

# Factors Affecting the Use of Instructional Media by Middle and High School Math Teachers

## SURVEY RESULTS SUMMARY

### Math Teachers Survey 2006–07

**1. What instructional purpose could the use of media serve in your classroom? (Select as many as apply.)**

	Response Total	%				
To motivate students	133	86.9%				
To introduce a new topic	126	82.4%				
To provide real-life context for learning	129	84.3%				
To reinforce learning	132	86.3%				
For direct instruction	87	56.9%				
For supporting project-based learning	83	54.2%				
I don't know	3	2.0%				
Other (please specify)	6	3.9%				
Total Respondents	153					
(skipped this question)	0					

**2. What types of media would you most likely use? (Select all that apply.)**

	Response Total	%				
biographies of career mathematicians on video	42	27.8%				
computer games featuring animated problems	60	39.7%				
interactive computer simulations	104	68.9%				
video introducing a project-based learning activity	69	45.7%				
video that models students being persistent in solving problems	45	29.8%				
video that shows real-life applications of math concepts	128	84.8%				
visualizations of complex or 3-D concepts	107	70.9%				
online problems with animations or illustrations	99	65.6%				

video that models teaching strategies	47	31.1%				
would not use media for math instruction	3	2.0%				
Other (please specify)	8	5.3%				
Total Respondents	151					
(skipped this question)	2					

**3. What format do you prefer for viewing video? (Select one or more answers.)**

	Response Total	%				
Download media to view later	68	45.0%				
DVD to play in a DVD player	112	74.2%				
DVD to play in a computer	76	50.3%				
VHS video cassette	35	23.2%				
Online streaming with Windows Media	47	31.1%				
Online streaming with QuickTime	27	17.9%				
Other media player (please specify)	5	3.3%				
Total Respondents	151					
(skipped this question)	2					

**4. How often do you use different types of media for math instruction?**

	Never	Once in a while	A few times per year	Once or more per month	Once or more per week	Response Average
video	36	58	40	8	3	2.2
computer games	82	34	13	7	0	1.6
online Web resources	18	44	32	33	16	2.9
animations	51	48	12	16	4	2.04
computer simulations	49	36	22	18	7	2.23
textbook	8	9	6	12	112	4.44
printed handouts	3	3	4	30	109	4.6
Total Respondents	152					
(skipped this question)	1					
coefficient alpha	0.70					

**5. Describe the level of technology access and support at your school:**

	none	some but not adequate	barely adequate	sufficient	exemplary	Response Total
student access to computer labs	9	45	29	51	9	143
adequate computers in class	77	34	12	16	4	143
access to Internet resources	4	38	26	59	15	142
ability to store and view video on computers	25	34	29	42	9	139
access to projector and computer	10	32	21	47	31	141
access to interactive whiteboard	78	29	9	14	11	141
student access to computers at home	4	42	36	53	3	138
technology support staff	5	34	33	59	12	143
adequate training and support for teachers	7	34	44	51	6	142
time to plan for technology integration	39	57	33	12	0	141
Total Respondents	144					
(skipped this question)	9					
coefficient alpha	0.79					

**6. Rate your technology expertise and the level of expertise of MOST of your peer teachers at your school.**

	Very tech-savvy: fearless and knowledgeable	Capable and often help others with their tech problems	Average skills requiring occasional assistance	Barely functional find it hard to learn new technologies	Not interested in utilizing technology	Response Total
My expertise	21	49	68	5	0	143
Most Math teachers at my school	2	32	85	16	2	137
Total Respondents	143					
(skipped this question)	10					
coefficient alpha	0.33					

**7. How often do you (or math teachers at your school) use technology for math instruction?**

	Never	Once in a while	A few times per year	Once or more per month	Once or more per week	Response Average
interactive white board	87	19	7	13	15	1.94
computer-projected images	25	36	27	26	25	2.93
computer games	65	42	22	9	0	1.82
online lesson plans	44	32	25	16	19	2.51
assign students work that requires computer access	51	50	21	14	4	2.07
online games or activities	59	52	16	10	2	1.88
electronic calculators	15	8	4	12	102	4.26
hand-held devices (iPods PDA's)	123	8	4	0	4	1.23
Total Respondents	143					
(skipped this question)	10					
coefficient alpha	0.67					

**8. What single factor most influences your use of media technology for math instruction? (Please write a short answer.)**

Total Respondents	117					
(skipped this question)	36					
See detail						

**9. What is your job?**

	Response Total				
Teacher: MS/HS Math	130				
Teacher: MS/HS other than Math	0				
Teacher: other grades	2				
Media Technician/Librarian	0				
Administrator	2				
Curriculum specialist	3				
Other (please specify)	7				
Total Respondents	144				
(skipped this question)	9				

**10. Please describe your school by selecting from the drop down menus. Click on the down arrow and the menu will appear scroll down to your selection.**

Ethnic representation						
	Mostly white	Mostly minority	Mixed ethnicities	Response Total		
	91	27	27	145		
Location						
	Urban	Suburban	Rural	Response Total		
	39	57	46	142		
Size K-12						
	Less than 200	201-1000	1001-3000	3001-10000	more than 10000	Response Total
	10	33	73	15	11	142
Your state						
	Texas	Utah	Wisconsin	Response Total		
	41	97	6	144		
Total Respondents	145					
(skipped this question)	8					