives should be firmly grounded in an examination of the school's leadership capacity, internal communication processes, ability to collaborate internally and with the broader community, resource allocation, commitment to change, and most basic assumptions about teaching and learning.

2. Helping schools to clarify how they expect student learning to improve with technology. Too many schools apply for external funding to achieve sweeping goals such as "preparing students for 21st century." By helping to focus conversation on what students need to know and know how to do, LEFs can assist schools in identifying specific, attainable goals for student learning with information technology.

3. Starting where teachers and administrators are now. Teachers are most likely to use technology to meet specific, immediate needs that support classroom, school and district plans. LEF efforts should reinforce teachers' current best practices and demonstrate for teachers how technology use can help them to meet school and district reform goals.

4. Providing specific models. Teachers do not have the time to "start from scratch" as they integrate technology into their teaching. LEFs may assist teachers by providing them with a range of instructional models and lesson plans to incorporate into their own professional practice. These models are most useful to teachers if they have been designed by other teachers, tested in "real" classrooms, and are easily adaptable to a variety of classroom settings.

5. *Stressing the personal utility for teachers and administrators.* Teachers and administrators are justified in asking, "What is in it for me?" Time spent exposing educators to household management and entertainment uses of technology is well invested. It is difficult to imagine a teacher who doesn't read outside the classroom conveying to students the value of this skill. Teachers and administrators for whom technology has personal relevance are more likely to support student computer use.

6. *Assisting in the evaluation of technology programs.* One of the most difficult aspects of educational uses of computer technology has been evaluation. Traditional measures of student achievement do not necessarily capture the learning that occurs as a student works with a particular technology. But the computer's price tag calls for justification in terms of student achievement. LEFs are well positioned to engage school and university representatives in planning and implementing evaluation designed to measure the impact of classroom technology use on student teaming.

7. *Acting as a broker among schools, businesses, and other community resources.* The most successful school technology models are the result of broad based collaboration. Universities, private business, and state and federal public agencies, if asked, may bring a wide range of resources into the planning and implementation process. The LEF may act as a conduit of communication and an easily accessible first contact for these and other groups. Especially in large school districts, business and university representatives may be hesitant to work directly with district administration, but will channel resources through a third party "broker."

8. *Advocating for policy to support ongoing integration of technology.* The spectrum of district, state and federal policies that impact school technology use is vast and complex. Education funding, student achievement standards, telecommunications regulations, and teachers' contracts are only a few of the policy areas which impact school technology use. The LEF can act as both "translator" of the complex political processes surrounding these policy decisions and advocate for policies which best support students at risk of growing up without computers.

9. *Modeling technology use in their own organizational functions.* An LEF advocating that local schools use information technology is in turn responsible for modeling technology use in its own organization. Even if funding is not immediately available, each LEF should have a three to five year plan to increase its own technological capacity. This plan guides the purchase of new hardware, software and networking tools, acceptance of donated equipment, and staff development.

10. *Recognizing that technology does not save failing schools.* There are some schools for which an investment in technology may amount to little more than a way to deflect attention away from much more serious issues. Effective school technology use requires leadership, communication, collaboration, and dedication. If a school is seriously lacking in any of these, deferring attempts to integrate technology school wide in favor of immediate attention to organizational capacity may be a better long term investment. The LEF may still serve the students involved by working with parents and community agencies such as libraries and after school programs to provide the children with computer access outside the school.

Conclusion

Although the cost of computers is rapidly dropping, few schools have achieved full integration of computer technology into student teaming. Programs such as Project FIRST play a critical role in ensuring that our youth do not "fall between the cracks" as workplace demands for technological skills out pace policy changes and resources needed for full integration of technology into all schools. By combining technological expertise and familiarity with the culture of each participating school, Project FIRST has focused on the point at which computer technology and the classroom come together. At this point, traditional school practices, structures, roles and relationships are tested, presenting local education funds with the opportunity to raise. critical questions about the fundamental assumptions upon which teaching and learning are based. Given the current pressure on schools to advance technologically, the opportunity is ripe for local education funds to proceed with initiatives modeled after Project FIRST and to use computer technology as a catalyst for fundamental school change.

As computers continue to permeate almost every aspect of our lives outside schools, there is an urgency for local education funds to begin working in
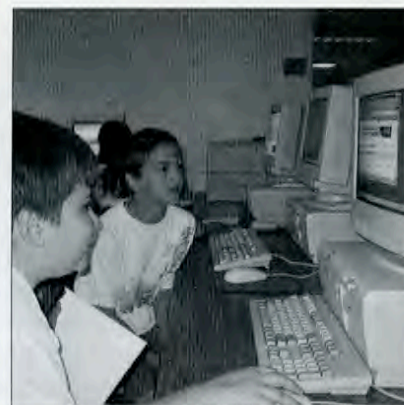
this area if they have not already done so. This urgency, however, should not lead to a rush to finish a technology project. Computers may be purchased and installed in a matter of months, but it takes years to reshape teaching and learning to take full advantage of the technology. Furthermore, we should expect to see new developments in computer technology, school applications of which we have not yet even imagined. Finally, the stakes are too high should the initiative fail. Unlike other curriculum changes, technology integration involves numerous physical artifacts. If positive changes in teaching and teaming do not accompany computer purchases, each classroom computer becomes a visible reminder of the failed initiative and a disincentive for future change, rather than a launching pad for a child's future.