Reform's Missing Tools

Educational policymakers responded unexpectedly to Educational Leadership's March 1986 Technology issue. Within weeks of its publication the National Governors' Association had sent a copy to each governor, several governors' offices had asked for additional copies for special state task forces, and schools had requested copies for board members.

The journal apparently carried a timely underlying message: education must catch up with other institutions in understanding how technology can provide tools for its workers, not just its clients. For reform-minded policymakers, the concept translates to a new planning idea—strategic tool use, or the use of technology as a tool of reform.

Technology is used strategically when the end drives the means, when the commitment is to achieving a purpose or solving a problem rather than to a particular technique for doing it. Contrast this to situations where commitments to introduce a new technology often make it look as if the technology is an end in itself.

Strategic technology use strikes out against an invisible cost that a generation of first-time tool users pay. This is not the cost of hardware or software, but of people—what the personal time and energy required to rethink what we do. How we do it, and (because of the effects of the answers to those questions on established relationships) why we do it. Most of us are unwilling to invest considerable time and energy unless the end makes it worthwhile.

Strategic use of technology in education requires a different perspective on means, ends, and the ways to connect them. Without losing sight of the ends, it recognizes that many of us in schools spend a good portion of our time trying to overcome the barriers and constraints that separate us from our goals.

Most teachers and administrators, for example, work in relative isolation from their peers. As we discover how effective schools and districts function, we need the need for peers to have access to each other's experience as well as to their authoritative practical knowledge. And we need to be able to tap these networks as problems occur. Here is a major arena for technology: providing tools to connect educators with one another.

A second barrier is time. Implementation of many reforms requires new decision-making skills, and learning new skills takes time. Skills are not developed in one-shot training sessions, regardless of length. Most centralized training programs do not have the resources to provide continuous cycles of required practice and feedback at home sites. Here, too, technology can extend training programs by linking them to individuals at many different, convenient locations.

These are but two examples. We need only to brainstorm a list of similar constraining conditions, identify priorities, and analyze technologies that we can use as tools to solve work problems. For example, technological tools can

- provide access to information or other resources when they are needed,
- connect individuals for the exchange of productive information in new relationships,
- enable trade-offs of time or space to better capitalize on the unique attributes of individual educators, and
- empower individuals by giving them increased control over their own job destinies.

When educators apply this type of strategic thinking to their planning, they may pay less attention to what technology is and does and more to what technology allows people to do.

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