

Educating Thriving Citizens

Digital Conversion

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Digital Conversion Presentation



The above Keynote was presented to the Bend-La Pine School Board of Directors on April 23rd, 2013. To access, simply tap through to transition slides.

Overview

Digital Conversion refers to the transformation of instruction from a paper-based world to a primarily digital world, in which every student in grades 3-12 and teacher has access to a personal computing device and the Internet anytime/anywhere. Digital Conversion has the power to profoundly change the nature of teaching and learning by going far beyond traditional learning modalities. It supports second-order change by enabling a fundamental shift across all aspects of daily life in our schools. It affects instruction, pedagogy, professional development, student and teacher motivation, student—teacher roles, learning experiences, and relationships. It creates a new vibrancy and energy that comes from the currency and connectivity among students and teachers.

Addressing the Needs of Today

Digital Conversion allows educators to level the playing field and provide every student, including at-risk learners, with anytime/anywhere access to resources and the opportunity to develop the skills they need for today's workplace. And the time has come. In words of Adam Frankel, executive director of Digital Promise: "While technological innovation has transformed other sectors of our society and economy in recent decades, our education system has been largely resistant to change. There are a range of challenges that stifle innovation in education, from policy to political hurdles in school culture and market failures to outdated infrastructure in our nation's classrooms. But these are challenges that can and must be overcome if we are going to offer all our students the world-class education that's an essential ingredient in their—and America's—success."

In the Bend-La Pine Schools, we believe that school must address the challenges of today and align with what students need to know today. Today's workplace demands not only digital skills but also the ability to work collaboratively and creatively and engage in independent research—all skills that are enabled and enhanced by technology.

Digital Conversion Critical Success Factors

In 2010, a team of researchers who studied one-to-one computing implementation in almost 1,000 schools across the country found that fewer than one percent were practicing all nine "key implementation factors" identified by the study. These findings were published in Project RED, The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness.

The Project RED study found that one-to-one computing was most effective in schools that understood second-order change

and the importance of the key implementation factors. Project RED shows that one-to-one computing is complex and involves many factors in addition to hardware and software. We call this move digital conversion and not a one-to-one initiative to encompass the interplay of the factors that are critical to our success, starting with a personal computing device for every teacher and student in grades 3-12 and going far beyond.

The following "Steps to Success" checklist summarizes the key factors highlighted in the Project RED study that we believe the Bend-La Pine Schools must understand and commit to in order to replicate digital conversion successfully and sustain it over time. The checklists are provided both for initial background and planning purposes and as an ongoing reference tool to help the Bend-La Pine Schools keep the success factors front and center. Digital conversion is not a short-term fix. It is an on-going process in which student improvement grows over time, supported by sustained commitment, gradual improvement in practice, and learning together as a team.

STEP #1: Plan, Plan, and Plan Again

Comprehensive plans provide the bandwidth for organic change and the dynamics for implementation. They serve as living blueprints that positively embrace change, as described by Thomas and Brown in A New Culture of Learning: "Embracing change means looking forward to what will come next. It means viewing the future as a set of new possibilities rather than something that forces us to adjust."

Planning Steps to Success:

o Define the members of your central district planning team and your school planning teams.

o Define your goals, utilizing the Strategic Device Initiative format, and remember that student achievement must be goal number one.

o Take a long-term view.

o Plan your technical infrastructure, including hardware devices, bandwidth, connectivity, deployment, security, and technical support.

o Select pilot sites.

- o Plan your device rollout.
- o Plan for capacity building, with models for coaching and mentoring.
- o Adjust the instructional program based on digital resources.
- o Plan for budget needs.
- o Plan for facilities needs.
- o Develop a communication plan.
- o Embrace and promote the idea of change.

o Constantly evaluate against reference points—shared vision, moral imperative, impact on student achievement, preparation for today's work-place, instructional quality, equity and opportunity, communication, and change management.

o Use feedback loops to adjust and change as needed.

STEP #2: Build a Shared Vision

A shared vision is the foundation that holds together a team, and implementing the vision together ensures a consistent direction. In Leadership and the New Science, Margaret Wheatly writes:

"In a field view of organizations, clarity about values and vision is important, but it is only half the task. Creating the field through the dissemination of those ideas is essential. The dialogue must reach all corners of the organization and involve everyone. Vision statements come off the walls and come alive in classrooms and hallways and provide a shared path for growth."

Vision Building Steps to Success:

o Discuss with all stakeholders why digital conversion is the right thing to do.

o Identify the needs of at-risk and special needs students and English learners.

o Develop your moral imperative and use it to drive the discussion.

o Create a shared vision statement.

o Connect the vision to goals, benchmarks, resources, and roles.

o Evaluate all programs and activities against that vision.

o Work to bring programs and activities into alignment with the vision.

o Expect constant innovation, exploration, new ideas, and new opportunities.

o Be prepared for ongoing learning and adjustment.

STEP #3: Align Resources

Digital conversion is surprisingly affordable with budgeting strategies that focus on prioritization and repurposing rather than finding new or more monies. Digital conversion must be the priority for instructional spending because we cannot afford a parallel program with textbooks.

Based on work from Dr. Mark Edwards in Mooresville Graded School District, North Carolina, the end result of all prioritization efforts, repurposing of resources, and cost-efficiencies that digital conversion costs approximately \$1.25 per student per day (\$250 annually per student). This cost includes teacher and student hardware, software, cases, digital content, and professional development. This does not include infrastructure costs since these are capital costs and should be aligned with capital funding sources and because much of the infrastructure is required anyway, with either computer labs or digital conversion.

So for approximately 3-4% of the daily budget, we would be able to provide all teachers and students in grades 3-12 with a portal to the world, cutting-edge creativity tools, and a reference library larger than the Library of Congress.

Resource Alignment Steps to Success:

o Establish priorities.

o Evaluate repurposing options, including staff positions, physical spaces, and instructional materials.

o Repurpose textbook funds and computer lab costs to purchase devices and online content.

o Train students to provide help desk support.

o Redefine librarian and lab tech roles.

STEP #4: Focus on Student Achievement

The public will support digital conversion as long as there is a return on the investment, and student achievement is how the return is determined. We must focus all efforts on closing achievement gaps and preparing all of our students to be future ready.

Achievement Steps to Success:

o Consistently communicate that improved academic performance is the goal of digital conversion.

- o Evaluate all programs and activities in light of this goal.
- o Define daily expectations for students, teachers, and staff.

o Engage teachers in mapping out their daily work and how they will work together.

- Use formative assessments to drive instructional planning.
- o Align plans and policies with student achievement goals.
- o Incorporate individual student data into daily instructional planning.

o Use a variety of measures to evaluate progress, including graduation rates, state assessments, AP/IB/Honors participation, and student next step success.

STEP #5: Foster Leadership

Leaders at all levels are essential to digital conversion success. A top-down approach will not build the necessary buy-in and teamwork. Digital conversion demands we develop a distributed leadership approach in which we recognize, develop, and utilize leaders at all levels and schools and in every aspect of the work of the district. Nowhere is this more important than in the strong partnership that must be established between IT and Teaching and Learning to allow educational decisions to drive all IT solutions. Having worked with both teachers and an IT department, it is important that we have conversations to understand how we can work together to serve our schools. Daniel Pink sums it up nicely when he writes:

"Perspective-taking is at the heart of our first essential quality in moving others today."

Empathy is something that is essential to the work that we do, and I realize as I have been in central office positions that there is a ton of work that our IT Department does that I do not have the ability or skill set to do. They do amazing work. What I am suggesting, however, is that to create a culture where our IT department's policies, procedures, and responses are viewed by our average teacher as proactively supportive, instead of getting in the way of serving the educational needs of their work with students, we must create strong leadership between IT and Teaching and Learning to increase our ability to work together, not apart.

Leadership Steps to Success:

o Select teacher and department leaders based on their commitment to the vision, goals, and leadership potential.

- o Develop leaders at every school.
- o Develop leaders in every department.
- o Develop leaders in every grade level.

o Develop leaders among administrators and staff.

o Make sure the central office administrators vigorously embrace a service model.

o Encourage parent and community leaders to be all in and enlist their input.

STEP #6: Establish a Digital Infrastructure

Infrastructure Steps to Success:

- o Select pilot sites and initiate a pilot program.
- o Select and distribute student devices.
- o Plan a staged device rollout
- o Develop a financial support program for low-income students
- o Build a robust wireless infrastructure with an eye to future needs.
- o Evaluate cloud computing options.

o Develop software evaluation criteria and select online content and tools.

- o Select and implement a learning management system.
- o Build a library of multimedia tools.
- o Develop policies for social networking and required use.
- o Plan for training, staffing, and support.

STEP #7: Build Capacity

We embrace the concept that, as digital conversion evolves, we must grow our capacity—meaning our ability to use digital resources and work as individuals and teams to meet goals. Every school leader must be vigilant in ensuring that individuals and teams constantly reflect on how to improve the success of every student.

Capacity Building Steps to Success:

o Commit to a philosophy of individual and team learning for all adults.

- o Talk the long view and accept different rates of growth.
- o Develop formal growth plans for teachers and principals.
- o Encourage students and teacher to learn together.
- o Expect steady progress and constant effort.
- o Provide constant encouragement, feedback, and leadership.
- o Establish meetings to build teams at all levels.
- o Define professional development goals.

STEP #8: Implement Data-Driven Personalized Instruction

Digital conversion allows us to progress in our ability to use personalized student information as part of our daily instruction methodology—providing teachers greater clarity and means to make adjustments, to advance or review, based on real-time data.

Data Steps to Success:

o Transition to online instructional software that provides detailed data on every student.

o Work toward a culture of data transparency.

o Systematically align student data and instructional planning.

o Assess achievement by students, subgroup, teacher, department, grade level, and school.

o Use the data to enable accurate, personalized interventions on a daily basis.

o Encourage a team approach among instructional staff.

o Use data to inform resource allocation decisions.

o Keep parents and students in the data loop.

STEP #9: Rethink the Instructional Process

In it's simplest terms, the Bend-La Pine Schools believe that increases in student learning only occur as a result of improvements in the instructional core—composed of the student, the teacher, and in the presence of content in context. Technology is a powerful facilitator but it cannot, by itself, meet any educational objective. If technology is to be truly effective it must be carefully and thoughtfully woven into the entire fabric of the instructional core, creating a new 21st Century context, in which guidance of learning occurs in our schools. Done right, technology integration has the power to transform both the appearance and nature of education as a force multiplier allowing us at long last to fully implement for all of our students what we all know to be essential-a rigorous and coherent curriculum, sound instruction, and students actively engaged in purposeful reading, writing, and discussion as the primary modes of learning both content and thinking skills. None of this is new or unique to this century, but in fact represents what our best educators have been teaching us for decades. What is new is the recognition that now, more than ever, all students need and deserve such an education, and the reality that if we are going to turn this vision into practice we must leverage the power of technology in the context of supporting the relationship of the teacher and the student in the presence of content. Engagement, personalization, efficiency, precision, and fun are all a part of new instructional recipe available through digital conversion.

Instructional Steps to Success:

o Develop lesson plans that engage students with relevant, personalized, collaborative, and connected learning.

o Evaluate new teaching strategies appropriate to a digital learning environment.

- o Develop keys to successful group work.
- o Encourage teachers to become "roaming conductors".
- o Empower students with more choice.
- o Extend the time available for teaching and learning.
- o Provide immediate feedback via formal and informal assessments.
- o Promote responsible digital citizenship.
- o Use digital resources to support struggling students.

