Educating the Digital Generation

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What Should Texas Be Doing?

- School Transformation is **NOT** about the technology
- Technology is a tool that can greatly enhance School Transformation
- Equal access to technology has the ability to level the the playing field for all students

What Should Texas Be Doing?

- At NBISD, School Transformation is about Project Based Learning
- Project Based Learning is:
  - Application of the TEKS being taught and learned
  - Deeper level of understanding
  - Developing critical thinking skills
  - Enhancing the ability to collaborate
  - “Farmer Math”

What Should Texas Be Doing?

- Allow and encourage districts and teachers to create content
  - How many teachers/former teachers work for textbook companies?
  - Creation of content can be the best way for teachers to understand project based learning in their areas of expertise
  - Great teachers have always created project based activities to enhance instruction

What Should Texas Be Doing?

- Allow and encourage districts and teachers to create content, cont.
  - Allow districts to utilize IMA money to pay teachers to develop content
    - Provides monetary incentive for teachers to invest in the “whole” process
    - Allow alignment to local values

What Should Texas Be Doing?

- Allow and encourage districts and teachers to create content, cont.
  - Great OER resources exist to accommodate content development
    - Apple iBook Author
    - Apple iTunes U
    - Others

What Should Texas Be Doing?

- Considerations
  - Blended learning
  - On-line courses
    - Remove limit on the number of on-line courses a student may take/a district may be funded for
    - Remove requirement that on-line courses must be 175 days in length
      - Some students can accomplish success much quicker
      - Students who fail a course can make up the credits they need

Cost Drivers

- Pre-Instructional Materials Allotment
  - Textbooks on average - $50.00
  - Ten yr. cycle - ($50.00/10) = $5.00 per yr.
- Digital Textbooks
  - Cost - $14.99 per year licensing
  - Ten year cycle = $149.99
- IMA funding is less than textbook funding was under the old system

Cost Drivers, Cont.

- Develop a process for cost elimination to help sustain the technology
  - Copier contracts
  - Graphing calculators
  - Teacher created content and OER

Adoption Process

- EMAT System allows us to order materials electronically when needed
- It would be helpful if funds were available July 1prior to school year
- It would be helpful to eliminate the approval process and substitute for an audit process

Use of Materials

- Textbooks have often been utilized as supplemental only
  - Textbooks bridged the gap between class assignments and homework assignments
  - Equal access to technology has the ability to extend classroom projects to the home
  - Teacher developed content is required to include all of the TEKS – verification process

Use of Materials, cont.

- Ensuring alignment of content to Texas Standards
  - Curriculum specialists assist in creation of content
  - Content is judged by rubrics to ensure quality

Use of Materials, cont.

- College and Career Readiness
  - Is a major driver in Project Based Learning
  - Once content is developed, planning time is spent enhancing and accommodating changes in Texas Standards
  - Curriculum specialist positions are full time, mainstay positions in our district

Education Technology

- Technology continues to be a disruptive change to our daily lives
  - Factors that will continue to make an impact
    - Affordability
    - Size
    - Access to on-line content and services
    - Functionality
    - Integrated systems

Education Technology, cont.

- Technology continues to be a disruptive innovation in our daily lives
  - Factors that will continue to make an impact
    - Affordability
    - Size
    - Access to on-line content and services
    - Functionality
    - Integrated systems

Education Technology, cont.

- Trends observed in our community
  - The number of students K-12 who have their own smart phones continues to grow at a phenomenal pace
  - Many families have multiple smart phones
  - Technological advances are reducing and eliminating jobs

Education Technology, cont.

- Adaptive Feedback
  - If feedback is based on objective measures only, improvement in teaching and learning does not occur
  - Adaptive feedback is much more complicated to achieve through the use of technology

Education Technology, cont.

- Professional Development/Teacher Planning
  - All NBISD teachers will have in-depth professional; development in project based learning within the next two-three years
  - Teachers are given contract time to develop content
  - Teachers have the opportunity to develop content outside of contract hours for additional compensation

Education Technology, cont.

- Parent Portals
  - Parents have access to district iTunes U content
  - Parents have access to district iBooks
  - Access may be limited if internet access is not available at home
  - Parents may review iTunes U and iBooks on student iPads
    - students take them home

Education Technology Challenges

- Content Delivery
  - Is a major shift from previous practice
    - Students
    - Teachers
    - Parents
  - It takes time
  - Communicate with all groups
    - Ongoing staff development
    - Ongoing student training
    - Ongoing parent meetings and training

Education Technology Challenges

- Handheld devices
  - The district provides 1:1 iPads
  - Students have come to view iPads as their learning device and their cell phones as personal communication
  - Students are allowed to use personal devices in conjunction with iPads