

# Highlights of The 2006 ECAR Study of Students and Information Technology

Judy Borreson Caruso  
Gail Salaway

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# Web-based Quantitative Survey

- 96 institutions
- 28,724 freshmen, seniors, and community college respondents
- 49 institutions participated in both 2005 and 2006
- Qualitative – student focus groups of 71 students

# Participants' role

- Obtain IRB approval
- Pull sample e-mail addresses of freshmen and seniors
- Send e-mail invitation to students

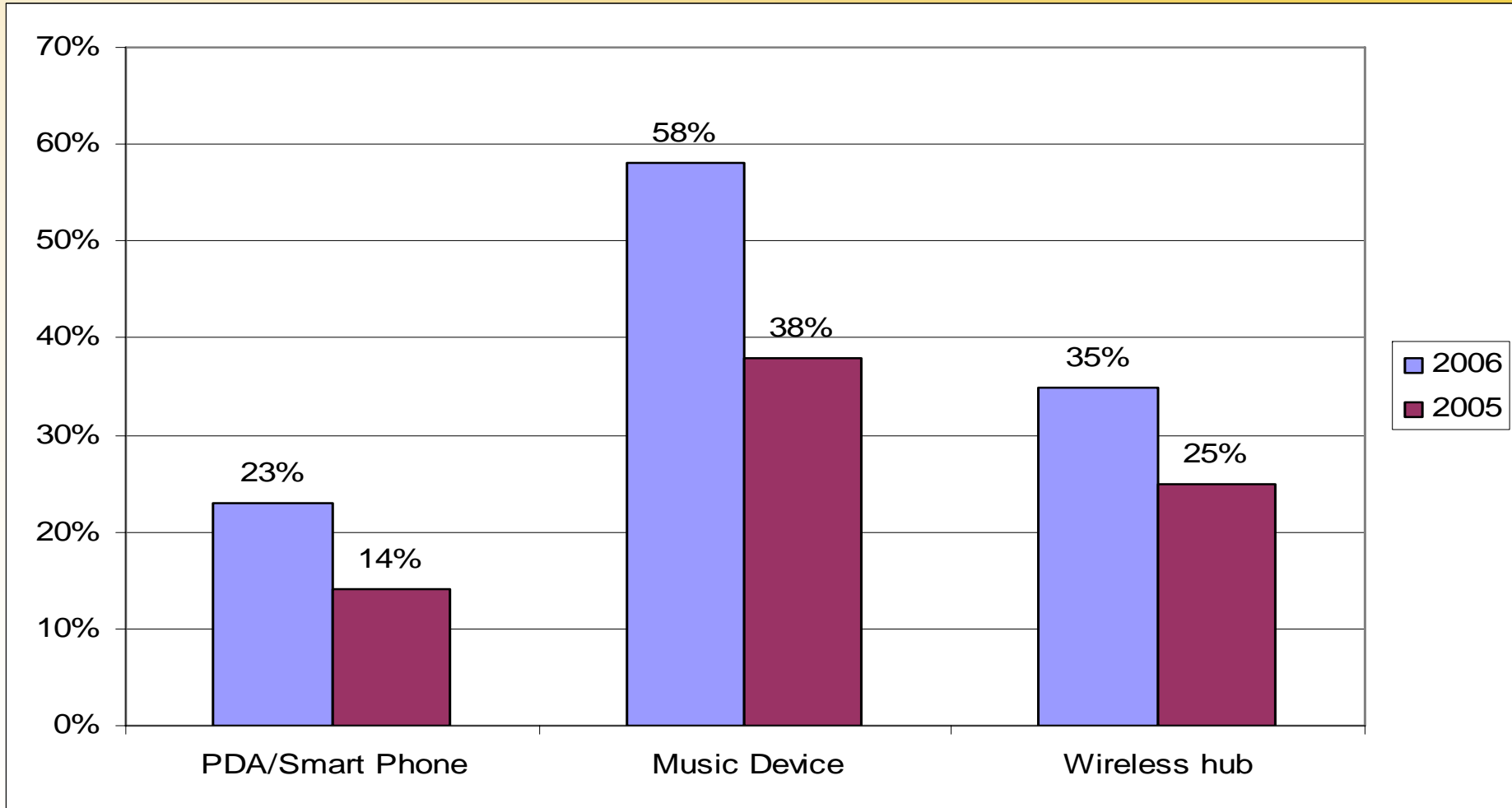
# Participants' report

		University								
		University			Other 4 year institutions			Total		
		senior or freshman			senior or freshman			senior or freshman		
		Senior	Freshman	Total	Senior	Freshman	Total	Senior	Freshman	Total
2.11 If your institution could communicate with you in any form, what would your first choice be?	Instant messaging	11	9	20	336	474	810	347	483	830
		1.60%	4.80%	2.20%	2.30%	4.80%	3.30%	2.30%	4.80%	3.30%
	E-mail	604	150	754	12727	8195	20922	13331	8345	21676
		85.20%	79.40%	84.00%	87.60%	83.30%	85.80%	87.40%	83.20%	85.80%
	Text messaging	13	5	18	235	220	455	248	225	473
		1.80%	2.60%	2.00%	1.60%	2.20%	1.90%	1.60%	2.20%	1.90%
	Personally authenticated Web site	17	3	20	265	155	420	282	158	440
		2.40%	1.60%	2.20%	1.80%	1.60%	1.70%	1.80%	1.60%	1.70%
	Paper mail	46	14	60	588	394	982	634	408	1042
		6.50%	7.40%	6.70%	4.00%	4.00%	4.00%	4.20%	4.10%	4.10%
	No preference	18	8	26	385	403	788	403	411	814
		2.50%	4.20%	2.90%	2.60%	4.10%	3.20%	2.60%	4.10%	3.20%
	Total	709	189	898	14536	9841	24377	15245	10030	25275
		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

