

# Empirical Education Inc. Surveys

## AMSTI Principal Survey, UM

The information you provide is being collected for research purposes only and will be kept strictly confidential. Please be assured that your name and your school name will not be reported or disclosed outside of the research agencies. Public reporting burden for this collection of information is estimated to average about 30 minutes. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to the Department of Education 50 North Ripley Street PO Box 302101 Montgomery, AL 36104

Questions regarding this survey or the research study can be directed to

Laurel Sterling at [lsterling@empiricaleducation.com](mailto:lsterling@empiricaleducation.com) or call toll free 1-888-486-8886 ext. 127.

### Principal Information

#### 1. Please identify yourself

- Carol Barber
- Joy Brown
- Linda Chesler
- Cindy Echols
- Donna Hudson
- Marian Humphries
- Mark Kirkemier
- James Martin
- Vanessa Nason
- Dolia Patterson

- Karen Peak
- Sue Porter
- Other

2. What is the name of your school?

- m Abbeville Elementary
- Abbeville Middle
- Andalusia Middle
- Brantley High School
- Daleville Middle School
- Goshen Elementary
- Goshen High School
- Greenville Middle School
- Highland Home School
- Houston County High School
- Pleasant Home High School
- Red Level High School
- Luverne High School
- Zion Chapel High School
- Other

3. Prior to the 2006/07 school year, how many years have you worked as a school administrator?

4. Prior to the 2006/07 school year, how many years have you been the principal at this school?

5a. During the 2005/06 school year, what would have helped **grade 4-8** teachers improve their **math** instruction? Select up to four items that you think would have helped the most.

- Better quality curriculum
- Better organization of lessons
- More planning time to develop lessons
- Quality hands-on activities
- Supplies for hands-on activities
- Accessing technology
- Accessing quality assessments
- Accessing performance assessments
- Professional development on math content knowledge
- Professional development on instructional strategies
- Professional development on the use of technology in instruction
- On-Site teacher support
- Other
- Don't know
- Not Applicable

5b. During the 2005/06 school year, what would have helped **grade 4-8** teachers improve their **science** instruction? Select up to four items that you think would have helped the most.

- Better quality curriculum
- Better organization of lessons
- More planning time to develop lessons
- Quality hands-on activities
- Supplies for hands-on activities
- Accessing technology
- Accessing quality assessments
- Accessing performance assessments
- Professional development on science content knowledge
- Professional development on instructional strategies
- Professional development on the use of technology in instruction

- On-Site teacher support
- Other
- Don't know
- Not Applicable

## Instruction

Please answer the following questions about math and science instruction at your school during the 2005/06 school year, *for grades 4 through 8 only*.

*For questions 6a and 6b only*, Consider the following description of Inquiry-Based Instruction in which students do all of the following activities as part of the learning process:

- >Make observations
- >Pose questions
- >Examine books and other sources of information to see what is already known
- >Plan investigations
- >Review what is already known in light of experimental evidence
- >Use tools to *gather, analyze, and interpret data*
- >Propose answers, explanations, and predictions
- >Communicate the results

**6a.** Approximately how much instruction conformed to this Inquiry-based model *in math classrooms at your school?*

- 76% to 100%
- 51% to 75%
- 26% to 50%
- 0% to 25%
- Don't know
- Not Applicable

**6b.** Approximately how much instruction conformed to this Inquiry-based model *in science classrooms at your school?*

- 76% to 100%
- 51% to 75%
- 26% to 50%
- 0% to 25%
- Don't know
- Not Applicable

7a. How much instruction incorporated hands-on activities *in Math Classrooms*?

- 76% to 100%
- 51% to 75%
- 26% to 50%
- 0% to 25%
- Don't know
- Not Applicable

7b. How much instruction incorporated hands-on activities *in Science Classrooms*?

- 76% to 100%
- 51% to 75%
- 26% to 50%
- 0% to 25%
- Don't know
- Not Applicable

8a. How much instruction *in Math Classrooms* required that students use higher-order thinking skills? (i.e., where students advance from skills such as *focusing and information gathering* to skills such as *integrating and evaluating*)

- 76% to 100%
- 51% to 75%

- 26% to 50%
- 0% to 25%
- Don't know
- Not Applicable

8b. How much instruction *in Science Classrooms* required that students use higher-order thinking skills? (i.e., where students advance from skills such as *focusing and information gathering* to skills such as *integrating and evaluating*)

- 76% to 100%
- 51% to 75%
- 26% to 50%
- 0% to 25%
- Don't know
- Not Applicable

9. Did science teachers engage students in long-term (lasting a week or longer) research projects?

- Yes
- No
- Don't know
- Not Applicable

10a. How frequently did teachers employ formative assessments to guide their instruction *in math classes*?

