1:1 EXPLORING MODERNIZED LEARNING

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Spring-Ford Area School District
School Board Work Session Meeting
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The Question

How do we get to 1:1
In this presentation we will:
• Define 1:1 computing
• List the requirements for providing personal computers to students
• Provide the estimated costs
• Provide information about best practices for 1:1 computing to with a focus on modernized learning

This is not a recommendation. This presentation is for informational purposes only. Any recommendation for implementing this type of program would come from the Curriculum and Technology Committee.
1:1 Computing Definition
(Grades 9-12)

- Computer is issued to each student at the start of the school year
- Students carry the computers with them throughout the school day
- Students take the computers home
### Supporting Cost for 1:1

#### NEEDS:
- Support (i.e. tech, coaching, repair, etc.)
- Loaner laptops
- Charging stations
- Printing
- Wi-Fi Access
- Policy and legal items
- Equipment protection and insurance
- Infrastructure improvements
- Room structures (i.e. furniture, hybrid)
- Student and staff digital file storage

#### CONSIDERATIONS:
- Digital content
- Learning management system
- Student email
- Professional development (with differentiated supervision)
- Technology orientation program - staff, students, parents
- BYOT
- Technology fee
- Parent involvement
• **1:1 Cost Estimate**

Assumptions

- 2255 students (current enrollment)
- Microsoft Windows computers
- $600 per device
- Phased in plan over 4 years
- Cost recovery from laptop carts and computer labs
- Additional support technicians required
- Other factors

Assumptions

- 1:1 Cost Estimate
**1:1 Phased Plan Cost Estimate**

Estimated cost above the current technology budget

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>$120,240.20</td>
<td>$275,899.00</td>
<td>$379,076.80</td>
<td>$397,696.00</td>
</tr>
</tbody>
</table>

- Includes cost of additional tech support staff
- Includes recovery of selected computer labs
- Does not include instructional coaching
- Does not include professional development
1:1 Computing
Is just the tip of the iceberg...

Supporting “Needs” & “Considerations” for 1:1
**Modernized Learning**
College, Career & Life Readiness

### GLOBALIZED
- The world no longer has walls
- Learning is now boundless & 24/7
- “Real-time” Learning
- Extends beyond the traditional classroom

### STUDENT-CENTERED
- Facilitation of “self-directed” learning
- Supports diverse learning styles
  - Engagement
  - Meets “every” student where they are, and helps them to move forward

### ACCESS READY
- Research
- Collaboration
- Publication
• Instructional Pedagogy

Pedagogy (/ˈpɛdəɡɒdʒi/ or /ˈpɛdəɡoʊdʒi/) [1] the function or work of a teacher; teaching.
• **Learning Management**

  **Definition:**

  • A *learning management system (LMS)* is a software application for the administration, documentation, tracking, reporting (data) and delivery of education courses.

  • **In short...**
    
    • Common Platform
    
    • Paperless
    
    • 24/7 Access - (On-line/Internet)
• **Digital Content**
  Consist of the following items:
  
  - Electronic Materials & Resources (including assessments)
  - Always current
  - Differentiated
  - 24/7 Access
  - Accessed through personal computing devices
• 1:1 Computing
Supporting “Needs” & “Considerations” for Best Practice

These are a pathway to a successful 1:1 Program

**NEEDS:**
- Professional development (with differentiated supervision)
- Learning management system - includes student email (i.e. Moodle or Canvas)
- Digital content
- Loaner laptops
- Charging stations
- Printing
- Wi-Fi Access
- Policy and legal items
- Equipment protection and insurance
- Infrastructure improvements

**CONSIDERATIONS:**
- Room structures (i.e. furniture, hybrid)
- Support (i.e. tech, coaching, repair, etc.)
- Student and staff digital file storage
- Technology fee
- Parent involvement
- Technology orientation program - staff, students, parents
- Phased in plan
- BYOT
Costs include:

- Hardware
- Infrastructure
- Software (i.e. Learning Management System)
- Digital Content
- Professional Development
- Support Staff

Costs are based upon the a figure of $1.80 - $2.50 per student/per day (at 180 school days) - **based upon a 4 year lease, with costs distributed over the 4 years of the lease.**

**NOTE:**
- Regarding costs savings...No return on investment (offset costs) will be observed until all staff are using and committed to the project
Financial Implications (Cont.)

Estimations of Costs (based upon annual leasing costs)*

<table>
<thead>
<tr>
<th>Grade Levels</th>
<th>Enrollment</th>
<th>Low End Costs</th>
<th>High End Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th – 12th TOTALS</td>
<td>2,255</td>
<td>$1.80 X 180 days X Enrollment</td>
<td>$2.50 X 180 days X Enrollment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$730,620</td>
<td>$1,014,750</td>
</tr>
</tbody>
</table>

Based upon a 4 year lease, with costs distributed over the 4 years of the lease

* Student enrollment numbers as of April 2014
• Example: Projected Costs (Gr. 9-12)

**TOTAL ANNUAL COSTS: $913,620.00**

- **Computer Hardware, $365,310.00**
- **Instructional Support, $160,000.00**
- **Technical Support, $110,000.00**
- **Learning Management System, $18,040.00**
- **Professional Development, $108,000.00**
- **Other, $152,270.00**
Next Steps

1. Move this conversation back to the Curriculum & Technology Committee to determine:
   - Scope
   - Schedule
   - Budget

2. Assemble a planning committee of stakeholders
   - Administrators
   - Teachers
   - Parents
   - Students
• Questions & Answers
THANK YOU