Instruction and IT Leading Together

The Tools are Here, the Standards are Here, the Future is Now

Seymour Hanfling, Renton School District

Mobilize IT: The New Realities

ACPE

December 5, 2013 – Ashland, Oregon

Feelings…..

Which of these following images describes your feelings as you think about a day at work…

Excited about going where my

district hasn't gone before!

The wave is coming and ....

Hakusai's The Great Wave Off Kanagawa by Fumiko Nakamura Bunka

where is the life vest?

Somewhat Perplexed

All in the same day?

We Are All Leaders – Our Job Title Doesn't Matter!

Are you asked for your advice?

You lead

Do you solve problems for your colleagues?

You lead

Do you look for new solutions or innovations?

You lead

There is a Need for Technology Leadership to Build Out – Human Capacity

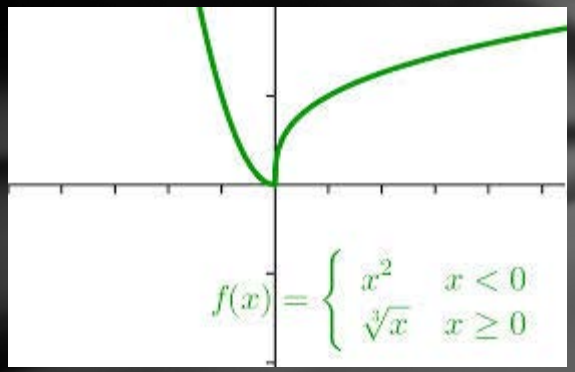
- Superintendents must understand their role in making the digital leap
- Instruction needs to incorporate models and curriculum that are student-centered
- Students and teachers require quicker feedback for continuous improvement
- We (technology leaders) must understand educational requirements, business needs, manage technology, and provide vision & leadership

Keith Krueger - CoSN

Building Human Capacity To Deal With a Strategic Inflection Point

Inflection Point

A point on a curve when the curvature changes from + to – or – to +



In business (*and education is a business*) when major changes take place due to regulations, technology, customer values/expectations, etc.

(Andy Grove, Intel)

Now is an Inflection Point in Education

- New Standards
  - Common Core State Standards – New Curriculum
  - Common Assessments (Smarter Balanced)
  - Teacher & Administrator Evaluations
- New Expectations
  - Access Anywhere, Anytime
  - Everyone has a Device – Bring Your Own
- New Technologies
  - Mobile, Inexpensive Devices
  - Wireless Everywhere

Common Core State Standards

- 16,700 search results for

  "common core state standards" apps software (w/o apps sw = 30,800,00)

- It is critical to have an understanding of the implications of CCSS

  http://www.ode.state.or.us/search/page/?id=3430

CCSS Curriculum Requirements: K-2

Writing: Production and Distribution of Writing

Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

W.2.6	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
SL.2.5	Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.

Reading: Craft and Structure

Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

RI.2.5	Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.

CCSS Curriculum Requirements: 6-8

Writing: Research to Build and Present Knowledge

Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

Speaking and Listening: Presentation of Knowledge and Ideas

Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Writing: Production and Distribution of Writing

Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

CCSS Curriculum Requirements: 9-12

Writing: Production and Distribution of Writing

Speaking and Listening: Presentation of Knowledge and Ideas

- Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

- *Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.*

- Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

BFF - Curriculum and Instruction Staff

Seymour's First Law: *Integrating technology into mediocre instruction creates more expensive mediocre instruction.*

- Instruction drives student success, incorporating technology effectively usually implies changes in instructional practice.

Gil's First Law (courtesy of Gil Valdez): *Limited resources should be focused on students' weakest curricular areas.*

- This is counterintuitive for many – staff seem to want to expand or deepen areas students are succeeding in rather than focusing on areas of weakness.

Higher Cognitive Demand Digital Tools – Bloom's Taxonomy

You need to help your teachers and curriculum department see the present and the future.

- Pip Cleaves - An easy way to integrate technology into daily teaching
- Padagogy Wheel - for the iPad
- 35 digital tools that work with Bloom's Taxonomy

Digital Tools Needed for CCSS

Use digital tools to create (graphics, charts, texts), communicate, research, collaborate, publish, share, revise, archive…

Renton School District analysis showed…

…we have a lot of work to do. But why? Aren't we supporting most of these things now? Some, but not all, nor with the ability to support tools across 15,000 students.

