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ABSTRACT

This research, based on nationwide telephone surveys of voters, state legislators and legislative staff, and high-level business executives, addressed the priority that respondents place on computers/technology in public education, the perceived benefits--and drawbacks--of computers in public education, and the expectations that respondents have about the effectiveness of computers in the public schools. The following key findings are discussed: (1) voters are committed to assuring that schools are properly equipped with computers and technology; (2) voters strongly believe that computers can play an important role in improving the quality of public education; (3) legislators do not perceive the same pressing need for funding computers in education as do either the public or business leaders; (4) voters concerns about uses of computers in education focus on the lack of adequate funding, rather than on questions about their effectiveness as an educational tool; (5) voters support funding these efforts despite the absence of concrete proof of their effectiveness; and (6) business leaders voice the strongest support for investments in learning technology, based on the belief that the increased use of computers and technology in classrooms will improve the quality of their workforce. Twelve figures illustrate results. Survey questionnaires with tabulation of responses are included. (AEF)

Milken EXCHANGE on education technology

The Second Annual **Milken Exchange on Education Technology** Public Opinion Survey

"Preparing Our Young People for a Changing World:
Policymakers, Business Leaders and the Public Speak Out on the Role of Education Technology in America's Classrooms"

Conducted by
Peter D. Hart Research Associates, Inc.

Presented at the
1998 Milken Family Foundation National Education Conference

Los Angeles, CA
June 25, 1998

INTRODUCTION AND SURVEY METHODOLOGY

In early June 1998, Peter D. Hart Research Associates conducted a series of comprehensive telephone surveys for the Milken Family Foundation's Milken Exchange on Education Technology. The study consisted of three separate telephone surveys among the following audiences:

- A representative nationwide sample of 810 registered voters conducted between June 2 and 4, 1998. This national survey has a margin of error of ±3.5%.

- A nationwide survey of 201 state legislators and top legislative staff who are members of the Education or Appropriations committees in their respective states. This survey was conducted between June 4 and 8, 1998, and has a margin of error of ±7.1%.

- A nationwide survey of 206 high-level business executives of U.S. companies with 25 or more employees, including 50 business executives of Fortune 500 companies. This survey was conducted between June 6 and 10, 1998, and has a margin of error of ±7.0%.

The overall objectives of the research project were to address (A) the priority that respondents place on computers/technology in public education; (B) the perceived benefits—and drawbacks—of computers in public education; and (C) the expectations that respondents have about the effectiveness of computers in the public schools.

The current research builds upon a series of quantitative surveys that Hart Research undertook for the Milken Exchange on Education Technology in 1997 among voters, public teachers/administrators, and public school students in grades 6 to 12.

Full survey results follow.

KEY SURVEY FINDINGS

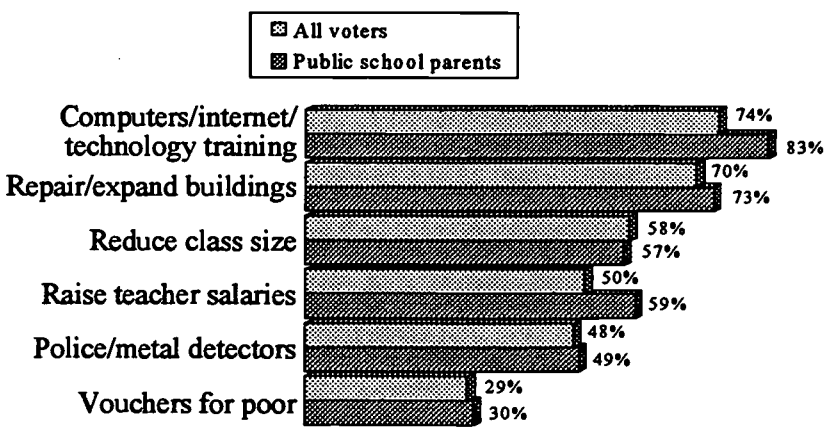
1 THE AMERICAN ELECTORATE IS STRONGLY COMMITTED TO MAKING CERTAIN THAT THE NATION'S PUBLIC SCHOOLS ARE PROPERLY EQUIPPED WITH COMPUTERS AND TECHNOLOGY AND ARE DISSATISFIED WITH THE SLOW PACE OF CURRENT EFFORTS OF THEIR STATE GOVERNMENT TO MAKE THE NECESSARY INVESTMENTS.

Compared to other educational needs, three in five (60%) American voters say that providing public schools with access to computers should be one of the top priorities. While public school parents place slightly more emphasis on providing public schools with access to computers (66%), it is significant that 58% of voters who are not parents of public school children assign a high priority on giving schools these tools.

In this regard, one of the most significant findings from the survey is that among six education-related items, American voters most want to spend a $14 billion federal budget surplus on equipping every classroom with computers and technology. This item, which is rated as the top priority by three in four (74%) voters, beats out fixing public school buildings (70%) and reducing class size (58%). In particular, among "consumers" of public schools (i.e. parents of public school children), equipping classrooms with technology is rated ten points higher than is expanding, repairing, and modernizing public school buildings.

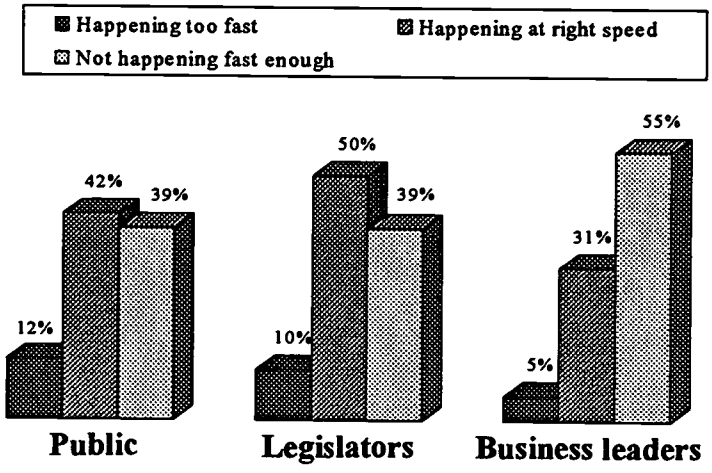
Public's Priorities For Spending Budget Surplus On Education

(% saying each should be a very/fairly high priority)



Despite strong voter support for providing public schools with access to computers, a solid plurality of the American public voice dissatisfaction with their state government's performance on this issue. Just 5% believe that their state government is doing too much when it comes to equipping public schools with computers, compared to 31% who say it is doing the right amount, and 45% who say it is doing too little.

Introduction Of Computers/ Technology Into Classroom

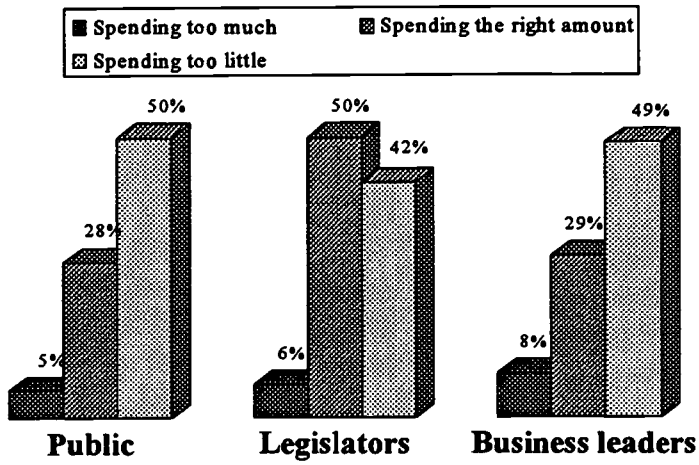


Moreover, 39% of voters say that the introduction of computers and technology into public schools is not happening fast enough, 42% feel that it is taking place at the right speed, and just 12% think that it is happening too fast. These results are nearly the same as we found in last year's national voter survey: 43% not fast enough, 40% at the right speed, 11% too fast.

Similarly, voters believe that their state government is *lagging* when it comes to providing the resources to increase access to computers in the schools. Half (50%) of Americans say that their state government is spending too little money on computers in education, 28% contend that it is spending the right amount, and again just 5% say state government is spending too much money.

Even a plurality of Republicans and conservatives think that state government is spending too little money on computers.

View Of State Spending On Computers In Education



It is interesting that state legislators and staff—those who help determine the education funding priorities in their states—are more satisfied with the status quo than are business leaders or the American public. Half of the state legislators/staff surveyed believe that their state government is spending the right amount of money on computers in education, compared to 28% among the public and 29% among business leaders.

TELEVISION VS. COMPUTERS

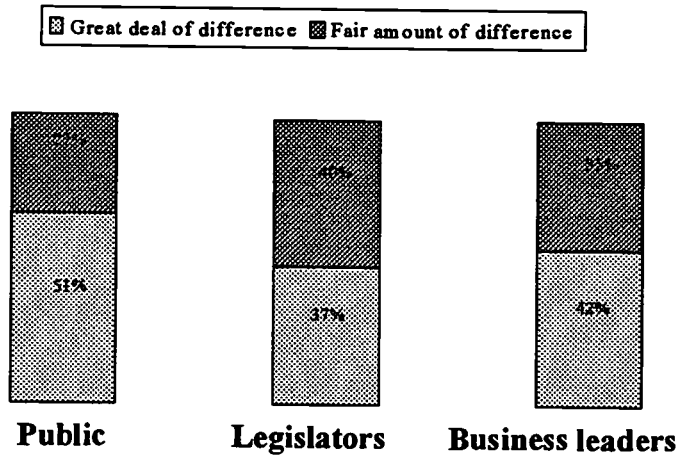
Parents of school-age children in households with personal computers report that while television viewing still dominates children's time, computer-usage is growing. 41% say their child spends two or more hours watching television, while 20% say their child spends at least that much time using a computer.

But 46% of parents say their child prefers using the computer to watching television (the preference of 33%). And parents overwhelmingly (85%) say that they consider the use of computers a better use of their child's time than watching television.