* The above "Steps to Success" checklist was adapted for Bend-La Pine Schools from *Project RED, The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness* (2010) and *Every Child, Every Day: A Digital Conversion Model for Student Achievement* (2012). The complete Project RED published findings and full research project can be found at the following link-- <u>http://bit.ly/ProjectRed</u>.

Gallery: Learning Empowered by Technology



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Research Summary

The following is a summary of the research around best practices in the integration of technology into K-12 schools.

Introduction

Bend-La Pine Schools

- 1. Introduction
- 2. Trends in Technology in Education
- 3. Benefits of Digital Conversion
- 4. Student Achievement Data in Digital Conversion Initiatives
- 5. Benchmark Districts
- 6. Phase 1 Foundation

As part of the Bend-La Pine School District's System Readiness and Implementation Planning, research was conducted on technology integration in the classroom and the success around 1:1 technology initiatives taking place throughout the United States.

While research and best practices around technology integration is more common, research on 1:1 technology initiatives is just now becoming more readily available. Numerous sources were studied including the National Technology Plan, The Horizon Report, and Project Red.

Key findings from the Research Summary:

The use of technology in schools increases engagement in the learning process and allows teachers the opportunity to personalize instruction especially in "technology-transformed" intervention classes.

The ability for students to collaborate with others online through e-mail, instant messaging, and other Web 2.0 options improves student learning and increases engagement. The daily use of 1:1 technology delivers the best success in improving student learning.

Trends in Technology Education

To study trends in educational technology, the school district reviewed numerous key documents including the National Education Technology Plan and the Horizon Report.

Key Findings from the National Education Technology Plan

The National Education Technology Plan 2010 (NETP) calls for revolutionary transformation rather than evolutionary tinkering. It urges our education system at all levels to:

· Be clear about the outcomes we seek.

- Collaborate to redesign structures and processes for effectiveness, efficiency, and flexibility.
- Continually monitor and measure our performance.

• Hold ourselves accountable for progress and results every step of the way.

"The plan recognizes that technology is at the core of virtually every aspect of our daily lives and work, and we must leverage it to provide engaging and powerful learning experiences and content, as well as resources and assessments that measure student achievement in more complete, authentic, and meaningful ways.

Technology-based learning and assessment systems will be pivotal in improving student learning and generating data that can be used to continuously improve the education system at all levels. Technology will help us execute collaborative teaching strategies combined with professional learning that better prepare and enhance educators' competencies and expertise over the course of their careers. To shorten our learning curve, we should look to other kinds of enterprises, such as business and entertainment, that have used technology to improve outcomes while increasing productivity.

We also should implement a new approach to research and development (R&D) in education that focuses on scaling innovative best practices in the use of technology in teaching and learning, transferring existing and emerging technology innovations into education, sustaining the R&D for education work that is being done by such organizations as the National Science Foundation, and creating a new organization to address major R&D challenges at the intersection of learning sciences, technology, and education." (Office of Educational Technology, 2010) The National Education Technology Plan identifies five areas that comprise a model for technology in education. These five areas are: learning, assessment, teaching, infrastructure, and productivity.

Learning: Engage and Empower

"The model of learning described in this plan calls for engaging and empowering learning experiences for all learners. The model asks that we focus what and how we teach to match what people need to know, how they learn, where and when they will learn, and who needs to learn. It brings state-of-the art technology into learning to enable, motivate, and inspire all students, regardless of background, languages, or disabilities, to achieve. It leverages the power of technology to provide personalized learning and to enable continuous and lifelong learning." (Office of Educational Technology, 2010)

Assessment: Measure What Matters

"The model of learning requires new and better ways to measure what matters, diagnose strengths and weaknesses in the course of learning when there is still time to improve student performance, and involve multiple stakeholders in the process of designing, conducting, and using assessment. In all these activities, technology-based assessments can provide data to drive decisions on the basis of what is best for each and every student and that, in aggregate, will lead to continuous improvement across our entire education system." (Office of Educational Technology, 2010)

Teaching: Prepare and Connect

"Just as leveraging technology can help us improve learning and assessment, the model of learning calls for using technology to help build the capacity of educators by enabling a shift to a model of connected teaching. In such a teaching model, teams of connected educators replace solo practitioners, classrooms are fully connected to provide educators with 24/7 access to data and analytic tools, and educators have access to resources that help them act on the insights the data provide." (Office of Educational Technology, 2010)

Infrastructure: Access and Enable

"An essential component of the learning model is a comprehensive infrastructure for learning that provides every student, educator, and level of our education system with the resources they need when and where they are needed. The underlying principle is that infrastructure includes people, processes, learning resources, policies, and sustainable models for continuous improvement in addition to broadband connectivity, servers, software, management systems, and administration tools. Building this infrastructure is a far-reaching project that will demand concerted and coordinated effort." (Office of Educational Technology, 2010)

Productivity: Redesign and Transform

"To achieve our goal of transforming American education, we must rethink basic assumptions and redesign our education system. We must apply technology to implement personalized learning and ensure that students are making appropriate progress through our P–16 system so they graduate. These and other initiatives require investment, but tight economic times and basic fiscal responsibility demand that we get more out of each dollar we spend. We must leverage technology to plan, manage, monitor, and report spending to provide decisionmakers with a reliable, accurate, and complete view of the financial performance of our education system at all levels. Such visibility is essential to meeting our goals for educational attainment within the budgets we can afford." (Office of Educational Technology, 2010)

Key findings from the Horizon Report K-12 2011 Edition

The Horizon Report K-12 Edition examines emerging technologies for their potential impact on and use in teaching, learning, and creative inquiry in pre-college education environments. The New Media Consortium researches the upcoming trends and ranks them for consideration. The following five trends have been identified as key drivers of technology adoptions for the period of 2011 through 2016; they are listed here in the order the advisory board ranked them: 1. The abundance of resources and relationships made easily accessible via the Internet is increasingly challenging us to revisit our roles as educators.

2. As IT support becomes more and more decentralized, the technologies we use are increasingly based not on school servers, but in the cloud.

3. Technology continues to profoundly affect the way we work, collaborate, communicate, and succeed.

4. People expect to be able to work, learn, and study whenever and wherever they want to.

5. The perceived value of innovation and creativity is increasing. (Johnson, 2011)

Along with current trends, critical challenges that schools will face are also covered. After careful analysis of current events, papers, articles, and similar sources, the advisory board named the top five challenges in rank order:

1. Digital media literacy continues its rise in importance as a key skill in every discipline and profession.

2. Economic pressures and new models of education are presenting unprecedented competition to traditional models of schools. 3. The demand for personalized learning is not adequately supported by current technology or practices.

4. A key challenge is the fundamental structure of the K-12 education establishment — aka "the system."

5. Many activities related to learning and education take place outside the walls of the classroom and thus are not part of our learning metrics. (Johnson, 2011)

The Horizon Report identifies the key trends in technology that will be emerging in the next few years.

•Near term, within the next 12 months, Cloud Computing and Mobile Devices will be emerging.

•Mobile devices are proving ubiquitous access to information, productivity and collaboration tools. This access will have a big influence in classrooms.

•Cloud Computing is transforming the way users of the Internet think about computing and communication, data storage and access, and collaborative work. More schools are employing cloud-based solutions for staff and students for email, backups, and productivity. (Johnson, 2011)

•The next level of emerging technologies, the Second adoption, are those that will be appearing in the next two to three years.

Identified in the report are Game-Based Learning and Open Content.

•Game-based Learning spans from single player to multiplayer games. The potential for game-based learning is the ability to foster collaborations and engage students in the learning process.

•Open Content - more organizations, schools, and universities such as MIT, are providing their content for anyone to use. Collections of free online course materials is a response to the rising costs of education, providing learning opportunities where access is limited, and allowing students a choice about when and how to learn. (Johnson, 2011)

•The final level, Far Team, are the emerging technologies we will see in the next four to five years. The two identified were Learning Analytics and Personal Learning Environments

•Learning analytics brings together a variety of data- gathering tools and analytic techniques to study student engagement, performance, and progress in practice, with the goal of using what is learned to revise curricula, teaching, and assessment in real time.

•Personal learning environments (PLEs) refer to studentdesigned learning that brings together different types of content — videos, apps, games, social media tools, and more — chosen by a student to match his or her personal learning style and pace. (Johnson, 2011)

Benefits of Digital Conversion

The key research around 1:1 technology initiatives benefits comes from the Project Red Report--The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness. The study done by Project RED tested three hypothesis around the following themes: properly implemented technology increases student achievement, 1:1 initiatives can be revenue positive at all levels, and that having a device for each student leads to the previous two points. (Greaves, Wilson, Gielniak, & & Peterson, 2010)

Project RED selected eleven Education Success Measures(ESMs) to provide information to inform their hypothesis:

Disciplinary action rate

Dropout rate

High-stakes test scores

Paper and copying expenses Paperwork reduction Teacher attendance High Schools AP course enrollment College attendance plans Course completion rate Dual/Joint enrollment in college Graduation rates

There were seven major findings from their study:

Finding 1: Nine Key Implementation factors are linked most strongly to education success

The integration of technology in schools have shown positive impact in schools, however these practices are not consistent and widely practices. These nine implementation factors include in predictive order: **Intervention Classes:** Technology is integrated into courses for ELL learners, Special Education, Title I and reading intervention programs

Change Management Leadership by Principal: Providing time for collaboration and professional learning at least once a month

Online Collaboration: Students collaborating daily using technology such as email, instant messaging, Web 2.0 tools, video conferencing

Core Subjects: Core subjects integrate technology weekly or more frequently

Online Formative Assessments: Weekly assessments are given in classes

Improved outcomes with lower ratios: Lower computer to student ratios had improved student outcomes

Virtual Field trips: Monthly virtual field trips were taken by schools with higher results

Search Engines: Students used search engines daily in their work

Principal Training: Principal learning around teacher buy-in, best practice and transforming learning with technology was done in the best schools

Finding 2: Properly implemented technology saves money

Project RED found from their study that the "richer the technology implementation, the more positive the impact" on finances. Some of the examples of cost savings included:

- Copying and paperwork expenses
- Instructional materials
- Dropout rate
- Systems cost reduction

Finding 3: 1:1 technology schools employing key implementation factors out-perform all schools and all other 1:1 technology schools

Having a 1:1 student computer ratio has a higher impact on student achievement and financial benefits than other computer ratios, and these benefits increase when the key implementation factors are in place. The research showed a stronger positive impact if the top four of those factors were in place:

- · Intervention classes that use technology in every class period
- Principal leading change
- Online collaboration of students daily and
- Core curriculum using technology at least weekly

Finding 4: The principal's ability to lead change is critical

"Change must be modeled and championed at the top."

