Welcome everyone
...to establish the value of our topic...I would like to read two items:
The first is from *Digital Learning Now!* a national advocacy organization:

"Digital learning is the great equalizer. It holds the promise of extending access to rigorous high quality instruction to every student across America, regardless of language, zip code, income levels, or special needs."

And the second from the National Technology Plan:
Recommendation 4.2 and 4.3 Ensure that every student and educator has at least one Internet access device, software and resources for research, communication, multimedia content creation, and collaboration for use in and out of school
and
Leverage open educational resources to promote innovative and creative opportunities for all learners and accelerate the development and adoption of new open technology-based learning tools and courses. p XIII

HIGHLIGHTS FOR TRANSFORMATION
The guide is full of questions to ask and answer and resources to explore and some stories.

DEFINING Digital Content
All content that is electronic in nature that supports/acts as the curriculum and/or helps students learn. It may include delivering traditional content used in the classroom through a technology-based mechanism.

Digital content includes
- •video: films, tv programs, YouTube segments, vodcasts
- • audio: music, lectures, podcasts
- • instructional games and simulations
- •web 2.0 tools: collaboration, research, quiz tools
- •textbooks and work books
- • reference books: Encyclopedia Brittanica---might even include wikipedia

BENEFITS
•Allows greater efficiency and timeliness in updating information

• Enables anywhere anytime learning

•Helps teachers and students to create their own instructional resource repositories

• Allows students to use materials that match their preferred learning modalities

• Engages students actively and maintains their interest in learning

• Makes possible immediate feedback

• Saves youngsters' backs through eliminating the need for heavy backpacks

• Enables better management of the inventory of resources

• Makes community use of school intellectual's resources possible

• Can be a wise use of instructional material funding..open source is free and so much is now available...think MIT's courses

Some of these capacities have been available for a long time. A teacher in a junior high school put together her own source book of "protest literature" for a course she was teaching to seventh, eight and ninth graders. She made copies of poems, short stories and newspaper articles for the students, bound the documents and handed each student a folder. She created her own "text" but without the ease of today's digital access.

THE PLANNING PROCESS
Creating the plan requires convening a team which needs to view digital content as an enterprise resource with acquisitions that can be written off as capital expenses.

The instructional side must be integrally involved. The team should consist of these titled and/or equivalent positions:
• Assistant Superintendent for Curriculum and Instruction
• IT administrator
• Technology instructional specialist
• Teacher from every level
• Subject matter leaders in all disciplines
• Principal from each level
• A few secondary students

In one of my districts in the 90s the students created a cadre which they called InternetScouts. They helped teachers learn how to use technology for instruction and found resources for them.

In addition, the planning team should be advised by a broad based community group which includes:
• A municipal leader
• Business partners
• Parents
• Community organizations representatives
• If possible, a local member of the state legislature (or his/her aide)

Giving each of these "representatives" a voice will enhance the decision-making, provide support for community outreach and advocacy, especially when funding is indicated, which it undoubtedly will be.
Such an advisory committee can build partnerships for future development purposes. Many people understand the need for education to influence the development agenda rather than being driven by what others think the schools, students and teachers need.

Next you need to get a measure of where you are vis a vis digital content, the guide has a set of questions you can use, such as:

• What percent of the staff uses digital content? At what levels?
• What digital content is being used?
• How is digital content being used?
      Regular instruction
      Compensatory instruction
      Homework

•What percentage of students use digital content?
• Do you offer online courses?
• Do you allow students to take online courses from outside providers?

Next think about your strategy: What are your vision and goals for transforming the learning environment?

Are you interested in increasing engagement and interaction in learning?

Can both teachers and students "repurpose and manipulate" materials for better teaching and learning?

Do you have the technical, instructional and leadership expertise to handle this transformation?

Do you have the access/capacity to provide this transformation?

How will you assess student learning in this new medium?

How tightly coupled are IT and Curriculum/Instructional staff?

Planning should be a process that is thorough, inclusive, forward looking and focused on teaching and learning.

Next you SWOT --strengths, weaknesses, opportunities, threats...If you have done any strategic planning you know this.

You always need to look at the Instructional Objectives
      • What should students know and be able to do?

      • What do the state and national standards say they need to know and do?

      •Are there cultural norms in your district that need to be observed?

      • What content and skills must be taught for students to meet the standards and the high stakes testing requirements?

      •How much of what is taught will be mandated by instructional leaders and

how much will be left to individual teachers' discretion?

• What learning experiences must they have?

• What learning environments are best for them to succeed in?

• What careers are they considering and how prepared are they becoming?

• What is each student's preferred learning style? How to deal to the strengths while compensating for the weaknesses?

• How can you ensure that it is about the "whole child" and not about the very attractive latest "cool" tool or trend?

For many educational leaders, such as superintendents and principals, technical infrastructure decision require expert knowledge which can come from internal and/or collaborative IT specialists, business partners or potential vendors. A clearly written advisory entitled Assessing Technology Readiness to Support Digital Learning Initiatives can be obtained from Dell. The url is on page 11 of the guide.

