VISION STATEMENT

Pittsburgh Public Schools Office of Information and Technology will be recognized as a premier provider of technology infrastructure, services and support aligned to the District axiom of Excellence for All. We will be known for our efficient and effective use of technology to provide information in support of Teaching, Learning and Academic Improvement for all students in the Pittsburgh Public School system.
KEY VISION ELEMENTS

“Doing More with Less”

• Excellence for All
• Turning Data into Information
• Cost Control – Efficiency
• Service Enhancement

WHERE WE WERE - JANUARY 2007

• Solid Hardware & Network Infrastructure
• Data Rich
• Information Poor
• Not aligned to District Strategy
• Reactive Service Organization
• Inefficiencies
• Extensive Software Portfolio
COUNCIL OF THE GREAT CITY SCHOOLS RECOMMENDATIONS

- Re-title director to CIO reporting to Superintendent - DONE
- Reassign and Reorient Instructional Technology - DONE
- Redefine OIT to Service Orientation – Ongoing
- Align Staff and Services by Service Area – Ongoing
- Adopt Best Practices – Underway
- Build or Buy & Integration Strategy - Ongoing

ORGANIZATION EVALUATION

- Staff
- Skill Sets
- Structure
- Position Elimination
- Cross training
- Automation
PROGRESS MADE

- Current staff at 71.5 as compared to 97 in 2004
- Eliminated 6 positions—saves ~$240,000/year
- Energy Savings Initiative - saves >>$250,000/year
- Reduced software portfolio – saves $175,000/year to date
- Reduced software maintenance – saves $240,000/year to date
- Changed hardware refresh strategy – saves >$300,000/year

Doing More with Less

NEW RESPONSIBILITIES

- Deployed central scanning / RTI Tool for student assessments analysis/reporting – 4Sight complete, others under development
- Absorbed AV / Telephone support in 2006 – absorbed 4 staff
- Absorbed Distance Learning in 2007 with no increase in staff
- New Technology initiatives

Doing More with Less
2007 REDUCTIONS

2007 Budget - $14,310,056
2007 Final - $12,505,633
Encumbrance $1,271,262

2007 Reductions - $533,161
2007 Budgeted Staff – 77.5
2007 Current Staff – 71.5
2007 Staff Reduction – 6

BUDGET AND STAFF HISTORY

<table>
<thead>
<tr>
<th>Budget Year</th>
<th>Positions</th>
<th>Adjusted Budget</th>
<th>Change</th>
<th>Positions</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>97.0</td>
<td>$19,235,801</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>90.0</td>
<td>$15,139,265</td>
<td>(7.0)</td>
<td>($996,536)</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>89.0</td>
<td>$14,212,117</td>
<td>(1.0)</td>
<td>($27,148)</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>77.5</td>
<td>$14,310,056</td>
<td>(11.5)</td>
<td>$97,039</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>73.5</td>
<td>$13,246,961</td>
<td>(4.0)</td>
<td>($1,053,085)</td>
<td></td>
</tr>
</tbody>
</table>

2008 Budget compared with 2004: (23.5) ($5,968,040)
-24.2% -31.1%

* Communications/Telephones added to OIT ($341,093 absorbed 4 staff).
District copier maintenance added to OIT ($550,500 and 0 staff)
EXCELLENCE FOR ALL

• Create tools and information in support of EFA objectives
  ➢ Parent Engagement - AlertNow
  ➢ Student Level Evaluation – 4Sight
  ➢ School Plans for Excellence - refined
  ➢ Improved RTI usability
  ➢ In-depth training for educators and administrators

PARENT ENGAGEMENT

• Replaced old system with AlertNow
  ➢ Immediate information sharing
  ➢ Parent/Guardian surveys via phone
  ➢ District-wide broadcast cut from 3 days to less than 1 Hour
  ➢ Phone, Email, Text capability
  ➢ User friendly, web-based rapid message creation
  ➢ Contact Information validation and updating
TURNING DATA INTO INFORMATION

- Information Portals
- School Plans for Excellence
- Central Scanning System
- Student Assessment System

INFORMATION PORTALS

- Portal interface under development
- Principal Portal presenting School Plans for Excellence in RTI now
- PPIP Monitoring system being added to Principal Portal
- Student/Parent & Teacher Portal being developed under Pittsburgh Promise / College Readiness initiatives
SCHOOL PLANS FOR EXCELLENCE

The Principal Portal

RTI
INTERNAL SCANNING AND ASSESSMENT SYSTEM
Why build a centralized scanning and online reporting system for assessments?

- To enable the use of assessment more to support learning during the school year and less to verify learning at the end of it
- To enable effective use of 4Sight tests, which align closely to state standards and our curriculum
- To maximize the time schools spend on using assessment results to guide instruction rather than printing answer sheets, scoring, data entry, manipulating data files and formatting results
- To make assessment results available districtwide quickly
- To provide teachers, administrators and families with information in forms that they can use immediately to understand each child’s progress in order to increase learning

How are test results reported in the new system?