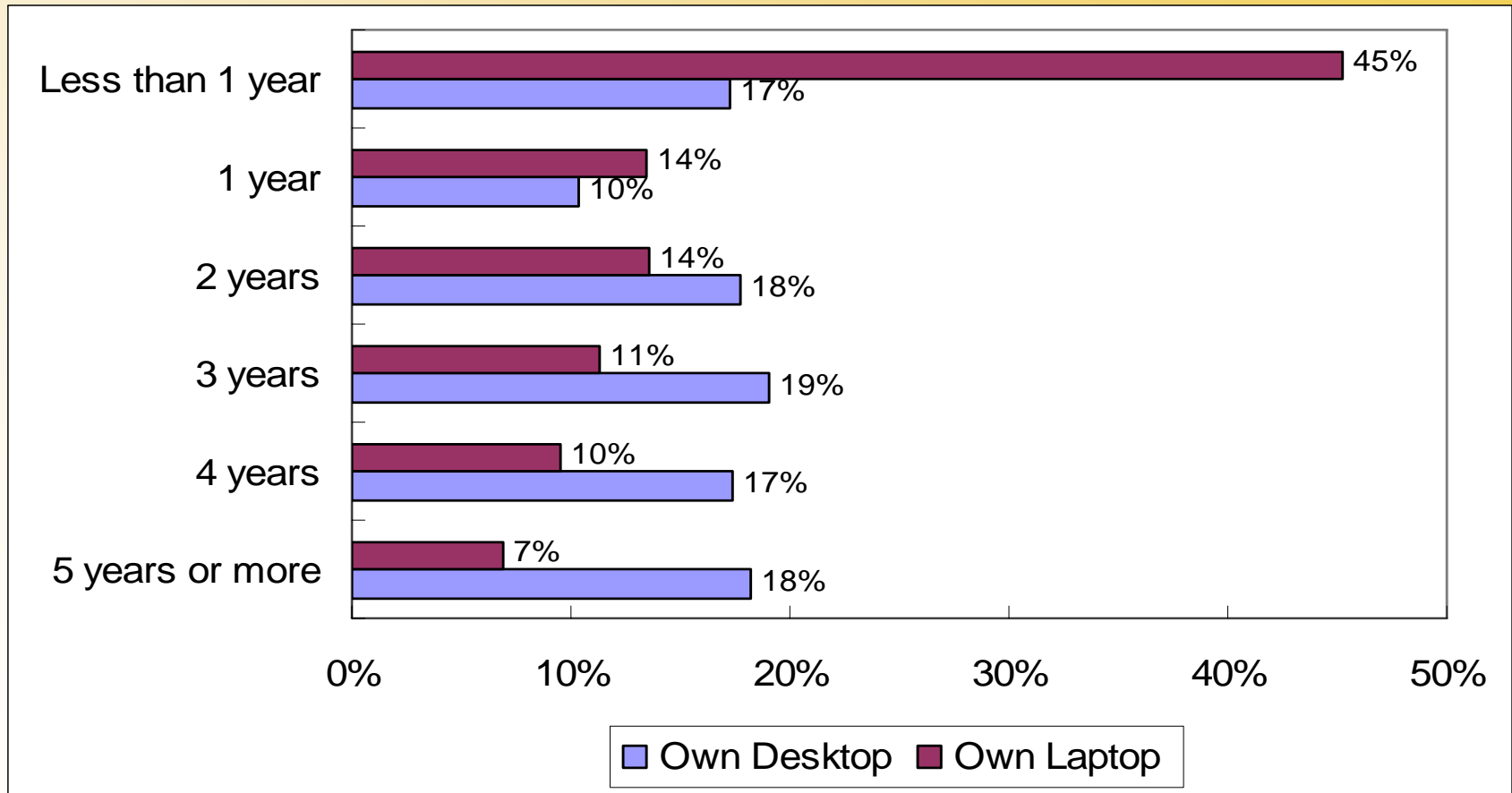
# 2006 Respondents

- 63% female
- 53% Seniors; 35% Freshmen; 12% Community College
- 86% Full-time
- 63% Live off campus
- Majors- Business (20%), Social Science (19%), Other (18%)
- 19% 26 yrs or older. 6% students over 40.

