

Kempton Elementary

Technology Plan

2007-2010

We believe technology tools will be used effectively in daily instruction to support objectives/goals, meet the diverse learning needs of students, and prepare students for their future in a digital world.

Vision

At Kempton Elementary, we believe technological literacy is fundamental to success. Our vision is that learners will be able to interact successfully in a technological environment to achieve their personal, education, and work-place goals. We believe technology allows us to better serve the diverse learning needs of our students. It is our goal to provide optimal student learning through integration of technology in the classroom, as well as build a culture of continuous learning for staff. Together, we can support student achievement and produce lifelong learners able to succeed in today's information technology society. To accomplish our vision for increased student learning with the use of technology, our plan enables the following goals:

Goals for Our School

Kempton's main goal is to support student learning and enhance school improvement through the use of technology. Our goals are aligned with the Maryland Teacher Technology Standards, as well as support the goals of Frederick County's Master Plan.

Goal #1: Increase staff training.

"Teachers must engage in high-quality, on-going professional development and training to understand how to fully and effectively utilize technology in the classroom to ensure that the benefits of technology use translate down to the kids." –Bob Marshall, CEO and President, AWS Convergence Technologies, Inc.

Kempton strives to create opportunities for staff training. We believe if teachers see the relevance of technology to add to their current instruction, they are more likely to incorporate it into their current strategies. Currently, our administrators have integrated technology training sessions into Staff Development days as well as Faculty Meetings. The staff has shared their experiences with technology, and the way they use it in the classroom. The staff has been introduced to a school-wide program, BrainPOP and BrainPOP Jr., two educational programs that provide content spanning 7 main subjects including: Science, Math, English, Social Studies, Health, Arts and Music, and Technology. BrainPOP currently features more than 600 animated movies. Each movie is supported by activities such as a quiz, comic strip, experiment and other

printable worksheets, all of which speak to kids in a language and voice that they can understand. The staff has also been introduced to blogging in a KES chatroom, as well as blackboard instruction.

Most teachers currently use technology into their daily classroom activities. However, a recent February 2007 survey reveals that, although 92% of staff members use technology for professional use daily, a mere 36% use technology for daily instructional use. Further results show that 55% of staff members use technology for instruction weekly, and 9% on a monthly basis. It is our goal to increase the daily instructional use of technology, by providing opportunities for continuous professional development and ongoing systematic mentoring to support the use of technology.

FCPS has budgeted \$42,300 for 2008 designated specifically for teacher technology training. These funds can be facilitated at Kemptown through afternoon training sessions (which pay teachers the workshop pay rate of \$18.00/hour), provided by our tech coordinator and Penny Knapp. Furthermore, staff can continue to be trained during Staff Meetings, Professional Development days, as well as through Team Meetings with administrators. These trainings can be followed up by peer-coaching teams and peer collaboration groups organized by staff.

Additional ideas from the FCPS Technology Plan to enhance staff knowledge:

- Train the trainer model
- Intensive building-level training through the FCPS BLT program, which consists of two trainers per feeder pattern who work with a core group of 5-10 individuals on integrating technology into their daily instruction, and expand the program as funding allows
- Training from the Teacher Specialists for Technology on system-wide initiatives
- MSDE credit courses
- Online training
- Availability of resources and training documents through the FCPS Intranet (I-Know)
- Traditional training in a classroom or in a lab
- Computer-based Training (CBT)
- User group forums
- Electronic Learning Communities (ELCs)
- Training sessions of shorter duration, focusing on a specific task
- Training for teachers and administrators on methods of using data for instructional decision-making
- Training with greater depth and specificity on various applications to meet individual needs
- Specific courses to enable staff to master and demonstrate technical competencies required for career advancement
- Recognize those individuals who are technology literate in various system communications and software programs

During the 2007-2008 school year, Kemptown staff will participate in a study group model for improving utilization of instructional technologies. Staff members were surveyed about technologies of interest as well as those of expertise and groups were formed based by topic from things such as Brain Pop/United Streaming, Non-Linear PowerPoint, Audacity, use of Math websites during instruction, etc. Groups work in three session rotations taking time to explore the new technology with the help of an expert facilitator (all staff based), create and implementing a lesson plan that uses the technology, and then sharing the lesson with others on staff. The model will then continue with staff members trying out a new technology for the second round.

