Educating the Digital Generation

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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 playing field for all students
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”
• 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
• 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
• 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
• 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 1 prior to school year
• It would be helpful to eliminate the approval process and substitute for an audit process
• 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
• Ensuring alignment of content to Texas Standards
  – Curriculum specialists assist in creation of content
  – Content is judged by rubrics to ensure quality
• 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

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• 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
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  – Factors that will continue to make an impact
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• 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
• 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
• 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
• 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
• 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
• 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