

Honey Creek Community School

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Honey Creek Community School
2009-2012 Technology Plan
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District No. 81901
School No. 8241
Washtenaw Intermediate School District

<http://honeycreekschool.org/techplan/>

Honey Creek Community School Technology Planning Team

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SECTION 2: Introductory Material

Mission Statement

The mission of Honey Creek Community School is to provide an education of the whole child emphasizing the integration of thought and experience by centering learning on themes and projects in a multi-age setting. Adults with various kinds of expertise, including teachers, parents, and other community members, share in the teaching of the children, connecting the children's lives inside the school with their local and global communities and ecosystems. Honey Creek Community School is committed to fostering an understanding of difference and diversity, and to teaching and modeling an active dialogue about communicating and working together effectively in a democracy with a diverse population.

Belief Statements

We believe that people learn and grow best when various aspects of their education and experience are integrated and interactive.

We believe that students are most effectively guided by "Expert Models" who participate in cooperative apprenticeships.

We believe that complex, situated learning environments and experiences enable all individuals to progress as successful, life-long learners.

We believe that the development of cooperative learning strategies and the ability to work successfully as a team member are essential life skills.

We believe that understanding and appreciating differences and diversity are integral to becoming successful adults in our changing democracy.

We believe that it is essential for children to understand themselves as active participants in their school and in their larger community.

Background

Honey Creek Community School (HCCS), established in 1995, is a public, NCA accredited, educational institution sponsored by the Washtenaw Intermediate School District for children from kindergarten through eighth grade. HCCS is designed to guide the students in a multi-age setting emphasizing team and interpersonal skills, Academic Service-Learning, integrated academics, environmental studies and technology literacy.

Housed at the High Point Center, we are located on 40 acres with nature trails,

playgrounds, indoor heated pool and a shared campus environment where our students interact with special-needs students and learn appreciation for those who are different from them. Each of our 200-230 students is a resident of Washtenaw County's ten school districts and is supported by 40+ full- and part-time staff members.

Approximately 14% of the students participate in the free/reduced lunch program. The goals of HCCS are to nurture the child's positive self-image, to foster a keen enthusiasm for learning through meaningful community- and experience-based projects, and to develop a genuine appreciation and respect for the diversity in others and all life.

SECTION 3: Vision and Goals

Vision

At Honey Creek Community School, our vision is that all members of our school community (staff, students, and others) use technology as a transformative tool which helps us solve problems and engage in new opportunities that would otherwise be inaccessible. Technology can be defined as "the extension of human capabilities through the use of inanimate objects, based on human wants and needs". Based on this definition, we believe that technology is wide-ranging in its influence and usefulness, and spans a broad spectrum from the simplest tools through the most complex networked systems.

The following four touchstones have been identified as part of our vision. We believe that technology at Honey Creek must meet four criteria to advance our vision of technology to help solve problems and engage in new opportunities:

1. Available

Technology at Honey Creek must be available in necessary quantities to all staff and students when it is needed. Our goal is that the technologies that help our teachers teach and students learn should be permanently available in the classroom; in situations where it is impossible to meet that goal, it must be easy for staff and students to check out and reserve technology resources. Permanent availability in the classroom is desired because of the subtle but critical change in mindset that accompanies "always available" technology. The school's technology resources must be well maintained if they are to be effective.

2. Understood

Technology at Honey Creek must be understood if it is to be effective. Our staff must be trained to both use and teach technology. Our students must be trained to use technology. This takes two forms.

First, staff and students need to know how to use technology for specific applications. This could range from the use of a word processor to type an essay through the use of a hand tool for creating a scale model.

Secondly, staff and students need to know how to both solve problems using technology, as well as how to solve problems that may arise during the use of technology. It is important to distinguish this type of knowledge from the mechanics of how to use a piece of technology. The type of creative problem-solving in which technology can play such a vital role in cannot be learned by mere rote instruction; specific situations must be cultivated in order to teach this type of thinking and behavior. It is also important to acknowledge that technology itself can create problems even as we attempt to use it to solve problems. Staff and students are well aware of this fact, and we must be brave enough to teach staff and students how to solve the inevitable problems that arise when using new tools.

3. Transparent

Technology usage at Honey Creek must be transparent if it is to meet our vision. The analogy of technology being as familiar as using a pencil and as ordinary as writing on a piece of paper applies here. Instead of technology usage being designated for a specific time and place, it should be a natural, transparent way of doing things.

Part of this notion of transparency points toward the fact that technology contains a broad spectrum of tools, from very low-tech and simple to very high-tech and complex. The right tools for the task at hand will vary based on the problem to be solved or opportunity in which be engaged.

4. Supported

In order for technology to have a transformative effect, the school must have the proper amount of technology support time and personnel built into the budget and staffing requirements. See Section 13 for detailed budget and timelines. In addition to staff, there must be process systems in place to make support requests fast and efficient to manage.

Goals

Technology plays an integral part in meeting the goals of Honey Creek's School Improvement Plan (SIP). The four major areas of our SIP are:

1. Community Communication
2. Writing
3. Reading
4. Mathematics

Technology provides many new and improved opportunities for community communication. One way we plan to use technology to improve community relationships is through an expanded online presence, comprising not only our school Web site, but also other online outlets such as photo and video sharing sites (Flickr, TeacherTube, etc), community blogs, and others.