Collaboration, digital curriculum and a whole host of interconnected issues…

Student email

- Email address are required by an increasing number of applications. Apps with licenses require us to track the licenses & that requires a need to automate adding and deleting accounts (i.e., Active Directory, LDAP compliant). We want to be legal, thus the need to track.

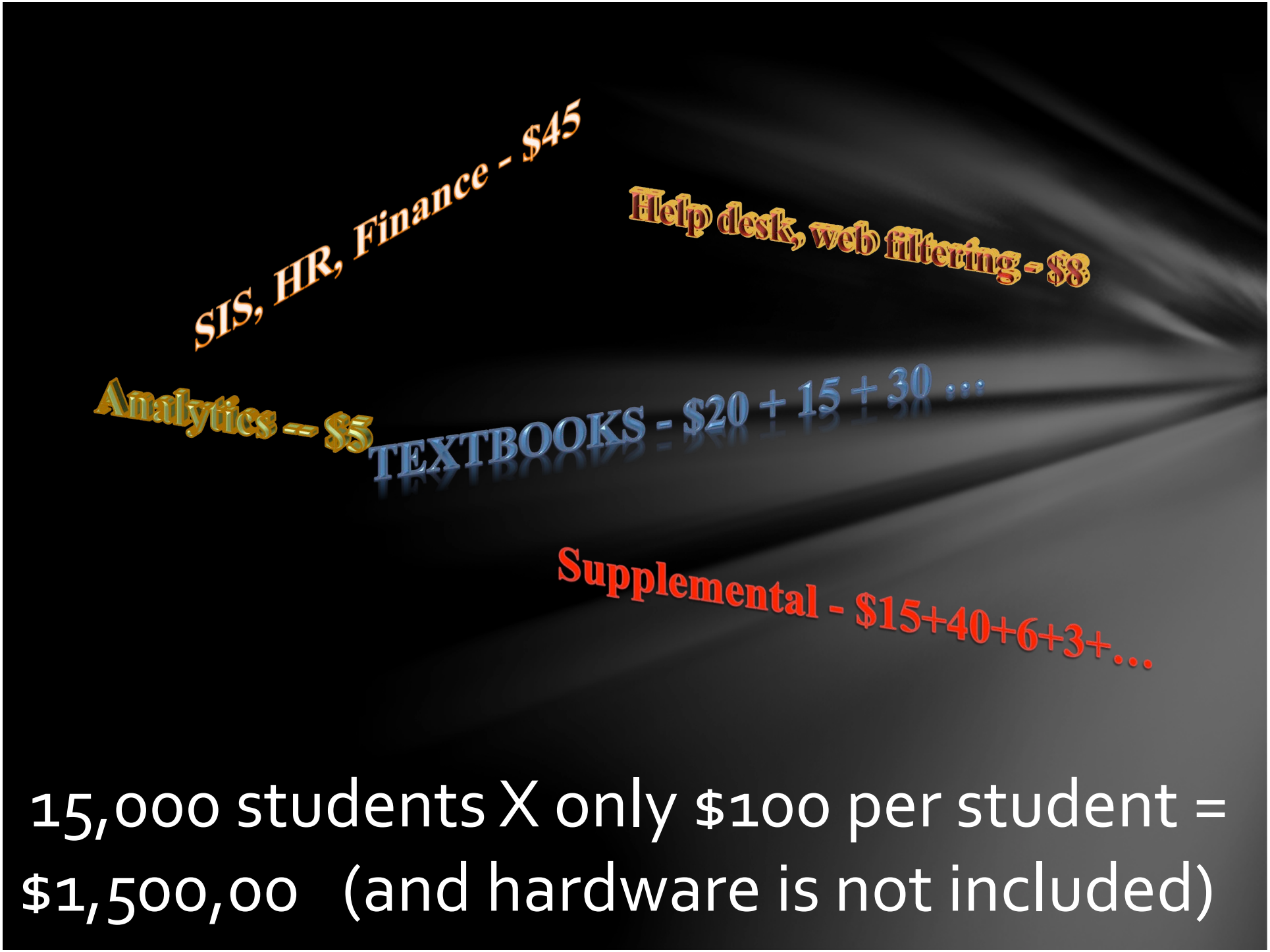
- Pulling names out of SIS, creating unique email addresses, automating new accounts/deletion, archiving (do or don't) --- this is a lot of work! We thought we were behind, but in the Puget Sound area some districts provide student email, some don't; some archive, some don't, etc. It is a big topic of conversation on our local forum.

