

Session 2 Schedule & Topics

- October 9: School-Centered Technology Planning
 - So What? Why it matters.
 - Why Me? A Principal's role
 - Stages and Process
 - Curriculum & Technology Thinking Concretely about Teacher Training
 - Assignment: A 2-Week Needs Assessment
- October 23: Your First School-Based Tech Planning Meeting
 - Implications of your Needs Assessment & Research
 - Setting the Agenda for a School-Based Technology Planning Meeting (mid-November)?
 - Assignment: Creating a Powerpoint about your needs and goals for this afternoon's meeting.

So What?
POTENTIAL BENEFITS OF INSTRUCTIONAL TECHNOLOGY FOR YOUR SCHOOL.

- ✓ Increasing individual and institutional productivity.
- ✓ Enhancing traditional teaching with engaging presentations, authentic resources, sounds and images.
- ✓ Changing pedagogy from lectures, basal readers and worksheets to constructivist facilitation.
- ✓ Changing content from textbooks to authentic sources, building a "cumulative curriculum".

Moves That Technology Helps Makes Possible

From reception to engagement.
The dominant model of learning has the student passively absorbing knowledge disseminated by teachers and official textbooks. Using internet-based, project-centered "WebQuests", students can move away from reception of information to active engagement in the construction of knowledge.

From the classroom to the real world.
Too often students walk out of class ill-equipped to apply their new knowledge to real world situations and contexts. Often, classrooms examine ideas out of the context of gritty real-world considerations. Internet links to real settings, like virtual field trips, packaged expeditions and collaborative videoconferences, can break down the walls between the classroom and the real world.

From text to multiple representations.
The printed page is a powerful technology that does not work well for all learners. Multimedia technology is expanding our ability to express, understand, and use ideas in other symbolic systems.


From coverage to mastery.
As academic intervention supports, Integrated Learning Systems (like Compass Learning) can teach skills at individual paces and learning levels, and drill them on concepts required for class participation and performance.

From isolation to interconnection.
Though book-centered learning suggests a view of learning as an individual act done in isolation, shared simultaneous access to resources and sharing of student work on a network supports learning as a collaborative activity. Classroom computer clusters support network-based cooperative learning.

From products to process.
Electronic documents such as essays, brochures, and web pages can be easily revised in multiple iterations after teacher comment and peer review. This enables a shift from grading assignments to re-creating in the classroom the academic processes that create knowledge. As a peer review community of researchers, designers and reporters, students can relate to each other as a learning community the way scholars and scientists do.

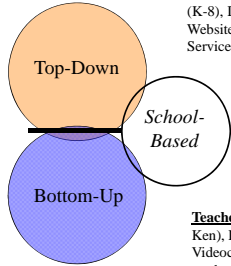
Adapted from Robert Kozma and Jerome Johnston, "The Computer Revolution Comes to the Classroom." *Change* (January-February) 1991.

THE PRINCIPAL IS THE LINCH PIN



- Without principal leadership and advocacy, the power of technology to improve instruction is limited to a few pioneer teachers.
- You, the principal, are the linchpin of school technology integration for your school.
- *How can you best use your time and position to help your school make smarter use of computers?*

The Linch Pin: School-Based Technology Planning



Districtwide Initiatives: Learning Village (10/20), Technology Planning Process (10/23), Computer Skills (K-8), Department Management (8/2003), District Website Redesign, Technology Budget Allocation, In-Service course creation, Conference Day Planning.

School Initiatives: Computer Lab Configuration and use planning, grade/department coordination, software evaluation (integrated learning), data analysis (Starbase); teacher observation criteria, school website creation, school-based purchases, teacher training to meet grade standards.

Teacher Initiatives: Individual projects, iMovie (with Ken), Library Teacher Project Page (with Sharon), Videoconferencing (with Bram), interdisciplinary or inter-grade projects, teacher home pages, teacher fund purchases, THEEF and other grants, conference requests.

Stages of Integration



- **Stage 0: Planning, investigation, and experimentation.** Recognition that best instructional practice in the field requires technology. Recognition by some individuals that they can do some of their work better and faster if they can use the most widely available functions of a desktop computer.
- **Stage 1: Some buy-in, few results.** A few years of marked increase in planned capital investment and surprising increases in operating expenses - with little reduction in other expenses. Additionally, there are unanticipated but significant delays in implementing some of the most "obvious" applications. The school slowly begins to accomplish some tasks never before attempted and experiences a modest gain in the scale or scope of new activities.
- **Stage 2: Steady Growth.** A few years of readjustment where costs and annual investments in technology stabilize while capacity continues to grow and new functions are developed and implemented.
- **Stage 3: Normalization.** Several years where the school achieves new levels of efficiency and effectiveness. No one seriously considers abandoning the technology because it has become inconceivable to accomplish what is now being done without it.

Stages of School-Based Planning

1. **None.** ("If teachers don't initiate it and the district doesn't require or support it, it doesn't get done.")
 - **Bottom-up Pressures:** Some teachers are asking for equipment, support and services that requires planning and funding, and are frustrated.
 - **Top-Down Pressures:** The District Technology Plan, CDEP or other Top-Down initiatives require coordination and delivery of results on a school level (e.g. Learning Village, School Web Design) but there's little follow-through.
2. **Ad Hoc (Reactive):** Principal checks in with trusted teachers about urgent technology issues in individual or ad-hoc group meetings. Non-urgent issues are never/rarely addressed. Very little instructional payoff.
3. **Structured (Pro-Active):** Principal has convened an ongoing STP group with continuity of agenda and follow-up work done between meetings. "Mainstream" teachers are starting to recognize that the shift to a more high-tech school is going to include them eventually. Successes percolate.
4. **Mature (Effective):** The School Technology Planning group is informed by teachers, students and parents, and considers both individual teacher needs and district plans in its work. It is clear to almost everyone that technology is helping teachers teach and students learn more effectively, and test score improvements are linked to technology integration.