Other ways we plan to use technology to improve community relations is through our curriculum mapping and online student assessment tools. These allow our school community to see inside the four walls of the school and get a more full view of what students are learning, and how their learning is progressing.

The use of technology can contribute much to developing and improving the SIP area of writing. We plan to use technology to improve our students' writing abilities in a number of ways, including providing tools, teaching digital literacy skills, and offering the ability to write for a global audience through the use of class blogs and other online publishing opportunities.

Improving the reading abilities of Honey Creek students is a third area of the SIP, and we plan to use technology to assist students in their reading abilities. A variety of digital tools exist to improve student reading, and we will work closely with our reading teachers and teacher consultants to identify, purchase, and implement these tools.

Finally, improved math abilities is the fourth area of the SIP. Technology has much to offer here, especially when mathematics and technology are treated as integrated subjects and co-taught. We have already had experience with this approach, and plan to expand the ways that technology can assist with math instruction. This can be as simple as providing graphing tools, or as complex as a fully-integrated math/technology project.

SECTION 4: Curriculum Integration

Honey Creek is currently at mixed levels of technology integration in its curriculum and instruction.

The middle school classes (grades 6-8) have the highest level of technology integration. Each classroom has a projection system used often (every day in some cases). One middle school classroom has a mounted projector and document camera; the rest of the projection systems are on mobile carts. Students use the mobile laptop lab frequently to create presentations and projects. Each middle school classroom also has either 4 or 5 classroom computers used by students to access the Internet and do project work.

The elementary classes (grades K-5) are currently at a lower level of technology integration. Each classroom has either 4 or 5 desktop computers, but in most cases they are older machines. Each grade level (K/1, 2/3 and 4/5) shares a cart-based projection system, which is used to varying degrees by the teaching staff. These grade levels, however, make extensive use of a number of computer-based programs, including Compass Learning Odyssey, Discovery United Streaming, and Grolier (described more fully in Section 6) to accomplish individualized education through the use of technology.

Elementary students also use technology resources to create presentations and projects, often using a more teacher-led approach.

Our integration goals, therefore, are to:

1. Continue to support the middle school classrooms as they use and further integrate technology
2. Create additional opportunities for technology integration in the elementary classrooms, as well as supporting the integration that already exists.

Elementary School (Grades K-5)

By the end of this 3-year cycle, our goals are that:

- All classrooms will be Agile Classrooms, equipped with mounted projectors, document cameras, speaker systems, and other infrastructure. Agile Classrooms are defined more fully in Section 11 in the section entitled "Agile Classrooms".

Agile Classrooms will enable our teaching staff to make the most efficient use of their time by reducing the need to share projection equipment and eliminate

setup time. Teachers will be able to show their class internet research, videos, photos, and other material spontaneously, an essential component to being able to take advantage of teachable moments.

- Elementary teachers will be well-trained in the use of available technology resources.

One potential roadblock to more complete technology integration is a lack of awareness or understanding of the available technology resources. To address this, the Technology Specialist will develop a comprehensive overview of the school's technology resources, and schedule both group and one-on-one professional development sessions to increase staff competency in these areas. This development may be conducted by the Technology Specialist, vendors, training organizations, or a combination of these.

- Support the elementary staff in the new curriculum mapping and online grading programs (Atlas Rubicon and Akili).

Use of our new curriculum mapping and online grading tools will enable staff, students and families to access current curriculum and student progress. This is a vital component to communicating student progress, and must be well-supported by the technology staff to ensure easy and effective use by teaching staff.

Middle School (Grades 6-8)

By the end of this 3-year cycle, our goals are that:

- All classrooms will be Agile Classrooms, equipped with mounted projectors, document cameras, speaker systems, and other infrastructure. Agile Classrooms are defined more fully in Section 11 in the section entitled "Agile Classrooms".

Agile classrooms are essential at this level for the same reasons described above in the "Elementary School" section.

- Technology courses will be standards-driven, using the Michigan Educational Technology Standards (METS) and International Technology Education Association (ITEA) standards as the content guidelines.

Having a standards-based Technology Education curriculum is essential to ensuring that our students are technologically literate in all facets of technology.

- 100% of 8th grade students will meet the MDE's Eighth Grade Technology Literacy Requirement.

This benchmark assesses students' technological literacy, and is a vital checkpoint to ensure that students are equipped with the skills needed for high school and beyond.

- Continue to support the Middle School Math curriculum's online math textbook, and identify one technology/math integrated project per year.

Past integrated math/technology projects have proven to have great success in cross-teaching concepts, and we plan to continue to support and expand these projects in the future.

- Support the middle school staff in the new curriculum mapping and online grading programs (Atlas Rubicon and Akili).

Use of our new curriculum mapping and online grading tools will enable staff, students and families to access current curriculum and student progress. This is a vital component to communicating student progress, and must be well-supported by the technology staff to ensure easy and effective use by teaching staff.

- Staff will be provided with relevant, timely information about current and upcoming technology resources & opportunities

Our middle school staff has proven to be quite adept technologically, and we expect to continue to support them by providing information about technological resources, content and pedagogy.

SECTION 5: Student Achievement

As described in Section 4, "Curriculum Integration", we see great value in integrating technology. The areas listed below describe more fully how technology will be integrated into the curriculum, with specific examples from content areas and grade levels.