# Ownership of Electronic Devices



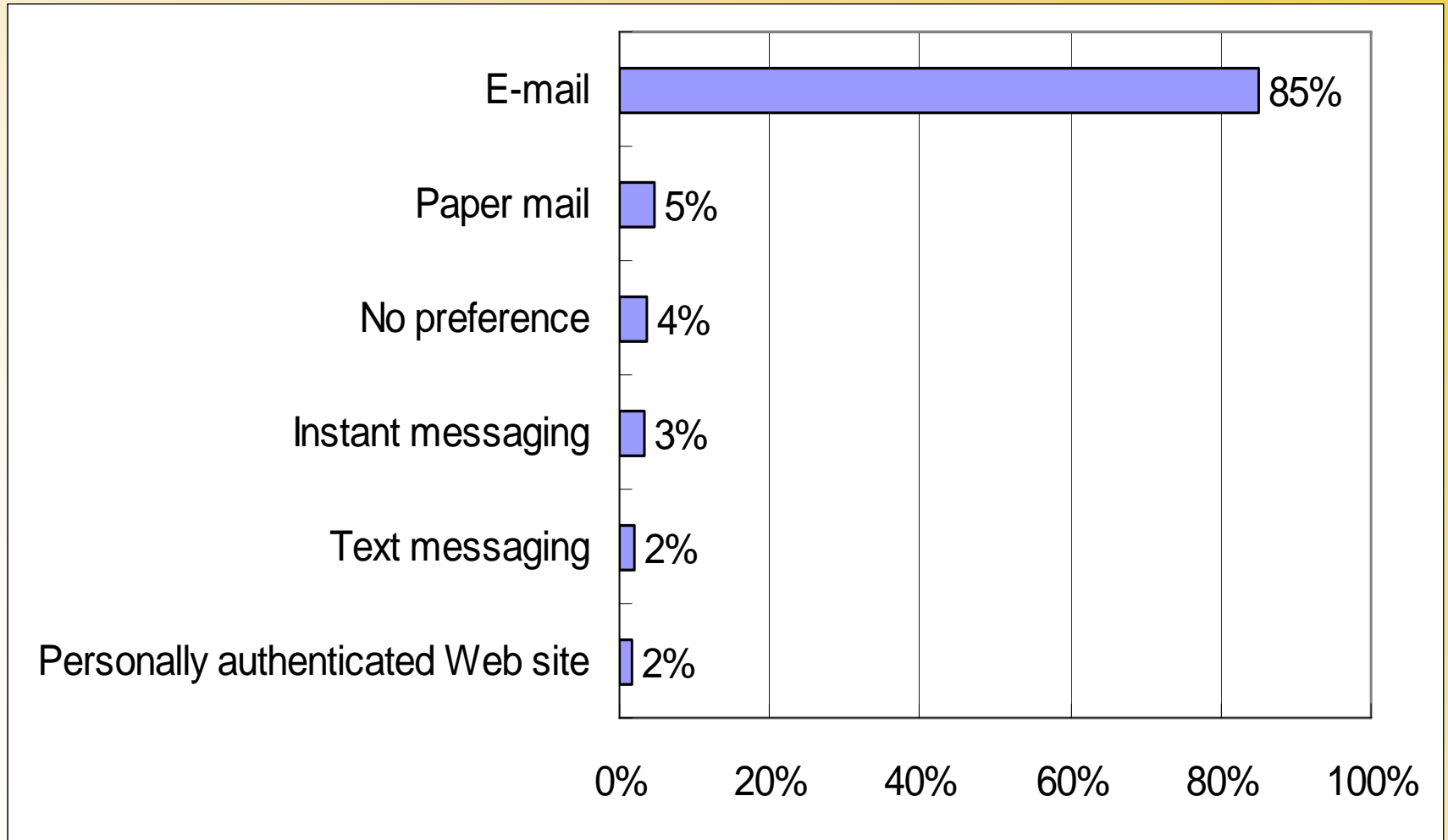
# How old is your computer?



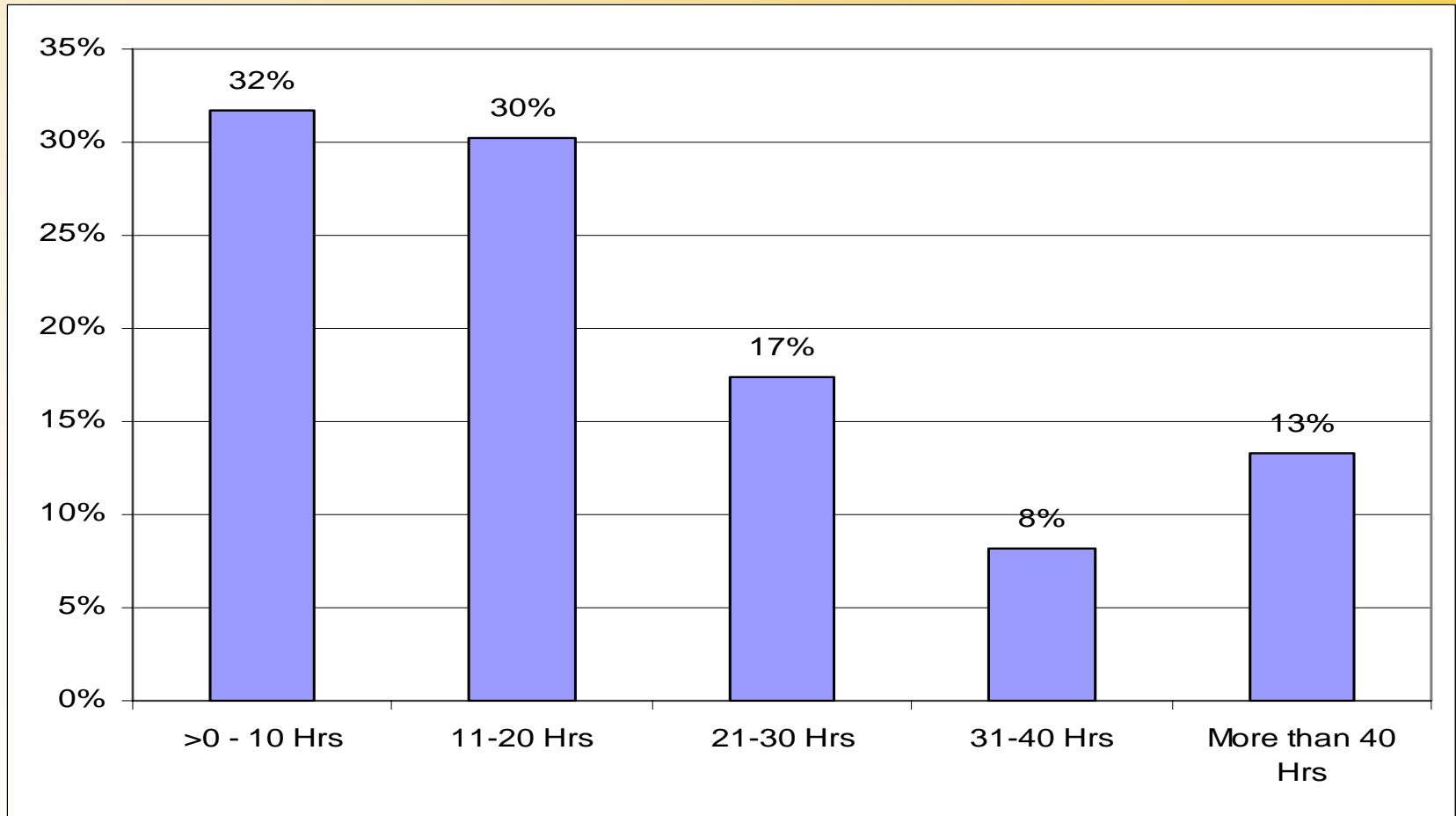
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Desktops – 71% of students; Laptops – 66%