Collaboration, the cloud, …

- We don't support collaboration software – have left it to individual teachers
- We haven't provided district support or recommendations for cloud-based productivity tools (Google apps; Office 365, etc.)
- We are committed to district supported applications, but we haven't supported collaboration tools much – why?
  - No new curriculum, no demand from instruction, focus on other issues – especially infrastructure, etc.

Student and teacher access

1. Need more devices – they cost $
2. Need mobile access & have to expand wireless and its density – that costs $
3. Need new curricula – can we support digital curricula? Go back to 1 and 2
4. Every vendor in the world (including curricula publishers) wants to sell us subscriptions, won't let us purchase – ongoing need for $



15,000 students X only $100 per student = $1,500,00 (and hardware is not included)

Curriculum Solutions

- Open Education Resources (OER), a part of the global open content movement, shared teaching, learning, and research resources available under legally recognized open licenses—free for people to reuse, revise, remix, and redistribute. (www.edutopia.org & bit.ly/whyopened)

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Creative Commons develops, supports, and stewards legal and technical infrastructure that maximizes digital creativity, sharing, and innovation.

Assessments – Smarter Balanced

Oregon has been doing online testing for over a decade so you are ready …

- Technically – probably, but do your students have tech access beyond testing
- CCSS Curriculum – probably not, since no one is
- Assessment –4th grade assessment requires a one-page typed response; can all of your 4th graders type? Do they time to practice typing?

Teacher and Administrator Evaluations

It is a Big Deal! What does it mean to IT?

- Teachers – progress monitoring, test scores; technology supporting student learning; differentiated instruction and supplemental materials…..
- Administrators – support for teachers, for technology, and for their own work

Teachers Will Be Evaluated on Student Use of Technology to Meet CCSS

Apple Classroom of Tomorrow Report (1990)

Five stages of evolutionary change:

1. Entry
2. Adoption
3. Adaptation
4. Appropriation
5. Invention

Some things haven't changed

Inflection Point in Education - Revisited

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Some things have changed

… *Expectations*

Access anywhere

Access anytime

House Bill 2426

Some things haven't changed

Funding – where is it coming from?

Wireless access – A survey

How many of you:

- have wireless access in over 90% of each of your buildings?
- can support 30 students' wireless devices in a classroom?
- are ready now to support standardized tests from wireless devices in the classroom?
- have the density to support 30 students' wireless access to video?

BYOT & BYOD – Does it matter for IT?

Did you know there was a difference?

BYOD – bring your own device – being increasingly used to describe a model of student technology usage in those schools that see the need to take a stepped approach to the inevitable adoption of BYOT. (Mai Lee - http://byot.me/archives/318)

BYOT

Mai Lee - http://byot.me/archives/318

- Trust in – not mistrust of – the students and the professionalism of teachers
- Greater personalization of teaching
- Children choosing and using their preferred technologies 24/7/365
- Use of that technology in their teaching and learning – in and outside the school
- Blurring of the now strict home-school divide and a lowering of the school walls
- Student's care and maintenance of own kit

How is this all supported?

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Build your own device?

Phonebloks – the idea

phonebloks.com/idea/

Phonebloks…can they lead to an Edublock – a configurable device for learning?

Devices, Devices Everywhere

- How important are keyboards?

  Smarter Balanced Assessment requires essay answers; future versions may want to see student's work – a need to draw?