Agile Classrooms

Agile Classrooms, which are equipped with mounted projectors, document cameras, speaker systems, and other infrastructure, will allow classroom teachers to quickly and easily use electronic media to enhance their teaching in many ways. Several examples are listed below:

- Playing relevant videos
- Virtual field trips
- Computer-based maps & atlases (for example, Google Earth)
- Showing student work and allowing students to present to their classmates and teachers
- Displaying pictures related to the current topic
- Showing 3-dimensional objects or written text using a document camera

There are many, many other uses for the technology included in the Agile Classroom model. The key reason for integrating technology in this way is to engage student learners who have diverse learning modes (visual, auditory, kinesthetic) in ways above and beyond verbal directions and handed-out assignments. Students who are primarily visual, for example, benefit from seeing a picture of the place they're studying in Social Studies - it becomes real in a way that a verbal description could not be. Students who are auditory learners may finally "get it" when they hear a poem being read by the author. Kinesthetic learners who can manipulate objects under a document camera suddenly grasp a mathematical concept that might have otherwise remained mysterious.

Inspired Classrooms

A new model of technology integration is known as "Inspired Classrooms". A definition is found at the Inspired Classrooms Wiki:

"Inspired Classrooms is a new integration model that takes the teaching and learning enhancements found in 1-to-1 classrooms at the secondary level and puts them to use in "regular" classrooms at the elementary level. Moving away from a traditional classroom arrangement, the Inspired Classroom model brings four or five classroom computers

from the perimeter of the room to the student's desks. The student desks are arranged in small groups that allow students to work cooperatively, and each group has dedicated access to a computer throughout the day."

Taken from: <http://inspiredclassrooms.wikispaces.com/About+Inspired+Classrooms>

We believe that piloting the Inspired Classroom model has the possibility to change the dynamic and usage of our classroom computers in a way that could dramatically improve student achievement and perceived relevance. Again quoting from the Inspired Classroom wiki:

"The reason behind setting up an Inspired Classroom is to put authentic and engaging learning activities in the hands of the kids that they can complete on their own, using the technology available to them within their team environments. The benefit to this model is that the teacher is not tied to the front of the classroom, but free to work one-on-one with individual students or small student groups. The notion that the teacher is the "sage on the stage" is no longer valid. Teachers in the Inspired Classroom want the students to use the technology to get information, find solutions and respond as a team to prove understanding and learning."

Compass Learning Odyssey

We have used Compass Learning Odyssey for individual, independently paced learning, and we plan to deepen and continue our use of this system. Compass Learning Odyssey allows students to learn concepts at their own pace, providing repetition for students who require this, and the opportunity for students to work ahead.

Compass Learning Odyssey also works well for students with diverse learning styles, especially students on the Autism spectrum. The concepts that might otherwise prove difficult when delivered through traditional pencil-and-paper worksheets may suddenly come alive when delivered electronically.

PTO STEM Theme

Our school Parent-Teacher Organization (PTO) runs 2-year theme committees, which are dedicated groups of parents and teachers who focus on a particular issue. One of the 2 themes for the 2009-2010 and 2010-2011 school years is Enhancing Science, Technology, Engineering and Math (STEM) Education at Honey Creek. As a result, we expect this group to provide funding, support and inspiration for enhanced STEM programs, which will by definition be integrated across the curriculum.

Grade-level Technology Courses

Grades 2-8 at Honey Creek receive weekly hour-long technology classes, led by the technology specialist. The technology class is a METS and ITEA standards-based course, with the goal of producing technologically literate students. Our goal is to produce thoughtful members of society who take joy in using technology to solve problems.

Middle School Technology Elective

In addition to the standard weekly technology class, middle school students (grades 6-8) may also choose to take an elective technology class. The elective technology class meets two hours per week, and gives students the opportunity to become deeply engaged in a specific area of technology. There will be 6 technology electives offered in this 3-year cycle.

Timeline for integration

The following timeline is provided for the efforts listed above.

Year 1 (2009-2010):

- 2 additional classrooms will be set up as Agile Classrooms (for a total of 3 out of 13 rooms)
- 1 or 2 elementary rooms will pilot the Inspired Classroom model of technology integration
- Professional Development for Compass Learning Odyssey will take place before the start of the school year; teachers will continue their use of Compass Learning Odyssey
- Year 1 of 2 for the PTO STEM initiative
- Middle School Elective Technology: Appropriate Technology, Adaptive/Assistive Technology

Year 2 (2010-2011)

- 5 additional classrooms will be set up as Agile Classrooms (for a total of 6 out of 13 rooms)
- The Inspired Classroom model will be evaluated and expanded based on its level of success (based on teacher and Technology Specialist evaluation)
- Teachers will continue their use of Compass Learning Odyssey
- Year 2 of 2 for the PTO STEM initiative
- Middle School Elective Technology: Web Design, Robotics

Year 3 (2011-2012)

- The 6 remaining classrooms will be set up as Agile Classrooms
- Teachers will continue their use of Compass Learning Odyssey
- Middle School Elective Technology: Visual Programming, 3-D Modeling & Prototyping

SECTION 6: Technology Delivery

The use of technology to access content and learning experiences that would otherwise be unavailable is one of the most fundamental uses of technology at Honey Creek Community School. There are a number of different forms these experiences take.

All classrooms at HCCS provide always-on Internet access, allowing our students to access text, photos, maps, video, and audio from all around the world. Teachers use this resource daily to make deep, relevant connections to the larger world. For example, using the Internet to research information for a project is a regular part of school life, especially in the later elementary and middle school grade levels.