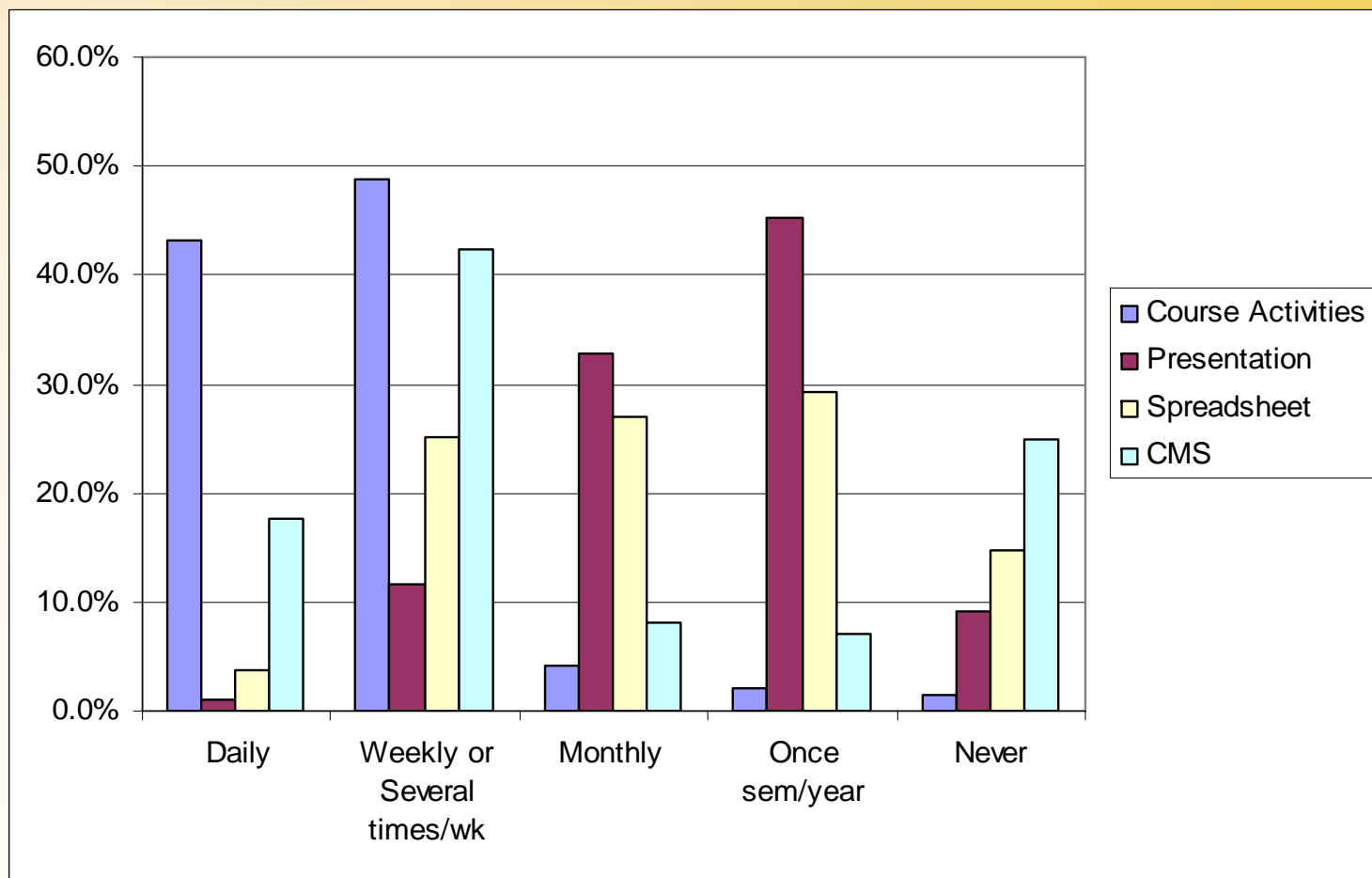
# Institutional communication



# Hours/Week of Use of Electronic Device



# Use of Electronic Device for Activity



# Use of Electronic Device

- Library Access – 46% use weekly or more often
- E-mail – 80% use daily
- IM – 47% use daily; 19% never
- Online social networks – 31% daily; 29% never

# Skill by Class Standing

	Seniors (N = 15,287)		Freshmen (N = 10,057)	
	Basic	Advanced	Basic	Advanced
<b>Seniors - more advanced skill</b>				
<b>Online library resources</b>	45%	50%	55%	37%
<b>Presentation software</b>	43%	49%	49%	40%
<b>Spreadsheet software</b>	45%	46%	54%	31%
<b>Course Management System</b>	43%	37%	49%	27%
<b>Seniors and Freshman - similar skill levels</b>				
<b>Video/audio</b>	14%	12%	13%	14%