- On a daily basis
- At least weekly
- At least monthly
- At least quarterly
- At least twice a year
- Never

- Don't know
- Not Applicable

10b. How frequently did teachers employ formative assessments to guide their instruction *in science classes*?

- On a daily basis
- At least weekly
- At least monthly
- At least quarterly
- At least twice a year
- Never
- Don't know
- Not Applicable

11a. How frequently did teachers use performance-based assessments *in math classes*? (i.e., assessing students based on their application of knowledge, skills, and work habits through the performance of tasks that are meaningful and engaging to students)

- On a daily basis
- At least weekly
- At least monthly
- At least quarterly
- At least twice a year
- Never
- Don't know
- Not Applicable

11b. How frequently did teachers use performance-based assessments *in science classes*? (i.e., assessing students based on their application of knowledge, skills, and work habits through the performance of tasks that are meaningful and engaging to students)

- On a daily basis
- At least weekly
- At least monthly
- At least quarterly
- At least twice a year
- Never
- Don't know
- Not Applicable

## Professional Development

Please answer the following questions about the participation of this school's math and science teachers in professional development during the 2005/06 school year, including the summer of 2005, *for grades 4 through 8 only*.

**12a.** How many teachers participated in professional development *in math* (not including on-site support or collaboration meetings)?

- 76% to 100%
- 51% to 75%
- 26% to 50%
- 0% to 25%
- Don't know
- Not Applicable

**12b.** How many teachers participated in professional development *in science* (not including on-site support or collaboration meetings)?

- 76% to 100%
- 51% to 75%
- 26% to 50%
- 0% to 25%



- Don't know
- Not Applicable

13a. Which areas were included in the *math* professional development in which teachers participated? (select all that apply)

- Content Knowledge
- Pedagogy
- Technology Use
- Don't know
- Not Applicable

13b. Which areas were included in the *science* professional development in which teachers participated? (select all that apply)

- Content Knowledge
- Pedagogy
- Technology Use
- Don't know
- Not Applicable

14a. How frequently did teachers receive on-site support (e.g., mentoring or coaching) for improving their instruction *in math*?

- On a daily basis
- At least weekly
- At least monthly
- At least quarterly
- At least twice a year
- Never

- Don't know
- Not Applicable

14b. How frequently did teachers receive on-site support (e.g., mentoring or coaching) for improving their instruction *in science*?

- On a daily basis
- At least weekly
- At least monthly
- At least quarterly
- At least twice a year
- Never
- Don't know
- Not Applicable

15a. How frequently did teachers meet collaboratively with other teachers about teaching *math*?

- On a daily basis
- At least weekly
- At least monthly
- At least quarterly
- At least twice a year
- Never
- Don't know
- Not Applicable

15b. How frequently did teachers meet collaboratively with other teachers about teaching *science*?

- On a daily basis
- At least weekly

- At least monthly
- At least quarterly
- At least twice a year
- Never
- Don't know
- Not Applicable

### Potential Value of Technology

16. To what extent do you agree with the following statements about education technology? Mark one box per row.

(1=Strongly Disagree, 2=Somewhat Disagree, 3=Neither Disagree nor Agree 4=Somewhat Agree, 5=Strongly Agree)

a. Educational

technology can be used  
to improve instructional  
practice.

b. Educational

technology can be used  
to improve teachers'  
subject matter  
knowledge.

c. Educational Technology can be  
used to improve student  
learning.

d. Educational

technology can be used  
to improve students'  
performance on  
standardized tests.

e. Educational technology (the  
availability of )can help to  
narrow the achievement gap  
between traditionally  
underserved students and other  
students.

### Availability of Technology, Tools, and Resources Schoolwide

Please answer the following questions about the availability of technology, tools, and resources for this school's math and science classes during the 2005/06 school year *schoolwide*.

17. During the 2005/06 school year, how many computers were used by staff and students at this school, (*include all grade levels*)?