2 AMERICANS HAVE A STRONG BELIEF THAT COMPUTERS CAN PLAY AN IMPORTANT ROLE IN IMPROVING THE QUALITY OF PUBLIC EDUCATION. THEY STILL, HOWEVER, LACK A COMPLETE UNDERSTANDING OF THE FULL RANGE OF EDUCATIONAL USES FOR THE COMPUTER, BEYOND PROVIDING GREATER ACCESS TO INFORMATION AND PREPARING STUDENTS FOR THE WORK FORCE.

Close to four in five (78%) American voters say that using computers in education would make a great deal (51%) or a fair amount of difference (27%) on the quality of education that children receive. Parents of children in public school are even more convinced that computers can make a big difference, with 87% giving computers a strong rating. The perception that computers are important in education does not vary much by occupation, income, or education, though fully 91% of African Americans think that computers will make a substantial difference on the quality of education, higher than the 76% of whites who feel the same way.

Difference Computers Would Make In Quality Of Education



Equally as important, the results to this question are identical in our surveys of legislators/staff (77% great deal/fair amount of difference) and business leaders (77%). Among the former group, we note that legislators have slightly more positive attitudes about computers than do staffers, while "veteran" legislators do not differ from "newcomers" in acknowledging the difference that computers can make in education.

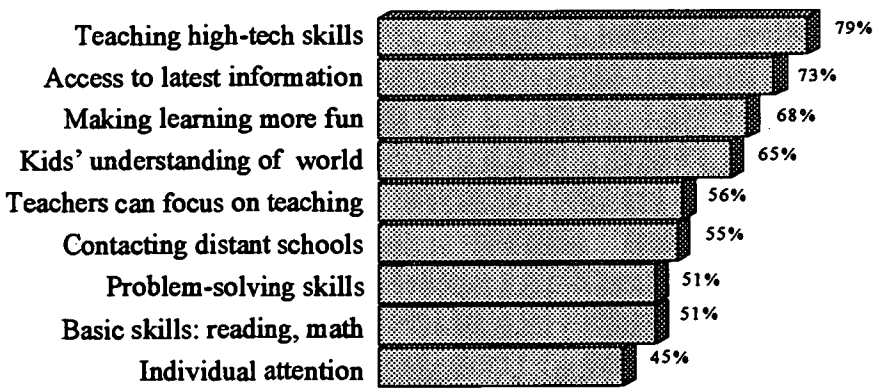
Not surprisingly, then, Americans strongly believe that computers would enrich the learning experience of students of all ages. Voters hold near-unanimous views that students

in senior high schools (92% benefit great deal/fair amount) and in middle/junior high schools (86% benefit great deal/fair amount) would benefit greatly from having regular access to computers in the classroom. But even 75% of Americans believe that younger students in elementary school would benefit from having regular access to computers. In fact, Americans are equally divided about whether the highest priority for spending money on computers and technology should be with senior high schools (29%), middle/junior high schools (25%), or with elementary schools (28%). This is a shift from one year ago, when a 43% plurality felt that senior high schools should be the priority over middle/junior high (25%) and elementary schools (21%).

On the other hand, as we discovered in last year's research and through a series of focus groups, while Americans believe that computers are an important educational tool, their sense of its benefits are limited and largely focused on access to information and preparation for the future workplace. Those benefits that relate to a more expanded role for computers in education, such as helping students develop problem-solving skills or teaching the 3 "Rs" of "reading, 'riting, and 'rithmetic," have somewhat lower profiles.

Computers' Value In Education

(for each area, % public saying computers would be very helpful)



Interestingly, socioeconomic factors such as income, educational status, and race have little to do with voters' knowledge—or lack thereof—of the expanded uses of computers. In most cases, blue collar workers, voters limited to a high school education, and African Americans are more likely to believe that computers can provide more individual attention to students, improve the teaching of basic skills, or help students develop better problem-solving skills.

This focus on the informational and practical applications also is evident when Americans are asked to volunteer, in their own words, the impact of computers in education. Voters are more likely to mention that computers help prepare children for jobs (16%) or provide ready access to vast amounts of information (12%) than they are to say that computers make children eager to learn (6%) or develop problem-solving, thinking skills (1%).

3 THE RESPONDENTS WHO CONTROL "THE PURSE STRINGS" FOR SPENDING ON EDUCATION—STATE LEGISLATORS AND KEY LEGISLATIVE STAFF MEMBERS—DO NOT PERCEIVE THE SAME PRESSING NEED FOR FUNDING COMPUTERS IN EDUCATION AS DO EITHER THE PUBLIC OR BUSINESS LEADERS. INDEED, WHILE LEGISLATORS AND STAFF MEMBERS BELIEVE THAT COMPUTERS ARE USEFUL TOOLS IN EDUCATION, THEY FEEL THAT OTHER EDUCATIONAL ITEMS SHOULD RECEIVE HIGHER PRIORITY WHEN IT COMES TO FUNDING.

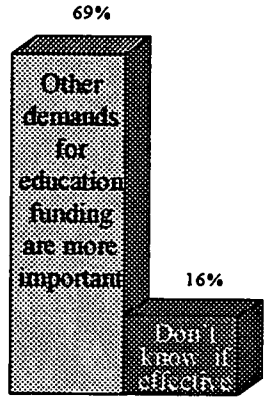
Like the electorate and business leaders, state legislators and key staff members do not have difficulty believing that computers can play a positive role in education—77% believe that it will make a big difference to the quality of education, and 54% say they already have enough information that computers are essential to improving education. Yet, legislators/staffers are the most likely to be satisfied with the current expenditure on computers in education, as the previous polling data show.

Legislators' Reluctance To Fund Technology In Education

Volunteered Reasons

Legislators don't understand, are computer illiterate	16%
Not enough $ to go around	14%
Money going to more important things	9%
Money doesn't go where it's intended to go	8%
Spend too much on schools	7%
Money for teacher salaries	7%

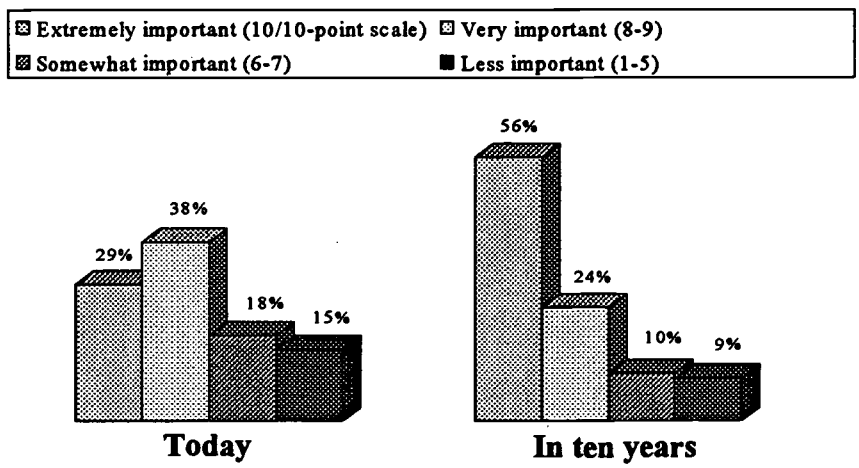
Greater Obstacle



The survey data suggest that a key factor for their complacency is the belief that computer investments are simply not as urgent as are other competing demands for education spending. When asked to volunteer why few legislators have strongly advocated more spending on computers despite strong public support for such investments, legislators/staff admit they aren't sophisticated about technology (16%), or say there is not enough money in the budget (14%) or that money is being spent on more important things (9%). Moreover, when asked which is the bigger obstacle to providing funding for computers, 69% of legislators/staffers say there are other demands for education funding that are more important than computers, compared to just 16% who say questions about the effectiveness of computers in education pose the bigger impediment.

Indeed, it is telling that when legislators/staffers are asked to volunteer in their own words the most important challenges facing the public school system in their state, the need to expand technology in the classroom (7%) falls far down the list. It ranks well below other education changes, including improved curriculum (45%), disruptive students (42%), more funding (36%), and better teachers (23%), among others. While respondents recognize that computers are important, given the other competing demands on the education dollar, this is something that they'll deal with in the future. Thus, it follows that 29% of legislators/staffers say it is extremely important that public schools have access in every classroom to computers and technology, while 56% place the same level of importance for ten years from now.

Legislators' View Of Having Computers In Every Classroom



While there is a lack of urgency among legislators/staff to spend more money on computers for public schools, they recognize this responsibility as one that state government should primarily bear. Pluralities of voters, business leaders, and legislators/staff feel that the obligation for providing the funding for computers and technology in public schools should lie with state government—rather than local school boards, the federal government, or the private sector—but it is notable that legislators and staffers are significantly more likely to feel this way. Indeed, 48% of legislators staff say that state government should be primarily responsible for providing the funds, compared to 36% of business leaders and 33% of the electorate.

In terms of lobbying the state Houses on education technology issues, our respondents tell us that information from the "front lines" has the most credibility and impact on their decision-making. Forty-five percent say that definitive studies that demonstrate the effectiveness of computers in increasing student achievement would make them most likely to increase support for the use of computers, followed by 35% who select testimony from teachers and students on the issue. More vocal public support (21%), more support from key business leaders (21%), and more support from the state's political leadership (15%) are viewed as less influential. Interestingly, state legislators/staff tell us that definitive studies on the effectiveness of computers are what's most missing in their state.

4 AMERICANS RECOGNIZE SOME DRAWBACKS TO THE USES OF COMPUTERS IN EDUCATION, BUT THEY FOCUS ON THE LACK OF ADEQUATE FUNDING TO USE COMPUTERS EFFECTIVELY IN THE CLASSROOM, RATHER THAN ON QUESTIONS ABOUT THEIR EFFECTIVENESS AS AN EDUCATIONAL TOOL. IN OTHER WORDS, THE DOWNSIDE TO COMPUTERS IN EDUCATION IS THE CONCERN THAT OUR PUBLIC SCHOOLS LACK THE RESOURCES TO MAKE COMPUTERS A MORE INTEGRAL PART OF THE LEARNING PROCESS.