Since the principal is a variable for most of the Educational Success Measures, the principal's role in leading the change is critical. The principal is one of the people who plans professional learning within a school and therefore needs to lead the change that will move the school forward. (Greaves, Wilson, Gielniak, & & Peterson, 2010)

Finding 5: Technology-transformed intervention improves learning

A technology-transformed classroom defined by Project RED is one where technology plays an integral role in the class. The students all have a computer and the curriculum is delivered electronically. In their study, Project RED found that technologytransformed intervention in Special Education and reading interventions was one of the top-model predictor of improving test scores. (Greaves, Wilson, Gielniak, & & Peterson, 2010)

Finding 6: Online collaboration increase learning productivity and student engagement

Collaboration and interaction among students has shown to be important in improving student achievement; study group participation for students is also a good predictor of college success. Using technology expands student collaboration from face-toface to Instant messaging, chatting, email, or video conferencing with peers. Online collaboration removes barriers of time, distance, and money when using Web 2.0 tools. Collaboration allows students to reach beyond their friends to include mentors, experts, and tutors worldwide. (Greaves, Wilson, Gielniak, & & Peterson, 2010)

Finding 7: Daily use of technology delivers the best return of investment

The daily use of technology in core classes correlates highly to the education success measures. When used daily, technology is a top-five indicator of better discipline, attendance, and increased college attendance. (Greaves, Wilson, Gielniak, & & Peterson, 2010)

Data from Digital Conversion Initiatives

1:1 technology initiatives are a newer initiative in many school districts. Student data about the effectiveness are just now starting to be published. The strongest theme in the research of 1:1 technology was student engagement and the personalization of instruction that teachers were able to accomplish with its use. Some of the findings from the research throughout the country included:

• In Riverside Unified School District, 90.5% of students using iPads are testing as proficient or above on benchmark tests, compared with 60% in other classes. (Apple, 2012)

• Chicago Public Schools implemented a 1:1 iPad program. In their preliminary findings the benefits they are seeing for students included:

- Immediate information access
- More collaboration

- · Learning is individualized
- Increased student engagement
- · Learning expanded outside the classroom

Chicago teachers are reporting that the 1:1 technology initiative is transforming their classrooms:

- 95% of teachers say iPads improve time on task
- 86.4% of teachers say iPads provide improved instantaneous feedback
- 100% of teachers say iPads provide improved instructional differentiation

The Chicago teachers also reported an increase in student engagement in learning:

- 90.4% of students say iPads make school more interesting/enjoyable
- · 93.7% of students say iPads improved internet research
- 100% of teachers say iPads have increased student interest in learning
- 90% of students say iPads make them feel more confident about school and lessons learned (Apple, 2012)

• In a study done on the Denver School of Science and Technology 1:1 technology program the great majority of students say that the laptops have a very (65%) or somewhat (29%) positive impact on how much they learn in school. The laptops positively influence students on how well they work with other students, how interested they are in school, their grades, and other factors.

Nearly all teachers in this school agreed that the laptop program is very (67%) or somewhat (30%) important for students; only 3% disagreed. A large majority of teachers report an increase (57%) or a slight increase (30%) in the depth of students' understanding of the curriculum as a result of the use of laptops and related technology.

The teachers also reported that the 1:1 technology initiative changed their instruction. Among the teachers, more than 90% agree or strongly agree that "I have changed the way I organize classroom activities." Nearly two-thirds reported that they rely less on textbooks because of the laptops and over 85% agree or strongly agree that they are better able to meet the needs of students with different needs.

89% of the teachers in this program reported that the laptop program is important for their students. Teachers also report that because of the laptops they are more reflective of basic teaching goals and priorities (80% agree or strongly agree) and they more often require students to work independently (77%). (Zucker, 2007)

In a recent survey from the Westlake Initiative for Innovation project, Eanes Independent School District, Austin, Texas found the following:

For students:

- 90% of students reported some level of greater motivation to learn
- 85% of students felt some level of increased engagement in the learning process
- 24% of students reported feeling distracted at some level at school with the iPad
- 40% felt little to no distraction with the iPad at school.
 (The rest were neutral)
- 89% reported having the iPad gave them a desire to dig deeper into certain subjects
- 93% replied that having the iPad in the classroom increased likelihood of submitting an assignment online rather than on paper
- 89% agreed or strongly agreed that overall, having the iPad enhanced their learning experience

For teachers:

- 95% reported a high to extremely significant impact on how the iPad has helped them as a teacher
- 93% use the iPad to research content for their courses during the week and at some point several times a day
- 100% reported that teacher to communication has improved between student because of the iPad
- 93% reported that it had improved their assessment abilities to some level, with 34% reporting a significant increase in ease of assessment and data gathering
- 96% reported that the iPad helped them accomplish what they need to do each day as a teacher, 30% of that group gave it the highest rating (Hooker, 2012)

• Best practices about implementation were also derived from the research. Maine has had a 1:1 initiative for several years. From this initiative is was reported that how they implemented professional learning and tools was important to the integration of the technology. It was stressed that a 1:1 initiative can't be a technology initiative, instead, it is the content and teaching profession development that need to be the focus, with the technology supporting. (Kessler, 2011) • A review of articles published on 1:1 technology initiatives by CASTLE, found a theme of student engagement and motivation in 1:1 schools. "Similarly, other researchers (Bebell & Kay, 2010) analyzed the impact of one--to--one on five Massachusetts middle schools. Teacher surveys revealed beliefs that student engagement and student motivation had both increased. Of the teachers who responded to the survey, 83% indicated that "traditional" students were more engaged in the one-to--one setting. It also indicated that 71% of the teachers believed that students were more motivated with laptops. Many other studies also have found an increase in student engagement at one--to--one schools (Bebell, 2005; Metiri Group, 2006; Mouza, 2008; Russell, Bebell, & Higgins, 2004; Warschauer & Grimes, 2005; Zucker & McGhee, 2005.)" (Sauers N. J., 2011)

• Some of the other benefits reported from elementary schools in a report from Getting Smart:

- Differentiating student instruction
- · Publishing for a real-world audience
- Extending learning beyond the school day
- Building tech expertise
- Increased student motivation (Pullen, 2012)

Benchmark School Districts

Schools and school districts choosing a 1:1 computing strategy for their students are becoming more common throughout the United States. As Bend-La Pine Schools looks towards Digital Conversion, a number of school districts across the country that have been identified as leaders in 1:1 computing were studied in depth. Members of the System Readiness and Planning group researched district websites and contacted key individuals within these districts to learn more about the process that they took to becoming a 1:1 school/district.

Benchmark Districts included:

- Burlington, Massachusetts
- Mooresville, North Carolina
- Eanes School District, Austin, Texas
- Manitou Springs, Colorado

- · Kent, Washington
- · Auburn, Alabama
- · Catalina Foothills, Arizona
- · Zeeland, Michigan
- Forrestville Valley, Illinois
- · Van Meter, Iowa
- Becker, Minnesota
- · Minnetonka, Minnesota
- · Huntsville, Alabama
- · San Diego, California

The following are the Key Findings in each of the areas:

Hardware/Infrastructure

A strong infrastructure to support additional devices is crucial to the success of 1:1 technology initiatives including the proper wireless system. Implementation of 1:1 technology initiatives varied among the districts; key variables were type of device and system implementation. While all districts had different types of implementation plans, each district did utilize a pilot program to learn about the implementation.

Internet access for students at home was not identified as a barrier if purposely planned for in device selection. Students either visited a public place for access or downloaded information onto the device before going home.

Communication

Setting a clear purpose and vision, and then sharing is a key to successful implementation of a 1:1 technology initiative.

Honoring the community by keeping them informed on the initiative is important for continued support for technology. A well planned website for students, parents, and staff was the most effective form of communication about the technology initiative.

Policies and Procedures

Technology policies, manuals, and procedures need to be up to date to reflect a 1:1 technology initiative. This includes: Acceptable Use Policies, (for use of Internet and devices); procedures for lost, stolen, and damaged devices in place for staff and students; manuals for staff and students on device use and care; and insurance and fees need to be considered.

Management

Processes and procedures need to be in place for distribution and collection of devices in a 1:1 technology initiative. App Management needs to be defined and should the process and procedures for the purchases and distribution of apps.

For student and staff ease of use, a Learning Management System and common practices or workflow need to be in place so that students and staff have a way to manage their classes. Some examples of common practices or workflow are how a student turns in their work to a teacher or how a student downloads assignments to their device.

Professional Learning

Ongoing differentiated learning needs to be in place for staff, students, and parents. This can be offered by utilizing a variety of methods. Having support staff, like a technology coach, to support learning in the schools is important to moving the initiative forward.

Support

Most districts did not find a need for additional technology staff to repair devices, however, instructional staff to support teachers was added in several of the districts. Several districts also added student technology teams to support the 1:1 technology initiative.

Funding

While no two districts funded a 1:1 technology initiative in the same way, districts found that a plan for sustainability past the initial implementation years was important.

Phase 1 Foundation

Education is the key to Bend-La Pine's economic growth and prosperity and to our ability to compete in the global economy. It is the path to good jobs and higher earning power. It is necessary for our democracy to work. It fosters the cross-border, cross-cultural collaboration required to solve the most challenging problems of our time.

To greater understand the foundation of the Digital Conversion initiative, including the research findings that support it, please explore the complete Bend-La Pine Schools' *Curriculum and Instructional Technology Plan: Learning Empowered by Technology* by clicking through the images on the following page.

BEND LA-PINE SCHOOLS

LEARNING EMPOWERED BY TECHNOLOGY



CURRICULUM AND INSTRUCTIONAL TECHNOLOGY PLAN 2013-2015

520 NW Wall Street, Bend, OR 97701 • telephone: 541.355.1032 • email: shay.mikalson@bend.k12.or.us • http://blogs.bend.k12.or.us/instructionaltechnology/

1 of 34

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Phase 1 Overview



Digital Conversion

Phase 1 Application Overview

Spring 2013

Rolling out a full Digital Conversion technology program can be a daunting task for any school or district. After talking to some of the most forwardthinking administrators and teachers, we've got the inside scoop ... and we're here to share it with you!

The following section offers the guidance you need in order to proactively, rather than reactively, address issues that schools commonly face when going digital. We encourage you to explore, customize, and choose the resources that will best support your school community's decision as to whether or not to apply for the Phase 1 Demonstration Sites.

Digital Conversion Overview and District Vision

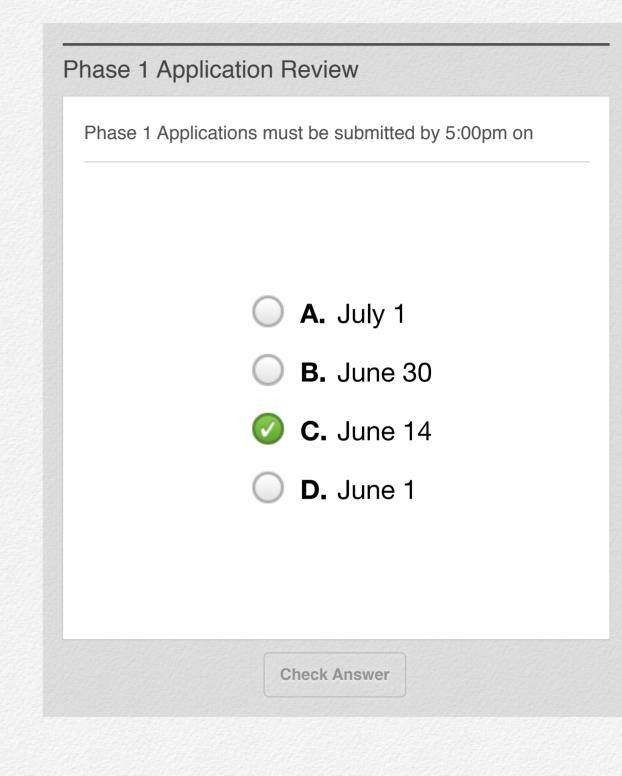
Digital Conversion refers to the transformation of instruction from a paper based world to one that is primarily digital, where every student and teacher has access to a personal computing device and the resources associated with it 24/7. This conversion will profoundly change the nature of teaching and learning in the Bend-La Pine Schools.