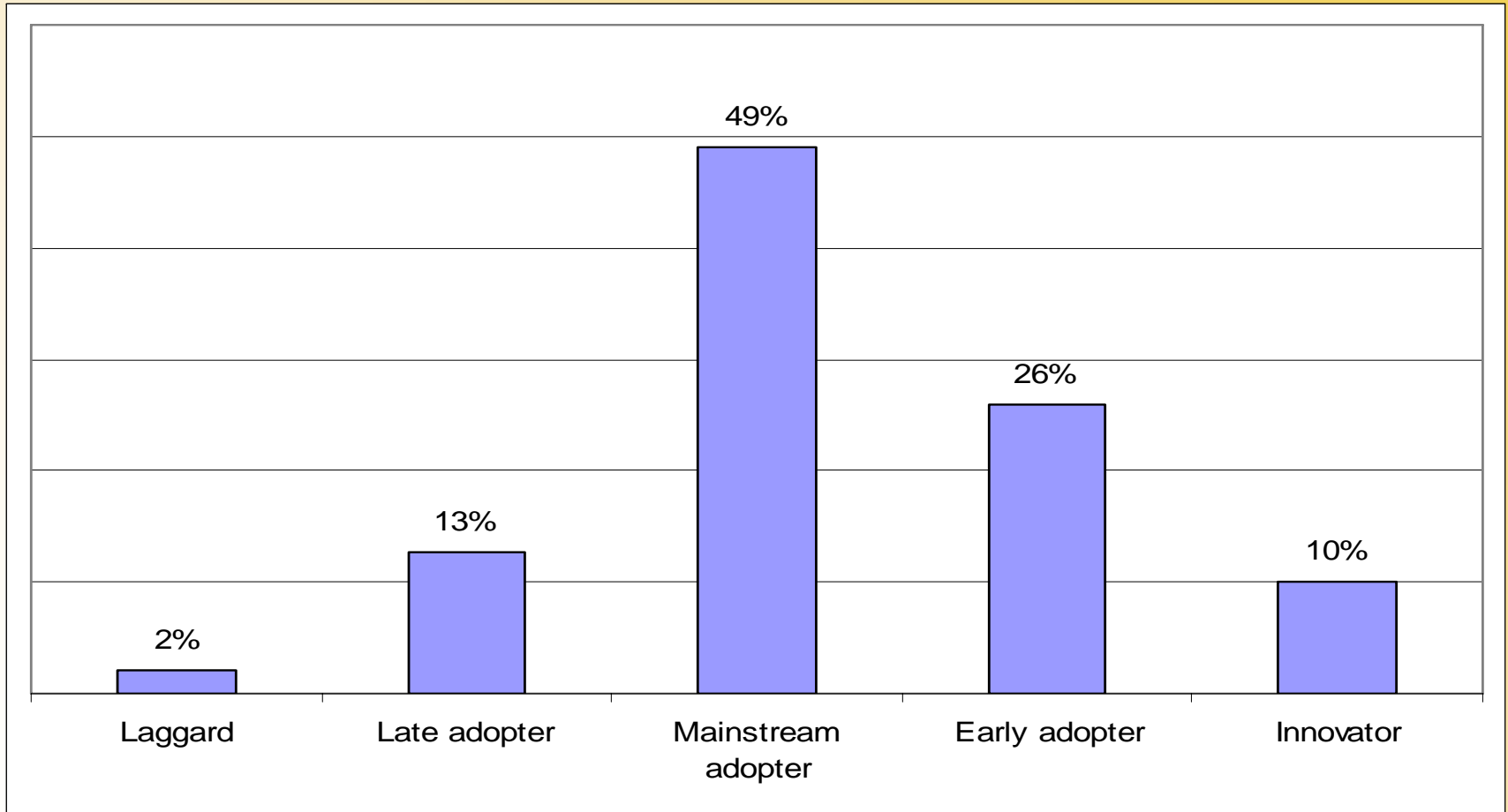
# Student skills



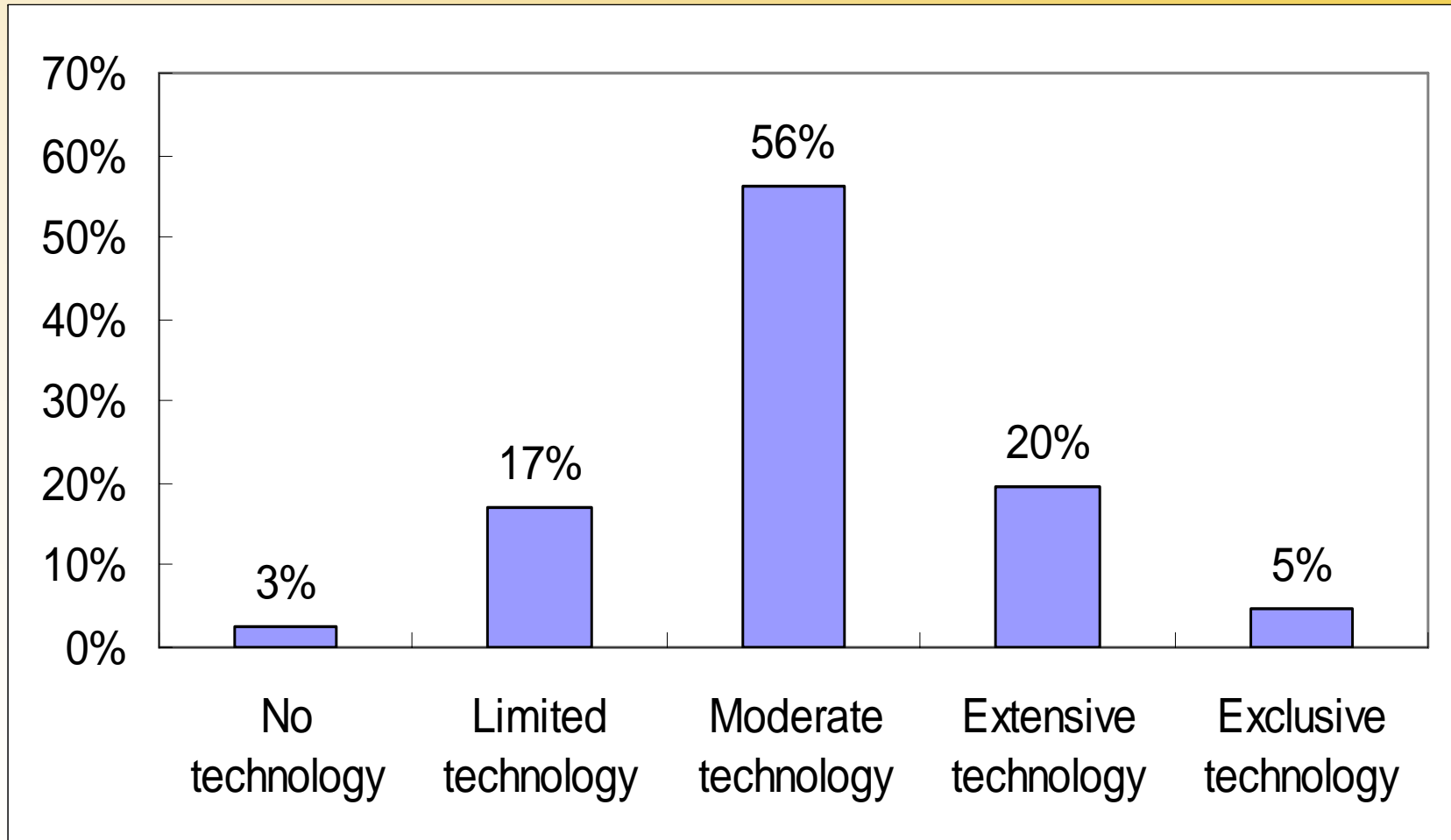
# Why did you learn software?

- Course or major requirement = #1 for:
  - Spreadsheet
  - Presentation
- Personal interest = #1 for:
  - Graphics
  - Video/Audio software
  - Web page creation software

# Student Self Description about IT Adoption



# Preference