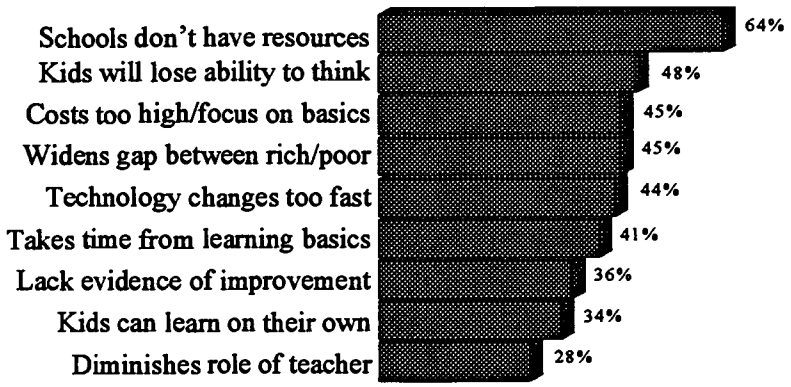
Nearly two-thirds (64%) of Americans report that they have major concerns about the fact that most schools don't have the equipment, training, or funding to effectively use computers and technology in educating children (40% very big concern, 24% fairly big concern), which places this concern in the top tier. With regard to other problems, there is a lingering preoccupation that reliance on computers will result in a decline in critical thinking. However, most of the concerns have a financial aspect—whether it is the cost of equipping the schools, the widening gap between the haves and the have-nots, or the difficulty of keeping up-to-date with technology.

It is revealing that 45% of American voters express concerns that a focus on computers and technology in schools will create a wider gap between public schools in wealthier and poorer areas (27% very big concern, 18% fairly big concern), and that this is among the top-rated worries that the public perceives. These feelings are even stronger across racial and socioeconomic groups: African Americans are among those most anxious about issues of fairness (55% very or fairly big concern), followed by blue collar workers (53%), people

limited to a high school education (52%), and those in households earning $30,000 or less (52%).

Public's Concerns About Computers In Education

(% saying each is a very/fairly big concern)



Business leaders and legislators/staff echo the public's concern about fairness by an overwhelming margin. In fact, fully 86% of legislators/staff and 80% of business leaders feel that the issue of equity in providing computers to schools is very or fairly important to them, including 76% and 63% who believe it is *very* important, respectively.

On the other hand, it is significant that just 28% of Americans are worried that computers will diminish the role of the teacher, and only 36% are concerned with the lack of evidence that computers increase student achievement.

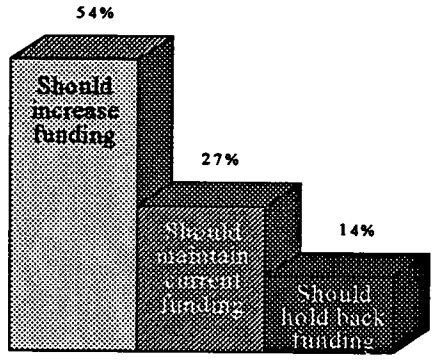
5 THE SOLID SUPPORT THAT THE AMERICAN PUBLIC HAS FOR EQUIPPING THE NATION'S PUBLIC SCHOOLS WITH COMPUTERS IS EVIDENT IN VOTERS' WILLINGNESS TO CONTINUE FUNDING THESE EFFORTS DESPITE THE ABSENCE OF CONCRETE PROOF OF THEIR EFFECTIVENESS. THIS COMMITMENT IS A REFLECTION OF THEIR OPTIMISM, AS TWO-THIRDS OF AMERICANS BELIEVE THAT FUTURE STUDIES WILL INDEED CONFIRM THE EFFECTIVENESS OF COMPUTERS IN EDUCATION.

A fifty-four percent majority of Americans surveyed agrees with the statement that "we should increase current spending levels on computers because we need to do more in order for students to succeed academically," while another 27% believe we should maintain

current spending levels; and just 14% of voters say we should hold back on spending on computers because we lack proof of their effectiveness.

The support for increasing spending on computers is widespread throughout the electorate, eliciting solid bipartisan support from Democrats (59%), independents (52%), and Republicans (50%). Lower-income Americans are slightly more favorable toward increasing spending on computers than upper-income Americans.

Public Support For Funding Computers In Education



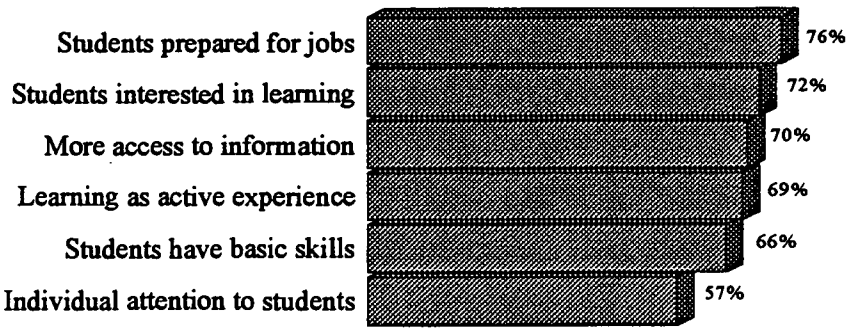
It is significant that when asked which factors they would use to determine the effectiveness of computers and technology in education, Americans expand their criteria beyond the traditional uses of workforce preparation and access to information.

Make no mistake, both items are rated as very important factors by large majorities of Americans: 76% say they would judge the effectiveness of computers based on having students who are prepared to enter the workforce and 70% give the same score to having more access to information.

However, 72% would be impressed by students who are more interested in learning, while another 69% would place great stock on making learning a more active experience.

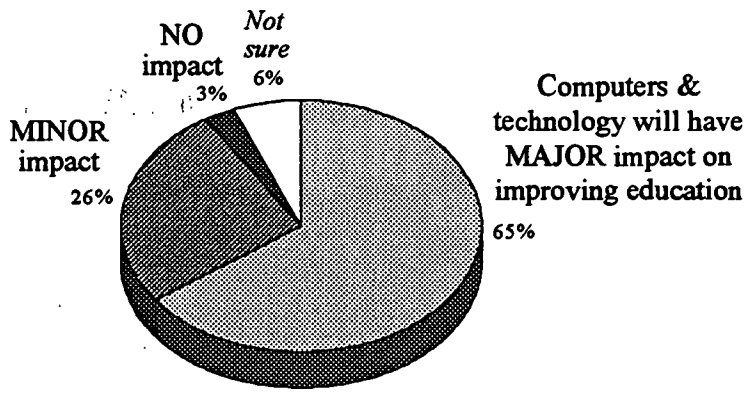
Factors In Deciding If Computers Are Effective In Education

(% public saying they would give each factor a lot of weight)



One of the most encouraging survey findings is the optimism the American public has that future academic studies will confirm what they already believe: that computers and technology play a critical role in improving education.

Public's Expectation Of Computers In Education

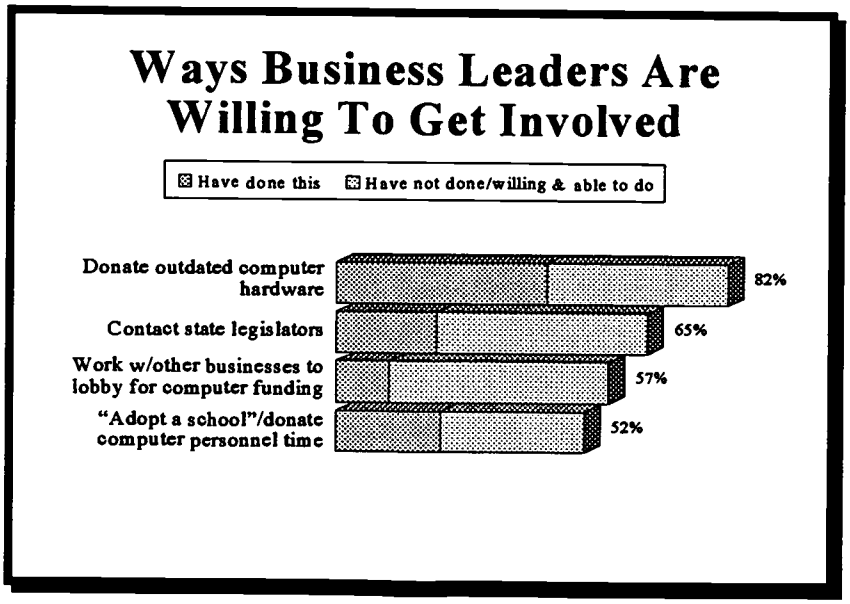


About two-thirds of Americans expect future studies will show that computers have a major impact on improving education, and this view is consistent regardless of occupation, income, educational status, or race. Even among the small proportion of computer "skeptics" (those 21% who think computers won't make much difference in education), just 12% think future studies will show that computers will have no impact on improving education, with almost four in five who say it will have either a major (27%) or minor (51%) impact.

6 BUSINESS LEADERS VOICE THE STRONGEST SUPPORT FOR INVESTMENTS IN LEARNING TECHNOLOGY, BASED ON THE BELIEF THAT THE INCREASED USE OF COMPUTERS AND TECHNOLOGY IN CLASSROOMS WILL IMPROVE THE QUALITY OF THEIR WORKFORCE. BUT THEY OVERWHELMINGLY BELIEVE EXISTING SCHOOL BUDGETS SHOULD BE REALLOCATED TO PAY FOR THE INVESTMENTS.

Business leaders believe they will reap the benefits of education technology, which helps explain their perception that computers in education are indeed a worthwhile investment. Fully 70% of business leaders say that the increased use of computers and technology in classrooms would make a great deal (44%) or a fair amount of difference (26%) in the quality of workers they hire.

