

### 1:1 1:World

June 17th, 2014

### **Technology Vision Statement**

To enhance learning opportunities for students and staff, <u>anytime</u> and <u>anywhere</u>.



#### Section One: Introduction

The conversation about technology in schools is trapped in the wrong subject. The talk is all about "does the technology work" as a fix for the old. It ought to be about developing and choosing between visions of how this immensely powerful technology can support the invention of powerful new forms of learning to serve levels of expectation higher than anything imagined in the past. (Papert & Caperton, Vision for Education, 1999)



#### Why 1:1?

Research is clear that to ensure student success, education must move from teacher-centric to a learner-centric approach. One-to-one programs create the **opportunity** for authentic personalization of teaching and learning for each student. With access to personal portable technologies in a wireless environment, students can learn at their own pace, readiness levels, and take advantage of the worldwide experiences and resources available online and in real-time. Teachers become facilitators of powered up learning experiences-meaningfully linking technology to curriculum, assessment, and instruction. The concept has gained momentum at an increasing rate (America's Digital Schools 2008) as a key to transforming education, enhancing economic goals, and preparing students to succeed in a global marketplace.

#### **OPPORTUNITY v.** Reality...

Despite the research, only 33% of school districts with 1:1 schools considered their academic improvement due to technology to be significant, despite investment and availability of revenue.

#### A New Approach: Bridging the Knowing-Doing Gap via Research.



#### 1:1 Project Blueprint Based on Research

- **Planning**-The development of an evidence-based, project management plan for implementation and sustainability.
- **Leadership**-Empower those who are capable to lead and support all aspects of the implementation effort.
- **Technology Infrastructure**-Build a solid technology infrastructure and maintenance/service plan.
- **Professional Learning**-Schedule regular professional development for administrators, teachers, and technical personnel.
- **Communication**-Encourage accurate and verifiable information sharing among stakeholder communities.
- **Policies**-Develop and document policies and procedures guided by instructional goals.
- **Support**-Build a network of partners and experts.
- **Expectation Management**-Establish and monitor strategic and attainable goals that are *student-focused*.
- External Evaluation-Include ongoing independent evaluation to promote *accountability*.



#### The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness

- Finding 1: Nine key implementation factors are linked most strongly to education success.
- Finding 2: Properly implemented technology saves money.
- Finding 3: 1:1 schools employing key implementation factors outperform all schools and all other 1:1 schools.
- Finding 4: The principal's ability to lead (*second order*) change is critical.
- Finding 5: Technology-transformed intervention improves learning.
- Finding 6: Online collaboration increases learning productivity and student engagement.
- Finding 7: Daily use of technology delivers the best return on investment (ROI).



#### **Intended Outcomes:**

- 1. To properly implement an evidence-based, 1:1 model for educational technology that can substantially improve student achievement and maximize the learning potential of each individual student.
- 2. To properly implement an evidence-based, 1:1 model for educational technology that can be revenue-positive at all levels—federal, state, and local.
- 3. To achieve *all* desired outcomes by carefully abiding by a projectmanagement model that includes clearly defined goals, detailed planning elements, and addresses program, preparation, and implementation considerations.

#### Is it the Right Time: Analysis Paralysis v. Initiative Fatigue

Every morning on the plains of Africa, a gazelle awakens, knowing that it must outrun the fastest lion, or be killed. At the same time, a lion awakens, knowing it must run faster than the slowest gazelle, or it will starve.

So it doesn't matter much whether you're a lion or a gazelle; when the sun comes up, start running.



# 1:1 - Project Plan

#### **Project Plan**

- Develop a well-designed plan for implementation and sustainability.
- Build a shared vision.
- Involve all stakeholders—principals, teachers, technology coordinators, curriculum directors, parents, students, and community members.
- Include vision, mission, goals, milestones, resources, roles responsibilities, monitoring, and evaluation.



# 1:1 - Project Team Roles

#### **Board of Education:**

- Ensure Value
- Support sound decisions for the stakeholders

#### **Project Sponsor:**

The Project Sponsor acts as a vocal and visible champion, legitimizes the project's goals and objectives, keeps abreast of major project activities, and is a decision-maker for the project.

#### **Project Manager:**

Is responsible for ensuring that the Project Team completes the project. The Project Manager develops the Project Plan with the team and manages the team's performance of project tasks. It is also the responsibility of the Project Manager to secure acceptance and approval of deliverables from the Project Sponsor and Stakeholders. The Project Manager is responsible for communication, including status reporting, risk management, escalation of issues that cannot be resolved in the team, and, in general, making sure the project is delivered in budget, on schedule, and within scope.

#### **Project Team:**

Is responsible for executing tasks and producing deliverables as outlined in the Project Plan and directed by the Project Manager, at whatever level of effort or participation has been defined for them.



#### Leadership

Lead and support all aspects of the implementation effort.

- Develop a shared vision with focused goals based on research and best practices.
- Define a strategic action plan toward goals.
- Build ongoing professional learning to lead school transformation.
- Develop change management expertise, especially second-order change.
- Schedule team meetings.
- Schedule classroom observations and walk-throughs.
- Communicate formally and informally.
- Ensure funding for sustainability.