What Can You Do To Help Your School Grow?



- Conduct a technology needs assessment with a small team of teachers
 - Top-Down: Revisit the Technology Plan and CDEP.
 - Bottom-Up: Conduct surveys (formal/informal).
 - Schoolwide: Use Faculty, PTO meetings and a BBS.
- Initiate a school technology planning process (STP)
 - Recruit and convene a faculty team (needs assessors and a mix of pioneers, early adopters, solid teachers and a resistor).
 - Meet during Superintendents Conference Days at first.
 - Once there's buy in, schedule monthly meetings.
- Build a relationship with your IT Specialist - s/he can be your "pulse checker" on technology issues in the building.
- Position your IT Specialist - Ask him/her to gather agenda and facilitate STP meetings when you can't. Find training and release time opportunities.

Conducting a Needs Assessment

- **Survival Needs**
 - How is the work order system working?
 - Does every teacher have a working machine w/ email, necessary software?
- **Program Needs**
 - What software/hardware purchase/upgrade/repairs are needed?
 - What teacher training needs (Email, Powerpoint) are indicated?
 - What student needs exist (keyboarding, net use orientation, OS changes)?
- **Infrastructure Needs (Classroom Clusters, Labs)**
 - Are labs available and functioning to serve full classes?
 - Are teachers ready for clusters in their rooms?
 - Are clusters ready for teachers who want them?
- **Performance Improvement Needs**
 - How can test scores be improved with technology integration?
 - Is student and teacher work being showcased on the web?
 - Are the district computer skills (K-6) being taught effectively?

Suggested Building Goals

- **Teacher Productivity:** Require that grades and attendance be submitted electronically and develop an implementation plan (including purchasing, testing, training and implementation).
- **Teacher Performance:** Establish benchmark abilities for teachers, such as:
 - research topics online and incorporate them in lessons
 - produce high quality class materials consistently
 - create and deliver engaging multimedia presentations
- **Teacher Performance:** Inform teachers that principal observations for the following year will require demonstration of technology integration skills and plan a series of in-service courses to support this.
- **Student Productivity:** Survey how students use computers currently at home, in classrooms and in labs to determine how equitable student access is currently and what the barriers are. Develop a plan to establish equity.

How's this:

A PROJECTOR IN EVERY CLASSROOM AND TEACHERS WHO KNOWS HOW TO USE IT!

White Board (4'x8')	\$150
Overhead Projector	\$350
20" TV w/ VCR	\$600
Multimedia computer w TV Converter and mounted monitor	\$2,000
Multimedia computer w/digital projector	\$2,500

Teacher Training Options

- **The IT Specialist's Changing Role**
 - From Break/Fix to Staff Development
 - Before School, During Free Periods, After School
 - Informal or Formal, Just-in-time or pre-planned
- **The Teacher Specialist & Technology Integration**
- **The Classroom Teacher**
 - IT Specialist Meetings
 - District and Questar III Trainings
 - Conferences (NYSCATE)
 - On-Line Courses

Technology Planning Process Goals

1. **Work with faculty to envision your school as a technology-integrated learning environment.**
2. **Establish stages and benchmarks toward building a schoolwide vision over many years.**
 - How do we move from pilot projects to school-wide integration?
 - How are the range of teachers (pioneers, early adopters, mainstream, resisters) brought in?
 - How are existing curriculum standards currently related to technology, and how can the increasing integration be promoted?"
3. **Develop a work plan.**
 - Discuss infrastructure upgrades, professional development, technical support capacity, etc. and make budget requests.
 - Create a planning document for your school website.

SPECIFIC STEPS YOU CAN TAKE

1. **Facilitate formative evaluation of the process.**
 - Send a representative to DTP Meetings (4th Thursdays)
 - Ask your STP Team to create annual (?) progress reports.
 - Make sure articles in school publications highlight successes.
2. **Pursue your own technology professional development agenda.**
 - Continue to participate in principal institutes to reflect on issues and achievements and modify planning.
 - Attend NYSCATE every few years, or other conferences.
 - Design an "individual education plan" for yourself including use of your laptop, using email & the Web, accessing Starbase, creating Powerpoints, knowing classroom integration models.

“Homework”

- **Vocabulary Building:** Glossary of Terminology and Concepts (see [STAR Chart](#) by the [CEO Forum](#))
- **Needs Assessment Planning:** Make a staff survey? Convene focus groups? Your call.
- **Conduct the Needs Assessment by October 23rd.** Get the help you need, think small.

Resources

- ISTE's Technology Leadership Standards: http://cnets.iste.org/ncate/n_lead-stands.html
- Technology Leadership Self-Evaluation: http://cnets.iste.org/ncate/n_lead-rubrics.html
- Getting Real about School Technology, <http://www.cousinit.org/committee/realist.html>
- Participatory Planning Culture: <http://www.cousinit.org/committee/gearup.html>
- Project Planning and Support <http://www.cousinit.org/committee/curricul.html>
- Collaborative Change: <http://www.tlgroup.org/Strategies/PortfolioLinks3-02.htm>