Indeed, they are even more enthusiastic than the public or legislators and key staffers about expanding investments in computers. A substantial 61% of business leaders say that we should increase current spending levels on computers because we need to do more in order for students to succeed academically, while smaller majorities of the public (54%) and legislators/staff share that view (51%). However, business leaders overwhelmingly oppose (80%) raising taxes to fund these investments, preferring instead to reallocate existing school budgets.



Although business leaders are excited by the prospects of what computers can do for the success of students as well as their businesses, they have been slow to get directly involved in promoting computers in education. As the accompanying graph indicates, businesses are most

likely to donate outdated computer software (44%), and very small minorities are undertaking other activities that advance the use of computers in education, such as donating the time of computer personnel or engaging in lobbying efforts. However, business leadership is a resource that has not been tapped sufficiently—a significant proportion of businesses (at least 30%) are willing to engage in the actions that would promote computers and technology in schools and just haven't done so.

PUBLIC SURVEY

Interviews: 810 voters
Dates: June 2-4, 1998

FINAL

47 Male
53 Female
[109]

Study #5116a
Education & Technology Survey (Public)
June 1998

1. Are you currently registered to vote at this address?

Yes, registered to vote	100	**CONTINUE**	**[139]**
No, not registered to vote	-	**TERMINATE**	
Not sure	-		

2a. Thinking about the country overall, how would you rate the quality of education students receive in public schools today--excellent, good, just fair, not so good, or poor?

	6/98	5/97	
Excellent	4	5	**[140]**
Good	35	35	
Just fair	33	34	
Not so good	11	11	
Poor	11	12	
Not sure	6	3	

2b. And thinking about your own local community now, how would you rate the quality of education students receive in your local public schools--excellent, good, just fair, not so good, or poor?

	6/98	5/97	
Excellent	12	13	**[141]**
Good	39	39	
Just fair	27	26	
Not so good	8	9	
Poor	9	10	
Not sure	5	3	

3. Where do you generally get most of your information about education and education-related issues--is it (A) from direct observation or from your children's experience, (B) from educators, other school employees, or school publications, or (C) from media coverage by newspapers, radio, or television? *

A/direct observation or children's experience	40	[142]
B/educators, other school employees, or school publications	20	
C/media coverage	33	
None/other (VOL)	5	
Not sure	2	

* Asked of one-half the respondents (FORM A).

4. Suppose the federal government had a fourteen billion dollar budget surplus that would be spent on public education. I'm going to read you some education items that this budget surplus could be spent on. For each one, please tell me whether it is (A) a very high priority when it comes to spending the budget surplus, (B) a fairly high priority, (C) a medium priority, (D) a lower priority, or (E) not a priority.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY VERY OR FAIRLY HIGH PRIORITY

	Very High Priority	Fairly High Priority	Medium Priority	Lower Priority	Not A Priority	Not Sure	
Equipping every classroom with the technology—i.e. computers, software, and internet connections—and providing technology training to teachers.	53	21	15	6	4	1	[145/ 146]
Expanding, repairing, and modernizing public school buildings**	40	30	20	5	4	1	[148]
Reducing class size by three students per class*	40	18	19	9	11	3	[143]
Raising the average teacher salary by $5000*	29	21	28	7	13	2	[144]
Hiring three campus police officers and installing metal detectors at each school**	34	14	23	17	10	2	[147]
Providing vouchers of $620 to every student whose family income is below the median family income, which could be used to pay tuition in a private school**	15	14	21	19	28	3	[149]

* Asked of one-half the respondents (FORM A).

** Asked of one-half the respondents (FORM B).

5a. Generally speaking, how much of a difference do you think that using computers in education would have on the quality of education that children receive--would it make a great deal of difference, a fair amount, some, or not that much difference?

A great deal of difference	51	[150]
A fair amount of difference	27	
Some difference	12	
Not that much difference	9	
Not sure	1	

5b. Why do you feel that way about using computers in education?

(PROBE:) In what ways do you think computers and technology can improve the quality of education? *

Net Ways Computers Can Improve Education	73%
It's the future, computers are everywhere, used for everything	23
Develops needed skills, prepares children for jobs	16
Vast amount of information readily accessible	12
It's important; kids need to know how to use computers	8
Educational tool; one aspect of educating students	6

Net Concerns About Computers In Education	28%
Still need to teach basics; computers can't replace educators	12
Computers don't allow students to think for themselves	6
Too much emphasis on computers	4
Computers do not make children learn better	3
Computers don't allow students to develop social skills	1
Don't know; no response	5%

* Asked of one-half the respondents (FORM A).

6a. Generally speaking, would you say that the introduction of computers and up-to-date technology into public schools is happening too fast, at the right speed, or not fast enough?

	6/98	5/97	
Too fast	12	11	[159]
At the right speed	42	40	
Not fast enough	39	43	
Not sure	7	6	

6b. On a ten-point scale on which a "1" means it is not important at all and a "10" means it is extremely important, how important is it for schools to have access in every classroom to computers and up-to-date technology?

	6/98	5/97	
10, extremely important	35	44	[160-161]
8-9	26	26	
6-7	16	14	
1-5	22	15	
Cannot rate	1	1	

7a. When it comes to equipping public schools with computers, do you think that your state government is doing too much, doing too little, or doing the right amount?

Doing too much	5	[162]
Doing too little	45	
Doing the right amount	31	
Not sure	19	

7b. Compared with other educational priorities, how important is it to provide public schools with access to computers--is it (A) one of the top few priorities, (B) near the top of the list, (C) in the middle of the list, or (D) toward the bottom of the list of priorities?

A/one of the top few priorities	26	[163]
B/near the top of the list of priorities	34	
C/in the middle of the list of priorities	31	
D/toward the bottom of the list of priorities	8	
Not sure	1	

8. When it comes to the public schools in your community, do you think that these schools are ahead of the curve or behind the curve in using computers and up-to-date technology to teach students?

	6/98	5/97	
Ahead of the curve	36	35	[164]
Behind the curve	40	42	
Neither (VOL)	10	9	
Not sure	14	14	

9. How much do you think students in **(READ RESPONSES)** would benefit from having regular access to computers in the classroom--a great deal, a fair amount, some, or very little? **

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY BENEFIT A GREAT DEAL OR A FAIR AMOUNT

	Benefit A Great Deal	Benefit A Fair Amount	Benefit Some	Benefit Very Little	Not Sure	
Senior high schools	74	18	4	4	-	[167]
Middle schools/junior high schools	59	27	9	4	1	[166]
Elementary schools	48	27	13	11	1	[165]

** Asked of one-half the respondents (FORM B).

10. Let me read you a list of different ways that computers could be used in education. For each one, please tell me whether you think that computers would be very helpful, fairly helpful, somewhat helpful, or not really helpful in education.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY VERY OR FAIRLY HELPFUL

	Very Helpful	Fairly Helpful	Somewhat Helpful	Not Really Helpful	Not Sure	
Helping students learn the high-tech skills they will need for jobs of the future						[168]
June 1998	79	11	7	2	1	
Having access to the latest information						[169]
June 1998	73	13	9	4	1	
May 1997	77	12	7	3	1	[171]
Making learning more fun and interesting						
June 1998	68	16	11	4	1	
May 1997	69	15	11	4	1	
Providing students with a better understanding of the world around them						[170]
June 1998	65	18	12	4	1	
May 1997	71	13	8	6	2	

Helping students communicate with other students in distant schools						**[172]**
June 1998	55	18	13	11	3	
May 1997	61	14	13	10	2	
Giving teachers more time to focus on teaching students rather than dealing with administrative tasks						**[173]**
June 1998	56	15	12	11	6	
May 1997	55	14	15	12	4	
Helping students develop better problem-solving skills						**[174]**
June 1998	51	17	16	14	2	
May 1997	53	16	17	11	3	
Improving the teaching of basic skills such as reading, writing, and math						**[175]**
June 1998	51	16	15	16	2	
May 1997	52	13	15	15	5	
Giving more individual attention to students						**[176]**
June 1998	45	18	14	20	3	
May 1997	49	16	15	18	2	

11. Now, let me read you some fears and concerns that people might have about the role of computers in education. For each one, please tell me whether it is a very big concern, a fairly big concern, somewhat of a concern, or not that much of a concern.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY VERY OR FAIRLY BIG CONCERN

	Very Big Concern	Fairly Big Concern	Somewhat Of A Concern	Not That Much Of A Concern	Not Sure	
Most schools don't have the equipment, training, or funding to effectively use computers and technology in educating children	40	24	18	14	4	**[212]**

If students rely on computers and technology too much, they'll lose their ability to think for themselves	34	14	19	31	2	**[180]**
The cost of properly equipping schools with computers and technology is much too expensive, and the money is better spent on teaching the basics	27	18	25	28	2	**[178]**
A focus on computers and technology in schools will create a wider gap between public schools in wealthier and poorer areas	27	18	22	30	3	**[209]**
It's not worth spending a lot of money on computers now because the technology is changing so fast that schools can't keep up	29	15	21	33	2	**[208]**
Using computers and technology takes time away from learning basic skills.....	25	16	20	37	2	**[210]**
There is not enough evidence that using computers and technology in the classroom increases student achievement.	19	17	19	37	8	**[177]**
Students can learn how to use computers and technology on their own.....	18	16	21	39	6	**[211]**
The growth of computers and technology in education will diminish the role of the teacher.....	16	12	17	54	1	**[179]**

12a. Do you have children under age 18 living at home?

Yes, have children under age 18 at home	40	CONTINUE	[213]
No, do not have children under age 18 at home	60	Skip to Q.14a	
Not sure	-		

Q12b - Q13d ASKED ONLY OF RESPONDENTS WITH CHILDREN UNDER AGE 18 LIVING AT HOME IN Q.12a.

12b. Do your children attend public school, independent private school, parochial or religious school, or are they not old enough to attend school?