The purpose of the Bend-La Pine Digital Conversion Initiative is to employ technology in ways that improve teaching and learning through increased student engagement with content, in a context that is current and relevant to the future where our children will be living. It is imperative to note that this project is a teaching and learning project, not a technology project. Through this paradigm shift in methodology, we will be changing the way teachers teach and students learn, while utilizing a powerful set of digital and technological tools.

We are separating the Bend-La Pine Digital Conversion into two phases. In Phase 1, several schools and programs will help us further define not only why and how we want to do this, but what the best practices are for roll out with our student, parent and school communities. Phase 1 sites will help construct the policies that will govern student and teacher interactions in our digital schools, while also delineating crucial curricular resources, professional development and communication strategies at each level of our system. Phase 1 schools will be a key part of planning for Phase 2 of this project; their leadership and the models they help create will ensure that our plan for Digital Conversion throughout all of our Bend-La Pine Schools is built on a solid, well planned and successful foundation.

Selection for Phase 1 will be competitive. If you are interested in participating, please convene a team that will work together to prepare a proposal, not to exceed 5 pages, that addresses the areas and questions that follow. These items are all provided to guide you. They do not need to be addressed individually if you do not feel it strengthens your proposal. We have also included links to resources that will be extremely helpful as you think through and plan what a Digital Conversion will entail, please be sure to review them as part of your planning process. The scoring guide that will be used to rate proposals follows the application criteria.

Proposals need to be submitted to Shay Mikalson by the end of the day on Friday, June 14. Phase 1 schools will be identified and notified by July 1. It is our hope that teachers would receive their devices by the start of August. Device rollout to students at Phase 1 sites would be planned for later in the fall of 2013.



Phase 1 Application and Scoring Guide

Elements a site proposal should include—not to exceed 5 pages:

Site Name:

Vision Statement and Goals (10 points):

Please describe your vision for and articulate the rationale behind how your school's Digital Conversion program will enhance your ability to meet your SIP building goals. In that description, specifically identify the goals you have for your Phase I Digital Conversion as well as the data you will use to evaluate your success in reaching them. Imagine how students' learning environments within the instructional core might shift, the skills and competencies you want them to develop, and the impact your Digital Conversion program might have on your larger school climate as well. This vision should interface with your existing site vision and SIP goals while looking toward secondorder change that has the potential to transform how teachers teach and students learn. However, it is also important that you build some small, early goals into your plan so your site can celebrate some early successes. Use the following questions to guide your thinking as you complete this section of your proposal:

• How will your SIP building goals be enhanced (supported) by this conversion plan?

• What specific goals will digital conversion help you achieve? How will you measure progress?

• How will this program improve outcomes for your students with disabilities (print, communication, cognitive, etc.)?

• What shifts do you expect to see in your classrooms from what teachers are doing now to what they could be doing by the end of your first year of digital conversion?

Staff Development Plan (10 points):

Staff development is the key factor in successful Digital Conversions. We plan to centrally support your conversion with workshops and other opportunities for your teachers, but it will be critical that your site leadership team is a partner in initial and ongoing professional development efforts. Your plan will help us determine the most essential topics for your staff, a timeline for providing those trainings, and the most effective times and ways to work with teachers at your site. Use the following questions to guide you as you put together your staff development plan:

• What foundational skills will your teachers need to make this successful?

• When and how should staff development for your teachers occur?

• How could you make sure all teachers are confident in their own skills and ready to transform their classroom environments, be they novice or more experienced technology users?

• How might you ensure staff buy in, participation, and use of these tools?

• What partnerships would be helpful when planning your professional development (SPED, Assistive Technology, etc.)?

Student Skills and Expectations (10 points):

Students, and their success, are at the core of our Digital Transition. Although the term "Digital Natives" is often used to describe those we are currently educating, their backgrounds, previous experiences and current knowledge or practices are by no means consistent or predictable. Successful Digital Conversions not only plan for students to access curricular and learning resources in a digital manner, they guide their students toward responsible digital decision making and citizenship by planning for and teaching a wide variety of technology skills and processes. This part of your proposal could address questions such as the following:

• What foundational skills will your students need to make this successful, both before and after device deployment?

• How will you teach appropriate use and digital citizenship to all students, both in and out of the classroom?

• What school or district policies might need to be in place to support your digital conversion?

• What are some specific student behaviors and actions that these policies should address?

Support Plan (10 points):

Central support will be in place for curricular resource management and device deployment as well as ongoing care, maintenance, planning and evaluation. However, Phase 1 programs will be essential in helping us define other successful support structures that could provide just-in-time help for both students and teachers at your site. As you think about this challenge and craft this part of your proposal, consider the following:

- What support structures could you implement internally to ensure the success of this program?
- In what ways could your staff and students be supported?
- What ongoing support do you envision offering families throughout the digital conversion?

Timeline (10 points):

With the following dates in mind, please share your ideal implementation timeline, including staff development sessions, parent and student information sessions, student device roll out, and significant academic or programmatic measurement checkpoints. Please make sure to keep in mind your school's real capacity and realize that selection to be in Phase 1 is NOT contingent on all teachers being involved or on being ready to go with this program on day 1 of the 2013/2014 School Year, especially considering our system-wide implementation of a new student information system. The most important part of this section of your proposal will be that it is well thought out and addresses all elements of your Digital Conversion in a way that will lead you to a successful implementation.

Please keep these dates in mind while you create your timeline:

- June 14: Proposals due by end of the day
- July 1st: Phase 1 Schools/Programs announced
- July 31st: Staff iPads issued
- August 6, 7, 8: Staff development opportunities related to mobile technology, services and applications
- August (ongoing) Essential Synergy Trainings for Office and Support Staff, Counselors, and many other groups across our system
- August 14-23 Optional Synergy Trainings for Teachers
- August 26-30 Teacher Inservice Week
- Wednesday, September 4, first day of school

Competitive Priorities (5 points):

In the case of a tie between school proposals, the following items will be scored. Please address how and if they apply to your application.

• Site and/or Principal can show evidence of a commitment to technology infrastructure and instructional technology integration into instruction through locally funded investments in technology hardware, software, infrastructure, and professional development. These items are addressed in the proposal and their impact on teaching and learning is described.

• Administration shows a commitment to instructional technology through participation in the Administrator Technology Roundtable during the 2012/2013 school year.

Resources:

The Bend-La Pine Schools are not unique in moving toward a Digital Conversion. The following resources have been useful as we have developed both our vision and foundation for this exciting project.

Common Sense Media 1:1 Essentials Program

How to Roll Out a 1:1 iPad Program

Bend-La Pine Acceptable Use Policy

Project RED

Mooresville School District's Digital Conversion Story

The Story of Burlington High

Universal Design for Learning Guidelines

http://aim.cast.org/learn

Digital Conversion Pre-Application Information Session

Scoring Guide:

Site:

Scoring Guide for Proposals

| 0 | Item is not addressed |
|----|--|
| 2 | Less than half of criteria are met. Many areas incomplete, underdeveloped or not addressed. |
| 4 | 50% of the criteria are met, but there are many areas that are incomplete or underdeveloped. |
| 6 | 75% of the criteria are met, but there are some areas that are incomplete or underdeveloped. |
| 8 | Meets all criteria. |
| 10 | Exceeds all criteria. This means the section goes beyond the expectations of the application criteria. |

Vision Statement and Goals (10 points)

Criteria:

- Provides a clear vision of what the site wishes to achieve through Digital Conversion.
- Specific long and short-term goals for Digital Conversion at this site are listed.
- A clear process for achieving goals is described.
- Methods to measure success are included.
- Shows strong evidence that Digital Conversion will strengthen the ability of the site to improve
 progress toward meeting measurable objectives that already exist in the site and district
 improvement plans.
- Clear descriptions of the impact of Digital Conversion for both teacher and student participants and the community as a whole are included.

Score/Points:

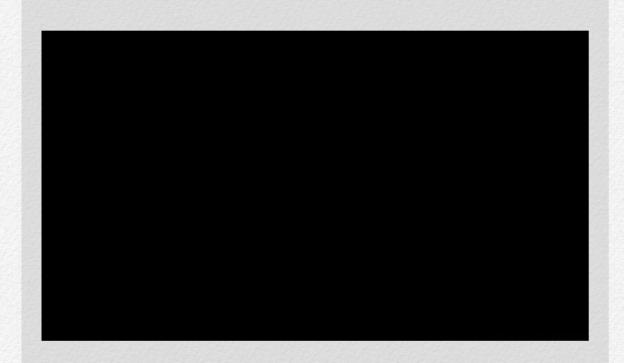
Staff Development Plan (10 points)

Criteria:

 Demonstrates a clear understanding of the impact that intensive, on-going professional development can have on improving student performance.

We look forward to the partnership!

How to Start a Movement



Ted Talks: With help from some surprising footage, Derek Sivers explains how movements really get started. (Hint: it takes two.)

Phase 1 Next Steps for Selected Sites

Digital Conversion

Phase 1 Next Steps for Selected Sites

Summer 2013

The following elements are NOT to be included in your initial proposal. Instead they are provided here for your preview, as if selected during the Phase 1 competitive application process we will work with your site to additionally develop the following components over the summer.

We have a systemic plan and effort to provide substantial professional support by grade level and content level. We will work with selected buildings to break it down into sizable chunks everyone is comfortable with; we know individuals are moving at different rates; we just want to make sure everyone is moving in the right direction.

Site Digital Leadership Team Roster:

Your site leadership team should be representative of your school community, and might include administrators, staff, parents and even students. This team will be essential in crafting your digital conversion, and leading the way as it takes place. Please list who will be involved, and any specific reasons or ways that these people will be essential to your success.

Communication Plan:

Communication with stakeholders will be essential to the success of your Digital Conversion. This includes the message that is sent to teachers, students, families and your larger community. From the start it will be important that plans are transparent, and your community knows when and how their questions will be answered. With that, please outline how you will communicate with all of the key players involved in your Digital Conversion program. Communication plans should include specific strategies, and could even be as specific as times and places. The following are some questions your Communication Plan might address:

o What are some questions that you anticipate staff, students and families will have?

o How do you anticipate addressing those questions?

Curriculum and Digital Resources Plan:

The Bend-La Pine Schools currently support digital systems that will be useful for your teachers as you move into and through your Digital Conversion. These include Edmodo, Google Apps, Discovery Streaming, Book Share and other tools. We will also be supporting teachers as they learn to use resources such as Apple's iTunesU and iBooks Author to transform the way that content is delivered to their students. Please address how, as a Phase 1 school, you would evaluate your current curricular resources and learning tools, and determine how these could be enhanced, augmented and even replaced by digital tools as you move toward a transformation of learning at your site.

• What are your specific goals for Digital Conversion in each subject area or at specific grade levels?

• Please identify any learning tools (apps, services, books or other digital textbooks, etc.) that will be essential to your plan.

• As classrooms start to incorporate more digital technology, it becomes increasingly important that materials used are designed to be useable by all students including those with disabilities. Discuss how the materials you select for each subject area or grade level meet the following Universal Design for Learning Guidelines:

- provide multiple means of representation;
- provide multiple means of action and expression; and
- provide multiple means of engagement

• Describe how these tools will be used to meet project goals and curricular standards.

