

# Pro-technology: The Parent Perspective

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# Introduction

In the 21<sup>st</sup> century, we are in dire need of competing globally. With the constant growth and innovation of technology, we must prepare our students to compete on global levels in the workforce of tomorrow. In this presentation, several aspects will be illustrated to highlight why parents today support teaching technology in schools. The discussions range from:

- Some parents today are computer literate and proficient themselves.
- Parents actually utilize technology in their lives.
- Parents recognize the benefits in exposing their children to technology.
- Other parents who may not have technology at home and recognize the benefit in having the schools introduce students to technology who otherwise may not get the exposure.

Both sets of parents would agree that technology increases academic achievement in general education and special education students.



# PARENTS UTILIZE TECHNOLOGY

*Research shows that increased parental involvement  
improves student achievement*

# Technology in the Classroom: *Parents Approve it & Use it!*

Web based student information systems include...

## I. Parent/student online grade viewer , which communicates....

- Upcoming assignment description/due dates
- Upcoming project description/due dates
- Upcoming test dates
- Test reviews
- Etc...

**Upcoming Assignments**

Due Date	Assignment	Class
Fri, Oct 24	Homework 5.5 #3,11,15 5.7 #3,5,7,11,15,17,21,25,28,35,37,39	5th-ALGEBRA 2 A
Thu, Feb 5	Crossword: Developments in Europe	TRM2-2nd-WORLD HISTORY A
Wed, Mar 25	Remodeling an older home	TRM3-2nd-INTERIOR DES
Tue, May 5	Ceramic project	TRM3-3rd-ART 1
No Assignments Due Today		
No Future Assignments Due		

Trimester 1			
Class	MP1	Trimester Exam	Final
1st-ACCEL CHEM A	90.2 / A-	96.0 / A	91.4 / A-
2nd-SPANISH 2 A	98.6 / A	96.5 / A	98.2 / A
3rd-ENGLISH 10 A	94.0 / A	90.0 / A-	93.2 / A
4th-FABRIC PRO/DES	94.6 / A	99.0 / A	95.5 / A
5th-ALGEBRA 2 A	95.3 / A	87.7 / B+	93.8 / A

Trimester 2			
Class	MP2	Trimester Exam	Final
TRM2-1st-GRAPH DESIGN	97.7 / A	96.0 / A	97.4 / A
TRM2-2nd-WORLD HISTORY A	94.2 / A	90.0 / A-	93.4 / A
TRM2-3rd-ALGEBRA 2 B	93.1 / A	85.0 / B	91.5 / A-
TRM2-4th-EXPL FOOD&NUTR	94.4 / A	95.0 / A	94.5 / A
TRM2-5th-ENGLISH 10 B	98.4 / A	92.0 / A-	97.1 / A