Children attend public school	78	CONTINUE	[214]
Children attend independent private school	6		>
Children attend parochial or religious school	8		
Children not old enough for school	6	Skip to Q.13a	
Do not attend school (VOL)	5		
Not sure	-		

(ASKED ONLY OF RESPONDENTS WITH CHILDREN WHO ATTEND PUBLIC SCHOOL IN Q.12b.)

12c. If money were not a consideration, would you prefer to send your (child/children) to a private or religious school, or would you prefer to send your (child/children) to your local public school?

Prefer private/religious school	45	[215]
Prefer local public school	50	
Not sure	5	

For these next few questions, let's just focus on the oldest child you have in kindergarten through 12th grade.

13a. In general, about how much time each day does your child spend using a computer at home-- (A) four or more hours, (B) two to four hours, (C) up to two hours, (D) hardly any, (E) none, or do you not have a computer at home?

A/four or more hours	6	[216]
B/two to four hours	14	
C/up to two hours	28	
D/hardly any	19	
E/none	12	
No computer at home	19	
Not sure	2	

13b. In general, about how much time each day does your child spend watching television--(A) four or more hours, (B) two to four hours, (C) up to two hours, (D) hardly any, or (E) none?

A/four or more hours	12	[217]
B/two to four hours	29	
C/up to two hours	32	
D/hardly any	22	
E/none	4	
Not sure	1	

13c. Which does your child prefer doing?

Watching television	33	[218]
Using the computer	46	
Neither/other (VOL)	14	
Not sure	7	

13d. Do you think that the time your child spends using a computer is a better or worse use of time than watching television?

Better use of time	85	[219]
Worse use of time	2	
Depends (VOL)	8	
Not sure	5	

14a. From what you know, do you think that your state government is spending too much money, spending too little money, or spending about the right amount of money on computers in education? *

Spending too much money	5	[220]
Spending too little money	50	
Spending the right amount of money	28	
Not sure	17	

* Asked of one-half the respondents (FORM A).

14b. From what you know, do you think that the public schools in your area are spending too much money, spending too little money, or spending about the right amount of money on computers in education? **

Spending too much money	6	[221]
Spending too little money	40	
Spending about the right amount of money	40	
Not sure	14	

** Asked of one-half the respondents (FORM B).

15a. Suppose that a Democratic candidate for governor in your state said that his or her top priority would be making sure that the public schools have greater access to computers and technology to improve the way we educate our children. Is this something that would make you feel much more favorable, somewhat more favorable, or no more favorable toward this candidate for governor? *

Much more favorable	26	[222]
Somewhat more favorable	31	
No more favorable	36	
Less favorable (VOL)	3	
Not sure	4	

* Asked of one-half the respondents (FORM A).

15b. Suppose that a Republican candidate for governor in your state said that his or her top priority would be making sure that the public schools have greater access to computers and technology to improve the way we educate our children. Is this something that would make you feel much more favorable, somewhat more favorable, or no more favorable toward this candidate for governor? **

Much more favorable	21	[223]
Somewhat more favorable	35	
No more favorable	40	
Less favorable (VOL)	2	
Not sure	2	

** Asked of one-half the respondents (FORM B).

16. Do you think that the primary responsibility for providing the funding for computers and technology in public schools should be with:

THIS TABLE HAS BEEN RANKED BY THE HIGHEST PERCENTAGE

The state government	33	[224]
Local school boards	23	
The federal government	22	
The private sector	8	
None/other (VOL)	8	
Not sure	6	

17a. Would you be willing to pay one hundred dollars more in federal taxes if the additional money were used only to equip public schools with computers and up-to-date technology?

	6/98*	5/97	
Yes, willing to pay $100 more in taxes	46	61	[225]
No, not willing to pay $100 more in taxes	44	28	
Depends (VOL)	7	7	
Not sure	3	4	

* Asked of one-half the respondents (FORM A).

17b. Which should have the highest priority when it comes to spending money for computers and up-to-date technology--(A) elementary schools, (B) middle schools/junior high schools, or (C) senior high schools?

	6/98*	5/97	
Elementary schools	28	21	[226]
Middle schools/junior high schools	25	25	
Senior high schools	29	43	
All (VOL)	15	10	
Not sure	3	1	

* Asked of one-half the respondents (FORM A).

18a. As you may know, there is a proposal to dedicate up to one dollar per month from every long-distance phone bill to a special fund, which would be used to equip and wire every classroom in the country for internet access. Before I mentioned this, were you aware of this proposal or not? **

Yes, aware of proposal	13	[227]
No, not aware of proposal	87	
Not sure	-	

** Asked of one-half the respondents (FORM B).

18b. What is your reaction to this proposal to dedicate up to one dollar per month from every long-distance phone bill to specifically fund the equipping and wiring of every classroom in the country for internet access--do you strongly favor, mildly favor, mildly oppose, or strongly oppose this proposal? **

Strongly favor	36	[228]
Mildly favor	26	
Mildly oppose	12	
Strongly oppose	20	
Not sure	6	

** Asked of one-half the respondents (FORM B).

19. Let me read you a list of some other options to raise additional revenue to equip public schools with computers and up-to-date technology. For each one, please tell me whether this is something you would strongly favor, somewhat favor, somewhat oppose, or strongly oppose. *

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY STRONGLY OR SOMEWHAT FAVOR

	Strongly Favor	Somewhat Favor	Somewhat Oppose	Strongly Oppose	Not Sure	
Raising the tax on cigarettes and other tobacco products						**[229]**
June 1998	44	16	11	28	1	
May 1997	57	15	8	17	3	
Raising the corporate income tax						**[230]**
June 1998	32	27	16	21	4	
May 1997	40	21	15	19	5	
Raising the state sales tax by one penny						**[231]**
June 1998	31	28	11	27	3	
May 1997	28	31	14	24	3	
Instituting a special sales tax on the sales of computers and other technology-related equipment						**[232]**
June 1998	16	26	17	39	2	
May 1997	22	35	15	23	5	
Increasing local revenue, either through bond measures or property taxes						**[233]**
June 1998	12	27	20	39	2	
May 1997	10	28	18	38	6	

* Asked of one-half the respondents (FORM A).

20a. Have the things you've recently seen and read in the news about computers in schools made you more likely to believe in the value of computers in education, made you more likely to question the value of computers in education, or haven't you heard enough either way?

News made you believe in value of computers.....	42	CONTINUE	[234]
News made you question value of computers	13		
Haven't heard enough either way	41	Skip to Q.21	
Not sure.....	4		

(ASKED ONLY OF RESPONDENTS WHO HAVE RECENTLY SEEN OR READ NEWS ABOUT THE USE OF COMPUTERS IN SCHOOLS IN Q.20a.)

20b. What do you remember seeing or reading about the use of computers in schools?

(PROBE:) What have you seen or heard that makes you more likely to believe in the value of computers in education?

(PROBE:) What have you seen or heard that makes you more likely to question the value of computers in education?

Net Reasons To Believe In The Value Of Computers	52%	Net Reasons To Question The Value Of Computers	24%
From personal experience, seeing kids learning more	12	Concerns about kids using the Internet	8
Prepares students for the future, good jobs	8	Kids aren't learning the basics	3
Students are more eager to learn; makes learning fun	7	Too many schools use computers as toys	2
More access to information for students	6	Computers can't replace the teacher	2
Seeing kids using the Internet, working on computers	5	Not enough computers for every student	2
		Don't know; no response	25%

21. Let me read you some factors that may be used to determine the effectiveness of computers and technology in education. For each one, please tell me how much weight you would place on each of these factors--a lot of weight, some weight, only a little weight, or no weight at all.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY A LOT OF WEIGHT

	A Lot Of Weight	Some Weight	Only A Little Weight	No Weight At All	Not Sure	
Having students who are prepared to enter the work force	76	16	4	1	3	**[243]**
Having students who are more interested in learning	72	18	5	3	2	**[244]**
Having more access to information	70	19	6	2	3	**[245]**
Making learning a more active experience	69	20	6	3	2	**[246]**
Having students who have basic reading, writing, and math skills	66	18	7	7	2	**[247]**
Giving more individual attention to students	57	23	9	8	3	**[248]**

22a. When it comes to deciding the effectiveness of computers in education, which of the following statements comes closest to your own point of view?

THIS TABLE HAS BEEN RANKED BY THE HIGHEST PERCENTAGE

We should increase current spending levels on computers because we need to do more in order for students to succeed academically	54	[249]
We should maintain current spending levels on computers and technology	27	
We should not increase spending levels on computers because we don't have enough evidence that a computer is an effective education tool	14	
Not sure	5	

22b. Why do you feel that way about deciding the effectiveness of computers and technology in education?

(PROBE:) What are some reasons to continue spending on computers and technology?

(PROBE:) What are some reasons to either maintain or reduce spending on computers and technology? **[250-257]**

Net Reasons To Continue Spending	64%	Net Reasons To Maintain/Reduce Spending	35%
Prepares kids for the future; they need the knowledge to get jobs	29	Students need the basics, not more computers	5
It's important, needed in today's world	12	Concerns about equality in using technology, poor/slow students	5
Should be spending more on computers	9	Maintain current spending, it is adequate	5
Great way for kids to learn, motivation	7	Too expensive to maintain, replace	4
Schools need updated equipment and technology	6	No evidence computers are effective educational tool	4
		Don't know; no response	9%

23. From what you know, is there enough evidence that computers improve the effectiveness of teaching, or is there not enough evidence yet?

Enough evidence	44	[258]
Not enough evidence	40	
Not sure	16	

24. Finally, several major studies on the effectiveness of computers and technology in education will be published within the next few years. Looking ahead, what do you think will be the conclusion of these major studies?

A/That computers and technology have a major impact on improving education	65	[259]
B/That computers and technology have a minor impact on improving education	26	
C/That computers and technology have no impact on improving education	3	
None/other (VOL)	1	
Not sure	5	

FACTUALS: These last few questions are for statistical purposes only.