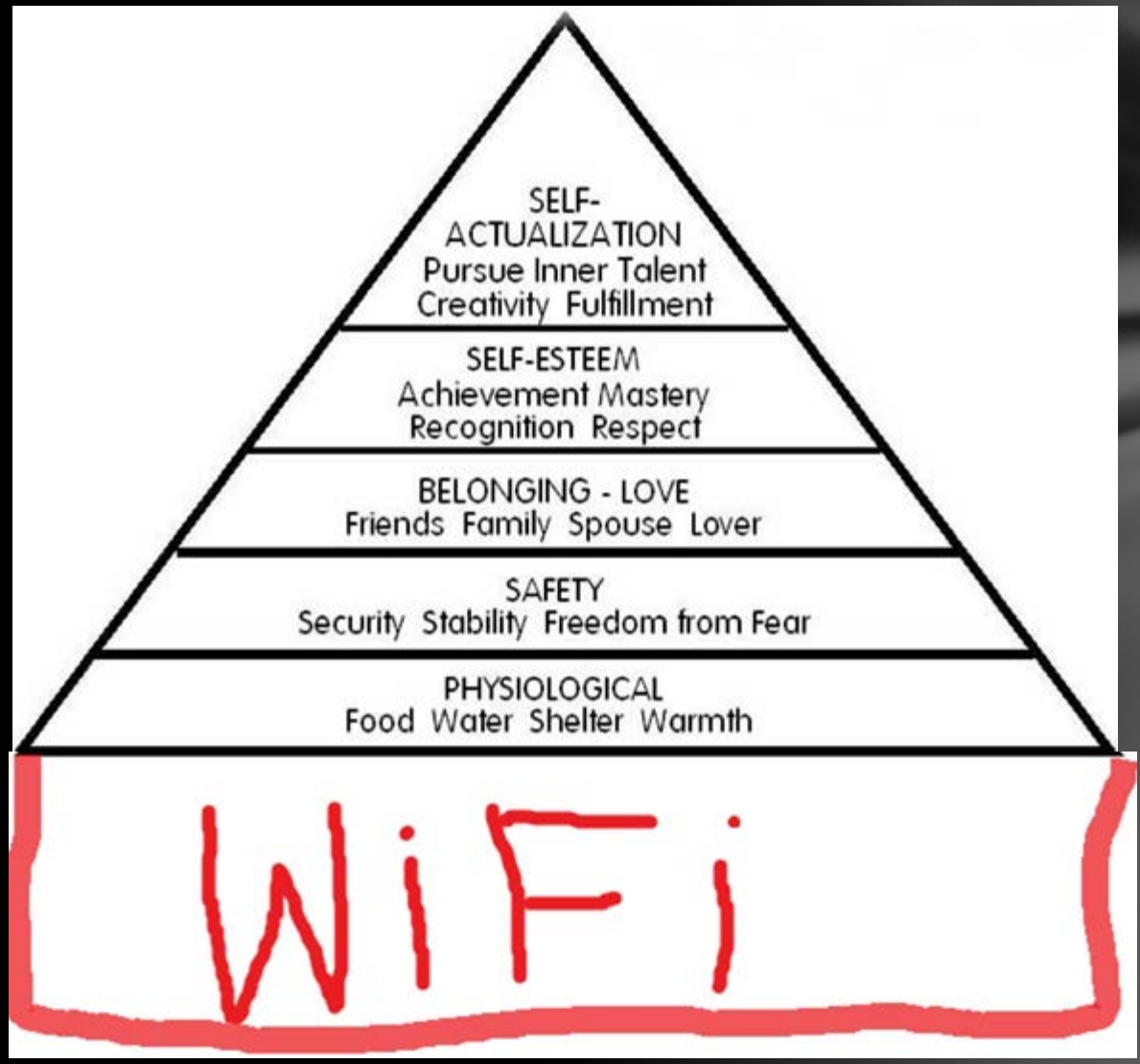
- Screen size for the assessments? 10", 12"
- What can we afford? Are Chromebooks or their ilk the latest silver bullet?

Instructional needs must drive the device

Expectations of the 24/7 World

- Wireless access at school
  - Security and virus/malware protection
- Network access at home and/or in the community
  - Security and virus/malware protection
  - Cloud access
  - Financial support for home and/or 24/7 access
- Single sign-on everywhere

Maslow Revisited



Hopefully it is a little clearer why we all feel this way in the same day

Times of Change Require Leaders

We are asked for our advice

We lead

We solve problems for our colleagues

We lead

We look for new solutions or innovations

We lead

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