In addition to providing access to content, HCCS uses our technology resources to provide access to a number of unique learning experiences. One of these is Compass Learning Odyssey, an online, comprehensive learning site that aligns with the Michigan Curriculum Framework. Compass Learning Odyssey enables personalized instruction and drill, reinforcement and practice opportunities, and provides the capability for diagnostic and pre and post unit assessment of student achievement. Since the summer of 2003, the Compass Learning Odyssey software has been used as one of HCCS's strategies to meet its School Improvement Goals.

Scantron Performance Series is another resource used to help assess student knowledge. It is a computer-adaptive test that automatically adapts to each student's instructional level. Performance Series gives educators an accurate snapshot of students' performance across a range of subjects and skills in far less time than traditional tests, allowing appropriate placement and tailored instruction right away. Students are tested at the beginning and end of the school year, providing two strong data points for the teachers to gauge student achievement and identify areas of strength and need.

HCCS also utilizes Grolier Online Passport and Discovery Education's Video-On-Demand. Washtenaw Intermediate School District (WISD) and Livingston Educational Service Agency (LESA) have worked closely with the school districts in Washtenaw and Livingston Counties to provide access to these two digital online resources. Grolier Online Passport is an online digital resource published by Scholastic Library Publishing, Inc., a division of Scholastic Inc. It includes a general encyclopedia, as well as a number of specialized encyclopedias.

United Streaming is a scientifically proven, award-winning educational video streaming service. Providing over 44,000 video clips, quizzes, a resource center for teachers and writing prompts, United Streaming is correlated to Michigan's Standards. United Streaming also fulfills all mandates set by No Child Left Behind.

In addition to these services, many informal opportunities exist to use technology to expand our school's reach beyond the physical building. One use of this can be seen in the following example. During the 2007-2008 school year, one of the Later Elementary teachers took a sabbatical to Australia. During that time, she used Skype video chat software to connect with her classroom and talk to them about her experiences, what she'd seen and done, and check up on how their class time was going with the long-term substitute. This was a very powerful experience for both teacher and students, showing how closely connected the 21st century world can be.

SECTION 7: Parental Communications & Community Relations

Honey Creek Community School, as our name so powerfully reminds us, is founded on ideals of building a strong school community. This is represented in all aspects of our school, including the creation and dissemination of this technology plan. As noted on Page 2, the Honey Creek Community School Technology Planning Team is composed of members from all areas of our school's adult community, including parents, teachers, and administrators.

At Honey Creek Community School, we use technology in many ways to communicate with and build our community. The school maintains a comprehensive set of e-mail lists, allowing individual classroom announcements, school-wide discussion, and specific groups to communicate quickly and effectively. All staff have access to their school e-mail, calendar and online documents via Google Apps for Education accounts, which provides access anywhere the staff member has an Internet connection and a Web browser.

The school's Web site, built on the open source software Wordpress MU, also plays a critical role in providing information to our community. The multi-user capabilities of Wordpress MU allow for many different groups to have individualized access to update and maintain different areas of the site, including school administrators, the Parent-Teacher Organization (PTO), and individual classrooms. We are currently exploring ways to further publish student work to the larger community, including a newly-created Flickr Pro account for sharing photos and videos.

All online student photos and videos are tightly managed to comply with the school's Photo Release Agreement, which each parent signs at the beginning of the year.

Once completed, the school technology plan will be published on the Honey Creek Community School Web site at the following URL:

<http://honeycreekschool.org/techplan/>

SECTION 8: Collaboration

Not Applicable

Honey Creek Community School serves students in grades K through 8. As a result, we do not serve populations that require Adult Ed/GED programs.

SECTION 9: Professional Development

Honey Creek is committed to the standards set down by the International Society for Technology in Education (ISTE) in the National Educational Technology Standards for Teachers. We will strive to meet these standards by encouraging a culture of ongoing independent professional development and providing specific, meaningful professional development opportunities for our staff.

Rubicon's Atlas curriculum mapping software will allow us to see a broad overview of our curriculum and will allow us to provide targeted professional development opportunities based on the units being taught during a given year. We will look for opportunities to use the curriculum maps as a guide to know what to focus our professional development time and resources on, and to know when the appropriate times are that professional development will be needed.

New technologies such as RSS readers, podcasts, social networks, video tutorials/ screencasts, and distance learning via Webinars and video conferences will empower our staff to be continuously and independently plugged into professional development opportunities. Guidance and direction will be provided by the Technology Specialist, administrators, and other advocates for specific professional development opportunities.

In addition to independent professional development, we will provide specific, meaningful professional development opportunities for our staff. Some of this will be done in-house, through professional development sessions conducted by the Technology Specialist. Some of these opportunities will be provided using the resources of our chartering agency, the WISD.

In addition, specific tool-and-skill related professional development will be conducted by the vendors of various software and services that we use, including but not limited to:

- Rubicon - Atlas Curriculum Mapping / Akili Student Assessment
- Compass Learning - Compass Learning Odyssey
- Grolier - Online Encyclopedias

Finally, we believe that the use of team teaching is one strength of our environment that is designed to encourage development among teaching staff. As we continue to grow, we will look for additional team teaching opportunities that allow teachers to learn from one another.

Timeline

The timeline below indicates when specific professional development will take place.