- more than 1000
- 751 to 1000
- 501 to 750
- 301 to 500
- 201 to 300
- 101 to 200
- 51 to 100
- 26 to 50
- 1 to 25
- 0
- Don't know
- Not Applicable

18. During the 2005/06 school year, how many computers were available for students to use in this school's centers, labs, or other non-classroom areas, (*include all grade levels*)?

- more than 1000
- 751 to 1000
- 501 to 750
- 301 to 500
- 201 to 300
- 101 to 200
- 51 to 100
- 26 to 50
- 1 to 25
- 0

- Don't know
- Not Applicable

### Technology for Math and Science Grades 4-8

Please answer the following questions about the availability of technology, tools, and resources for this school's math and science classes during the 2005/06 school year, *for grades 4 through 8 only*.

19a. How many computers were available for students to use *in the classroom* for math lessons?

- One computer for each student
- One computer for every two students
- One computer for every three students
- One computer for every four students
- One computer for every five students
- One computer for every six or more students
- Did not have computers in the classroom
- Don't know
- Not Applicable

19b. How many computers were available for students to use *in the classroom* for science lessons?

- One computer for each student
- One computer for every two students
- One computer for every three students
- One computer for every four students
- One computer for every five students
- One computer for every six or more students
- Did not have computers in the classroom

- Don't know
- Not Applicable

20a. How many graphing calculators were available for students to use in the classroom for *math lessons*?

- One graphing calculator for each student
- One graphing calculator for every two students
- One graphing calculator for every three students
- One graphing calculator for every four students
- One graphing calculator for every five students
- One graphing calculator for every six or more students
- Did not have graphing calculators in the classrooms
- Don't know
- Not Applicable

20b. How many graphing calculators were available for students to use in the classroom for *science lessons*?

- One graphing calculator for each student
- One graphing calculator for every two students
- One graphing calculator for every three students
- One graphing calculator for every four students
- One graphing calculator for every five students
- One graphing calculator for every six or more students
- Did not have graphing calculators in the classrooms
- Don't know
- Not Applicable

21a. How many scientific calculators were available for students to use in the classroom for *math lessons*?

- One graphing calculator for each student
- One graphing calculator for every two students
- One graphing calculator for every three students
- One graphing calculator for every four students
- One graphing calculator for every five students
- One graphing calculator for every six or more students
- Did not have graphing calculators in the classrooms
- Don't know
- Not Applicable

21b. How many scientific calculators were available for students to use in the classroom for science *lessons*?

- One graphing calculator for each student
- One graphing calculator for every two students
- One graphing calculator for every three students
- One graphing calculator for every four students
- One graphing calculator for every five students
- One graphing calculator for every six or more students
- Did not have graphing calculators in the classrooms
- Don't know
- Not Applicable

22a. How many basic/4 function calculators were available for students to use in the classroom for *math lessons*?

- One basic/4 function calculator for each student
- One basic/4 function calculator for every two students
- One basic/4 function calculator for every three students
- One basic/4 function calculator for every four students
- One basic/4 function calculator for every five students

- One basic/4 function calculator for every six or more students
- Did not have basic/4 function calculators in the classrooms
- Don't know
- Not Applicable

22b. How many basic/4 function calculators were available for students to use in the classroom *for science lessons*?

- One basic/4 function calculator for each student
- One basic/4 function calculator for every two students
- One basic/4 function calculator for every three students
- One basic/4 function calculator for every four students
- One basic/4 function calculator for every five students
- One basic/4 function calculator for every six or more students
- Did not have basic/4 function calculators in the classrooms
- Don't know
- Not Applicable

23a. Were the *math classrooms* well equipped with *manipulatives*?

- Yes, manipulatives were available for all students in all classes.
- The school had some manipulatives, but not enough for all students in all classes.
- No, the school did not have manipulatives.
- Don't know
- Not Applicable

23b. Were the *science classrooms* well equipped with *materials (for hands-on science)*?

- Yes, sufficient materials were available for all students in all science classes.
- The school had some materials, but not enough for all students in all classes.
- No, the school did not have materials for hands-on science



lessons.

- Don't know
- Not Applicable

### **Current Scientific and Mathematical Instruments**

During the 2005/06 school year, were the following technologies available to teachers and/or students in classrooms or in the school's labs, centers or other areas *for grades 4 to 8* ? Check all that apply.