Technology Infrastructure Plan:

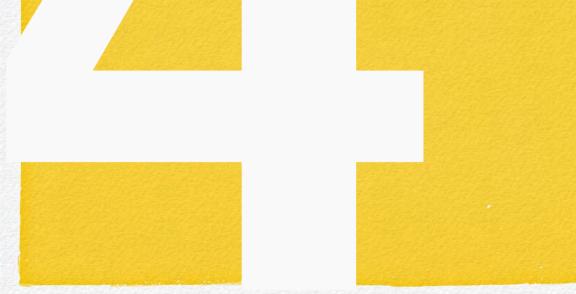
As a whole, our schools are equipped with a robust infrastructure and we are well positioned for Digital Conversion. That said, some network enhancements will be necessary across our system (mainly related to wireless capacity). As we plan for this, your input will be valuable because your leadership team knows your site better than anyone else and might be aware of areas of poor connectivity. Please work with the IT department, including your Site Tech and Ben Hansen, to address possible needs in this part of your proposal. Consider what areas at your site will need wireless coverage or additional capabilities.

A Digital Conversion District Example! Future @Now--Transition to Digital Classrooms futuremonov

Dr. Mark Edwards, Superintendent Mooresville Graded School District (NC)

Phase 1 Devices

Digital Conversion



Phase 1 Devices

Summer 2013

In 2003, the <u>New York Times</u> reported that laptops outsold desktops for the first time. In Q4 2012, <u>NPD</u> forecasted that tablets would outsell laptops for the first time. People are rapidly adopting devices that are lighter, simpler and less expensive than standard laptops. The Chromebook and iPad represent very distinct approaches to the post-PC device world. The iPad relies on installed apps and a touchscreen. The Chromebook gives us a web browser contained in a traditional laptop form. Here's a brief look at how each of these devices offers connectivity, applications, and access to data that ultimately led our decision to implement iPads in our Phase 1 Demonstration Sites.

Spec Summary and Comparison

The Chromebook and iPad both deliver simpler computing experiences then many conventional corporate laptops:

- · Boot times measured in seconds
- Battery life of 10 hours (iPad) or 6 hours (Chromebook)
- Weight of 1.5lbs. (iPad) or 3lbs. (Chromebook)
- · Limited access to the file system

Streamlined updates of the operating system, apps or extensions

 Built-in cameras, microphones and speakers for video conferencing

•Ubiquitous connectivity, thanks to WiFi or WiFi plus cellular data connections.

Both systems encourage user focus, although in different ways. iPad applications inherently fill the screen, encouraging monotasking. Chromebooks essentially run a single application - a web browser - complemented by user-added extensions and web apps.

The Chromebook and iPad are distinctly different pieces of hardware. The iPad uses touch, the Chromebook, a conventional trackpad and keyboard. The iPad display changes orientation as the user rotates the device; the Chromebook doesn't. The iPad has a back-facing camera for shooting photos or video; the Chromebook doesn't.

iPads are completely accessible devices, natively supporting text-to-speech, voice-over navigation, speech-to-text (new iPad as well as some apps), and a host of other features. They can accept input from Braille keyboards, and the touch screen responds to a number of external devices for those who have challenges with fine motor skills. While there are a number of Chrome extensions to support diverse learners, the entire environment is not quite as customizable.

Enterprise management features differ, as well. The iPad supports Mobile Device Management of iPads with third party software. Google's own Google Apps' control panel provides controls for management of Chrome OS devices.

Both product lines include multiple models. The Chromebook line now includes devices with 11" screens and slower performance (the \$249 Samsung Chromebook), as well as a lessexpensive device with a conventional hard drive (the \$199 Acer C7 Chromebook). The iPad mini (starting at \$329) is considerably smaller and lighter than the iPad 2 (starting at \$379), but lacks the "retina display" of the larger iPad.

1. Internet: Is connectivity an issue?

The Chromebook and iPad differ dramatically in their need for connectivity. The Chromebook is essentially a web browser that needs connectivity to function. The iPad on the other hand, through the use of Digital Textbooks and iTunesU allow downloadable content to be delivered anywhere with or without connectivity.

2. Data: How do you access, create and store data?

Input devices matter. Nearly any device handles email and basic document editing. But typing on a physical keyboard may be the fastest way to enter large quantities of data. And drawing a quick sketch with your finger might convey your point clearly. Personal preferences and habits play a significant role when choosing input devices but with auxilary features like a keyboard for iPads we believe the iPad provides the best all in one device on the market at this time.

3. Digital Content: What apps, digital content, and digital resources do you need?

While the Chromebook supports Flash and the iPad does not, the overall availability of educational apps, digital textbooks, and digital resources for the iPad dramatically outnumber in quantity and quality those available for the Chromebook.

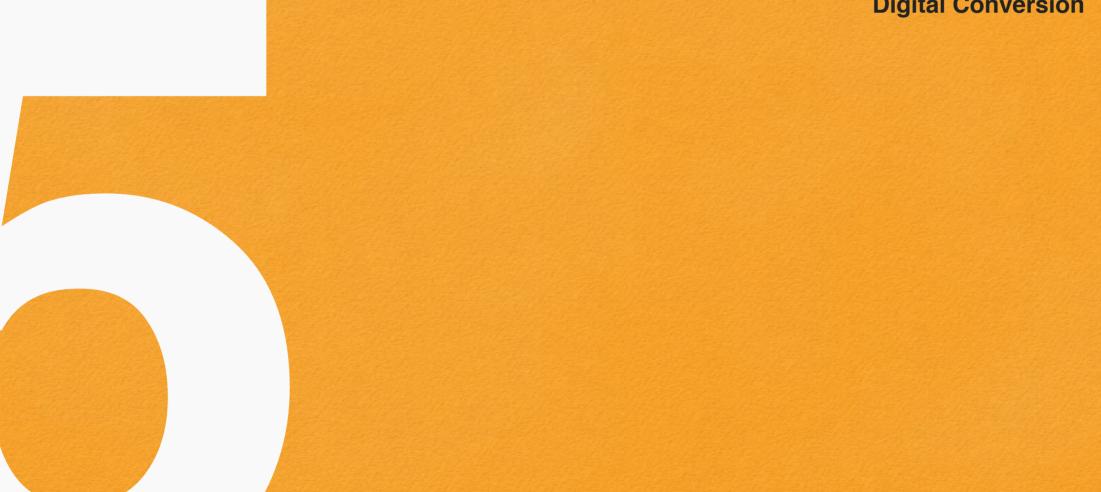
4. Device: What task do you need to accomplish?

Four Decisions

Choose devices best suited for the tasks you need to accomplish. Note the use of the plural: devices. In a browser-and-app world, you should be able to seamlessly switch devices. The device matters only to provide access to data and an application. The reality of our current Apple platform for teachers and student labs allows this plurality to occur much easier with the iPad than Chromebook.

* The Phase 1 Devices section above was adapted for Bend-La Pine Schools use from, "*Chromebook or iPad: Choose your post-PC device wisely*, by Andy Wolber.

Phase 1 Curriculum



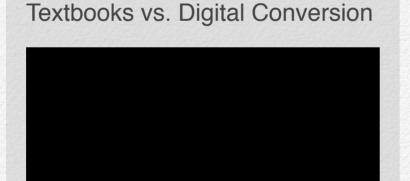
Digital Conversion

Phase 1 Curriculum

Fall 2013

The following pages are an initial Phase 1 draft summary crosswalk between current traditional curriculum and their corresponding potential digital solution. Please

note this section is focused on Phase 1 and calls for full curriculum reviews to occur for Phase 2 starting in the 2013-14 school year.



English/Language Arts ELEMENTARY LEVEL

Traditional:

Houghton Mifflin Reading, c.2006. Houghton Mifflin

Digital:

Reading, Literature, and Language Arts

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Journeys is where the reading adventure begins! Developed on a solid foundation of proven instruction and easy-to-manage organization, this exciting new K-6 reading program includes Adventure Unites and Guided Reading with literacy expert Irene Fountas, plus differentiated instruction components for intervention and ELL to help you ensure that every child can be successful.

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Write Source is the only comprehensive K-12 writing program with integrated 6traits instruction, detailed coverage of all key forms of writing, point-of-use grammar connections, and formative assessments incorporated into every unit.

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HMH eTextbooks are digital replicas of their textbooks. Now student and educators can access the same content they've come to expect from HMH on tablets and mobile devices.



HMH Readers featured leveled non-fiction and fiction selections designed to reinforce reading skills, promote academic vocabulary acquisition, and improve reading fluency and comprehension.

Alternatives:

English/Language Arts District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

MIDDLE SCHOOL LEVEL

Traditional:

EMC Masterpiece Series, Literature and Language Arts, c.2005 EMC Corp.

- Discovering Literature, Grade 6
- •Exploring Literature, Grade 7
- •Responding to Literature, Grade 8

Language Essentials: Grammar and Writing Text, c.2005 EMC Corp.

Digital:



Available as an ebook with 6 year license only. We would need to attempt to negotiate a one year pilot agreement.

Alternatives:

English/Language Arts District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

High School Level

Traditional:

Prentice Hall Literature (Grade 9-12) Pearson Prentice Hall, c2007

Great Source Write Source (Grade 9 and 10)

Digital:



Product Name

Prentice Hall Literature Common Core Standalone eText 1-Year Student License Grade 9 price: \$13.47 Isbn10: 013322452X Isbn13: 9780133224528 notes: †

Grade 10

Prentice Hall Literature Common Core Standalone eText 1-Year Student License Grade 10 price: \$13.47 isbn10: 0133224546 isbn13: 9780133224542 notes: †



Pearson eText for

Schools

Grade 11

Prentice Hall Literature Common Core Standalone eText 1-Year Student License Grade 11 price: \$13.97 isbn10: 0133224554 isbn13: 9780133224559 notes: †

Grade 12

Prentice Hall Literature Common Core Standalone eText 6-Year Student License Grade 12 price: \$13.97 isbn10: 0133224562 isbn13: 9780133224566 notes: †



Write Source

subscription) *

Write Source is the only comprehensive K-12 writing program with integrated 5traits instruction, detailed coverage of all key forms of writing, point-of-use grammar connections, and formative assessments incorporated into every unit. <u>Write Source © 2012</u> <u>Student Ed. eTextbook</u> ePub Grade 9 (1-year 1532912 0-544-10099-9 \$13.99



HMH eTextbooks are digital replicas of their textbooks. Now student and educators can access the same content they've come to expect from HMH on tablets and mobile devices.

Alternatives:

English/Language Arts District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Mathematics

Traditional:

Bridges (K-5)

Digital:

At this time Bridges digital offerings are primarily PDF versions of all the printed materials, including student books and teacher masters displayed for the student. There are some Smartboard files posted on their site, and they do have webpages for each grade that directs teachers to other 3rd party digital resources available on the web. (for instance, see the 2nd grade Bridges resources & Number Corner resources)

Bridges also has three virtual manipulative apps available on the iPad and on the web but does not currently have any interactive student ebooks at this time. Use of the student pages PDFs by students would be at the discretion of the teacher and depend on applications available to the students to view and annotate.

Math Learning Center Apps

Number Rack



The Number Rack facilitates the natural development of children's number sense. Rows of moveable, colored beads encourage learners to think in groups of fives and tens, helping them to explore and discover a variety of addition and subtraction strategies. Learn More ...

App Store

Also Available as a Web App

The free, web app version of the Number Rack works on all modern browsers, including Internet Explorer 9.