for IT in Courses



# Preference for IT in Courses

- Older students prefer more IT than younger
- Engineering and Business students prefer more than other majors
- Students who say they are skilled prefer more IT
- Early IT adopters prefer more IT

# IT in Courses



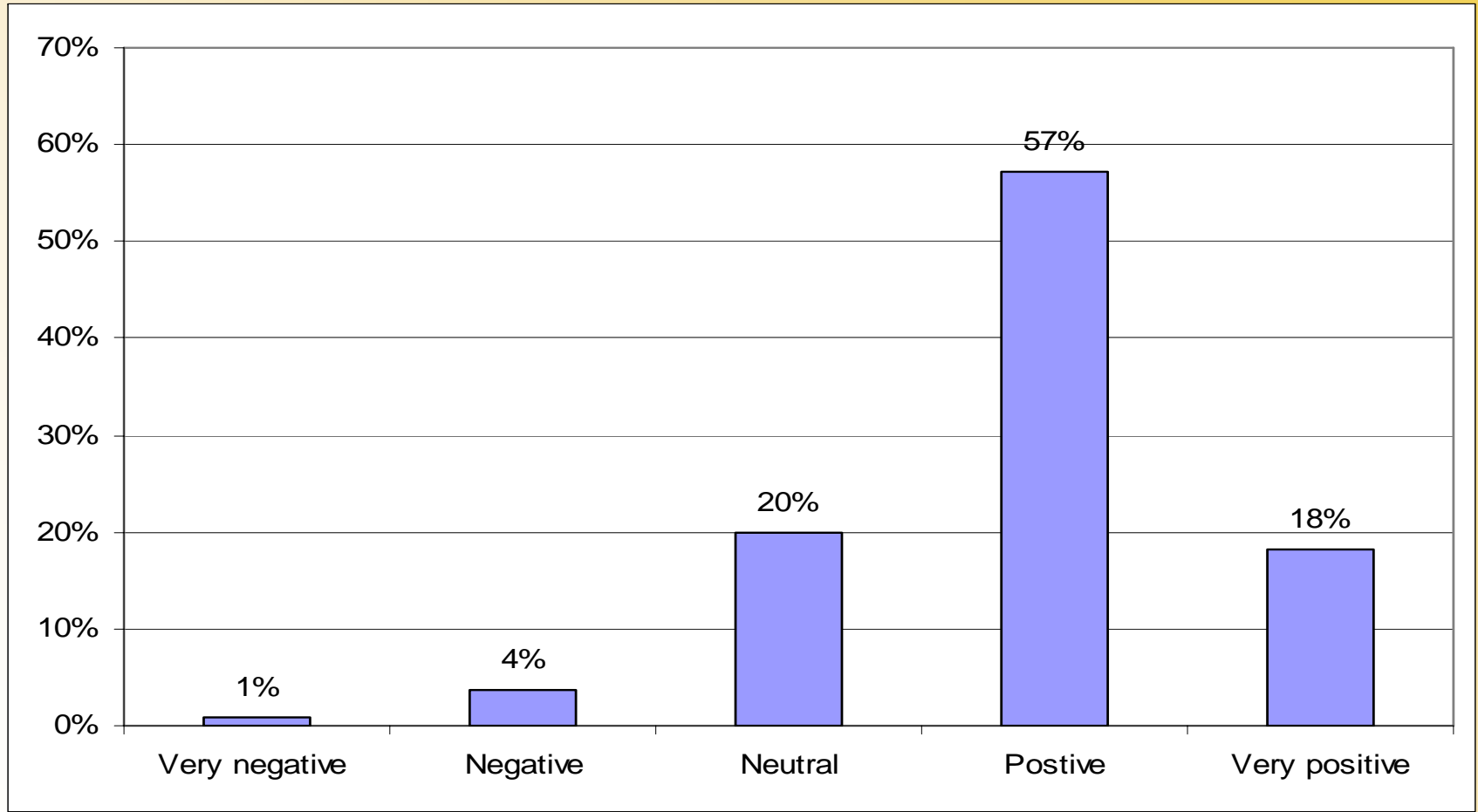
# Some Technologies Used in Courses this Academic Period