Goal #2 Increase integration of technology into daily instruction.

“Technology is a critical tool that must be used to support teachers in the classroom, enhance student learning, and improve accountability. School systems need to mirror the innovative technology advances used everyday in private industry to make real-time information instantly available to support learning in the classroom.”—Dr. Jerry D. Weast, Superintendent, Montgomery County Public Schools

Technology is integral to standards-based student learning and school improvement. Technology expands the variety of teaching tools to differentiate and support diverse learning. It is our goal to have all of our students use age appropriate technology to conduct research, solve problems, analyze data, collaborate and communicate with experts and peers. Teachers will enhance content-area learning with technology-infused lessons.

As previously mentioned, 36% of KES teachers and staff use technology for instructional purposes daily, 55% weekly, and 9% monthly. It is our universal goal to increase the daily instruction utilizing technology to 100%. We believe this is possible though continuous professional development and on-going technology support. Our administration recently purchased 30 e-pads, in which training will begin in two weeks. In addition, it is our goal to have a laptop on every student’s desk (an estimated 600 laptop computers), through the help of the FCPS Classroom Technology Upgrade Cycle fund (which is project to be \$696,105 for the year of 2008) along with outside grants. By the year 2010, all teachers will effectively utilize technology as part of the daily instructional process.

Goal #3 Access to current and appropriate information technology resources.

“It is imperative that our students be provided with 21st century technology to learn 21st century skills! One-to-one laptop initiatives across the country are changing the lives of our students and leveling the playing field so that ALL students will be able to sit at the table of 21st century economic success.”—Karen B. Salmon, Ph. D., Superintendent, Talbot County Board of Education

Kemptown is fortunate to have a student to computer ratio of approximately 1:4. Each instructional classroom has access to the internet, and

most classrooms contain two or more computers (with exception to the portable classrooms, which only contain one computer per classroom), complete with Microsoft Office, Microsoft Outlook, and a variety of other instructional software. Each grade level has access to a laptop computer, and each classroom has a Toshiba Document Camera. In addition, each classroom contains a television, phone with voicemail, speaker with intercom system, and access to a DVD/VCR player (which is housed in the media center, but is connected to the classroom televisions). Each computer is also connected to the Access Catalog, which allows access to the school library's card catalog from the classroom. We are planning to provide wireless connection laptops to each teacher, as the current system of wiring the laptop to the Toshiba and also connecting it to the internet serves as a potentially dangerous hazard. As previously stated, it is our goal for all of our students to each have access to a laptop computer, with continuous emphasis on responsibility and ethics.

Kempton's two computer labs, equipped with 62 Dell computers, provide ongoing available curriculum support to all grades. Unfortunately, the sign-up protocol creates an availability issue, making it a challenge to find computer lab time. Each teacher is signed-up from the beginning of the year for their own computer lab time. Some teachers are only signed up for one day a week for a short period of time, causing conflicting schedule concerns. In order to allow for more available computer lab time, the sign-up protocol must be reevaluated.

Another objective is to upgrade the Microsoft Outlook program. The outlook express version currently used by teachers at Kempton does not have the full email and calendar capabilities of the enhanced Microsoft Outlook used by our administrators and office staff for email, calendars, and arranging meetings. The calendar feature would assist teachers in schedule IEP and other parent and staff meetings. FCPS has budgeted \$80,000 to upgrade this technology in 2008.

We believe technology expands the variety of teaching tools to differentiate and support diverse learning. Therefore, it is imperative for students and teachers to have access to current and appropriate information technology resources.

Goal #4 Facilitate home-school communication.

