



TOTAL TIME: 33 - 45 minutes

READINGS FOR THIS LESSON

Lumley, D., & Bailey, G. D. (1997). Preface. In *Planning for technology: A guidebook for teachers, technology leaders, and school administrators* (pp. v-viii). Bloomington, IN: National Educational Service.

National Center for Education Statistics. Knowing what you need. In *Technology @ your fingertips: A guide to implementing technology solutions for education agencies and institutions* (pp. 7-19). Washington, DC: Author.

National Center for Education Statistics. Knowing what you have. In *Technology @ your fingertips: A guide to implementing technology solutions for education agencies and institutions* (pp. 21-35). Washington, DC: Author.

Technology planning

Managing versus leading

TIME: 10 – 15 minutes

Break the class into four to six groups. Pass out a Technology Planning worksheet to each group. Have each group appoint a discussion leader and a recorder.

Ask each group to discuss (for about 5 minutes) the difference between being a “leader” in regard to technology planning and being a “manager.” Ask them to think about what tasks may be merely managerial versus what might constitute the exercise of true leadership in the area of technology planning. Tell them to incorporate into their discussions their readings for tonight’s class as well as what they have learned about leadership in other classes.

Transformational leadership

- charismatic leadership (or idealized influence)
 - acting as a role model, considering the needs of others over her own personal needs, sharing risks with followers, consistent rather than arbitrary, demonstrating high standards of ethical and moral conduct, uses power only when needed and never for personal gain
- inspirationally motivating
 - motivating and arousing team spirit, displaying enthusiasm and optimism, envisioning attractive future states, clearly communicating expectations and a shared vision
- intellectually stimulating
 - stimulating followers’ efforts to be innovative and creative, questioning assumptions, reframing problems, and approaching old situations in new ways, creative problem solving
- individualized consideration
 - recognizing individual differences in terms of needs and desires, enabling new learning opportunities within a supportive climate, “management by walking around,” personalizing interactions with followers, effective two-way communication and listening

Bring the whole class back together for a full-class discussion for another 5 – 10 minutes.

Your reading

Will not
tell you what
computer hardware
and software
to buy

TIME: 1 minute

Note that their readings will, however, help them understand the questions they should ask, and the specific issues that need to be addressed, as they engage in the technology planning process.

Pass around for student perusal the two documents from which their readings were taken.

Technology

Should be a means,
not an end...

TIME: 1 minute

Note that administrators often forget this because of

- eagerness to implement technology
- pressure to implement technology
- lack of knowledge about technology

End result is that computers end up sitting in teachers' rooms, in instructional labs, and in administrators' offices collecting dust

Remember!

Many technological initiatives fail because they have been designed for users but without their crucial input

TIME: 2 minutes

Ask for one or two examples from students who can think of a situation where this has been true in their school / organization when it comes to technology

Knowing what to get

- ◆ Watch for hidden costs
- ◆ Think long-term
 - Don't forget maintenance and upgrade costs
- ◆ Be wary of proprietary solutions developed by vendors

TIME: 1 minute

Note that most / many school technology initiatives pay little attention to LONG-TERM planning issues and thus are doomed!

Taking into account Total Cost of Ownership considerations is important.

Also inform students of the Schools Interoperability Framework (SIF), an industry initiative to develop an open specification for ensuring that K-12 instructional and administrative software applications (e.g., student administration, library, food service, transportation, etc.) work together more effectively. SIF is not a product, but rather an industry-supported technical blueprint for K-12 software that will enable diverse applications to interact and share data seamlessly; now and in the future. (www.sifinfo.org)

Which is better?

20 computers for \$56,000

- ◆ Pentium III 733 MHz processor
- ◆ 128 Mb ECC PC700 RDRAM memory
- ◆ 27.3 Gb Ultra ATA hard drive
- ◆ 17" (.26dp) monitor
- ◆ 8X DVD-ROM drive
- ◆ V.90 56K modem
- ◆ 10/100 Mb Ethernet card
- ◆ MS Office 2000 Small Business

37 computers for \$55,500

- ◆ Pentium III 550 MHz processor
- ◆ 128 Mb SDRAM memory
- ◆ 13 Gb Ultra ATA hard drive
- ◆ 17" (.26dp) monitor
- ◆ 4x DVD-ROM drive
- ◆ V.90 56K modem
- ◆ 100 Mb Zip drive
- ◆ MS Works 2000

TIME: 5 – 7 minutes

Break the class into four to six groups again. Have them look at this information and discuss for about 3 – 4 minutes. Refuse to answer any questions.