<b>E-mail</b>	<b>94%</b>
<b>Course Management System</b>	<b>65%</b>
<b>Presentation software</b>	<b>63%</b>
<b>Spreadsheets</b>	<b>48%</b>
<b>Online quizzes or tests</b>	<b>41%</b>
<b>Online discussions</b>	<b>38%</b>
<b>Clickers</b>	<b>18%</b>
<b>Discipline-specific technologies</b>	<b>17%</b>
<b>Blogs</b>	<b>7%</b>
<b>Webcast</b>	<b>4%</b>
<b>Podcast</b>	<b>3%</b>

# Change in Most Valuable Benefit (49 institutions)

	2006	2005	Percent change	Rate of change
<b>Convenience</b>	<b>53%</b>	<b>51%</b>	<b>2%</b>	<b>4%</b>
<b>Control</b>	<b>18%</b>	<b>13%</b>	<b>5%</b>	<b>36%</b>
<b>Improved my learning</b>	<b>14%</b>	<b>12%</b>	<b>1%</b>	<b>11%</b>
<b>Communicate</b>	<b>12%</b>	<b>20%</b>	<b>-8%</b>	<b>-42%</b>
<b>No Benefits</b>	<b>3%</b>	<b>3%</b>	<b>0%</b>	<b>12%</b>
<b>Other</b>	<b>1%</b>	<b>1%</b>	<b>0%</b>	<b>0%</b>

# Student Overall Experience Using CMS

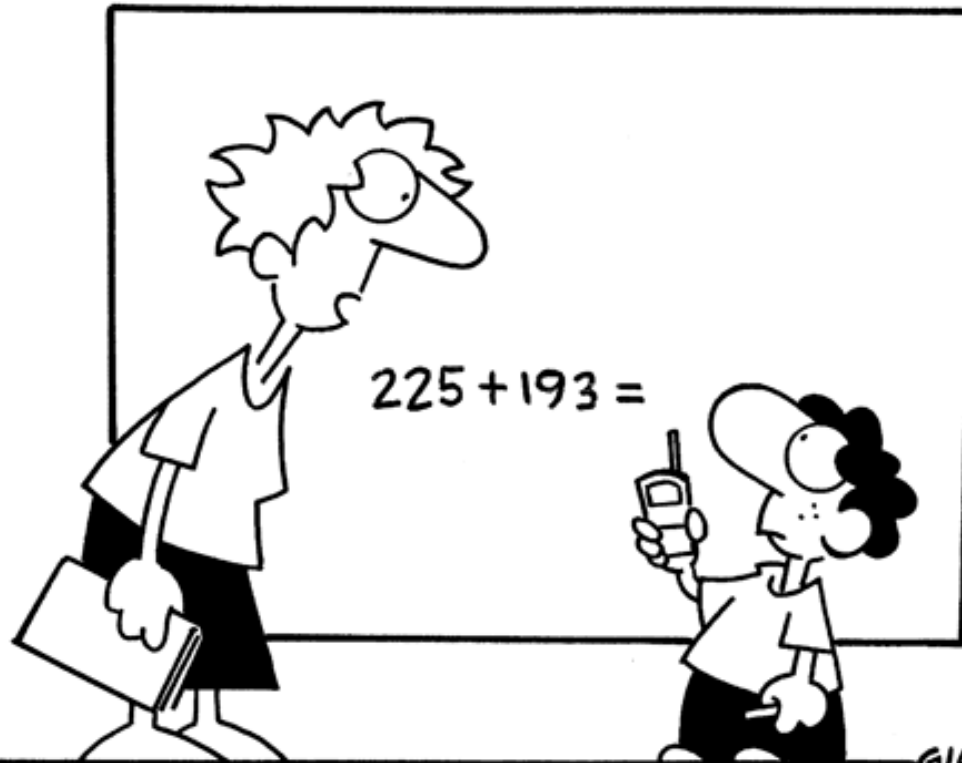


# Usefulness of CMS Features

	Mean
<b>Keeping track of grades</b>	<b>4.25</b>
<b>Access to sample exams and quizzes</b>	<b>4.04</b>
<b>Syllabus</b>	<b>3.86</b>
<b>Turning in assignments online</b>	<b>3.83</b>
<b>Getting assignments back from instructors</b>	<b>3.67</b>
<b>Sharing materials among students</b>	<b>3.44</b>
<b>Online discussion board</b>	<b>3.23</b>
<b>Scale: (1) Not useful, (2) Somewhat useful, (3) Useful, (4) Very useful, (5) Extremely useful</b>	

