

Methodology

GfK conducted an online survey of middle-school students, their parents, and middle-school teachers nationwide on behalf of the Verizon Foundation. Using GfK's KnowledgePanel™, a statistically representative sample source used to yield results that are projectable to the American population, GfK surveyed 507 parents and their middle-school child as well as 201 middle-school teachers. The survey was conducted from August 10-28, 2017. To qualify, parents had to have a child age 11-14 and who just completed 6th, 7th, or 8th grade. Teachers were required to currently teach 6th, 7th, and/or 8th grade. The margin of sampling error for parent/child data is +/- 4.99 percentage points at the 95 percent confidence level.

Middle-school students who attend a Title 1 school were determined by their parent's response to the question, "What percentage of the student body at your child's school would you say participates in the school's free or reduced price lunch program?" If a parent said that 40% or more of the student body participates in the program, then their child is classified as attending a Title 1 school. Middle-school teachers were asked, "Do you work in a Title 1 school?"

Percentages may appear as though they do not sum to 100%; this is due to rounding.

Findings and Supporting Data

Finding 1: Don't underestimate middle school students. Age is just a number. As early as middle school, students know what underpins success and whether or not they are primed and positioned to achieve it.

As young as 11 years old and in the 6th grade, children know that some of their peers are being set up to be successful while they are being left behind. Middle-school students also know technology's importance reaches far beyond the classroom – they believe technology can even the playing field and that their ability to realize their goals and attain a good job when they grow up hinges on their understanding and ability to use technology.

- Students are aware an unequal playing field exists, but they believe that providing students with technology can reduce inherent inequality.
 - Nearly eight-in-ten middle-school students (79%) "think there are people my age who will be more successful as adults just because of where they go to school now."
 - One out of every three middle-school students (32%) say their school lags behind other schools when it comes to getting new technology.
 - Nine-in-ten middle-school students agree (90%) that "providing students with technology creates a more even playing field."
- The benefits of schools adopting and integrating technology extend beyond the immediate term and academic success. Students believe that understanding technology underpins their ability to achieve their goals, realize their dreams, and attain a good job when they grow up.
 - Near unanimous consensus emerges when middle-school students consider the importance of understanding technology to obtaining a good job as an adult. Over nine-

- in-ten middle-school students (93%) concur that "understanding technology is important to getting a good job when I grow up."
- Over nine-in-ten middle-school students (93%) agree that "teaching students how to use technology helps us be successful both in the classroom and in life."
- Nearly nine-in-ten middle-school students (87%) agree that "understanding technology is important to achieving my goals and dreams."
- The importance of technology in the classroom is undeniable. Technology engages middleschool students in the subject matter and improves comprehension.
 - Over eight-in-ten middle-school students (81%) know having technology in the classroom is "extremely" or "very" important.
 - Students are also convinced of the importance that both they (80%) and their teachers (79%) learn how they can use technology in the classroom and for academic endeavors, that students are provided with technology (71%) and have technology at home so they can complete their homework (85%).
 - o In fact, eight-in-ten middle-school students (79%) say that when their teacher uses technology to help teach they either "love it" or "like it a lot." Why do students enjoy using technology in school?
 - "I think that using technology makes the subject being taught more interesting" (89% agree),
 - "When we use technology in class for things like labs, modules, and experiments, I understand better" (89% agree),
 - "When we use technology in school, I like school more" (86% agree),
 - "It's easier for me to pay attention when we're using technology in class" (79% agree).
 - Technology improves students' interest in and comprehension of science and math.
 - "When we use technology in science class, I think it makes science more interesting" (88% agree),
 - "When we use technology in science class, I understand it better" (84% agree),
 - "When we use technology in math class, I think it makes math more interesting" (80% agree), and
 - "When we use technology in math class, I understand it better" (77% agree).

School Students' Agreement Regarding the Value of Technology by Grade Level				
	6 th Graders N=178	7 th Graders N=174	8 th Graders N=155	
Understanding technology is important to achieving my goals and dreams.	86% agree	88% agree	87% agree	
Understanding technology is important to getting a good job when I grow up.	94% agree	95% agree	91% agree	
I think that using technology makes the subject being taught more interesting.	87% agree	90% agree	90% agree	
When we use technology in school, I like school more.	85% agree	87% agree	87% agree	

Finding 2: Behind now, behind always. How inequality fosters anxiety and dejection among middle schoolers who see themselves at a disadvantage.

The consequences of the inequality in middle schools – particularly the speed that schools adopt new technology – gives rise to feelings of dejection, lowered expectations and less effort, and bleaker views of the future among the students who feel left behind.

- Negative emotions plague those who say their school lags behind others when it comes to getting new technology.
 - A majority of middle-school students who say their school falls behind others when it comes to getting new technology (53%) use a negative emotion – anxious, concerned, stressed, scared, depressed, disappointed, sad – to describe how they feel as they think about their ability to be successful in the future.
 - In contrast, 92% of middle-school students who say their school gets new technology ahead of other schools regard their future with positivity and excitement.
 - When it comes to the parents whose child says their school is behind when it comes to adopting and integrating new technology, a majority (54%) regards their child's future job prospects more negatively.
- Not only are middle-school students attending Title 1 schools more likely to say their school
 gets technology later than other middle schools, they also see themselves at competitive
 disadvantage when it comes to their ability to use technology.
 - Four-in-ten middle-school students attending a Title 1 school (40%) "don't think I will ever be able to do what some kids my age can do with technology." This is significantly higher compared to students who do not attend a Title 1 school (40% versus 27%).
- Failing to address inequities in schools' technology jeopardizes the success of students. Revising
 dreams and lowering expectations occurs even as early as middle school. When middle-school
 students become dejected due to a perception that they will not thrive, they do not put forth
 the effort that achieving success demands.
 - Half of students attending a school that is either behind other schools in integrating new technology (50%) or a Title 1 school (48%) remark "my school cannot keep up with students' learning needs."
 - Nearly two-thirds of middle-school students who feel as though they are unable to compete with their peers' acumen and abilities with technology (64%) are also less likely to put in all of their effort.
 - Parents of middle-school students who doubt their ability to compete with their peers in tech note that they are noticeably more worried about their future. Over half of parents of middle-school students who don't think I'll ever be able to do what some kids my age can do with tech (52%) say, "My child is already worrying about their future." Only onethird of parents whose child feels they can compete with their peers in tech (33%) regards the future with concern.