Number Rack Web App

Geoboard



The Geoboard is a tool for exploring a variety of mathematical topics introduced in the elementary and middle grades. Learners stretch bands around pegs to form line segments and polygons and make discoveries about perimeter, area, angles, congruence, ractions, and more. Learn More.

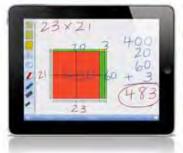


Also Available as a Web App The free, web app version of the Geoboard works on all modern

browsers, including Internet Explorer 9.

Geoboard Web App

Number Pieces & Number Pieces Basic



Number Pieces and Number Pieces Basic help students develop a deeper understanding of place value while building their computation skills with multi-digit numbers. Students use the number pieces to represent multidigit numbers, regroup, add, subtract, multiply, and divide. Learn More ...

Number Pieces Basic Number Pieces



Also Available as a Web App

The free, web app version of Number Pieces works on all modern browsers, including Internet Explorer 9.

Number Pieces Web App

App Store

Alternatives:

Mathematics District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

MIDDLE SCHOOL LEVEL

Traditional:

Connected Math 2 (Grades 6-8) Pearson, c2009

Digital:

The Teacher Guides

and student books for CMP 3 will be digital. Pearson has some sample units for CMP 3 available to review Downloadable sam-



(CMP3), Grades 6-8

Connected Mathematics Project 3

ples units are available from connectedmathematics3.com.

CMP 3 will be ready for implementation in the Fall 2013. It will have a copyright date of 2014. CMP 3 has been revised and field-tested and the units are in production. It will be fully aligned with CCSS content standards. Additionally, CMP 3 has added a unit to 8th grade that will allow students to take algebra 1 in 8th grade. There will be two paths through 8th grade—one

Grades 6 - 8

for CCSS 8th grade and one for CCSS Algebra 1. The Standards for Mathematical Practice are embedded in each problem and occurs during each lesson.



Available digitally on iPad but needs internet connectivity to access. This would be an issue needing a solution (iTunes U?).

Alternatives:

Mathematics District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

HIGH SCHOOL LEVEL

Traditional Algebra 1, Geometry, and Algebra 2:

Larson Algebra 1; Larson Geometry, Larson Algebra 2, Larson, Boswell, Kanold and Stiff; Holt McDougal c2011

Digital:



Larson Algebra 1, Geometry, Algebra 2

Holt McDougal Larson Common Core Ed. AGA ©

eTextbook ePub Algebra 1 (1-year subscription) *

2012 Student Ed.

Larson Algebra 1, Geometry, and Algebra 2, Common Core Editions, enable students to reach the depth of understanding demanded by the new Common Core State Standards through active learning opportunities, flexible lesson development, and effective assessment tools. Content Standards and Standards of Mathematical Practices are documented and integrated throughout every lesson.

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HMH eTextbooks are digital replicas of their textbooks. Now student and educators can access the same content they've come to expect from HMH on tablets and mobile devices.

978-0-544-04637-5

0-544-04637-4

\$13.99

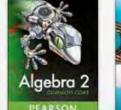
Alternatives

books on iPad

\$14.99



Randall I. Charles.





Algebra 2

John A. Carter, P.





Algebra 2 Algebra 1 Randall I. Charles... John A. Carter, P Geometry Randall I. Charles. Geometry John A. Carter, P... Mathematics District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Traditional Pre-Calculus:

Bend High School

IB Mathematics Standard level, 2nd Edition; c 2009; Maenpaa, OWen, et al; Haese and Harris

La Pine High School

Advanced Mathematics: An Incremental Development (Saxon Advanced Math) 2nd Edition; c1996; John H. Saxon, Jr; Saxon Publishers

Mt. View/ Summit High Schools

Precalculus Enhanced with Graphing Utilities, 5th Edition; c2009; Sullivan and Sullivan; Pearson Prentice Hall

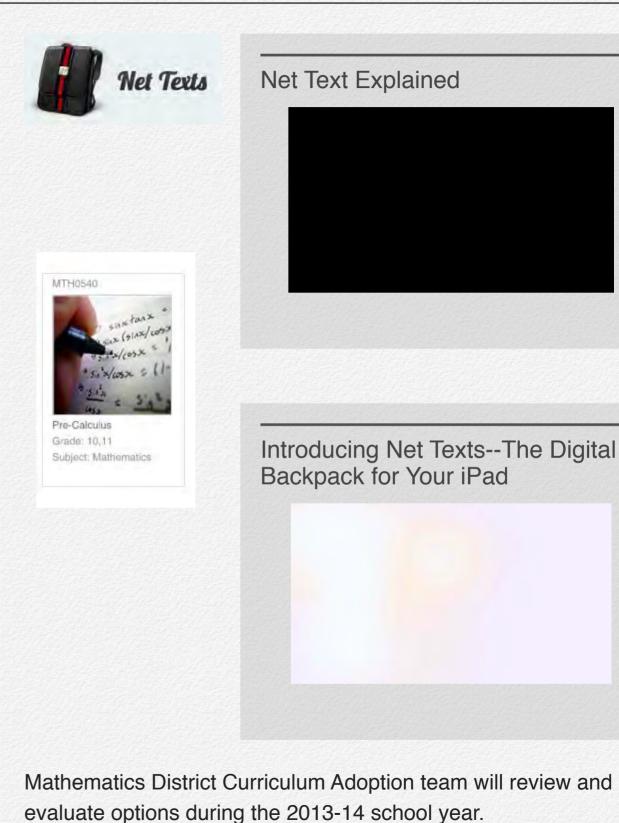
Digital:

Current Pre-Calculus textbooks are not available digitally.

Alternatives:

books on iPad





Traditional Calculus and Others:

Bend/Summit High Schools

Calculus of a Single Variable, 9th Edition; c2009; Larson, Edwards, Hostetler; Cengage Learning

IB Mathematical Studies and Standard Level; c2004; Coad, Whifren, Owen; Haese et. al.; Haese and Harris

Functions, Statistics and Trigonometry; c2010; The Wright Group; McGraw-Hill

La Pine High School

Saxon Calculus w/Trigonometry and Analytical Geometry, 2nd Edition; c2002; John Saxon, Jr, Frang Wang; Saxon Publishers

Mt. View High School

Calculus, 6th Edition; c2010; James Stewart, Holt

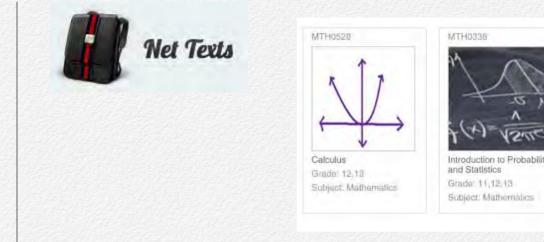
Digital:

Current Calculus and other textbooks are not available digitally.

Alternatives:

books for iPad





Mathematics District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Traditional Integrated or Contextual:

Algebra 1 and Geometry Foundations Series, c.2011; Charles, Hall, Kennedy, et. al; Pearson Prentice Hall

Cognitive Tutor Algebra 1, Geometry, and Algebra 2, c.2008; Carnegie Learning

Cognitive Tutor Integrated Math1 and Math 2, c.2003 and 2004; Carnegie Learning

Digital:

1 year Digital Access

price: \$17.97 isbn10: 0133696391 isbn13: 9780133696394



Cognitive Tutor/Carnegie is not available digitally as

new textbooks are provided annually as consumable workbooks.

Alternatives:

Mathematics District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Science

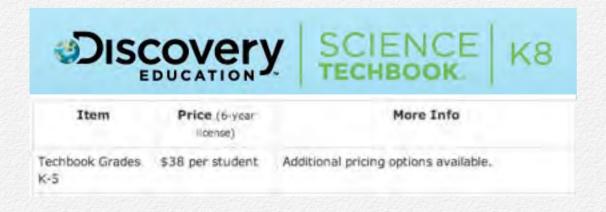
ELEMENTARY LEVEL

Traditional:

FOSS kits

Digital:

FOSS is a hands-on series of kits with no digital content.



Techbooks need internet connectivity to fully function, but many elements are downloadable. Additionally, they are fully set up for the iPad.

Science District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

MIDDLE SCHOOL LEVEL

Traditional:

6th--iScience (Custom Book for Bend-La Pine)

7/8 CPO Earth, Life, and Physical Science

Digital:

iScience is available in eBook Chapter PDF's. The interactive textbook is only available with Flash.

CPO's entire student text and lab manual are available in PDF form (textlinktoscience.com).

Alternatives:



Alternatives:

Techbooks need internet connectivity to fully function, but many elements are downloadable. Additionally, they are fully set up for the iPad.

Science District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

HIGH SCHOOL LEVEL

Traditional Physical Science:

Addison Wesley Science Insights (Physical Science)

Science Spectrum, A Physical Approach; Holt, Reinhart and Winston

Prentice Hall Conceptual Physics, Delmar Transportation Energy and Power Technology

Physical Science: Concepts in Action (Pearson)

Digital:





HMH eTextbooks are digital replicas of their textbooks. Now student and educators can access the same content they've come to expect from HMH on tablets and mobile devices.

Complete interactive textbook is available online. This would require connectivity and something that would need to be solved (iTunesU?)

Alternatives:



Techbooks need internet connectivity to fully function, but many elements are downloadable. Additionally, they are fully set up for the iPad.

Science District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Traditional Biology:

Biology, An Everyday Experience, c2002 Glencoe

Biology, 3rd Edition, by Campbell, Benjamin/Cummings Publishing Inc. 1993

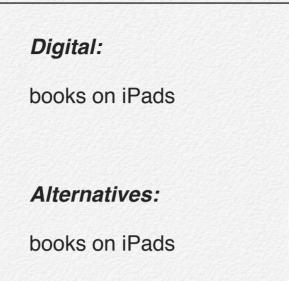
Biology, Miller and Levine Digital: books on iPads fliplogy effi Ft. Maler \$14.00 -Alternatives: BIOLOG Life on Earth books on iPads E. O. Wilson's Life Houghton Mittle Biology on Earth Harcourt Biology Mush Black \$14.99 -51.88 -\$14.99

Science District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Traditional Chemistry:

Chemistry: the Central Science and Media Companion, Brown, LeMay, and Bursten, Prentice Hall

PH Chemistry, c2008





Science District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Traditional Physics:

Physics: Principles and Problems, Zitzewitz/Murphy, Merrill 1990.