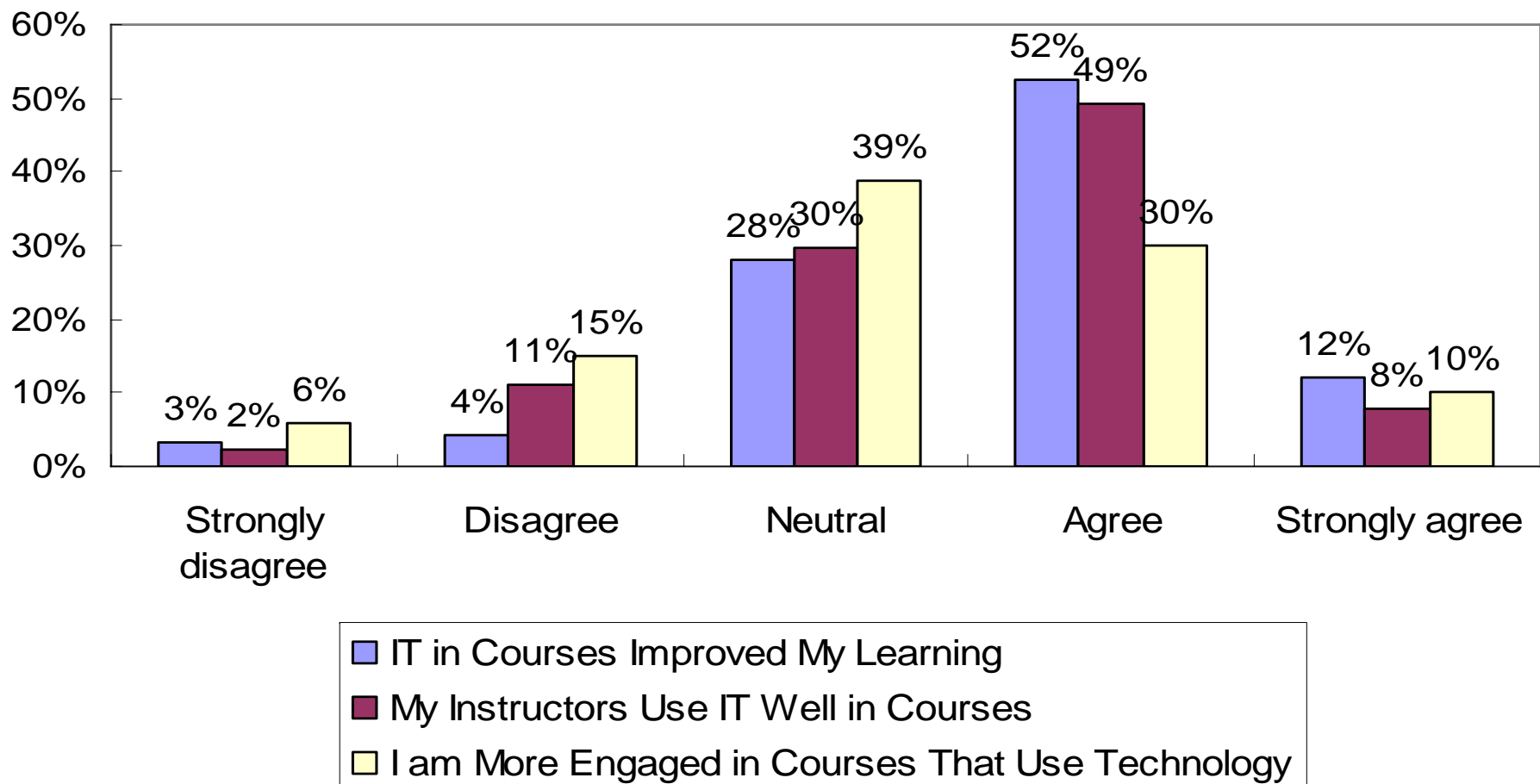
# IT and Learning

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**“You have to solve this problem by yourself. You can’t call tech support.”**

# Student Experience with IT in Courses



# Most Valuable Benefit, by Technologies Use in Courses This Academic Period

Students using this academic period	N	Improved my Learning	Convenience
Podcast	912	23%	46%
Webcast	1,141	22%	48%
Blogs	1,955	22%	48%
E-portfolios	2,029	22%	46%
Instant Messaging	3,967	20%	46%
Discipline-specific IT	4,751	18%	52%
Social networking software	5,780	18%	48%
Online discussions	10,556	17%	52%
Online quizzes or tests	11,564	16%	51%
Spreadsheets	13,375	16%	52%
Online gradebook	17,392	15%	53%
Presentation software	17,775	15%	52%
Course Web site	18,188	14%	52%
Course Management System	18,204	14%	55%
E-mail	26,544	12%	52%

# Students Who Report Positive Outcomes with IT in Courses

- Also:
  - Report positive experience with CMS
  - Prefer more IT in their courses
  - Adopt new technologies earlier
  - Find CMS features more useful

# Some questions to ask

- Why are the newer technologies: blogs, podcasts, webcasts, etc. receiving higher “improves learning scores”?

# Some questions to ask

- Freshmen – IM – trend or lack of maturity?

# Some questions to ask

- In 2005, for the most valuable benefit of IT in courses, communication was 19.7%. In 2006, it's 14.4%. Why is this?

*Technology is the only way I could have  
balanced my career, academics and  
personal life.*

-an undergraduate student

*I < 3 technology, please send me the gift  
certificate*

-an undergraduate student