Bring the whole class back together for a full-class discussion for another 2 – 3 minutes. Emphasize that there is no correct answer. Solicit from students what kind of questions should be asked to answer this question.

Example questions

-for what will you be using the computers (e.g., simple office applications, high-end multimedia and graphic design, Internet and streaming audio / video, etc.)

-where will the computers be located (e.g., teacher rooms, computer labs, administrative offices, etc.)?

-how will the computers fit in with our current technology configuration (i.e. compatibility issues)?

Don't forget the furniture!

◆ Things to consider

- Safety
- Security
- Comfort

◆ Occupational Safety and Health Administration (OSHA)

- See info about [repetitive stress injuries \(RSI\)](#)
- See OSHA's recently-approved [ergonomics guidelines](#)

TIME: 1 minute

Note that few, if any, school systems are paying attention to their potential legal liability for repetitive stress injuries, worker's compensation claims (for things like carpal tunnel syndrome), failure to comply with the new ergonomics guidelines from the Occupational Safety and Health Administration (a branch of the U.S. Department of Labor), etc.

Stress that furniture and appropriate computer usage considerations are vitally important and should be incorporated into contracts with vendors as appropriate. Remind students that furniture and computers designed for adults may not necessarily be what is appropriate for students (who are of a different size).

Support and maintenance

- ◆ Devise acceptable use policies
- ◆ Create a technology oversight committee
- ◆ Provide for ongoing training
- ◆ Provide for user assistance
- ◆ Monitor how the technology is used
- ◆ Budget for regular hardware and software replacement

TIME: 1 minute

Tell students that these are a few “best practice” tips for support and maintenance of information technology once it is acquired.

What's the difference?

- ◆ Tech coordinator
- ◆ Technologist

TIME: 1 minute

At the Warren County Educational Services Center, they use these terms to distinguish between someone in charge of maintaining the physical equipment (tech coordinator) and someone in charge of working with and training technology users (technologist). Many places combine the two roles into one person.

Note that perhaps it is appropriate to combine those aspects for technology planning purposes but not necessarily for day-to-day implementation purposes. For example, ask how many students have experienced situations where the person in charge of training teachers how to use technology and integrate it into the curriculum is a computer expert but has no formal training as an educator (and thus has little to no idea how to help teachers TEACH WITH technology).

Next week – guest speakers

Karen Smeltzer

Executive Assistant for Academics
Cincinnati Christian Hills Academy

Gini Browsh

Educational Technologist
Cincinnati Public Schools

TIME: 10 – 15 minutes

Share with students that they will have one or more guest speakers next week to discuss technology planning with them. Share their identities and explain that they should be a good, informative contrast in experiences.

Emphasize that students need to be well-prepared to take advantage of this opportunity to interact with people who are in the trenches when it comes to day-to-day technology planning issues. In order to do this, students should make sure to do the reading for next week and should come prepared to ask questions.

Explain that the speaker(s) will be asked to talk for five minutes or so (each) about their organization and its technology / planning and that the rest of the hour will be available for question-and-answer time from students.

Break the class into four to six groups again. Have each group appoint a discussion leader and a recorder. Have them record as many questions as they can think of to ask the guest speaker(s).

To facilitate their creation of questions, ask students to think about what they would like to know as people who may soon be in positions of technology planning leadership, whether as building-level or central office administrators or in other capacities (such as technology coordinators or technologists). Both general and specific, concrete questions are fine. Tell students to put down anything that comes into their heads.

After 10 – 15 minutes, collect questions from each recorder. Ask for a student volunteer to type up the questions and e-mail them to the class before next week. Students should bring the list of questions with them next week to facilitate their question-and-answer period.

I believe that...

- ◆ the teaching-learning process is primarily for the benefit of the learner, not the teacher. Although external, systemic constraints may exist, goals for student learning ideally should be set collaboratively and individually between teachers and students.
- ◆ all students can, will, and want to learn, given the proper learning environment.
- ◆ students actively and individually make sense of what they learn by integrating it into what they already understand. Because by definition teaching cannot occur without learning, teachers should always seek and value students' points of view in order to understand students' thought processes and knowledge acquisition.
- ◆ a teacher's ultimate responsibility is to create a learning environment that facilitates learning for every student.

My Teaching Philosophy