Year 1 (2009-2010):

- Compass Learning Odyssey training
- Rubicon - Atlas Curriculum Mapping / Akili Student Assessment training
- Technology Overview (to be conducted by the Technology Specialist)
- One-on-one and small group staff technology training
- Additional specific training as required; to be based on annual Staff Technology Surveys (described more fully in Section 15, Evaluation)

Year 2 (2010-2011):

- Rubicon - Atlas Curriculum Mapping / Akili Student Assessment training
- One-on-one and small group staff technology training
- Additional specific training as required; to be based on annual Staff Technology Surveys (described more fully in Section 15, Evaluation)

Year 3 (2011-2012):

- One-on-one and small group staff technology training
- Additional specific training as required; to be based on annual Staff Technology Surveys (described more fully in Section 15, Evaluation)

SECTION 10: Supporting Resources

The overall technology program at Honey Creek is supported by a number of resources. These resources are summarized and described below.

One area of support is the relationship Honey Creek has with the Washtenaw Intermediate School District. As our authorizing organization, the WISD and associated REMC provide many resources, including professional development, technical expertise, and equipment. We are fortunate to be physically located directly across from the WISD, which allows for easy access and spontaneous collaboration to take place. Similarly, we enjoy excellent working relationships with High Point School staff, with whom we share our school building, and Gretchen's House, a preschool and early child learning facility. These relationships allow us to build expertise among a diverse group of teaching professionals, and give us opportunities to draw on technological and pedagogical expertise outside our core areas of knowledge.

As described in Section 6, Honey Creek maintains a number of online subscription services, including Compass Learning Odyssey, Grolier Online, and Discovery United Streaming. These offer resources and supports for our teaching staff that we would not be able to otherwise provide. In addition, our media center was recently upgraded and uses Alexandria software; this makes our school's media catalog available via Web browser for students and staff to browse & search. As our school continues to grow, this will be an increasingly useful support.

All technology resources at Honey Creek are available for checkout by staff, and are scheduled with a reservations system powered by Google Calendar. This allows staff to see what resources are available for a given day and time, and easily reserve them for use in the classroom.

Another support is the Honey Creek Technology Program website. This is a new resource that will be built up and added to in upcoming years, providing staff, students, and parents with up-to-date information about the technology program.

The Honey Creek Technology Program website is located at:
<http://www.honeycreekschool.org/hctechnology/>

Another area of support for Honey Creek is our PTO and parent involvement. Due to the large proportion of our parents who work in highly technical areas of industry (including the University of Michigan), we have been fortunate to be able to draw on parent volunteers to offer expertise, provide donations of materials, resources and time, and build broad support for the technology program.

SECTION 11: Infrastructure Needs/Technical Specification, and Design

Current Overview

Honey Creek's IT services are based almost exclusively around the Mac OS X operating system, and networked throughout our school's campus with combination of hardwired Ethernet and 802.11 wireless.

Network/Server Infrastructure

All large-scale networking infrastructure (cable, routers, DNS, etc) is provided to Honey Creek via our authorizing entity, the Washtenaw Intermediate School District (WISD), which provides Internet access and grants Honey Creek a Class C block of IP addresses. Honey Creek provides wireless access points across our school campus, making Wi-Fi based Internet access available to staff and students in all parts of our campus.

We maintain a Mac OS X 10.5 Server, which provides staff and students with networked home and group folders (accessible from any computer in the school running Mac OS X 10.3+). Our server also provides automated network backup facilities via Mac OS X's Time Machine system. All full-time teaching staff and administrator laptops are configured to use Time Machine for automated backups any time their laptops are on the school's network. The server also provides shared access to school photos via iPhoto's Photo Sharing service. Up to 5 users can browse the school's library of digital photo assets at a time.

Printers are available in all middle school classrooms. Elementary classrooms use shared printers, distributed throughout the campus. We currently maintain approximately 5 black-and-white laser printers and 1 color laser printer that are network-accessible for staff and student use, and 2 more black-and-white laser printers that are reserved for administration staff use.

Honey Creek's Web site is outsourced to a company specializing in Web hosting. It is based on the open-source WordPress MU content management/bloggin software, and allows non-experts to maintain and update areas of the site. Honey Creek's e-mail system is provided through Google Apps, under a free 200-user Education License. Staff have access to e-mail, calendars, and Google Docs online tools anywhere they have a Web browser and an Internet connection.

Phone systems are provided and maintained by the WISD. Administrator offices have phones, and most classrooms do as well.

Technology for Students & Classrooms

At Honey Creek, our classrooms are equipped with between 4 and 6 desktop computers, all of which run Mac OS X version 10.3+ (minus a few computers at the K/1 level configured with Mac OS 9). In addition to the classroom computers, we have a 18-month-old Apple Mobile Learning Lab cart, which consists of 20 Apple MacBook laptops running Mac OS X 10.5. A web-based calendar system is used by teachers to reserve the Mobile Learning Lab for classroom use; individual laptops are also available for student use when the cart is not checked out.

At the middle school level, each classroom is equipped with a data projector on a cart. At the elementary levels, one projector cart is shared between the 2 or 3 classrooms at that grade level (our 3 K/1 classes share one projector, our 3 2/3 classes share 2 projectors, and our 2 4/5 classes share one projector).

Each classroom is equipped with a point-and-shoot digital camera, which takes both digital photos as well as digital video. A MiniDV-based digital camera is also available for checkout by teaching staff to document events, produce multimedia projects, etc. A scanner and 2 television/VCR & DVD player carts are also available for checkout by classroom teachers.