Trimester 3			
Class	MP3	Trimester Exam	Final

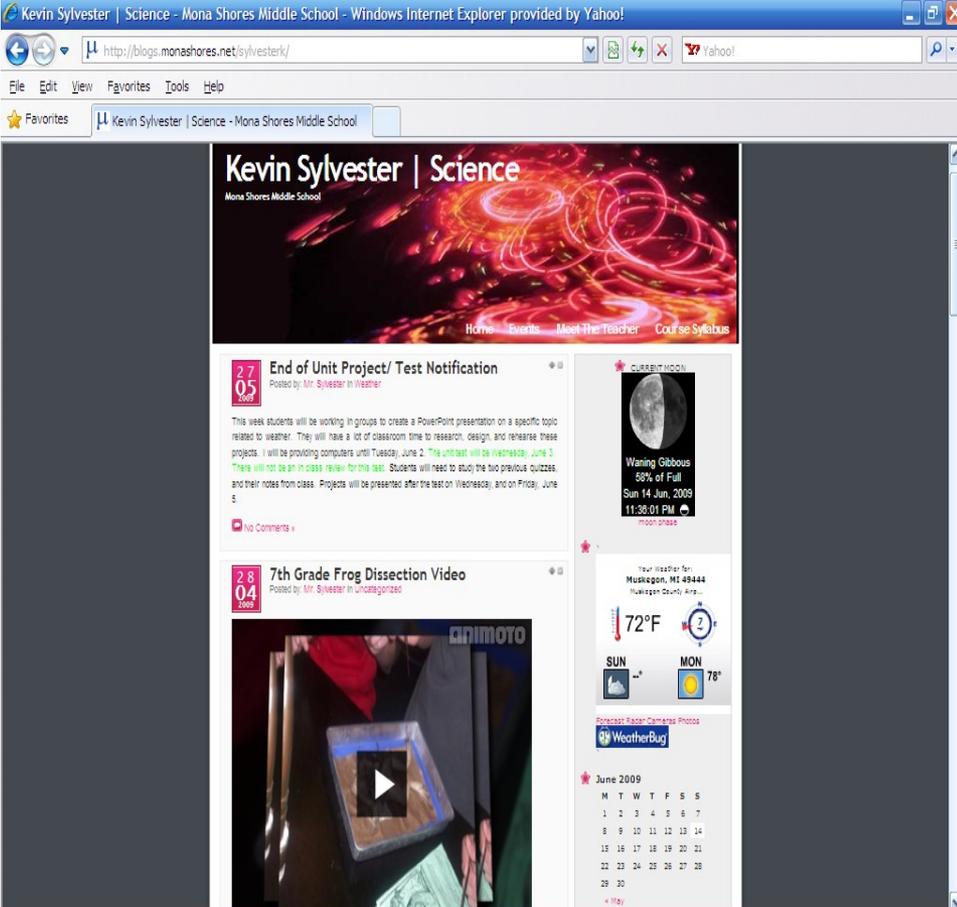


# Technology in the Classroom: *Parents Approve it & Use it!*

Web based student information systems also include...

## II. Teacher Web Pages which communicate...

- Course documents (*i.e.:* Syllabus)
- Additional subject related resource links (*i.e.:* textbook hyperlink)
- Teacher explanations and class calendar
- Make up work
- Important upcoming dates
- Teacher contact information
- And more...



The screenshot shows a web browser window displaying a blog page for Kevin Sylvester, a science teacher at Mona Shores Middle School. The page features a header with the teacher's name and school, a navigation menu (Home, Events, Meet the Teacher, Course Syllabus), and several posts. The first post is titled 'End of Unit Project/ Test Notification' and discusses a group project on weather. The second post is titled '7th Grade Frog Dissection Video' and includes a video player. The right sidebar contains a weather widget for Muskegon, MI, showing a current temperature of 72°F and a forecast for the next two days (SUN 78°F, MON 78°F), and a calendar for June 2009.

To view and explore this teacher's web page, click the following link:

<http://blogs.monashores.net/sylvesterk/>



# Student information system (SIS) programs

- Originally created to...
  - Manage and report assessments,
  - Scheduling, and
  - Grading
- Unexpected benefits when allowed parental access:
  - Improved attendance,
  - Decreased disciplinary concerns,
  - Increased test scores, and
  - Fulfilled No Child Left Behind requirements



# Research shows that increased parental involvement improves student achievement.



- Including, but not limited to...
  - Having better college entrance statistics
  - Earning higher grades and test scores, and enroll in higher-level programs
  - Being promoted, pass their classes, and earn credits
  - Attending school regularly
  - Having better social skills, show improved behavior, and adapt well to school
  - And, graduating and go on to post-secondary education



- And, enhance parental agreement about the following statements about that their child's school...
  - Child's teachers maintain good discipline in the classroom
  - In child's school, most students and teachers respect each other
  - The principal and assistant principal maintain good discipline at child's school
  - Child's school welcomes my family's involvement with the school
  - And, child's school makes it easy to be involved there

# Opponents may adhere to the following suggestions if they lack internet access...

- Telephone teacher
- Utilize Homework Hotline
- Attend Parent/Teacher Conferences
- Read School Newsletter
- In-person meeting
- Utilize public internet access
- Print and mail student grades
- Talk with Child
- And, more...



# EQUITY FOR ALL

*Addressing the pros and cons of using technology in schools from the parents' perspective for all students.*

# Technology in Schools: Equity for All

-  Parents feel that technology exposes their child to important experiences that are needed for the 21<sup>st</sup> Century.
- Parents feel that using technology in schools gives each child access to the same tools and resources.
- Technology use in school provides the opportunity for all students to have a leveled playing academic field.