#### **Technology Infrastructure**

Build a solid technology infrastructure and maintenance/service plan.

- Ensure connectivity and access points.
- Include support policies and procedures.
- Pay attention to charging and storing needs.
- Ensure on-site presence by technical personnel.
- Develop teacher and student troubleshooting skills.



#### **Professional Learning**

Schedule regular professional development for administrators, teachers, and technical personnel.

- Include parents and guardians.
- Include all school personnel.
- Build a coaching/mentoring model for administrators, teachers, and technology staff.
- Create a train-the-trainer model to ensure internal capacity.
- Focus on changing the classroom culture through curricular integration and dedicated time and resources.



#### Communications

Encourage viral information sharing among stakeholder communities.

 Clearly communicate the implementation research base, goals, vision, benchmarking/evaluation plans, and opportunities for feedback/input.

• Involve internal stakeholders, such as teachers, librarians, students, custodial staff, bus drivers, tech support personnel, curriculum directors, board members, and support staff.

• Involve external stakeholders, such as parents/guardians, media, legislators, businesses, religious groups, colleges, and universities.



### Policies

Develop and document policies and procedures guided by instructional goals.

- Ensure school board agreement.
- Include student acceptable use policy.
- Stay flexible and open to alternative directions.



#### Support

Build a network of partners and experts.

- Develop showcase sites to demonstrate best practices.
- Build a team of lead teachers and super-coaches.
- Ensure regional support.
- Research lessons learned by other schools.
- Build vendor partnerships.
- Reach out to other districts and states.



#### **Expectation Management**

Set realistic goals.

 Communicate that research shows teachers need three to five years to seamlessly integrate technology and instruction.

• Understand that student achievement will not increase through 24/7 access to technology alone.

 Understand that student achievement will increase over time when a guaranteed curriculum and instructional program are integrated with 21st century tools.



### **External Evaluation**

Include ongoing independent evaluation.

- Involve an outside research organization to provide consistent and focused review relative to goals.
- Be accountable for reaching benchmarks and adapt programs as needed.
- Build replicable, scalable, and sustainable models.



### 1:1 - Identified Key Milestones

Task

Date

# Formal Project Team NamedJune 20th, 2014Presentation of Project Plan to BOEJuly 15th, 2014



- Educational Technology must considered to be an investment and not a expense!
- K-12 education expenditures have increased at over twice the rate of inflation from 1965-2005, yet US School Districts continue to deal with the problems of disengaged students and low achievement.
- Educational leaders and policymakers are looking for ways to improve the quality of outcomes while showing the growth of expenditures. The positive financial impact of properly implemented educational technology can contribute substantially to the solution.
- Project RED measurable/data driven highlighted savings.
  - Copy Machine/Printer Cost reductions
  - Formative Assessments (online vs. paper)/ Student Placement in Programs
  - Disciplinary Action
  - Paperwork Reduction
- District Current Financial State strong compared to State Standards.



# 1:1 - Proposed Budget

| Item                            | Quantity | Cost/ea     | Total Cost   | Start-up Cost | Annual Cost  |
|---------------------------------|----------|-------------|--------------|---------------|--------------|
| Chromebooks                     | 650      | \$289.00    | \$187,850.00 | X             | -            |
| bags                            | 770      | \$20.00     | \$15,400.00  | х             | -            |
| GuardianEDU - Filtering Service | 763      | \$5.85      | \$4,463.55   | x             | x            |
| iPads                           | 380      | \$379.00    | \$144,020.00 | x             | -            |
| cases                           | 380      | \$15.00     | \$5,700.00   | х             | -            |
| carts                           | 9        | \$2,800.00  | \$25,200.00  | х             | -            |
| apps                            | 3        | \$2,000.00  | \$6,000.00   | х             | x            |
| Interactive Projectors          | 40       | \$1,500.00  | \$60,000.00  | x             | -            |
| On-line Subscriptions           | 3        | \$2,000.00  | \$6,000.00   | x             | x            |
| iCoach Position(s)              | 1        | \$62,000.00 | \$62,000.00  | x             | x            |
| eChalk - Learning Mgmt System   | 1        | \$2,000.00  | \$2,000.00   | -             | x            |
| Professional Development        | 40       | \$1,000.00  | \$40,000.00  | x             | x            |
|                                 |          |             | Total        | \$558,633.55  | \$120,463.55 |



# 1:1 - Risk if we Don't!

#### Hardware impact:

- 70% of District devices past end of life. "Not Supported! Can't Get Support!"
- Device Student ratio 5:1 and increasing daily "Below education standards and state standards"
- Devices will not support PARCC Assessment
- Devices will not support current education software Programs/Apps
- Current number and location of devices create unequal access across district. **Educational Impact:**
- Decreased access to student intervention programs.
- Low Student Engagement
- Decreased Rigor of instruction
- Decreased Attendance
- Students NOT ready for High School

### **General Impact:**

- Potential Decreased Student Enrollment
- Poor Community Perception of District