Our middle school math/technology classroom is equipped with a permanently mounted data projector, fixed projection screen, and document camera.

In addition to IT/communications technology, students at Honey Creek learn with a number of hands-on technologies, including Lego Mindstorms robotics, power and manual tools (drill press, foam cutters, hot glue guns, etc), and others. A mobile hands-on cart containing materials and tools houses some of these resources, with other pieces distributed throughout classrooms or available for checkout. This hands-on approach is essential to our school's philosophy of theme and activity-based curriculum.

Technology for Staff

All full-time teaching staff and administrators at Honey Creek are equipped with Apple MacBook laptops, running Mac OS X 10.5. Part-time teaching staff currently use older Apple iBook laptops running Mac OS X 10.3. All full-time teaching staff and administrators are configured to use Time Machine for automated backups any time their laptops are on the school's network.

Future Planning

In keeping with our goals that technology at Honey Creek should be available, understood, transparent, and supported, we see the need for a number of future upgrades and changes.

Agile Classrooms

One of the most significant changes is that we want to transform our classrooms into Agile Classrooms. An Agile Classroom allows technology resources to be brought into the classroom quickly and efficiently, and provides the necessary infrastructure to support those needs. Some examples of necessary infrastructure in the Agile Classroom are:

- permanently mounted projector
- speakers
- projector screen
- document camera
- ceiling electrical drops
- mobile tables for rapid reconfiguration

This setup allows additional technology to be brought in on carts as necessary, on a project-by-project basis. Setting up for a hands-on activity with hand tools is as easy as setting up for 1-to-1 laptop usage; the appropriate cart is wheeled in and plugged in, the instructor plugs a laptop into the projection system, and the session begins.

We have started setting up Agile Classrooms and will continue to add more.

Infrastructure, Networking, and Storage

As our storage and networking needs increase, we will be taking several steps to support this with infrastructure, including the following:

- Upgrade from 1 to 2 Class C blocks of IP addresses
- Upgrade available network backup storage from 1TB to 3TB
- Add a Student Information System

Eventually, we will need to add additional mobile laptop and hands-on carts to support the use of technology. An additional mobile cart of 20 laptops is a priority, but we recognize that procuring the funding for this may prove difficult. This priority may need to be funded by external sources such as grants, fund-raising, and corporate donations. More information is provided in Section 12, "Increase Access".

Technical Support

Technical support at Honey Creek is provided by our school's Technology Specialist. The Technology Specialist has responsibilities for both technical support and classroom teaching; approximately 50% of his time is allocated to providing technical support.

Honey Creek uses an automated issue-tracking system, FogBugz, to track support issues and maintain a database of past issues.

In addition to our Technology Specialist, Honey Creek's focus on Academic Service-Learning (AS-L) allows us to offer a unique experience to middle school students. The Middle School Tech Squad is a group of 6th through 8th graders who volunteer to assist in maintaining the school's technology resources. Students are given instruction and receive mentoring from the Technology Specialist, and take on the responsibility for a wide range of duties, including updating computers, helping in classrooms, and repairing technology assets.

It is crucial for Honey Creek to build and maintain strong professional relationships with the WISD Technology Department. Good relationships currently exist, and should be built upon and strengthened in upcoming years to allow for even more meaningful exchange of ideas and collaborations.

SECTION 12: Increase Access

As time passes, a number of things will be happening simultaneously. First, the technology program at Honey Creek will continue to grow and become more robust through careful planning and hard work. Second, available technologies will become cheaper, and new and innovative technology will become available. Third, the access to technology enjoyed by students will be increased in a variety of ways.

Understanding that, the technology program at Honey Creek is based upon a continuum of technology, driven by the needs of our staff and students. An example of the technology spectrum is given below:

Calculator
AlphaSmart
Cell Phone
Smartphone (iPhone/Android, etc)
Pocket Computer (for example, iPod Touch)
Netbook
Laptop
Desktop

Reviewing this list, we currently provide technology at the low end (calculators, AlphaSmarts) and at the high end (laptops, desktops). There is great potential in the middle (cell phones, smartphones, pocket computers/netbooks) but understanding the technical support requirements, price structure, and pedagogical implications make it difficult to plan for these technologies at the present time.

As these technologies continue to mature, we will seek out ways to make them available in order to take advantage of lower costs, portability and access.

Additionally, we will need to add additional mobile laptop and hands-on carts to support the school's technology usage. An additional mobile cart of 20 laptops is a priority, but we recognize that procuring the funding for this may prove difficult. This may need to be funded by external sources such as grants, fund-raising, and corporate donations.

Honey Creek has an excellent working relationship with the WISD and High Point School, and will continue to use that relationship to strengthen our understanding of how to best provide assistive technology to students who need it. At the present time, we provide a number of different assistive technologies to our students, including AlphaSmart writing tablets, projection systems in the classroom (for visually impaired

and disgraphic students), and speech-to-text software for writing disabled students. We will continue to identify and seek technological solutions to varying student abilities. The Technology Specialist and Special Education staff will continue to work closely together to meet this goal.

One strategy we use, and will continue to use, is to solicit teacher feedback on a regular and consistent basis to help understand the needs of the student population. Our technology checkout system also helps the teaching staff locate and secure the resources needed to be effective.