CHALLENGES

THINKING SYSTEMICALLY
a.   This is not a quandary for one teacher and one classroom at a time, probably not even a school at a time. The entire system needs to be considered and involved in the movement to digital content for the results to be significant. The size of the system is, of course, a key element. A large city district may have to phase in a plan while a small suburban district can institute the plan in one stage. Nonetheless, the infrastructure decisions need to be made for the largest component from the beginning.

One respondent suggested we should be looking at this as a nation. Why does each educational institution or authority have to "reinvent the wheel" he asked? And the answer is that the time is coming.....
More and more states are looking to collaborate and not reinvent--that is one result of the Common Core Standards movement.

FUNDING
Money is not everything but it must be factored in. Currently "money supports paper content" according to our experts, although that is starting to change, they say. Some states have statutes that do not allow multi year subscriptions.
The cost conundrum is how to determine the return on investment of creating and using digital content. It involves figuring out how to ensure that the schools are getting the best product and service for what they spend. The schools need to track utilization

metrics. In some states, such as North Carolina, choosing content will depend on what the state chooses. In MA probably it will be the opposite.

Will there be savings with digital content?

All of this remains to be seen. Fortunately, private industry is talking with education about these issues and how to make the transition to digital content work and the actual implementation beneficial and reasonably priced.

NEED FOR RENEWAL
And there is a need to refresh regularly to keep the technology current. Because the use of digital content is dependent on the availability of technology it is not a one-time investment. A schedule for doing replacement and upgrading needs to be part of the total plan.

AVAILABILITY OF APPROPRIATE RESOURCES
OPEN PLATFORM
Most school networks cannot deliver rich media objects. School districts need an open platform to load and inventory content and protect users.
ACCESS
 The best solution for how teachers and students get to the digital content is "one device for one student" which must be Child Internet Protection Act (CIPA) compliant and you need to review you Acceptable Use Protocol, given the new era of web based opportunities.

You need to review whether you have:
•one to one provided by the schools
•one to one (students bring their own computers) which must comply with school standards
•computer labs
•COWS or some mixture of all of these?

PROFESSIONAL LEARNING
Teachers need to be prepared to integrate digital content into their curriculum and their instructional practice. In many cases they are not provided with such "training" in their preparatory programs. Other teachers need leadership in the school to encourage them to be innovative. In many schools a culture change is required to enable collaboration and knowledge production (not just consumption) by students and teachers. Professional learning to be tailored.

STUDENT RIGHTS
And you cannot neglect FERPA (Family Educational Rights and Privacy Act) as you determine what content and student information will be available and to whom.

All of these urls are in the guide

STATUS OF THE MARKETPLACE
The major publishers do not yet have a comprehensive strategy to develop and distribute digital content in a coherent manner. Many smaller content companies,

nonprofit organizations and teachers are also creating content so it is difficult for school districts to make sense of where all the content is and how to use and align it to the curriculum.

SLIDE 8   HOW TO

WHO AND WHAT CAN AID IN THIS PROCESS?
>•Consortiums and collaboratives are great sources of encouragement and value added

In Massachusetts there is a non-profit collaborative organization for school districts in each of the seven regions of the state. Their original purpose was to provide special services for students in low incidence delivery programs. They soon became purveyors of other services such as professional development and group purchasing (small school districts benefit financially from aggregating). This kind of organization is perfect for providing planning services and economies of scale. You can find a couple of examples in the guide

•Business partners
You will find a list of actions you can take to partner productively with businesses in your area. In addition to the financial and curriculum development aspects of such a relationship, career development opportunities for students (shadowing, internships, speakers) and professional enhancement for educators (internships) can be created for mutual benefit. One model is described in the guide

• Local government
Since a major portion of the financial support for schools comes from local government, schools must take the leadership in getting everyone to the table and ensuring that accurate data are in the right hands before decisions are made. Bringing people into the schools as some districts to see what is happening with students in classrooms is a great tactic.

>•Professional Associations
These membership organizations often have the mission and capacity to assist educators in professional development and advocacy.
>• Community groups
Sharing the challenges and the rewards with the community helps you to get support from the citizenry and local government.

RULES AND POLICIES THAT NEED TO BE IN PLACE:

>a. Centralize and "command" certain processes. There should be a single operational approach to such tasks as:
>>1. Management of assets: inventory, metrics, assessments
>>2. Procurement: practices, forms, intake mechanisms
>>3. Delivery: how to provide the content to users for consumption and production
>b. Define quality
>>1. Has the content been evaluated and by whom?

2. If not, is there sufficient "testimony" from similar school districts so that your team can predict it will work in yours?
3. These days content must be aligned to a number of standards
4. Your instructional leaders should check out the authenticity and accuracy of the material
d. Develop and maintain responsible behavior
Anti cyber bullying policies: Acceptable use policies
Anti-plagiarism mechanisms (respect for copyright), e.g. Turnitin
Responsible sharing, e.g. Creative Commons

And finally, What to avoid
DO NOT
1. Choose the "coolest" device as your strategy

2. Progress one classroom at a time. Pilots are fine but once there is evidence, move to wide installation.

3. Let anyone talk you out of moving to digital content…it is the future.

Thank you.