F1. Is there a personal computer in your household? **(IF "YES," ASK:)** Is there a modem for the computer?

Have Personal Computer		
With modem	51	[260]
No modem	11	
Non-Computer Household	36	
Not Sure	2	

F2. Do you regularly use the Internet or other on-line computer information services, either at home or at work?

Yes, use the Internet/on-line services	46	[261]
No, do not use the Internet/on-line services	52	
Not sure	2	

F3. How old are you? **(IF REFUSED, ASK:)** Well, can you tell me which age group you belong to?

18-24	9	[262-263]
25-29	8	
30-34	8	
35-39	12	
40-44	11	
45-49	10	
50-54	9	
55-59	6	
60-64	6	
65 and over	18	
Refused	3	

F4. What type of work do you do?

High-level professional	6	[264]
Middle-level professional	13	
Executive, manager	5	
Sales, proprietor	8	
White collar worker	14	
Skilled laborer	16	
Semi- and unskilled laborer	1	
Farmer, rancher	1	
Homemaker	7	
Retiree	23	
Student	4	
Unemployed	-	
Refused	2	

F5. What is the last grade you completed in school?

Grade school	1	[272]
Some high school	5	
High school graduate	32	
Some college, no degree	16	
Vocational training/2-year college	11	
4-year college/bachelor's degree	20	
Some postgraduate work, no degree	2	
2-3 years' postgraduate work/master's degree	9	
Doctoral/law degree	2	
Not sure/refused	2	[273]

F6. How would you describe your overall point of view in terms of the political parties? Would you say you are mostly Democratic, leaning Democratic, completely independent, leaning Republican, or mostly Republican?

Mostly Democratic	30	[274]
Leaning Democratic	9	
Completely independent	23	
Leaning Republican	11	
Mostly Republican	21	
Not sure	6	

F7. Thinking about your general approach to issues, do you consider yourself to be liberal, moderate, or conservative?

Liberal	22	[275]
Moderate	38	
Conservative	32	
Not sure	8	

F8. If you added together the yearly income of all the members of your family who were living at home last year, would the total be less than $10,000, between $10,000 and $20,000, between $20,000 and $30,000, between $30,000 and $40,000, between $40,000 and $50,000, between $50,000 and $75,000, between $75,000 and $100,000, or would the total be more than that?

Less than $10,000	4	[276]
Between $10,000 and $20,000	8	
Between $20,000 and $30,000	12	
Between $30,000 and $40,000	12	
Between $40,000 and $50,000	12	
Between $50,000 and $75,000	16	
Between $75,000 and $100,000	8	
More than $100,000	6	
Not sure/refused	22	

F9. Finally, are you from a Hispanic or Spanish-speaking background? **(IF "NO," ASK:)** What is your race--white, black, Asian, or something else?

Hispanic	5	[277]
White	80	
Black	9	
Asian	1	
Other	2	
Not sure/refused	3	

LEGISLATORS SURVEY

Interviews: 201 legislators/staff
Dates: June 4-8, 1998

[109]	
Male	65
Female	35

FINAL

Study #5116b
Education & Technology Survey (Legislators/staff)
June 1998

1a. Thinking about your own state, how would you rate the quality of education students receive in public schools today--excellent, good, just fair, not so good, or poor?

Excellent	13	[140]
Good	59	
Just fair	20	
Not so good	4	
Poor	2	
Not sure	2	

1b. What do you think are the two or three most important challenges facing the public school system in your state?

(PROBE:) What changes or reforms would you like to see made to the public school system in your state? **[141-148] ***

Educating children properly, better curriculum	45%
Better ways to deal with disruptive students	42
More funding, state funding	36
Better teachers, qualified teachers	23
Lack of parental involvement	14
New schools, better schools, infrastructure	9
Better ways to deal with drugs, crime, violence	9
Reduce class size	7
Don't know; no response	-

* Asked of one-half the respondents (FORM A).

2. Let me read you a list of items that relate to the public schools in your state. For each one, please tell me whether you think that the state government is spending too much money on that item, spending too little, or spending the right amount of money on that item.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY SPENDING TOO LITTLE MONEY

	Spending Too Much Money	Spending Too Little Money	Spending The Right Amount Of Money	Not Sure	
Textbooks and teaching materials	2	50	43	5	**[151]**
Computers	10	48	38	4	**[152]**
Teachers	7	46	43	4	**[149]**
School buildings and facilities.	6	41	47	6	**[153]**
School administration	53	6	40	1	**[150]**

Now, I would like to focus specifically on the issue of technology and education.

3a. Generally speaking, would you say that the introduction of computers and up-to-date technology into public schools in your state is happening too fast, at the right speed, or not fast enough?

Too fast	10	**[154]**
At the right speed	50	
Not fast enough	39	
Not sure	1	

3b. On a ten-point scale on which a "1" means it is not important at all and a "10" means it is extremely important, how important is it for the public schools in your state to have access in every classroom to computers and up-to-date technology?

10, extremely important	29	[155-156]
8-9	38	
6-7	18	
1-5, less important	15	
Cannot rate	-	

3c. Using the same ten-point scale on which a "1" means it is not important at all and a "10" means it is extremely important, how important will it be ten years from now for the public schools in your state to have access to computers in every classroom?

10, extremely important	56	[157-158]
8-9	24	
6-7	10	
1-5, less important	9	
Cannot rate	1	

4a. Generally speaking, how much of a difference do you think that using computers in education would have on the quality of education that children receive--would it make a great deal of difference, a fair amount, some, or not that much difference?

A great deal of difference	37	[159]
A fair amount of difference	40	
Some difference	14	
Not that much difference	8	
Not sure	1	

4b. How much confidence do you have that the public schools in your state effectively use computers in educating students--a great deal of confidence, a fair amount of confidence, some confidence, or not that much confidence?

A great deal of confidence	9	[160]
A fair amount of confidence	44	
Some confidence	36	
Not that much confidence	10	
Not sure	1	

Which of the following statements best describes your attitude toward the use of computers in education?

4c. Statement A: We already have enough information that computers are essential to improving education, and we should move forward.

Statement B: We know that the potential exists for computers to improve education, but we don't have enough information yet.

Statement C: We already have enough information that computers don't make much of a difference in education, and we shouldn't invest too much money in computers.

A/computers are essential to improve education	54	[161]
B/computers have potential to improve education	40	
C/computers don't make much of a difference in education	3	
None/other (VOL)	3	
Not sure	-	

5. While public opinion polls consistently show strong support for education technology, very few legislators have strongly advocated the necessary increases in investment. Why do you think that there has been so little support among legislators for making the investments in education technology? **[162-169]** **

Many of the legislators don't understand, are computer illiterate	16%
Not enough money to go around	14
Money being spent on more important things	9
They think money does not go where intended	8
Already too much spending on education	7
Resources are being used to pay teachers' salaries	7
No problems in my state, they are getting enough money	16
Don't know; no response	5%

** Asked of one-half the respondents (FORM B).

6a. Let me read you a list of different factors that might make you more likely to support the use of computers in education. For each one, please tell me whether it would make you more likely or less likely to increase your support for computers in education, or whether it would make little difference either way? **(IF "MORE LIKELY," ASK:)** Would this make you much more likely or somewhat more likely to support computers in education?

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY MUCH MORE LIKELY TO SUPPORT

	Much More Likely To Support	Somewhat More Likely To Support	Less Likely To Support	Makes Little Difference	Not Sure	
Definitive studies that demonstrate the effectiveness of computers and technology in increasing student achievement	57	27	4	12	-	[170]
Testimony from teachers and students about the effectiveness of computers and technology in the classroom	47	37	3	11	2	[174]
More vocal public support	45	33	4	18	-	[171]
More support from the state's key business leaders	44	36	5	15	-	[173]
More leadership from your governor and key legislative leaders	38	27	10	22	3	[172]

6b. Given the same list of items and thinking about your own state, please tell me whether the following factor (A) already exists, (B) already exists but is not meaningful, or (C) doesn't already exist.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY ALREADY EXISTS

	Already Exists	Already Exists But Is Not Meaningful	Doesn't Already Exist	Not Sure	
More leadership from your governor and key legislative leaders	55	32	10	3	[177]
Testimony from teachers and students about the effectiveness of computers and technology in the classroom	50	30	16	4	[179]

More support from the state's key business leaders	46	28	21	5	[178]
More vocal public support	32	31	35	2	[176]
Definitive studies that demonstrate the effectiveness of computers and technology in increasing student achievement	29	28	34	9	[175]

6c. Thinking about the same list of items again, please tell me which one or two would make you the most likely to increase your support for the use of computers in education in your state. **(ACCEPT UP TO TWO RESPONSES.)**

THIS TABLE HAS BEEN RANKED BY THE HIGHEST PERCENTAGE

Definitive studies that demonstrate the effectiveness of computers and technology in increasing student achievement	45	[180]
Testimony from teachers and students about the effectiveness of computers and technology in the classroom	35	>
More vocal public support	21	
More support from the state's key business leaders	21	
More leadership from your governor and key legislative leaders	15	
None/other (VOL)	7	
Not sure	1	

7a. Have you ever visited a classroom in which the students were using computers?

Yes	91	CONTINUE	[208]
No	8	Skip to Q.8a	
Not sure	1		

(ASK ONLY OF RESPONDENTS WHO ANSWERED "YES" IN Q.7a.)

7b. All in all, would you say that using computers was very helpful, somewhat helpful, or not really helpful to the students' education?