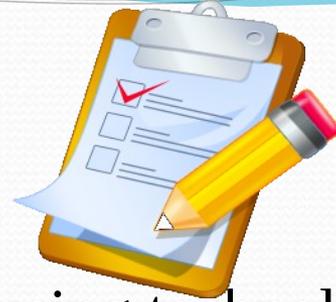
# Equity for All: Survey



A parent survey was conducted in a class of twenty-seven students. The background information for the survey is as follows:

- 11 homes without computers
- 14 without internet access
- Families of Low Socio-Economic Status
- 44% of students receive free or reduced lunch

# Survey



1. How do you feel about your child using technology in school?
2. What are the benefits you see with technology in school?
3. What are some worries you have about the use of technology?
4. If you had to choose, would you want your child to use technology or would you rather them go without?

# Survey Results



## ● Question 1-Multiple Choice Question

- ▢ 93% of parents said, “ I feel great about my students use of technology”.
- ▢ 7% of parents said, “ I don’t feel strongly either way”.

## ● Question 2-Short Answer Question

- ▢ Parents can see applications for the “real world”. (11 comments)
- ▢ Allows them the exposure to new things they do not have at home. (12 comments)
- ▢ Makes work time more efficient and allows them to focus on the subject. (4 comments)
- ▢ My kids can help me learn new things. (2 comments)
- ▢ Technology will be in their future so they should learn it now. ( 2 comments)

# Survey Results Continued

## ● Question 3-Short Answer Question

- ▢ Expensive for the district when teachers and resources are cut. (4 comments)
- ▢ Limited technology at home so unable to reinforce what is being taught; grades might go down because unfamiliarity with the technology. ( 5 comments)
- ▢ Concern of internet usage and monitoring. ( 1 comment)
- ▢ No Comment (17 left blank)

## ● Question 4-Multiple Choice Question

- ▢ 100% said “ I would want my child to use technology.”

# Equity For All

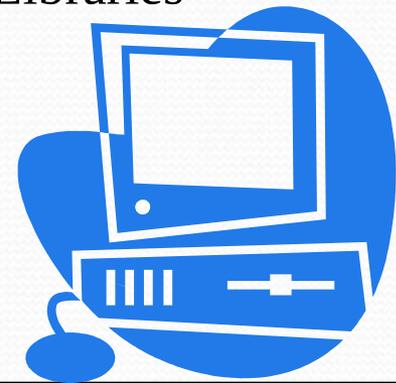


## Cons

- Students without technology access at home:
  - Grades may suffer due to lack of experience
  - May be viewed as “slower than the other students.”
- Parents concerned they will be unable to reinforce technology usage that is taught because:
  - No computers at home
  - Internet is too much monthly
  - Computers and software are too expensive

## Solutions

- Teachers can help alleviate parental concerns by:
  - Separate Grades
  - Extension Assignments
  - Laptop Checkout
  - Company Donations
  - Local Libraries



# INCREASES ACADEMIC ACHIEVEMENT

*“Today’s students grow up in a technology-mediated world and their thinking, behavior, and emotions are heavily influenced by new technologies”.*

# Increasing Academic Achievement

- Technology promotes equity and access in education
- Technology improves student achievement in reading, writing, and mathematics
- Students who are exposed to technology implement it in other curriculum areas
- Technology improves learning skills, facilitates research and provides extensive word processing tools
- Technology can be used to promote the development of higher-order thinking skills and allow opportunities for teachers to act as facilitators, as well as a co-learner with the students
- Technology can help schools meet the needs of all students

# Studies show Technology does Increase Academic Achievement

- “Researchers found that students studying language arts in a multimedia environment gained more auditory, language, decoding-in-context, and story-composition skills than did students in a control groups who did not use computers.”

(“Open your Eyes: The Evidence is There,” *Technology and Learning*, September 1997.)

- “A study of elementary aged students learning math found that students who used multimedia computer software showed less math anxiety and more frequently perceived the subject as relevant to everyday life than students in a control group did.”

(*Technology and Learning*, September 1997)

- “Using mapping technology has been found to help dyslexic children to write and achieve high marks at school and university.”

(*InteracTive*, March/April 2003)

# Technology may NOT increase Academic Achievement

- “Student’s expectation that learning must be entertaining and their failure to become active learners.”

*(Technology in Schools: Some say It Doesn’t Compute!, 6/11/2009)*

- Many students waste valuable time fooling around on computers.
- According to USA Today story, *Do Classroom PCs Help Kids Learn?* (8/03/98), “the Third International Math and Science Study found that the five countries that outperformed U.S. Fourth-graders in math did not use computers in their schools very often (one-third as often as we do), and fourth graders in five other nations who had more home computers than our children did not do better in science than did our students.” The study found no correlation between computer use and math and science achievement.
- Another study found that because of the language interaction, a child’s one-on-one contact with an adult produced far greater gains than those achieved when playing on a computer”.