#### **24a.** Sensors for use with computers

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

#### **24b.** Sensors for use with graphing calculators

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

#### **24c.** Probes for use with computers

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms

- For student use in labs or other areas
- Not available for students

24d. Probes for use with graphing calculators

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

### **Computers and Connectivity**

During the 2005/06 school year, were the following technologies available to teachers and/or students in classrooms or in the school's labs, centers or other areas *for grades 4 to 8* ? Check all that apply.

24e. Desktop computer

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24f. Laptop computer

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24g. Personal digital devices (e.g. PDA, tablet computer, etc.)

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24h. Technologies specific to content area (e.g. Geometer's Sketchpad, Probeware)

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24i. Access to the Internet via telephone modem

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24j. Access to high-speed Internet (e.g. through a cable modem or DSL)

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers

- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24k. School intranet access (i.e. electronic communication exclusively within the school)

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

### **Computer Peripherals and Software**

During the 2005/06 school year, were the following technologies available to teachers and/or students in classrooms or in the school's labs, centers or other areas *for grades 4 to 8* ? Check all that apply.

24l. Printers

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24m. CD-ROM or DVD Drive

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms

- For student use in labs or other areas
- Not available for students

24n. A device to project a computer screen for class viewing (LCD projector)

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24o. Touch Screen

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24p. Scanners

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24q. Digital photography and/or video equipment

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers

- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24r. Word processing software

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24s. Spreadsheet software (e.g. Excel)

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24t. Presentation software (e.g. PowerPoint)

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

24u. Multimedia editing or authoring tools (e.g. Hyper Studio)

- For teacher use in classrooms
- For teacher use in labs or other areas

- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

**24v.** Email software

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

**24w.** Web page creation software (e.g. Dreamweaver)

- For teacher use in classrooms
- For teacher use in labs or other areas
- Not available for teachers
- For student use in classrooms
- For student use in labs or other areas
- Not available for students

## **Technical Support**

How well was this school able to meet its needs for technical support?

(Answer each item below)

**25a.** Overall technical support needs

- Not Very Well
- Moderately Well
- Very Well

- Don't Know
- Not Applicable

25b. Installing equipment

- Not Very Well
- Moderately Well
- Very Well
- Don't Know
- Not Applicable

25c. Installing networks

- Not Very Well
- Moderately Well
- Very Well
- Don't Know
- Not Applicable

25d. Maintaining equipment

- Not Very Well
- Moderately Well
- Very Well
- Don't Know
- Not Applicable

26. Who had primary responsibility for supporting educational technology in this school during the 2005/06 school year? (Select one)

- Full-time, paid technology director/coordinator
- Part-time, paid technology director/coordinator
- Librarian/Media Specialist
- District staff (including district-provided help desk)
- Teacher or other staff as part of formal responsibilities



- Volunteers (including teachers, other school staff, and community members)
- Consultant/outside contractor
- No one
- Other. Please specify:
- Don't know
- Not Applicable

## Community Support

During the 2005/06 school year, to what extent were community-based organizations (the chamber of commerce, small businesses, faith-based institutions) involved in supporting the math and/or science programs in your school?

(Answer each item below)

### 27a. Community Partners Provided Financial Support

- Not At all
- A little
- To a moderate extent
- A great extent
- Don't Know
- Not Applicable

### 27b. Community Partners Provided Technology/Equipment

- Not At all
- A little
- To a moderate extent
- A great extent
- Don't Know
- Not Applicable

27c. Community Partners Provided Refreshments for events such as parent nights or trainings

- Not At all
- A little
- To a moderate extent
- A great extent
- Don't Know
- Not Applicable

27d. Community Partners Provided School Supplies

- Not At all
- A little
- To a moderate extent
- A great extent
- Don't Know
- Not Applicable

27e. Community Partners Provided Tutors/Mentors

- Not At all
- A little
- To a moderate extent
- A great extent
- Don't Know
- Not Applicable

27f. Community Partners Provided Other Please Describe

## Other Initiatives

28. Please list the initiatives in which your school participated during the 2005/06 school year.

- Alabama Reading Initiative
- Alabama Reading First Initiative
- Alabama Science In Motion
- LAMST
- Other
- Don't know
- Not Applicable

29. Please list all math and science curricula used in your school during the 2005/06 school year, for grades 4-8 only.

30. Please provide any other comments you would like to share about math, science, and/or technology instruction, only for grades 4 - 8 at this school.

31. Please provide any other comments you would like to share about this research project or this survey?