SECTION 13: Budget and Timetable

Honey Creek Budget 2009-2012

	2009-2010	2010-2011	2011-2012
Full-Time Technology Specialist w/benefits	\$54,518.09	\$56,710.76	\$58,730.18
New Equipment purchases/ Equipment Replacement	\$11,500	\$9,000	\$9,000
Software	\$0	\$3000	\$3000
Professional Development	\$500	\$500	\$500
Web hosting & support	\$120	\$120	\$120
Rubicon Atlas & Akili Curriculum Mapping & Student Assessment software	\$4000	\$4000	\$4000
Compass Learning	\$5000	\$5000	\$5000
Performance Series			
Discovery United Streaming	\$363	\$363	\$363
Grolier	\$64.26	\$64.26	\$64.26
Phone Service	included in rent from WISD	included in rent from WISD	included in rent from WISD
Internet Access	included in rent from WISD	included in rent from WISD	included in rent from WISD
Technology Class supplies	\$2000	\$2000	\$2000

Technology Supplies (toner, paper, batteries, etc)	\$5000	\$5000	\$5000
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Honey Creek Equipment Upgrade/Replacement Plan 2009-2012

	2009-2010	2010-2011	2011-2012
Administration		New Technology Specialist laptop	
Teaching Staff	1 new teacher laptop (4/5)		
Other Staff	1 new specials teacher laptop (replaces Art teacher laptop)	2 new specials teacher laptops (replaces Music & Swim/PE teacher laptops)	
Classroom Computers	14 computers (adds 3 computers for new 4/5 room, replaces all OS9 / OS X 10.3 desktops)		
Mobile Computers		10 new mobile computers ("half-lab")	10 new mobile computers ("half-lab")
Server/Network Infrastructure	2TB drive (network backups, media storage)	2TB drive (network backups, media storage)	New file server 2 new server-grade disks (network backup media storage)
Hands-on Technology/Tools		Additional LEGO NXT kits	

2009-2012 Computer Replacement Cycle

Assumption: It is presumed that 25% of the machines listed as "Possibly Available" will need to be replaced during a given school year.

	- Covered by AppleCare
	- Expected to be in good working order
	- Possibly Available
	- Presumed out of service

Machine Class	Quantity	2009-2010	2010-2011	2011-2012
iBook (G3)	8			
iMac (Blue/Green G3)	8			
iMac (Graphite G3)	7			
eMac (G4)	6			
15"/17" iMac (round base G4)	14			
Mac Mini (1.83 GHz Intel)	12			
MacBook (Mobile Lab - 1.83 GHz Intel)	20			
MacBook (Staff - 2.0GHz Intel)	16			
20" iMac (Media Center)	3			
Mac Mini (2.0 GHz Intel)	14			
New Machines (spec TBD)	15			
New Machines (spec TBD)	38			

SECTION 14: Coordination of Resources

We must have a sound financial plan in place to fund the activities and equipment described in this plan. We anticipate drawing upon a number of resources to fund the Technology Plan.

Our first, and primary, source of funding is the school budget, which is provided by state per-pupil funding. Using this funding source, we have allocated for new equipment acquisition, equipment replacement, and other necessary expenses. Our overview budget, found in Section 13, is based on this funding source. One important note: we recognize that the replacement cycle for the 2011-2012 school year calls for replacement of 38 computers. Based on current budget estimates, this level of replacement is not possible, and we will actively work to develop a plan to find the funds to sustain our current level of technology availability.

In addition to the state funding, we also plan on tapping additional resources. One possibility for short-term improvements is the stimulus funding provided by the American Recovery and Reinvestment Act. We recognize that the availability and level of funding through this source is currently unknown, but plan to actively pursue funding through this source wherever possible, including working with the WISD to identify infrastructure improvements that will benefit Honey Creek.

Grant-based funding will also become a higher priority during the 3 years covered by this plan. Specific examples of grants that may be pursued are the MACUL and Best Buy Te@ch grants, which would be used to fund innovative uses of technology by our classroom teachers and technology specialist. There are many other grants that could be pursued, and we will work to develop a more detailed plan to identify and pursue these grants during the 3 years covered by this plan.

University/Staff partnerships are another area where available resources can be used to help fund and grow our school's technology program. University or government-based professional development opportunities that offer teacher stipends toward purchasing equipment and teacher reimbursement can be a valuable way of bringing new technology, strategies and pedagogy into the classroom.

We are well positioned to draw on the resources made available through our community through our approach to education. One example of this is the Phoenix Rising fund raising campaign. Families at the school are asked to donate to support the school financially, and a number of families have already specifically targeted technology needs for their donations. We will use these funds to offset costs that would otherwise be paid out of the school budget as well as adding new and valuable resources that would have been previously unavailable due to budget shortfalls. In addition, we also have an active Community Donations program, which has provided a number of equipment donations

(monitors, computers, digital cameras, etc), and we will continue to solicit these donations in the future.

Finally, our school Parent-Teacher organization has been an invaluable supporter of the technology program, and we expect this to continue in the future. Integrated STEM (Science, Technology, Engineering and Math) is one of the PTO's focus areas for the 2009-2010 and 2010-2011 school years, and we expect to use this to help increase the relevance and use of technology in these core areas. These efforts will be supported both in financial terms as well as community volunteering.

SECTION 15: Evaluation

Understanding how effectively technology has been integrated and used is a vital component of our plan. To accomplish this, we will look at a number of different assessment tools.

