

1:1

EXPLORING MODERNIZED LEARNING



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Spring-Ford Area School District
School Board Work Session Meeting
(May 19, 2014)



The Question

How do we get to 1:1



•Agenda

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.



Modernized Learning

Instructional Pedagogy

Learning Management

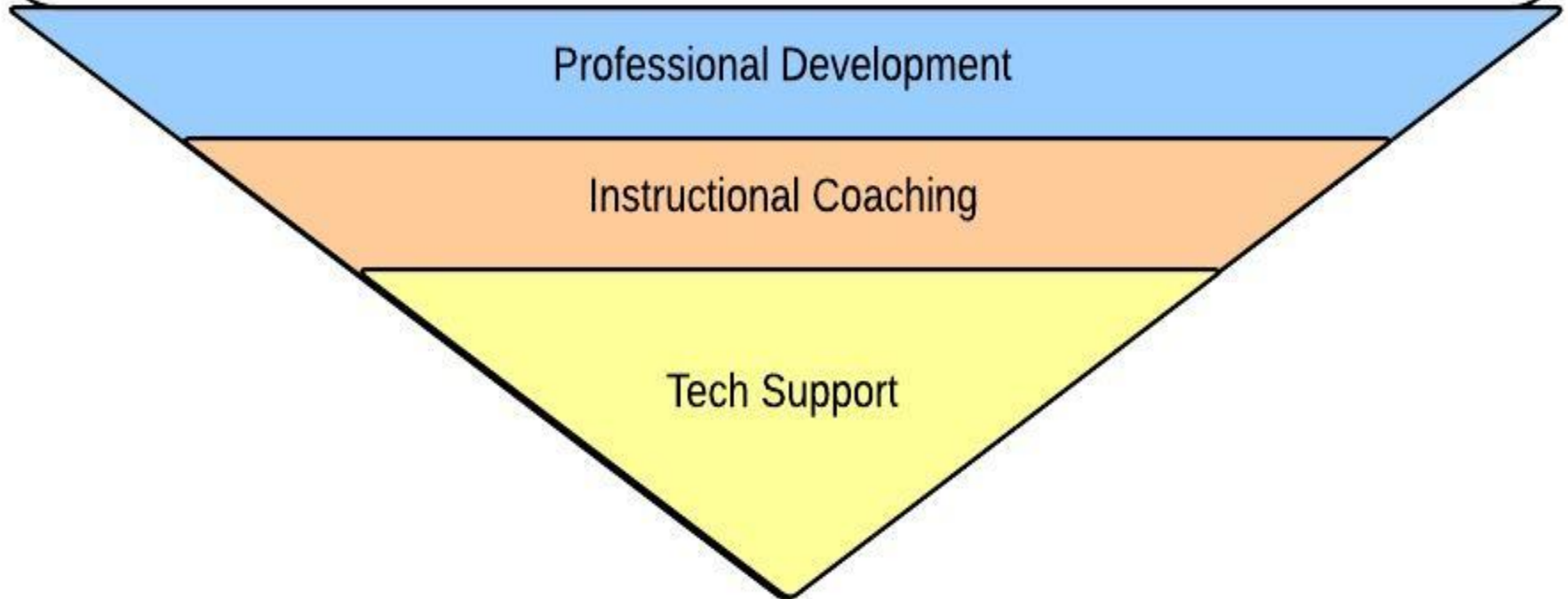
Digital Content

1-to-1 Computing

Professional Development

Instructional Coaching

Tech Support



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



•1:1 Phased Plan Cost Estimate

Estimated cost above the current technology budget

Year 1		Year 2		Year 3		Year 4	
\$	120,240.20	\$	275,899.00	\$	379,076.80	\$	397,696.00

- Includes cost of additional tech support staff
- Includes recovery of selected computer labs
- Does not include instructional coaching
- Does not include professional development