Very helpful	50	[209]
Somewhat helpful	46	
Not really helpful	3	
Not sure	1	

8. Let me read you a list of different ways that computers could be used in education. For each one, please tell me whether you think that computers would be very helpful, fairly helpful, somewhat helpful, or not really helpful in education.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY VERY HELPFUL

	Very Helpful	Fairly Helpful	Somewhat Helpful	Not Really Helpful	Not Sure	
Having access to the latest information *	83	8	8	1	-	[211]
Helping students learn the high-tech skills they will need for jobs of the future *	74	8	15	3	-	[210]
Making learning more fun and interesting *	54	13	27	4	2	[213]
Providing students with a better understanding of the world around them *	53	18	22	7	-	[212]
Helping students communicate with other students in distant schools *	53	17	19	9	2	[214]
Giving teachers more time to focus on teaching students rather than dealing with administrative tasks **	44	15	27	13	1	[215]

* Asked of one-half the respondents (FORM A).
** Asked of one-half the respondents (FORM B).

Giving more individual attention to students **	43	19	21	15	2	[218]
Improving the teaching of basic skills such as reading, writing, and math **	38	16	34	10	2	[217]
Helping students develop better problem-solving skills **	38	11	35	13	3	[216]

** Asked of one-half the respondents (FORM B).

9. Now, let me read you some fears and concerns that people might have about the role of computers in education. For each one, please tell me whether it is a very big concern, a fairly big concern, somewhat of a concern, or not that much of a concern.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY VERY OR FAIRLY BIG CONCERN

	Very Big Concern	Fairly Big Concern	Somewhat Of A Concern	Not That Much Of A Concern	Not Sure	
Most schools don't have the equipment, training, or funding to effectively use computers and technology in educating children **	36	17	24	22	1	[227]

The cost of properly equipping schools with computers and technology is much too expensive, and the money is better spent on teaching the basics *	22	24	25	28	1	[220]
If students rely on computers and technology too much, they'll lose their ability to think for themselves *	23	16	21	38	2	[222]
It's not worth spending a lot of money on computers now because the technology is changing so fast that schools can't keep up **	21	18	21	38	2	[223]
Using computers and technology takes time away from learning basic skills **	18	16	29	37	-	[225]
There is not enough evidence that using computers and technology in the classroom increases student achievement *	16	18	34	30	2	[219]
A focus on computers and technology in schools will create a wider gap between public schools in wealthier and poorer areas **	23	10	19	48	-	[224]
Students can learn how to use computers and technology on their own **	13	7	23	55	2	[226]
The growth of computers and technology in education will diminish the role of the teacher *	13	5	18	63	1	[221]

* Asked of one-half the respondents (FORM A).
** Asked of one-half the respondents (FORM B).

10a. From what you know, do you think that your state government is spending too much money, spending too little money, or spending about the right amount of money on computers in education?

Spending too much money	6	[228]
Spending too little money	42	
Spending about the right amount of money	50	
Not sure	2	

10b. How important to you is the issue of equity--that is, providing technology equally among different economic and demographic groups in your state? Is it very important, fairly important, just somewhat important, or not that important compared with other issues?

Very important	76	[229]
Fairly important	10	
Just somewhat important	7	
Not that important	6	
Not sure	1	

11. Suppose that your state government decided to make a substantial financial investment in computers and technology in the public schools. In exchange for this increased state aid, how important is it for your state government to take the lead in **(READ ITEM)**--very important, fairly important, just somewhat important, or not that important?

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY VERY IMPORTANT

	Very Important	Fairly Important	Just Somewhat Important	Not That Important	Not Sure	
Ensuring greater accountability	63	20	9	5	3	[230]
Investing state money in research and development to help school districts implement the most successful programs	51	25	15	7	2	[232]
Allowing the state to become involved in quality assessment	49	20	19	9	3	[231]

12. Do you think that the primary responsibility for providing the funding for computers and technology in public schools should be with:

THIS TABLE HAS BEEN RANKED BY THE HIGHEST PERCENTAGE

The state government	48	[233]
Local school boards	26	
The private sector	5	
The federal government	5	
None/other (VOL)	13	
Not sure	3	

13a. When it comes to deciding the effectiveness of computers in education, which of the following statements comes closest to your own point of view?

We should increase current spending levels on computers because we need to do more in order for students to succeed academically	51	[234]
We should not increase spending levels on computers because we don't have enough evidence that a computer is an effective education tool	8	
We should maintain current spending levels on computers and technology	37	
Not sure	4	

13b. Which do you think is the bigger obstacle when it comes to deciding whether to provide funding for computers in education?

There are other demands for education funding that are more important than computers	69	[235]
We don't know enough yet about the effectiveness of computers in education	16	
None/other (VOL)	12	
Not sure	3	

FACTUALS: Now I have just a few more questions for statistical purposes only.

F1. How knowledgeable would you say you are about computers and technology--very knowledgeable, fairly knowledgeable, just somewhat knowledgeable, or not that knowledgeable?

Very knowledgeable	22	[236]
Fairly knowledgeable	50	
Just somewhat knowledgeable	24	
Not that knowledgeable	4	
Not sure	-	

F2. How often would you say you use a computer, either at home or at work--every day, several times a week, once a week, a few times a month, or less than that?

Every day	71	[237]
Several times a week	17	
Once a week	4	
A few times a month	1	
Less than a few times a month	6	
Not sure	1	

F3. Could you please tell me your age? **(IF REFUSED, ASK:)** Well, can you tell me which age group you belong to?

18-24	2	[238-239]
25-29	6	
30-34	6	
35-39	6	
40-44	12	
45-49	15	
50-54	17	
55-59	10	
60-64	9	
65 and over	16	
Refused	1	

F4. For research purposes only, could you please tell me whether you are a Democrat, an Independent, or a Republican?

Democrat	49	[240]
Independent	6	
Republican	39	
Other (VOL)	1	
Not sure/refused	5	

(ASK ONLY OF LEGISLATORS.)

F5a. How many years have you served in the legislature?

Less than two years	4	[241]
Two to four years	20	
Four to eight years	36	
More than eight years	40	
Not sure/refused	-	

(ASK ONLY OF STAFF MEMBERS.)

F5b. How long have you been in your current position?

Less than two years	10	[242]
Two to four years	12	
Four to eight years	14	
More than eight years	64	
Not sure/refused	-	

(ASK ONLY OF LEGISLATORS.)

F6. Do you have an occupation outside of the legislature? **(IF "YES," ASK:)** What is your occupation? What is the job called?

High-level professional	14	[243-250]
Middle-level professional	15	
Executive, manager	5	
Sales, proprietor	8	
White collar worker	3	
Farmer, rancher	6	
Homemaker	1	
Retiree	11	
Student	-	
No occupation outside of legislature	34	
Not sure	3	

F7. What is the last grade you completed in school?

Grade school	-	[251-252]
Some high school	-	
High school graduate	4	
Some college, no degree	5	
Vocational training/2-year college	5	
4-year college/bachelor's degree	29	
Some postgraduate work, no degree	7	
2-3 years' postgraduate work/master's degree	34	
Doctoral/law degree	16	
Not sure/refused	-	

F8. Finally, are you from a Hispanic or Spanish-speaking background? **(IF "NO," ASK:)** What is your race--white, black, Asian, or something else?

Hispanic	2	[253]
White	90	
Black	4	
Asian	-	
Other	3	
Not sure/refused	1	

BUSINESS LEADERS SURVEY

Interviews: 206 business leaders
Dates: June 6-10, 1998

FINAL

Study #5116c
Education & Technology (Business Leaders)
June 1998

71 Male
29 Female
[109]

1a. How easy is it for your company to find employees with the skills and qualifications you need--very easy, fairly easy, somewhat easy, or not easy at all?

Very easy	3	**[139]**
Fairly easy	25	
Somewhat easy	29	
Not easy at all	43	
Not sure	-	

1b. Now, I'm going to read you a list of items that relate to the skills of your newly hired employees. For each one, please tell me whether you are very satisfied, fairly satisfied, just somewhat satisfied, or not very satisfied with the skills of your newly hired employees on that item.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY VERY OR FAIRLY SATISFIED

	Very Satisfied	Fairly Satisfied	Just Somewhat Satisfied	Not Very Satisfied	Not Sure	
Having good work habits such as being responsible and on time *	28	34	19	17	2	**[141]**
Having good basic reading, writing, and math skills **	22	38	25	9	6	**[145]**
Knowing how to use computers and up-to-date technology	25	32	20	14	9	**[140, 143]**
Having good communication skills *	11	46	27	14	2	**[142]**
Having good problem-solving and reasoning skills **	11	35	30	20	4	**[144]**

* Asked of one-half the respondents (FORM A).
** Asked of one-half the respondents (FORM B).

2. Thinking about your own state, how would you rate the quality of education students receive in public schools today--excellent, good, just fair, not so good, or poor?

Excellent	7	[146]
Good	29	
Just fair	34	
Not so good	17	
Poor	11	
Not sure	2	

Now, I would like to focus specifically on the issue of education and technology.

3. How much do you think that computers and technology have affected the quality of your own business in terms of increased productivity, greater efficiency, and lower costs--a great deal, quite a bit, some, or not much at all?

A great deal	51	[147]
Quite a bit	26	
Some	15	
Not much at all	7	
Not sure	1	

4a. How much of a difference would the increased use of computers and technology in classrooms make in the quality of the workers you hire--would it make a great deal of difference, a fair amount, some, or not that much difference?

A great deal of difference	44	[148]
A fair amount of difference	26	
Some difference	12	
Not that much difference	18	
Not sure	-	

4b. Why do you feel that way?

(PROBE:) In what ways would the increased use of computers and technology in classrooms raise the quality of the workers you hire? **[149-155]** *

Net Reasons Favor	63%	Net Reasons Oppose	32%
Our employees must know how to use computers	23	Children need to learn basic skills	13
Children need to learn to use computers	13	Not all jobs demand computer knowledge	13
Computer knowledge broadens knowledge base	13	They are getting good computer skills now	5
Computers are important, the way of the future	12	Opposed to computers in elementary schools	4
Computer knowledge will increase quality of work	6	Money could be spent more important things	1
		All other comments	10
		Don't know; no response	-

5a. Generally speaking, would you say that the introduction of computers and up-to-date technology into public schools in your state is happening too fast, at the right speed, or not fast enough?