- by performance levels
- by skills and concepts tested
How are performance levels reported?

- Advanced – exceeds grade level expectations
- Proficient – meets grade level expectations
- Basic – below grade level expectations
- Below Basic – far below grade level expectations
Results Database with Error Correction

Scan Database by Grade and School
Parameter Selection Screen

Lawrence Bergie, CIO Office of Information & Technology

Performance Level Report and Chart

Lawrence Bergie, CIO Office of Information & Technology
Sample District Level Report and Chart

4Sight Mathematics Assessment Results

Test 1 | Test 2 | Test 3 | Test 4
--- | --- | --- | ---
Student Count | 300 | 250 | 200 | 150
Student with Zero Score | NA | NA | NA | NA
Below Basic | 100 | 100 | 100 | 100
Basic | 200 | 200 | 200 | 200
Proficient | 300 | 300 | 300 | 300
Advanced | 400 | 400 | 400 | 400

Performance Level

4Sight Mathematics All Test Results

School Year: 2017 - 2018

All Test Results By Student Report

<table>
<thead>
<tr>
<th>StudentID</th>
<th>Last Name</th>
<th>First Name</th>
<th>Grade</th>
<th>Performance Level</th>
<th>Email</th>
<th>Address</th>
<th>Test 1</th>
<th>Test 2</th>
<th>Test 3</th>
<th>Test 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Smith</td>
<td>John</td>
<td>1</td>
<td>Basic</td>
<td><a href="mailto:js@domain.com">js@domain.com</a></td>
<td>1000, City, State</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>02</td>
<td>Johnson</td>
<td>David</td>
<td>2</td>
<td>Advanced</td>
<td><a href="mailto:dj@domain.com">dj@domain.com</a></td>
<td>2000, City, State</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>03</td>
<td>Brown</td>
<td>Robert</td>
<td>3</td>
<td>Proficient</td>
<td><a href="mailto:rb@domain.com">rb@domain.com</a></td>
<td>3000, City, State</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
</tbody>
</table>

Lawrence Bergie, CIO Office of Information & Technology
Scaled Score By Student Report

Lawrence Bergie, CIO Office of Information & Technology

Anchor Level Report and Chart

Lawrence Bergie, CIO Office of Information & Technology
Eligible Content by Student Report

Student Name: Lawrence Bergie, CIO Office of Information & Technology

<table>
<thead>
<tr>
<th>Student Name</th>
<th>School Year</th>
<th>Test Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawrence Bergie</td>
<td>2007-2008</td>
<td>3</td>
</tr>
</tbody>
</table>

Eligible Content by Student Report

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
<th>Eligible Content</th>
<th>Points</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA.1.NE.M</td>
<td>Write a fraction or decimal, including mixed numbers, which corresponds to a shading at set - no simplification necessary.</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MA.1.NE.M</td>
<td>Match the standard number form to the word form of decimal numbers (through the tenths place).</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MA.1.NE.M</td>
<td>Write whole numbers in expanded, standard and/or word form through 6 digits (example of standard to expanded form: 4,070 =</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MA.1.NE.M</td>
<td>Long and short fractions or decimals on a number line (decimals and fractions through the tenths - do not use fractions and decimals).</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MA.1.NE.M</td>
<td>Compare and/or order whole numbers through 6 digits and amounts of money to $100,000,000, then sets for ordering, to less than 4 numbers.</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MA.1.NE.M</td>
<td>Find/identify multiples of a number, where the multiples do not exceed 12.</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MA.2.NE.M</td>
<td>Solve problems involving addition or subtraction with decimals through the tenths or money to the cent and/or cover the solution.</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>MA.2.NE.M</td>
<td>Round whole numbers to the nearest ten, hundred, thousand, ten thousand or hundred thousand.</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MA.3.NE.M</td>
<td>Estimate the answer to addition, subtraction, multiplication and division problems using whole numbers through 6 digits (for multiplication, no more than 2 digits X 1 digit, including no zeros).</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MA.3.NE.M</td>
<td>Solve addition or subtraction problems involving decimals through hundredths (decimal numbers must have the same number of places).</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MA.3.NE.M</td>
<td>Solve addition or subtraction problems with fractions and like denominators (decompositions to 10, no simplification necessary).</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Lawrence Bergie, CIO Office of Information & Technology

Eligible Content Report by Test

<table>
<thead>
<tr>
<th>School Year</th>
<th>Test Year</th>
<th>Test Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>2007-08</td>
<td>All Students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author/Description</th>
<th>Eligible Content</th>
<th>Points</th>
<th>Points Possible</th>
</tr>
</thead>
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<tr>
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<td>2</td>
</tr>
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<td>1</td>
</tr>
<tr>
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<td>Solve addition or subtraction problems with fractions and like denominators (decompositions to 10, no simplification necessary).</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Lawrence Bergie, CIO Office of Information & Technology
### Eligible Content Detail Report by Student