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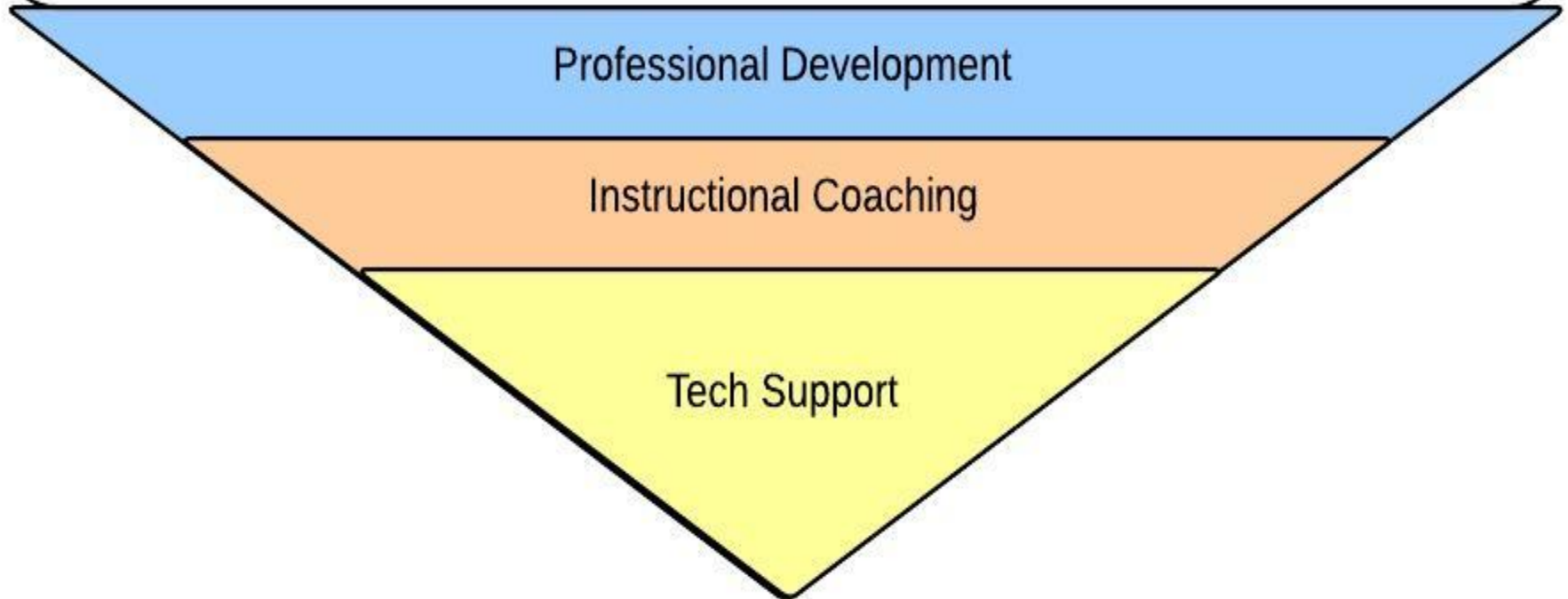
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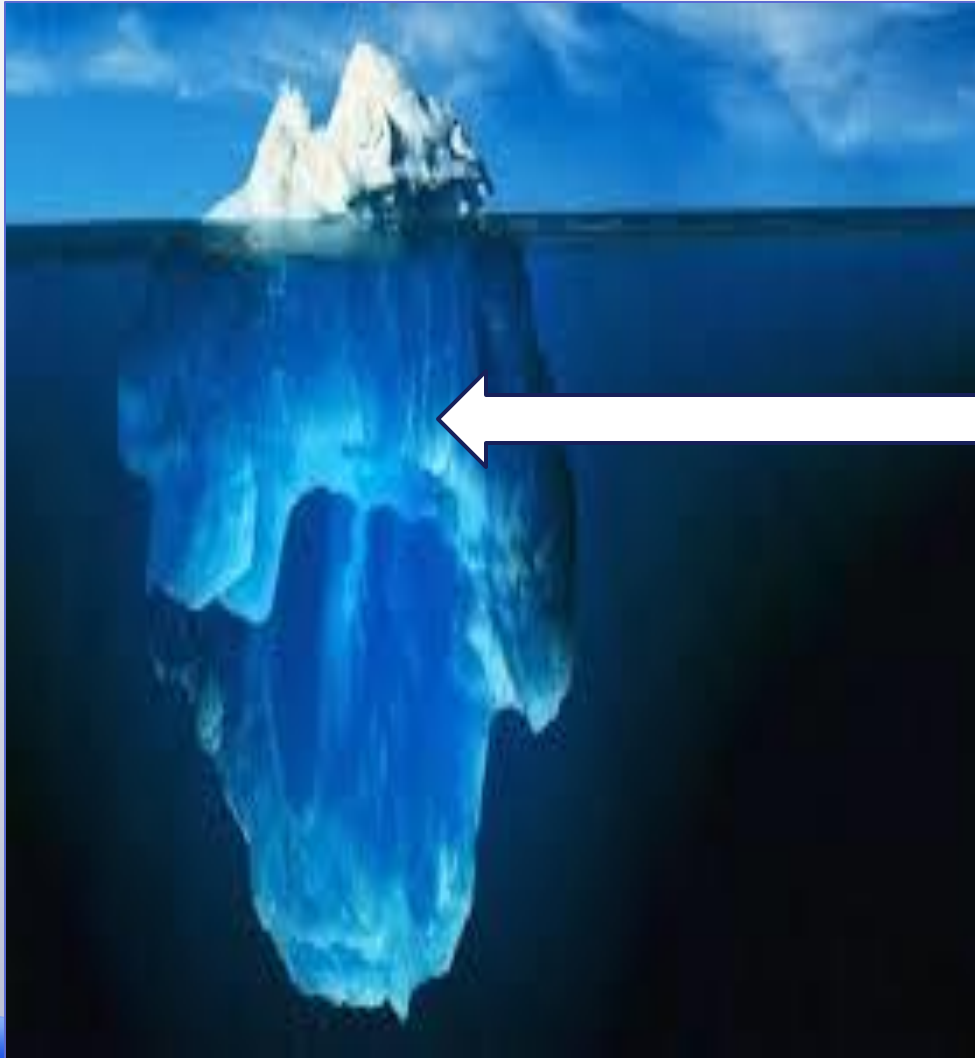
Instructional Coaching