"Technology ought to be thought of as a road to hope."—Rudy Crew, Superintendent, Miami-Dade County Public Schools, Florida

Kempton has developed processes and strategies to provide electronic communication with educators, students, parents, and the community through *Find Out First*. All of our team newsletters, the school's Thursday Bulletin, and important notices are sent electronically.

Kempton also regularly updates the school's website, which is maintained by our dedicated assistant principal. Here you can find a calendar of events, supply lists, parent and teacher resources, and PTA information. There are also archived Thursday Bulletins, a parent handbook, the School Improvement Plan, parent surveys, bus information, a link to FCPSTeach

(containing curriculum information for parents and teachers), among other information.

Perhaps one of the most important things the website offers, is the link to teacher and team websites. Each team has created a website with their contact information, monthly newsletters, and homework and grading policies. Unfortunately, not all teams update their sites regularly. By providing the necessary training and release time, teachers can create and maintain their team websites more frequently. Along with providing their contact information, these web pages can serve as an important home-school communication tool, including information such as posted weekly homework, important dates, newsletters, notices, and a showcase of student work. These web pages can be linked to *Find Out First* so that parents and the community can have access to sign up for electronic newsletters and important FCPS information, such as school closings. It would be beneficial for these web pages to also link back to the school's homepage so parents can have easy access to school-related information.

In an effort to facilitate two-way communication, a goal of KES is to host a chat room on our website to build dialogue between staff and community members. The parents and community will be invited to join chats on different school topics. Online chats will take place in the early evening so that many can participate in the comfort of their own home. Once topics have been selected, information will be provided regarding who our expert chat facilitators will be for each, information/guidelines, and how to sign up for participation. In addition, Kemptown would also like to set up a blackboard discussion board and chat room so that teachers can communicate.

It is important to us that all KES students, educators, and parents use technology as a communication tool linking school, family, and the community.

SWOT Analysis

School Strengths

Most classrooms contain two or more computers that are internet capable, allowing all of our students access to software stored on the server. One hundred percent of instructional classrooms have internet access. In addition, Kemptown's two computer labs, which are also connected to the internet, offer curriculum support to grades K-5. We are fortunate to be operating at an approximate 1:4 student to computer ratio, truly an advantage for optimal student learning.

Perhaps our biggest strength is our administration, which strives to provide continuous leadership, guidance, and resources so that Kemptown may meet the rise and demand of educational technology. They set good examples and routinely model appropriate use of technology. Meaningful use of staff development and faculty meetings for technology training purposes is provided frequently, such as ways to use technology instructionally, how to log in to the KES chat room, and effective video utilization strategies.

Collectively, our administration has instituted programs for data collection. In order to set, monitor, and report on student learning, teachers use

spreadsheets to graph and record student progress (such as fluency, running record/QRI, and math assessments, as well as other Language Arts scores and Individualized Learning Plans). This system allows teachers to store student records over a multi-year period in order to track progress.

Our school's website is consistently maintained and updated regularly, allowing our parents and community access to important information regarding our school. *Find Out First* is also a great tool that Kempton uses to communicate electronically with students, staff members, parents, and the community.

School Weaknesses

According to the recent technology survey, only 42% (less than half) of our staff agree that technology tools are used effectively in their daily instruction to support their objectives/goals, meet the diverse learning needs of students, and prepare students for their future in a digital world. Unfortunately, only 25% strongly agree with that statement, 25% somewhat agree, and 8% disagree altogether. Establishing better use of available technology through effective utilization strategies is an obvious need at our school.

Furthermore, an astounding 18% of our staff has never even heard of the Maryland Technology Literacy Standards for students. While 90% of teachers surveyed have a solid grasp of Office Suite (Word, Excel, Power Point), and 70% feel comfortable using Google Tools for Educators, many admit that they feel uncomfortable and do not have a strong knowledge base using many of our school's technology equipment and software. Less than 30% feel comfortable using our technology programs instructionally, such as Inspiration/Kidspiration, online assessment tools (Rubistar, ExamView), webquests, or podcasts.