Too fast	5	**[156]**
At the right speed	31	
Not fast enough	55	
Not sure	9	

5b. On a ten-point scale, on which a "1" means it is not important at all and a "10" means it is extremely important, how important is it for the public schools in your state to have access in every classroom to computers and up-to-date technology?

10, extremely important	37	**[157-158]**
8-9	29	
6-7	16	
1-5, less important	17	
Cannot rate	1	

6. Generally speaking, how much of a difference do you think that using computers in education would have on the quality of education that children receive--would it make a great deal of difference, a fair amount, some, or not that much difference?

A great deal of difference	42	[159]
A fair amount of difference	35	
Some difference	15	
Not that much difference	7	
Not sure	1	

7. Which of the following statements best describes your attitude toward the use of computers in education?

Statement A: We already have enough information that computers are essential to improving education, and we should move forward.

Statement B: We know that the potential exists for computers to improve education, but we don't have enough information yet.

Statement C: We already have enough information that computers don't make much of a difference in education, and we shouldn't invest too much money in computers.

A/computers essential to improve education	55	[160]
B/computers have potential to improve education	35	
C/computers don't make much of a difference in education	7	
None/other (VOL)	2	
Not sure	1	

8. Let me read you a list of different ways that computers could be used in education. For each one, please tell me whether you think that computers would be very helpful, fairly helpful, somewhat helpful, or not really helpful in education.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY VERY OR FAIRLY HELPFUL

	Very Helpful	Fairly Helpful	Somewhat Helpful	Not Really Helpful	Not Sure	
Having access to the latest information *	76	13	9	2	-	[162]
Helping students learn the high-tech skills they will need for jobs of the future *	71	14	9	4	2	[161]

Making learning more fun and interesting *	56	21	14	9	-	[164]
Providing students with a better understanding of the world around them *	52	22	14	11	1	[163]
Helping students develop better problem-solving skills **	45	28	14	13	-	[167]
Giving teachers more time to focus on teaching students rather than dealing with administrative tasks **	55	15	15	13	2	[166]
Helping students communicate with other students in distant schools *	41	21	23	14	1	[165]
Giving more individual attention to students **	42	19	20	16	3	[169]
Improving the teaching of basic skills such as reading, writing, and math **	44	14	19	20	3	[168]

* Asked of one-half the respondents (FORM A).
** Asked of one-half the respondents (FORM B).

9. Now, let me read you some fears and concerns that people might have about the role of computers in education. For each one, please tell me whether it is a very big concern, a fairly big concern, somewhat of a concern, or not that much of a concern.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY VERY OR FAIRLY BIG CONCERN

	Very Big Concern	Fairly Big Concern	Somewhat Of A Concern	Not That Much Of A Concern	Not Sure	
Most schools don't have the equipment, training, or funding to effectively use computers and technology in educating children **	46	18	19	10	7	[178]
If students rely on computers and technology too much, they'll lose their ability to think for themselves *	32	12	18	37	1	[173]

* Asked of one-half the respondents (FORM A).
** Asked of one-half the respondents (FORM B)

The cost of properly equipping schools with computers and technology is much too expensive, and the money is better spent on teaching the basics *	27	18	27	28	-	[171]
Students can learn how to use computers and technology on their own **	25	8	31	35	1	[177]
A focus on computers and technology in schools will create a wider gap between public schools in wealthier and poorer areas **	26	11	21	40	2	[175]
There is not enough evidence that using computers and technology in the classroom increases student achievement *	15	16	16	44	9	[170]
It's not worth spending a lot of money on computers now because the technology is changing so fast that schools can't keep up **	17	12	21	48	2	[174]
Using computers and technology takes time away from learning basic skills **	18	7	24	49	2	[176]
The growth of computers and technology in education will diminish the role of the teacher *	11	11	13	65	-	[172]

* Asked of one-half the respondents (FORM A).
** Asked of one-half the respondents (FORM B)

10a. From what you know, do you think that your state government is spending too much money, spending too little money, or spending about the right amount of money on computers in education?

Spending too much money	8	[179]
Spending too little money	49	
Spending about the right amount of money	29	
Not sure	14	

10b. How important to you is the issue of equity--that is, providing technology equally among different economic and demographic groups in your state? Is it very important, fairly important, just somewhat important, or not that important compared with other issues?

Very important	63	[180]
Fairly important	17	
Just somewhat important	7	
Not that important	12	
Not sure	1	

11. Please tell me which one of the following approaches you favor in order to raise the necessary revenue to properly equip public schools with computers.

A/Raise taxes, including the corporate income tax	15	[208]
B/Don't raise taxes, but find the necessary revenue by reallocating existing budgets	80	
C/Don't raise taxes and don't change existing budget priorities and delay investments in computers	2	
None/other (VOL)	2	
Not sure	1	

12. Do you think that the primary responsibility for providing the funding for computers and technology in public schools should be:

THIS TABLE HAS BEEN RANKED BY THE HIGHEST PERCENTAGE

The state government	36	[209]
Local school boards	32	
The federal government	15	
The private sector	8	
None/other (VOL)	6	
Not sure	3	

13. Let me read you some factors that may be used to determine the effectiveness of computers and technology in education. For each one, please tell me how much weight you would place on each of these factors--a lot of weight, some weight, only a little weight, or no weight at all.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY A LOT OF WEIGHT

	A Lot Of Weight	Some Weight	Only A Little Weight	No Weight At All	Not Sure	
Having students who are prepared to enter the work force	84	13	1	2	-	[210]
Having students who are more interested in learning	71	22	4	2	1	[211]
Having students who have basic reading, writing, and math skills	69	20	4	6	1	[214]
Making learning a more active experience	68	23	6	3	-	[213]
Having more access to information	61	31	6	2	-	[212]
Giving more individual attention to students	48	34	11	7	-	[215]

14. When it comes to deciding the effectiveness of computers in education, which of the following statements comes closest to your own point of view?

We should increase current spending levels on computers because we need to do more in order for students to succeed academically	61	[216]
We should not increase spending levels on computers because we don't have enough evidence that a computer is an effective education tool	14	
We should maintain current spending levels on computers and technology	19	
Not sure	6	

15. Several major studies on the effectiveness of computers and technology in education will be published within the next few years. Looking ahead, what do you think will be the conclusion of these major studies?

A/That computers and technology have a major impact on improving education	70	[217]
B/That computers and technology have a minor impact on improving education	24	
C/That computers and technology have no impact on improving education	3	
None/other (VOL)	2	
Not sure	1	

16. Finally, let me read you some ways that businesses like yours might get involved in promoting the use of computers and technology in schools. For each one I mention, please tell me whether (A) your business has done this, (B) your business has not done this but is willing and able, or (C) your business is not willing or able to do this.

THIS TABLE HAS BEEN RANKED BY THE PERCENTAGE WHO SAY BUSINESS HAS DONE THIS

	A/Business Has Done This	B/Business Has Not Done This But Is Willing And Able	C/Business Is Not Willing Or Able	Not Sure	
Donate outdated computer hardware	44	38	13	5	[219]
Participate in "adopt a school" programs that could include donating the time of your computer personnel	22	30	41	7	[218]
Contact state legislators	21	44	25	10	[220]
Work with other business groups to lobby for more computer funding	11	46	35	8	[221]

FACTUALS: Now I have just a few more questions that are for statistical purposes only.

F1a. What line of business is your company in?

Manufacturing	18	[222-228]
Sales, retail	17	
Service	12	
Banking, financial services	10	
Construction, engineering	7	
Restaurant, food service	6	

Computers, technology	6
Telecommunications	6
Repair, installation	4
Health care	4
Chemicals	2
Trucking	2
All other	6
Refused	-

F1b. Number of employees in company:

40 or fewer	34	[239-247]
41 to 200	36	
More than 200	30	

F2. How often would you say you use a computer, either at home or at work--every day, several times a week, once a week, a few times a month, or less than that?

Every day	94	[229]
Several times a week	1	
Once a week	1	
A few times a month	1	
Less than a few times a month	2	
Not sure	1	

F3. How knowledgeable would you say that you are about computers and technology--very knowledgeable, fairly knowledgeable, just somewhat knowledgeable, or not that knowledgeable?

Very knowledgeable	27	[230]
Fairly knowledgeable	43	
Just somewhat knowledgeable	26	
Not that knowledgeable	4	
Not sure	-	

F4. Could you please tell me your age? **(IF REFUSED, ASK:)** Well, can you tell me which age group you belong to?

18-24	2	[231-232]
25-29	4	
30-34	2	
35-39	15	
40-44	14	
45-49	19	
50-54	22	
55-59	14	
60-64	4	
65 and over	3	
Refused	1	

F5. For research purposes only, could you please tell me whether you are a Democrat, an independent, or a Republican?

Democrat	13	[233]
Independent	27	
Republican	48	
Other (VOL)	4	
Not sure/refused	8	

F6. How many years have you been employed in your current job?

Less than two years	10	[234]
Two to four years	19	
Five to ten years	18	
More than ten years	52	
Not sure/refused	1	

F7. What is the last grade you completed in school?

Grade school	-	[235-236]
Some high school	-	
High school graduate	12	
Some college, no degree	8	
Vocational training/2-year college	5	
4-year college/bachelor's degree	37	
Some postgraduate work, no degree	6	
2-3 years' postgraduate work/master's degree	26	
Doctoral/law degree	6	
Not sure/refused	-	

F8. Finally, are you from a Hispanic or Spanish-speaking background? **(IF "NO," ASK:)** What is your race--white, black, Asian, or something else?

Hispanic	6	[237]
White	86	
Black	3	
Asian	1	
Other	3	
Not sure/refused	1	

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For further information,
please contact:

Cheryl L. Lemke
Vice President,
Education Technology
Milken Exchange on
Education Technology

1250 Fourth Street
Fourth Floor
Santa Monica
California 90401-1353
voice: 310-998-2825
facsimile: 310-998-2899
www.milkenexchange.org
www.mff.org

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