College Physics, Saunders, Serway and Faughn

Bend and La Pine High Schools

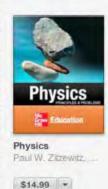
Physics Principal and Practices 2013 (McGraw Hill)

Mt View and Summit High Schools

College Physics 2nd Ed, 2012 Knight, Jones, Field

Digital:

books on iPads



Alternatives:

Science District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Traditional Other:

IB Chem; Pearson Higher Level Chemistry

IB Bio; Pearson Higher Level Biology

IB Environmental Systems and Societies

IB Living in the Environment (Brooks/Cole)

Earth Science; Prentice Hall

AP Understanding Human Anatomy & Physiology (McGraw/Hill)

Forestry; Intro to Wildland Fire Behavior (Forests Service)

Natural Res; Northwest by Alden (Knopf Doubleday)

Environment Science (Holt)

AP Bio; Principles of Life-HS Edition (Sinauer) 1st Ed, 2012

AP Chem; Chemistry: Principles of Reaction (Cengage) 7th Ed. and Principles and Reactions Masterson, Hurley

Bio Med; Intro to Health Care (Delmar Cenage) 3rd Ed, 2012

Bio Med Tech; Biomedical Engineering by Staltzman

Forensics; Forensics Science for HS (Kendall/Hunt) 2nd 2009

Ag; Modern Livestock and Poultry (Cengage) 2010 and Plant & Soil Science Fundamentals (Cengage) 2011

Lab Manual for Comparative Vet A&P (Cengage) 2011

Digital:

Environmental Science (Holt) pdf http://www.nexuslearning.net/books/Holt_Env_Science/

Pearson Baccalaureate Diploma Level eBooks are available for

- Maths Standard Leve
- Maths Higher Level
 Economics
- Environmental Systems and Societies
 Device place
- Psychology
 History: Cold War
- History: Causes, Practices and Effects of War

Chemistry: Principles and Reactions, 7th Edition

from \$91.99 6



CourseSmart e-Book for Principles of Life

A PDF-style e-Book David Hillis ISBN-10: 1-4292-8461-7 ISBN-13: 978-1-4292-8461-5 Our Retail Price to Students: \$44.99 Wholesale Price to Bookstores: \$36.00

Alternative:

Science District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Social Studies

ELEMENTARY LEVEL

Traditional:

Nystrom kits, fiction, and non-fiction books

Digital:

Not available

Alternatives:

SOCIAL STUDIES Discovery

Techbooks need internet connectivity to fully function, but many elements are downloadable. Additionally, they are fully set up for the iPad.

Social Studies District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

MIDDLE SCHOOL LEVEL

8th

Traditional: 6/7th History of Our World, The Early Ages, 2005 (Prentice Hall) Creating America, 2005 (McDougal Littell) Digital: Current adopted textbooks are unavailable digitally.

Alternatives:



Techbooks need internet connectivity to fully function, but many elements are downloadable. Additionally, they are fully set up for the iPad.

Social Studies District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

HIGH SCHOOL LEVEL

Traditional:

Scott Foresman Social Studies, c2003, Pearson Scott Foresman

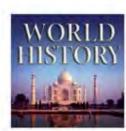
US Government: Democracy in Action, c2003, Glencoe/ McGraw Hill

American Vision, c2005, Glencoe/McGraw Hill

World History: Patterns of Interaction, c2005, McDougal Littell

Digital:

Most adopted textbooks are not available digitally.



World History: Patterns of Interaction

World History: Patterns of Interaction is a highly integrated program that provides teachers with a practical and motivational approach to teaching world history and to helping students think critically and reflectively. The highly visual approach and primary sources help all students understand world history and make global connections.

> World History: Patterns of Interaction @ 2012 Student 15 Ed. eTextbook ePub (1-(ear subscription)

| 32269 | 978-0-544-04796-9 0-544-04796-6 | \$13.99 |
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| | | |



HMH eTextbooks are digital replicas of their textbooks. Now student and educators can access the same content they've come to expect from HMH on tablets and mobile devices.

Alternatives:

books on iPad











Government Luis Ricardo Fraga \$14.99 -

Geography Daniel D. Arreola. \$14.99 -

World History Roger B. Beck, Li., \$14.99 -

Gerald A. Danzer \$14.99 -

Social Studies District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

World Languages

ELEMENTARY LEVEL

Traditional: Bear Creek?

Digital: ?

Alternatives:

World Languages District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

MIDDLE SCHOOL LEVEL

Traditional: ?

Digital: ?

Alternatives:

World Languages District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

HIGH SCHOOL LEVEL

Traditional:

Realidades, c2004, Prentice Hall

Discovering French, Nouveau!, c2004, McDougal Littell Holt German, Komm Mit!, c2003, Holt, Rinehart and Wilson Oggi in Italia, c2002, Houghton Mifflin IMA!, c2002, EMC Paradigm

Digital:



Realidades" Allons au-delà! AP French Ecce Romani AP Latin Readers



Discovering French Today!

Students learn French in context with the latest Valette program. Proven pedagogy, engaging new digital features, and embedded culture provide the keys to proficiency in French. *Discovering French Today!* takes you there.

 Discovering French Today

 © 2013 eTextbook files 978-0-544-05117-1

 ePub format Level 1A (1 1532878
 0-544-05117-3

 year subscription) *
 *



HMH eTextbooks are digital replicas of their textbooks. Now student and educators can access the same content they've come to expect from HMH on tablets and mobile devices.

Alternatives:



¡Avancemos!

¡Avancemos! was developed by and created for practicing teachers of Spanish like you. With a focus on culture as a cornerstone, this program emphasizes meaningful communication in Spanish, provides practice with a purpose through clear learning goals, frequent self-checks, and leveled practice activities, and promotes language learning that lasts through manageable units of study, plentiful review opportunities, and exciting multimedia applications.





HMH eTextbooks are digital replicas of their textbooks. Now student and educators can access the same content they've come to expect from HMH on tablets and mobile devices.

World Languages District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

Health

ELEMENTARY LEVEL

Traditional:

Health and Wellness, c2008, McGraw-Hill

Great Body Shop, c2007, Children's Health Market

Digital: ?

Alternatives:

Health District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

MIDDLE SCHOOL LEVEL

Traditional:

Teen Health, c2007, Glencoe

Teen Health and Wellness Database, Rosen

Digital: ?

Alternatives:

Health District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

HIGH SCHOOL LEVEL

Traditional:

Teen Health, c2007, Glencoe

Teen Health and Wellness Database, Rosen

Digital:

Currently adopted textbooks are not available digitally.

Alternatives:

Health District Curriculum Adoption team will review and evaluate options during the 2013-14 school year.

ESL

Traditional:

Moving Into English, c.2005, Harcourt School Publishers for K-5

Digital: ?

Additional Resources to Checkout!

cK-12

Introduction to cK-12

cK-12 Quick Start





Description

The iTunes U app gives you access to complete courses from leading universities and other schools — plus the world's largest digital catalog of free education content — right on your iPad, iPhone, or iPod touch. Whether you're majoring in molecular biology at a university, taking Spanish in high school, or just interested in

iTune U



Phase 1 BLPSO PLUS Resources

Ideas, Activities, and Resources Fusing Curriculum and Technology

As you know, the Bend-La Pine Schools dramatically increased our online presence this year to offer exciting, challenging, and enriching course and supplemental learning experiences to all of our students, anywhere, anytime through the creation of Bend-La Pine Schools Online PLUS. While the focus during the 2012-13 school year has been on the online course options, as we now actively serve over 1400 students, Digital Conversion demands a continued focus on the PLUS side of our work. PLUS for Teachers is designed to be a collection of resources that teachers can utilize to enhance classroom instruction. We encourage you to explore the following details as we are attempting to bring together all of the instructional technology tools offered by the district into a one stop shop. For more info--<u>http://blogs.bend.k12.or.us/instructionaltechnology/</u>.

| | Elementary School Optio |)1 |
|------------------------|--|----|
| | LINE PLUS | |
| Discovery streaming | The Bend-La Pine Schools purchases and supports a subscription to Discovery Streaming for all of our sites. This content library contains more than 100,000 digital video segments, as well as images and many other resources. | |
| LEADY | Though not as immense as the Discovery Streaming Content library, Learn 360 provides access to resources, such as National Geographic programming, not found in the DS library. This service is purchased and supported for all Bend-La Pine Schools. | |
| Study Island | Study Island is a web-based program that empowers teachers to help students master standards and prepare for assessments. It is available free of charge for all Bend-La Pine Schools. | |
| edmodo | Edmodo is a social networking tool for classrooms that provides a safe and easy way for classes to connect and collaborate, share content, access homework, take quizzes and polls, and access other resources. The Bend-La Pine Schools have set up a separate domain for our teachers and students. | |
| Coogle Das | Google Docs is an online word processor that lets you create and format text documents and collaborate with other people in real time. Also included in this service are google spreadsheets, forms, presentations, drawings and drive. All Bend-La Pine Staff and Students have accounts that can be accessed using standard usernames and passwords at http://docs.gapps.bend.kl2.orus | |
| KHAN | The Kahn Academy library of videos covers K-12 math, and science topics such as biology, chemistry and physics. It reaches into the humanities with playlists on finance and history. We encourage all of our teachers to explore this valuable resource. | |
| exia | Lexia is a technology-based reading program that increases reading proficiency for all students pre-k through grade 4, and at-risk students grades 4-12. Subscriptions are purchased and managed through the Special Education Department. | |
| ReadNaturally | Read Naturally provides intervention programs to help students improve their reading skills, particularly in the area of reading fluency. Participating schools purchase their own access to the program, but content is hosted centrally on district servers. | |
| Accelerated Reader | Accelerated Reader is software used to track reading progress through the administration of quizzes on thousands of titles at many levels. | |
| STAR Reading | STAR reading is an online assessment used to determine a student's reading level. It is frequently used in conjunction with the Accelerated Reader program. | |
| | IXL is a comprehensive web-based practice site for Pre-K through Eighth grade, including Algebra and Geometry. It provides unlimited questions on more than 2000 topics in a fun and standards-aligned platform that students find both engaging and motivating. | |

sed by departments or school

| | EMPOWERING FUTURE-READY CLASSROOMS | |
|------------------------|--|----|
| Ben (| Middle School Optio D-LAPINE SCHOOLS | ns |
| | NLINE PLUS | |
| Discovery streaming | The Bend-La Pine Schools purchases and supports a subscription to Discovery Streaming for all of our sites. This content library contains more than 100,000 digital video segments, as well as images and many other resources. | * |
| | Though not as immense as the Discovery Streaming Content library, Learn 360 provides access to resources, such as National Geographic programming, not found in the DS library. This service is purchased and supported for all Bend-La Pine Schools. | * |
| Study Island | Study Island is a web-based program that empowers teachers to help students master standards and prepare for assessments. It is available free of charge for all Bend-La Pine Schools. | * |
| edmodo | Edmodo is a social networking tool for classrooms that provides a safe and easy way for classes to connect and collaborate, share content, access homework, take quizzes and polls, and access other resources. The Bend-La Pine Schools have set up a separate domain for our teachers and students. | * |
| Coogle Des | Google Docs is an online word processor that lets you create and format text documents and collaborate with other people in real time. Also included in this service are google spreadsheets, forms, presentations, drawings and drive. All Bend-La Pine Staff and Students have accounts that can be accessed using standard usernames and passwords at http://docs.gapps.bend.kl2.or.us | * |
| KHAN | The Kahn Academy library of videos covers K-12 math, and science topics such as biology, chemistry and physics. It reaches into the humanities with playlists on finance and history. We encourage all of our teachers to explore this valuable resource. | * |
| VirtualSchool | Florida Virtual School is a set of more than 120 online courses loaded with content appropriate for Bend- La Pine Students. Hosted on a Moodle platform, this content is appropriate for use in blended, or hybrid course models as it must be facilitated by a Bend-La Pine Teacher. | * |
| | My Access is a web-based program that supports writing instruction and assessment by providing students topics on which they can write, and applying artificial intelligence to the scoring process to deliver immediate, useful feedback on the content they produce. Use of this software is currently targeted at the eighth-grade level, and managed by Dave VanLoo. | * |
| exia | Lexia is a technology-based reading program that increases reading proficiency for all students pre-k through grade 4, and at-risk students grades 4-12. Subscriptions are purchased and managed through the Special Education Department. | \$ |