Finding 3: The state of technology: the haves and have nots. The rate at which middle schools adopt new technology divides students across America into haves and have nots.

Title 1 middle schools struggle to satisfy expectations and stay on top of new technology. This is problematic because those attending Title 1 schools are even more inclined to believe that technology is their ticket to be able to better compete with their more privileged peers.

- Middle-school students and their parents perceive a sharp difference in how high-tech the middle-school experience is based on whether or not the school is a Title 1 middle school.
 - Whereas four-in-ten middle-school students who attend a Title 1 school (44%) say their school lags behind other schools when it comes to getting new technology, four-in-ten middle-school students who do not attend a Title 1 school (41%) say their school gets new technology ahead of other schools.
 - Rural middle-school students are also more likely to say that their school falls behind other schools when it comes to getting new technology (50% versus 32% overall).
 - More parents of middle-school students who attend a Title 1 school agree "my child is aware that there are kids their own age who go to schools that are more high tech" (71% agree versus 61% agree among parents whose child does not attend a Title 1 school).
- Parents' satisfaction with their child's middle school largely hinges on the type of school their child attends. Parents who have a child who does <u>not</u> attend a Title 1 school feel noticeably more satisfied with almost every aspect of their child's school.

Parents' Satisfaction with their Child's Middle School – Showing % Saying "Extremely" or "Very" Satisfied				
	Not a Title 1 School (N=282)	Title 1 School (N=208)		
The quality of education	72%	51%		
The amount of technology the school uses	69%	51%		
The amount of technology the school provides to students	67%	49%		
The amount of time spent preparing students for high school	66%	49%		
The amount of individual attention your child receives from teachers	58%	46%		
The amount of focus placed on STEM studies/topics	57%	38%		
The amount of time spent preparing students for STEM careers	56%	39%		
The amount of time spent preparing students for success in their post-high school educational plans	54%	40%		

- Middle-school students attending Title 1 schools are even more inclined to believe technology is their silver bullet.
 - Though the vast majority of middle-school students recognize the role technology can play in evening the playing field, students attending a Title 1 school appreciate the equalizing impact technology can have even more so than their counterparts who do not attend a Title 1 school (93% versus 87%).

Finding 4: Most middle schoolers' homework today necessitates technology, but not all students have the same access to technology when at home.

One of the more insidious aspects of the digital divide is the homework gap that students face. Most homework today necessitates or would be more easily accomplished with the assistance of technology, but not all students share the same access to technology at home.

- There is a difference in the types of devices used to complete their homework and the ways in which middle-school students access the internet at home.
 - The difference in the middle-school experience and access to technology also manifests at home. Parents whose child attends a Title 1 middle school say their child is less likely to have access to the following at home to share for their schoolwork:
 - Broadband/high-speed internet (71% of Title 1 middle schoolers have at home to be shared versus 85% of middle schoolers who do not attend a Title 1 school),
 - Laptop (51% versus 62%), and
 - Desktop (50% versus 61%).
 - When accessing the internet at home, just over half of middle-school students who do not attend a Title 1 school (51%) use the computer or laptop of someone else at home.
 Just 36% of middle-school students attending a Title 1 school say the same is true for them.
 - Middle-school students living in a household with an annual income of less than \$25K are more likely to rely on someone else's cell phone to access the internet at home (21% versus 10% overall).

Finding 5: Keeping up with changing technology is critical to middle schools earning parents' satisfaction. However, investment in training and support for teachers needs improvement.

Middle schools that integrate new technology ahead of other schools earn parents' intense satisfaction. Investing in and integrating new technology is only the start.

- The speed at which a middle school adopts new technology has an obvious impact on parents' intense satisfaction with all aspects of the school.
 - Just over three-in-ten middle-school students (31%) think their school gets new technology ahead of other schools. Nearly four-in-ten middle-school students (37%) believe that their school gets new technology when all the other schools do. Roughly onethird of middle-school students (32%) report that their school is behind other schools when it comes to getting new technology.
 - Fewer than one-in-five middle-school students (17%) say that when they use technology at school it works perfectly "all of the time."
 - Part of meeting parental expectations today rests on middle schools' rate of adoption when it comes to new technology. Schools on the cutting edge earn approval and acclaim from parents. The sooner a middle school adopts new technology, the more likely that every aspect of the school supremely satisfies parents.

Parents' Satisfaction with their Child's Middle School -Showing % Saying "Extremely" or "Very" Satisfied One of the first or Gets new tech Is a gets new tech ahead when all the little/way of other schools other schools do behind (N=159) (N=185)(N=159)The amount of technology the school 79% 67% 37% uses The amount of technology the school 78% 65% 35% provides to students The quality of education 76% 69% 44% The amount of time spent preparing 73% 61% 43% students for high school The amount of focus placed on STEM 67% 49% 32% studies/topics The amount of time spent preparing 66% 50% 30% students for STEM careers The amount of individual attention 64% 57% 40% your child receives from teachers The amount of time spent preparing students for success in their post-high 63% 51% 32% school educational plans The amount of time spent preparing 60% 45% 28% students for career success as an adult