This lack of teacher knowledge and comfort level is currently a limitation. However, more time needs to be committed to providing more opportunities for continuous staff training on what is available and how to integrate it into the classroom.

As previously mentioned, the sign-up protocol in the computer lab needs to be reviewed. It is unbalanced to have the teachers signed up for a time period each week at the same time. Many teachers would like to utilize their computer lab time for language arts activities, but are only signed up during their math times. This poses a problem because the teacher then needs to contact another teacher to switch time slots, which can also pose a problem for the other teacher involved.

Hooking up a laptop computer to a Toshiba can be a dangerous hazard to students. Currently, wiring a laptop to a Toshiba requires multiple wires and cords to stretch across the room in order to connect to the internet, or to find a hot plug-in source. This is an apparent risk to any student, or faculty member, walking through the classroom. In order to fix this problem, we propose to provide each teacher with a laptop that is wireless, allowing for an easy connection to the internet. Furthermore, in the future, we also plan to have projectors mounted to the ceiling to promote a safer, less hazardous work space for all.

School Opportunities

Our administration works hard to advocate effectively utilizing technology by routinely modeling its appropriate use. They believe teachers need to see the tools used effectively before they can begin to envision their use in the classroom. The training sessions follow, and our full-time technology support person provides support along with Penny Knapp. Every effort is made to pay teachers for the training, or provide these opportunities through staff development time.

Our faculty members take time to recognize those individuals who are using technology instructionally by passing along a decorated bathroom plunger, rewarding and symbolizing that the particular person is not afraid to "Plunge into Technology!" Our administration also recognizes those individuals who are technology literate in various system communications such as the system newsletter, Friday Fliers, during tech coordinator meetings, etc.

The full-time technology coordinator runs the lab, instructs students on software programs, and helps maintain our school equipment. In addition to this position, a county technology specialist is available at our school once a week for half a day.

Our administration also is in favor of piloting the use of assessment tools utilizing technology. In the fall of 2006, and the beginning of 2007, our school piloted the online CSA assessment, and our principal recently asked to be a pilot elementary school for the Pinnacle grading system.

Not only does each classroom have access to the internet, and every teacher has access to a Toshiba Document Camera in their classroom, we have also received 30 e-pads with a wireless chalkboard-classroom performance system in which we will be receiving training on in two weeks.

School Threats

A potential threat to our school is a lack of an active technology committee. Our technology committee has not met in over a year, posing an impending disadvantage to our school. Many of the matters and concerns indicated could possibly be alleviated, if not further discussed more in depth. Our administration has recently introduced meeting on blackboard to allow for more frequent meeting time, which we hope will help resolve this problem.

Resistance to technology is also a threat. Our overall school attitude towards embracing technology isn't as strong as one would hope. There is a core group of early adopters, but there are also too many who are happy just sticking with paper and pencil. There seems to be a lack of understanding of the big picture and why we need to continue to move forward with technology integration as well as the tremendous benefits for students. When teachers do learn new skills presented to them during staff meetings, often times they do not further pursue what is learned. Rarely, any follow-up trainings are provided to ensure teachers have a strong knowledge base. There are just not enough people to provide training and support at least with our current model. Although trainings are provided after school on occasion, the turn out is insignificant.

There are also inequities in our county in terms of the “haves” and the “have nots” in regard to hardware. New buildings, such as Centerville Elementary, get the newest and the best while older schools like ours struggle to keep up. If we don't have someone really working hard to write grants, allocate school funds, etc. it just won't happen quickly enough.

Holding teachers accountable is also an issue. Although our administration strives to encourage teachers to utilize technology, and also show them the benefits, often teachers oppose the new, foreign domains, which is evident through our technology survey. However, coming up with a “snapshot” evaluation (evaluations which are done informally, or just random walk-throughs) based on effective technology utilization, may further encourage teachers to enhance content-area learning with technology-infused lessons.