The first stage of assessment will be a continual, informal, anecdotal-based approach, conducted by the technology specialist. This will take many forms, including our bi-yearly Curriculum Celebration, materials posted to our Web site, photos and videos captured by members of our staff, and teacher observation. This layer of informal, ongoing assessment is the "finger on the pulse" of how technology is being used and integrated.

In addition to this ongoing informal assessment, a number of more formal assessment tools will also be used. One of these is our curriculum mapping tool, Atlas Rubicon, which allows for a comprehensive overview of all curriculum that is planned and which standards that are met. Units of instruction will be evaluated on a yearly basis to examine which technology standards are being addressed, and the technology specialist and classroom teachers will work together to identify areas that technology can be integrated effectively to increase student achievement and interest.

We will conduct yearly staff technology surveys. These will be a formal assessment tool judging attitudes and implementation, given to teaching staff at the beginning and end of each school year. These will allow us to judge how the teaching staff is integrating technology, what their areas of knowledge and interest are, and guide us in making decisions about what directions to pursue in terms of professional development and technical support. The staff technology survey will be created & administered by the technology specialist, with input from teachers and administration.

One way of assessing student technological literacy is by using the standards set down in the MDE 8th Grade Technology Literacy Requirement. At this point, this assessment is conducted via continual teacher observation. Additional formal assessment tools may be developed to supplement this as our technology program grows.

SECTION 16: Acceptable Use Policy

Honey Creek's Acceptable Use Policy (AUP) is included as Appendix B, "Honey Creek Community School Acceptable Use Policy". This policy is explained by the school Technology Specialist to students at the beginning of each school year, and students are required to sign before using the school's technology resources.

Honey Creek is committed to following the guidelines set in place by the Children's Internet Protection Act (CIPA) and all Internet usage policies are in compliance with the CIPA requirements.

In addition to the policy set forth by the AUP, Honey Creek relies on county-wide content filtering provided through the WISD. A crucial aspect of this usage is maintaining strong professional relationships with the WISD technical staff to allow for our school's specific content filtering requirements. WISD staff has been responsive and cooperative, and we expect this relationship to continue.

Appendix A: Links & References

[Honey Creek Community School - 2006-2009 Technology Plan](#)

ISTE NETS for Teachers 2008

http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS_for_Teachers_2008.htm

Appendix B: Honey Creek Acceptable Use Policy

Honey Creek Community School
Student Technology* Acceptable Use Policy
Revised June 26, 2008

Honey Creek Community School provides access to technology resources including access to the Internet. These resources allow interaction internally within the district and externally to systems located all over the world. These resources have a limited educational purpose. This purpose is to provide access to electronic resources to promote and enhance student learning consistent with school educational goals and objectives. This acceptable use policy ensures that use of the network by students is done in an appropriate manner. Network use is a privilege and not a right. Users are obligated to respect and protect the rights of every other user and act in a responsible, ethical and legal manner. Users are expected to:

Use a computer or other technology resources only when educationally beneficial and when permitted by a staff member. In other words, use the Internet only for appropriate learning activities.

Respect others while they are using the computer.

Ask for help when you do not understand something about the computer.

Respect the computer environment by not eating, drinking, using glue or using magnets around the computer.

Ask permission from a staff member to print if you're printing in color or printing more than a few pages.

Respect the work of other authors. If you use their words, include their name.

Keep your passwords private. Passwords should only be shared with your teachers and parents.

Use the computers under your own login name only.

Protect your identity when using e-mail or web pages by not including your full name, address, phone number or photograph.

Use only school-approved e-mail systems for assignments, correspondences, etc. Use of personal email sites may be restricted at a staff member's discretion.

Report security risks or violations to a staff member or network administrator.

The following activities are specifically prohibited. Students may not:

Illegally copy, send, or distribute any copyrighted software, work, or other material.

Send, publish, download, access, or retrieve any communication or material that may be defamatory, abusive, obscene, profane, sexually explicit, threatening, racially or ethnically offensive, harassing, or illegal, or anything that violates or infringes on the rights of any person.

Use the network for any commercial purpose or financial gain.

Access, attempt to access, modify, or delete any record or file without permission or authorization.

Attempt to harm or destroy the data of any other user or any system on the network, including creating or sending computer viruses, Trojan horses, or similar computer code.

Use electronic mail to send unsolicited, bulk, chain, harassing, anonymous, or other messages, commonly considered an annoyance to recipients or to degrade system performance.

Use vulgarity, obscenity, or swearing in messages or electronic postings, or send e-mail/message "flames" or other attacks.

Attempt to access material or sites, which are blocked by the Academy, or attempt to use the network while access privileges are suspended.

Violating or demonstrating the intent to violate any of the guidelines set forth in this acceptable use policy may lead to disciplinary action. Depending on the nature and severity of the policy violation or number of past violations, Honey Creek Community School may take one or more of the following disciplinary actions (possible consequences may be, but are not limited to, the following):

Restriction or loss of use of technology resources and/or privileges

Restitution

Law enforcement notification / legal action

The above rules have been explained to me and discussed. I understand these guidelines and agree to follow them.

Student Signature

Date

I have discussed these guidelines with my student and my student understands and agrees to follow them.

Parent Signature

Date

*Technology refers to any technology device used at Honey Creek Community School including scanners, digital cameras, software, video cameras, computers and printers.