*(Education Week, October 1998)*

# ASSISTIVE TECHNOLOGY FOR STUDENTS WITH SPECIAL NEEDS

*It's the Law!*

# Why do you use Assistive Technology?

## It's the Law!



# When do you consider Assistive Technology?

If the student has difficulty:

- Reading it
- Writing it
- Hearing it
- Seeing it
- Attending to it
- Accessing it
- Saying it
- Keeping up

# Three Stages of Assistive Technology

- Low Tech
  - Simple, low maintenance, little electronics
  - (highlighters, page flags, writing template)
- Mid Tech
  - Some maintenance, some training, more electronics
  - (speaking dictionary, MP3 player, spellchecker, digital recorder)
- High Tech
  - More maintenance, more training, complex electronics
  - (Text reader, talking word processor, interactive white boards)

# Assistive Technology

## Pros

- Keeps them engaged-less distractions
- Similar to their video games, TV, and movies sometimes so it is viewed as “fun”
- Break up from the routine
- Organization
- Reading, writing, spelling assistance programs
  - Dragon Naturally Speaking
  - Talking Typer
  - Microsoft Spell Check
- Hearing Amplification
  - Speaker systems
- Visual-Smartboard use

## Cons

- Too many distractions with technology
- They may see it too much as a game and not take it as serious
- Lack of understanding of how to use the technology
- Frustration with learning the new technology
- Break-down of the technology



# Assistive Technology

## Benefits

- Technology in the classroom may be time consuming for many educators, in the end it can increase academic achievement, especially for your special needs students through:
  - Reading assistance-books on CD, smart pen, talking typers
  - Writing assistance-word predictor software, spell check
  - Visual impairment-screen enlargers, high contrast screens
  - Hearing impairment-amplification systems
  - Organization-digital recorders
  - Other-email, internet for research, grading systems, etc.
- K-12 districts (especially the larger districts) purchasing these devices or programs would be beneficial to the special needs program within the district.
- All students can now attain the same information, regardless of ability level (reading level, writing ability, sight problems, etc) through these new technologies.



# TECHNOLOGY PREPARES YOU FOR THE WOLD

*Technology in schools is necessary to prepare students for the increasing technological demands of the workforce, across all levels and fields.*

# Which Jobs use Technology?



Fast Food Worker

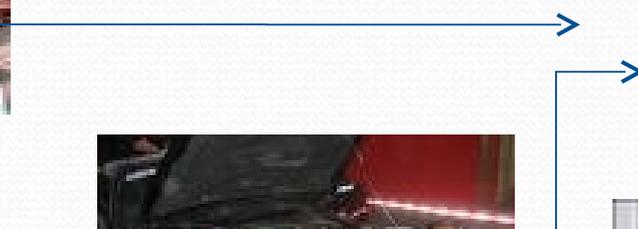


Auto Mechanic



Company CEO

Computers!



# Technology Benefits for Life

- ↑ Grade point averages
- ↑ State test scores
- ↑ Attendance rates
- ↑ High School Graduation rates
- ↑ Enrollment in Post-Secondary programs
- ↑ Graduation from Post-Secondary Institutions



# Is using technology in school helping to prepare your child for the workforce?

▣ “Yes! You have to go to college to get a good paying job, and you can’t do well in college if you aren’t good at using computers.”

▣ Patti V.

▣ “I would say yes because when my older son was looking for a part-time job, most of the jobs said you had to be able to use computers, unless you just want to mow lawns.”

• Sara M.

☞ “Maybe, but most jobs will train you after you get hired anyway.”

• Holly L.



# Fastest Growing Careers

- Network Systems
  - Data Communications
  - Computer Software Engineering
  - Information Technology
- Especially in times of recession, students need to be prepared for these fast growing jobs!



# Conclusion

While technology does come with its difficulties, overall it has been shown time and time again as a useful tool to help increase student learning. Through the use of comparing studies and teacher-created surveys, this presentation has shown that parents have ultimately come to the same conclusion that technology is the wave of the future and will greatly impact the lives of their child. While their concerns are valid, as teachers these concerns can be addressed practically.



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