=Free or provided free of cost for BLP Schools and Students at this level, centrally supported = Purchased by schools with building funds, little support

| | NE PLUS | |
|-------------------------------------|---|----|
| Discovery EDUCATION streaming | The Bend-La Pine Schools purchases and supports a subscription to Discovery Streaming for all of our sites. This content library contains more than 100,000 digital video segments, as well as images and many other resources. | * |
| | Though not as immense as the Discovery Streaming Content library, Learn 360 provides access to resources, such as National Geographic programming, not found in the DS library. This service is purchased and supported for all Bend-La Pine Schools. | * |
| Mex Learning | Oregon Education and Apex Learning® have entered into a new new partnership that will provide Oregon public high school students with access to online Advanced Placement* test preparation at no cost to the school or student. Starting immediately, Oregon students will have access to a range of tools and resources to help them better prepare to take, and succeed in, their AP exams. To start visit <u>http://</u> <u>oregonk-12.net/node/234</u> | * |
| k | As part of their contract with the Bend-La Pine Schools, K12 offers free online AP Test Preparation courses for our high school students. | * |
| edmodo | Edmodo is a social networking tool for classrooms that provides a safe and easy way for classes to connect and collaborate, share content, access homework, take quizzes and polls, and access other resources. The Bend-La Pine Schools have set up a separate domain for our teachers and students. | * |
| Cougle Des | Google Docs is an online word processor that lets you create and format text documents and collaborate with other people in real time. Also included in this service are google spreadsheets, forms, presentations, drawings and drive. All Bend-La Pine Staff and Students have accounts that can be accessed using standard usernames and passwords at http://docs.gapps.bend.kl2.orus | * |
| KHAN ACADEMY | The Kahn Academy library of videos covers K-12 math, and science topics such as biology, chemistry and physics. It reaches into the humanities with playlists on finance and history. We encourage all of our teachers to explore this valuable resource. | * |
| VirtualSchool | Florida Virtual School is a set of more than 120 online courses loaded with content appropriate for Bend- La Pine Students. Hosted on a Moodle platform, this content is appropriate for use in blended, or hybrid course models as it must be facilitated by a Bend-La Pine Teacher. | * |
| | My Access is a web-based program that supports writing instruction and assessment by providing students topics on which they can write, and applying artificial intelligence to the scoring process to deliver immediate, useful feedback on the content they produce. Use of this software is currently targeted at the eighth-grade level, and managed by Dave VanLoo. | * |
| READ 180 | Read 180 is a comprehensive system of curriculum, instruction, assessment and professional development designed for any student reading two or more years below grade level. Licenses are purchased centrally and managed by high schools. | * |
| exia | Lexia is a technology-based reading program that increases reading proficiency for all students pre-k through grade 4, and at-risk students grades 4-12. Subscriptions are purchased and managed through the Special Education Department. | \$ |

= Purchased by schools with building funds, little support

Phase 1 Evaluation

Digital Conversion

Phase 1 Evaluation and Improvement

2013-14

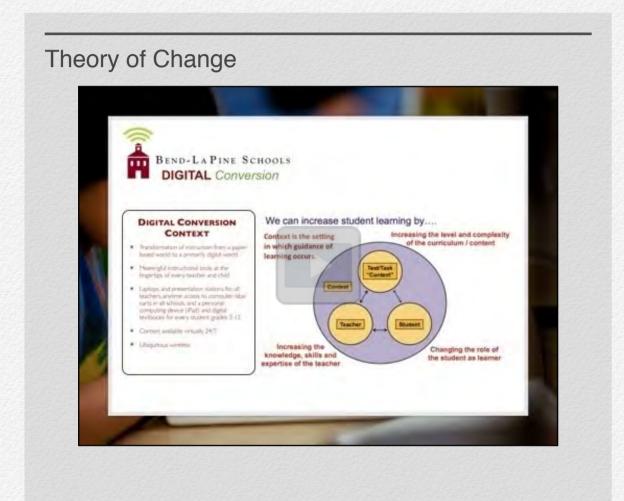
The Bend-La Pine Schools are committed to making our Digital Conversion effort a focused continuous improvement process within the instructional core. Proper evaluation of the planned action steps and strategies is vital for the designed increases in student learning to occur. It is important to note that this evaluation will be focused on student learning as a consequence of the power of a digital context to foster improvements in the level of content/tasks we provide our students, helping teachers' grow in their knowledge and skill, and changing the way students engage in the learning process.

Theory of Change

Our Digital Conversion theory of change is built upon Richard Elmore's and Elizabeth City's work out of the Harvard School of Education that demonstrate increases in student learning occur only as a consequence of improvements in the instructional core--consisting of the teacher and the student in the presence of content. Based on this empirical research, Bend-La Pine's Digital Conversion will improve student learning at scale through the following three foci:

- 1. increasing level of knowledge and skill of the teacher;
- 2. increasing the level and complexity of content students are asked to learn; and
- 3. changing the role of the student in the instructional process to be more active.

Bend-La Pine's Digital Conversion fundamentally understands that if you change any single element of the instructional core, you have to change the other two to affect student learning. Therefore, our strongest form for evaluating and continuous improvement stems from the reality that if we can not see the impact of Digital Conversion in the core, it's not there. The real accountability system is in the tasks that students are asked to do. The task we provide our students predicts performance. Digital Conversion will fundamentally look at what students are actually doing. We need to worry about whether students are actually interested in, actively engaged in, and able to explain how they think about what the adults in the system are trying to teach them.



Evaluation Metrics

Description before analysis, analysis before prediction, prediction before evaluation. Only after we develop the disciplines of description, analysis, and prediction will our evaluation be accurate and able to drive continuous growth. We will evaluate the impact of Digital Conversion on the instructional core, students and staff, in a systematic manner to inform the long-term investment of technology. Progress toward goals will be reviewed quarterly and adjustments will be made according to evidence of results or new priorities. A variety of surveys, classroom observations, lesson plan audits, analysis of students' scores, live feedback forums, and other data will be used as part of the assessment process. The data will be evaluated to determine the quality, reach, and impact of the plan. The following three hypothesis will be tested and analyzed in determining the effective-ness of the plan as well as the areas that need to be modified and upgraded:

- 1. Properly implemented educational technology can substantially improve student achievement.
- 2. Properly implemented educational technology can be revenue- positive at all levels.
- Continuous access to a computing device for every student leads to increased academic achievement and financial benefits when it's implementation is focused on improving the instructional core.

Education Success Measures (ESMs)

The success or failure of a school program can be determined in numerous ways. As any educator will tell you, test scores are important, but they are only one measure of success. With that reality in mind, we have selected ESMS in order to elicit the most valuable information for our hypotheses with the fewest number of variables. The measures were divided into two groups, short-term measures for Phase 1 and long-term measures related to a full digital conversion.

Short-Term Phase 1

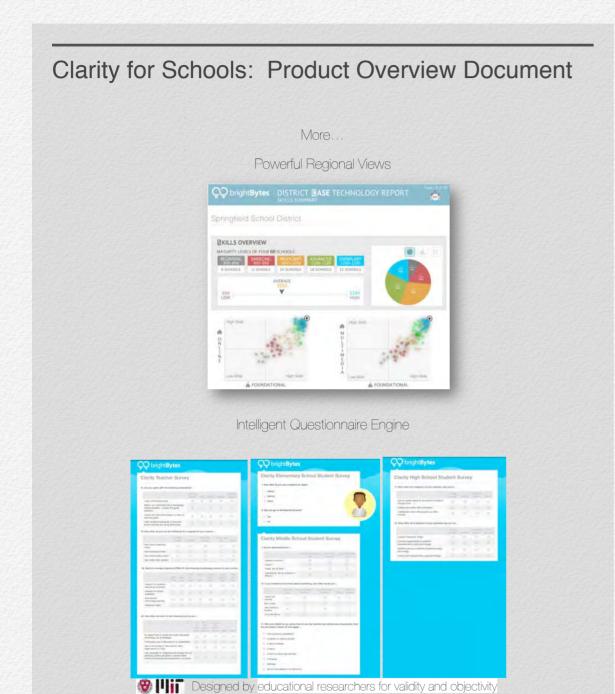
Instructional Core (Student Engagement, Level of Content/ Task, and Quality of Instruction)

- 1. Artifacts--Lesson Plan Audits (following TGD Studio Model)
- 2. Artifacts--Student Work Audits
- 3. Observation--Mini Classroom Teacher Observation Audit
- 4. Observation--Mini Classroom Student Observation Audit (Following Instructional Rounds Protocol)
- 5. Student Achievement--Student Learning Objective Results (Utilizing New 2B290 Goal Setting Process/Results)
- 6. Student Achievement--Student Achievement on OAKS, ACT, and other normed assessments
- 7. Student Achievement--School Improvement Plan Audit

- 8. Feedback--Student, Parent, Teacher, and Community Survey Results
- 9. Feedback--District Steering Committee Forum Session Feedback
- 10. External Evaluation (See Clarity for Schools Below)

Clarity for Schools: Linking Technology and Student Achievement Video





13 of 13

Long-Term Digital Conversion

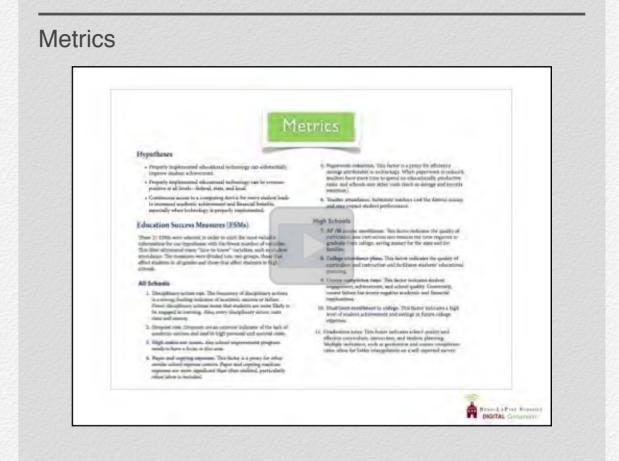
All Schools

- Disciplinary action rate. The frequency of disciplinary actions is a strong, leading indicator of academic success or failure. Fewer disciplinary actions mean that students are more likely to be engaged in learning. Also, every disciplinary action costs time and money.
- 2. Dropout rate. Dropouts are an extreme indicator of the lack of academic success and lead to high personal and societal costs.
- 3. High-stakes test scores. Any school improvement program needs to have a focus in this area.
- 4. Paper and copying expenses. This factor is a proxy for other similar school expense centers. Paper and copying machine expenses are more significant than often realized, particularly when labor is included.
- 5. Paperwork reduction. This factor is a proxy for efficiency savings attributable to technology. When paperwork is reduced, teachers have more time to spend on educationally productive tasks, and schools save other costs (such as storage and records retention).

6. Teacher attendance. Substitute teachers cost the district money and may impact student performance.

High Schools

- AP/IB course enrollment. This factor indicates the quality of curriculum and instruction and reduces the time required to graduate from college, saving money for the state and for families.
- 8. College attendance plans. This factor indicates the quality of curriculum and instruction and facilitates students' educational planning.
- 9. Course completion rates. This factor indicates student engagement, achievement, and school quality. Conversely, course failure has severe negative academic and financial implications.
- 10.Dual/joint enrollment in college. This factor indicates a high level of student achievement and savings in future college expenses.
- 11.Graduation rates. This factor indicates school quality and effective curriculum, instruction, and student planning. Multiple indicators, such as graduation and course completion rates, allow for better triangulation on a self-reported survey.



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