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•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 (/ˈpɛdəɡədʒi/ 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**

- **Room structures (i.e. furniture, hybrid)**
- **Support (i.e. tech, coaching, repair, etc.)**
- **Student and staff digital file storage**

CONSIDERATIONS:

- **Technology fee**
- **Parent involvement**
- **Technology orientation program - staff, students, parents**
- **Phased in plan**
- **BYOT**



•“Best Practice” Financial Implications

Estimations of Costs

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)*

Grade Levels	Enrollment	Low End Costs $\$1.80 \times 180 \text{ days}$ $\times \text{Enrollment}$	High End Costs $\$2.50 \times 180 \text{ days} \times$ Enrollment
9 th – 12 th TOTALS	2,255	\$730,620	\$1,014,750

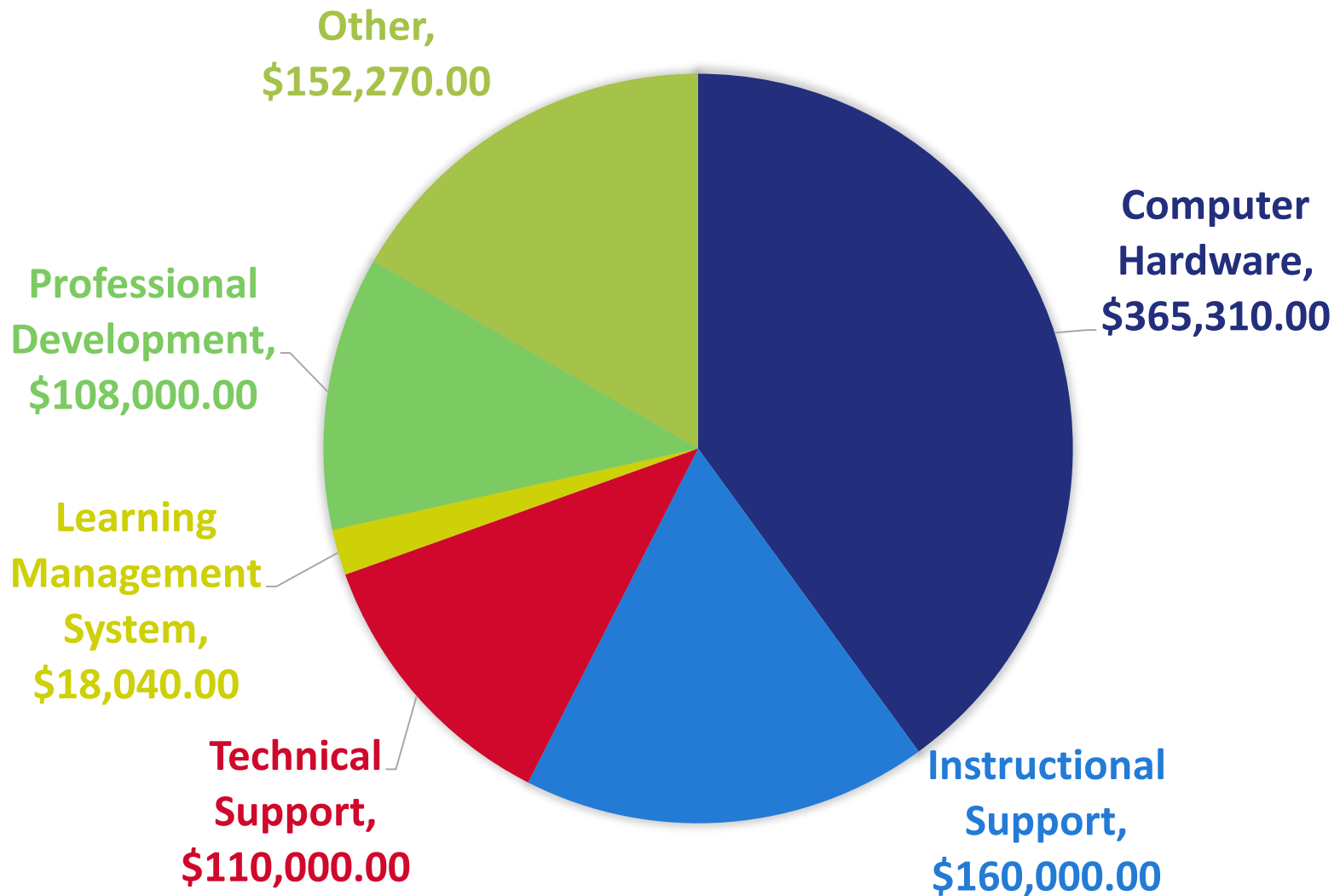
Based upon a 4 year lease, with costs distributed over the 4 years of the lease



* Student enrollment numbers as of April 2014

- **Example: Projected Costs (Gr. 9-12)**

TOTAL ANNUAL COSTS: \$913,620.00



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