<table>
<thead>
<tr>
<th>Report Groups: All Students</th>
<th>Report Level: School Level</th>
</tr>
</thead>
</table>

#### Report by Eligible Content

**School Year:** 2007 - 2008  
**School Number:** 1

**Report by Test:**

**School Year:** 2008  
**School Name:**

**Eligible Content Detail Report by Student**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Grade</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Item Analysis Report by Test**

<table>
<thead>
<tr>
<th>Test Number</th>
<th>Description</th>
<th>Grade</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lawrence Bergie, CIO Office of Information & Technology

Parent Report – Mailed to Home

April 1, 2009

To the Parent/Guardian

Dear Parent/Guardian,

I am writing to inform you of some exciting changes in our school that we believe will benefit your child. We are constantly striving to improve our educational programs and services in order to better meet the needs of our students. As part of this process, we have developed new initiatives that we believe will have a positive impact on your child’s academic progress.

One of the initiatives is the implementation of a new assessment system. This system will allow us to more accurately track your child’s progress and identify areas where additional support may be necessary. We have also implemented a new technology program that will provide students with access to the latest educational tools and resources.

We appreciate your continued support and look forward to working with you to ensure your child’s success.

Sincerely,

Mark Weisman, Department Head of Student Services

Lawrence Bergie, CIO Office of Information & Technology
In our opinion, the Pittsburgh teachers have a huge advantage over everyone else in the state because the system PPSD has constructed is better than what you can get using the 4Sight member center. We are training teachers this year in 10 other school districts in southwestern Pennsylvania and we would love to be able to easily access the same detailed 4Sight formative assessment data in these districts that Pittsburgh has created for their teachers. Pittsburgh has created a great system that will help teachers improve student performance.

James W. Turner
Director, Partnership for School District Improvement
School of Education
University of Pittsburgh
VOICE OVER INTERNET PROTOCOL (VoIP)

What is Voice over Internet Protocol (VoIP)?

Voice over Internet Protocol (VoIP) is a technology that allows you to make voice calls using a broadband Internet connection instead of a regular or analog phone line.
Current Needs Being Addressed

- Administration Building system has reached its capacity

- VoIP being used to allow Superintendent’s Office and Parent Hotline to better manage and service incoming call volume.
Why Use VoIP?

VoIP is advantageous and cost effective for PPS for the following reasons:

- Leverage E-Rate to pay up to 90% of the effort
- No cost per minute charge
- Will support the District’s Voice needs for the next 10 years+
- VoIP Technology will play an integral part in future security and Disaster Recovery initiatives
- Remote management allows us to resolve issues quicker
- Very dynamic. Users can unplug their phones, go to another area within the building and plug into the network and make and receive calls from their originally assigned phone number/extension!
- If the building closes the technology can be moved to the new location

VoIP: E-Rate Support

E-Rate funding is available for a communications infrastructure such as is needed for VoIP. It is not available for other hardware such as computers and printers.

Funding made available to the District (to date) in support of VoIP:

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
<th>Total Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>$662,778</td>
<td>$593,868</td>
</tr>
<tr>
<td>Year 9</td>
<td>$679,765</td>
<td>$607,920</td>
</tr>
<tr>
<td>Year 10</td>
<td>$136,657</td>
<td>$121,723</td>
</tr>
</tbody>
</table>

Total VoIP Funding: $1,323,511
Total Cost to PPS: $155,689
WHERE ARE WE NOW?

Most District Buildings have old, unshielded copper lines.

- Poor voice service due to interference from non-voice devices, electrical fields, etc which results in static, cross-talk and interruptions in service
- Modifications to functionality limited due to older technology
- Expansion of new lines can take weeks to address due to need to coordinate with external service provider.
- Majority of buildings are older and contain many structural challenges due to thick walls, solid ceilings, possible asbestos issues, etc.
- Challenges with keeping existing assigned phone numbers when relocating individual staff and/or splitting up departments.

COST CONTROL PLAN

- Energy Savings
- Staff realignment/reduction
- Maintenance agreements
- Hardware evaluation
- Software portfolio
- Resource utilization
DEVELOPING A SERVICE ORIENTED CULTURE

• Define information strategy
• Make RTI more user friendly
• Proactive User Involvement
• Enhance Service effectiveness
• Communications is fundamental
• Interdepartmental Teambuilding

WHAT COMES NEXT?

• Create District Information group
• Develop District and School Progress Reporting System in RTI
• Disaster Recovery facility
• Data Warehouse and Business Intelligence system for system wide data
• Data Retention and Storage Controls
• Continued Efficiency mandate phase 2 & 3
• Centralized Printing & Copying for large volume jobs