
WHITEPAPER

# No Time to Waste:

## 97% of Teachers Could Boost Instructional Time with the Right Edtech

## Executive Summary

Instructional time is a precious commodity that is constantly threatened by interruptions big and small.

**97% of teachers in grades 3–12 say they stop instruction at least 2x a day to repeat information students didn't hear the first time.**

Edtech can preserve this resource by facilitating teacher-student communication and by making devices more functional and easier to use.

A new survey, commissioned by Logitech and conducted by the nonprofit, nonpartisan EdWeek Research Center, quantifies edtech's potential to increase instructional time while also highlighting the challenges that can arise when schools use tools that fail to meet the needs of teachers and their students. The research provides insights into how the right edtech can reduce the amount of time that's lost to disruptions because students can't see or hear during instruction. Administered in June 2024, the survey attracted 591 U.S. teachers and school-based tech directors who work with students in grades 3–12.

Challenges such as noisy classrooms, seating arrangements, and undiagnosed vision impairments can make it difficult for students to see or hear instructions. Survey findings suggest that the typical teacher loses more than 30 hours of instructional time annually to repeating instructions students did not see or hear the first time and to refocusing the class after disruptions. And, the more often a teacher repeats material, the longer it takes to get students back on track after each interruption, results suggest.

> *"There are a dizzying number of edtech tools to choose from; we have to ease the burden on educators. It's critical that we help them identify what "quality" means for a given application and how to discern high quality products most suited to their goals, curriculum, students, and individual needs. To transform learning, educators deserve to be equipped with the right tools to support them."*
>
> **- JOSEPH SOUTH, CHIEF INNOVATION OFFICER AT ISTE**

Hardware accessories such as headsets, interactive flat displays, and video conferencing tools have the potential to reduce repetition by making it easier for students to see and hear the first time. Access to the right technology can enhance instruction and reduce the amount of time teachers spend troubleshooting. In fact, 69% of teachers and tech directors say students face more learning disruptions when they try to use software, apps, or devices without the relevant hardware accessories. 85% say that hardware accessories make devices more functional and easier to use.

The survey revealed challenges with hardware accessories as well. Roughly half of teachers report problems such as broken cables and headpieces that are more common with headsets not designed to withstand classroom use. Less than half of teachers and tech directors report that all of their students have access to functioning hardware accessories on a daily basis during class. Notably, teachers who say their schools cannot afford to buy enough headsets for all their students spend 5x as long troubleshooting tech problems of all kinds—nearly an hour every week—than do those who have a sufficient number of these items—approximately 10 minutes a week.

Overall, the results suggest that edtech can help teachers regain instructional time—but only if teachers have the right kind of tech tools, and a sufficient number of them.

## Introduction

Time is an important resource in schools. When students spend more time learning, their achievement increases. **Yet everyday disruptions such as student and teacher absences and classroom noise routinely reduce instructional time by 16 to 25%**. As schools undertake a rapid digital transformation and make efforts to address learning deficits, using edtech to maximize instructional time and accelerate student progress has been identified as a promising strategy.

Edtech has the potential to increase instructional time by enhancing the ability of teachers and students to consume and communicate information. **But when technology is broken, dated, or inappropriate for classroom use, it can have the opposite effect, contributing to time loss**.

This whitepaper draws upon a new survey of 591 U.S. teachers and school-based tech directors to quantify and explore two types of time loss that the right edtech can help address:

**Repetition:** While repetition can be an effective teaching tool, some students do not benefit from repeated demonstrations or instructions as much as others. Edtech built to maximize instructional time can amplify teachers' voices and actions, ensuring that repetition during lessons is a choice, rather than a response to students not hearing or seeing clearly.

**Troubleshooting and repairs:** When edtech is insufficiently durable, or inappropriately designed for classroom settings, teachers find themselves using instructional time to troubleshoot tech challenges, request or perform repairs, or create workarounds related to the very tools that are supposed to make learning more efficient.

## ABOUT THE SURVEY

Commissioned by Logitech and conducted by the nonprofit, nonpartisan EdWeek Research Center, the online survey was fielded in June 2024.

### WHO

507 U.S.-based public school teachers who work with students in grades 3–12, and 84 technology directors in schools that serve grades 3–12

### WHAT

An online survey fielded June 6–27, 2024

### WHY

To explore classroom challenges and instructional time loss and key causes

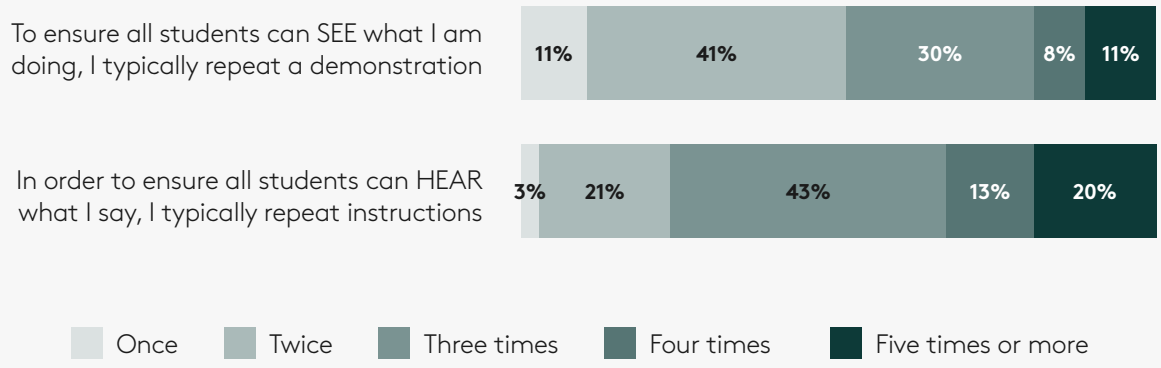
## The Physical Classroom Setup: Inability to Hear and See is Sapping Instructional Time

It is difficult for students to learn if they cannot hear or see the teacher. Yet even unoccupied, most classrooms exceed the maximum ambient noise levels recommended by the World Health Organization due to the humming of HVAC systems, the rumbling of traffic, and other sources of background sound. In addition, due to classroom seating arrangements and lack of video conferencing tools, students may also struggle to see—especially if they are experiencing undiagnosed impairments.

The World Health Organization and national health agencies around the world cite hearing and vision impairments as persistent challenges. The U.S.-based National Institutes of Health report that 40% of children under 18 haven't had a vision screening in the past year. And the problem has grown in recent years, as the share of children under 18 who had received an annual vision screening declined from 70% in 2016 to 60% in 2020. **Equity issues are also a concern**: Children from low-income families, multilingual learners, and students who are racial minorities are less likely to be screened, more likely to be identified with vision impairments if they do get screened, and less likely to get corrective care, a recent study found.

Survey results suggest that these hearing and vision challenges are cutting into instructional time. **97% of teachers in grades 3–12 say they stop instruction at least 2x a day to repeat information students did not hear the first time. Alarmingly, 1 in 5 teachers report stopping 5x or more. 89% say they pause at least 2x daily to repeat demonstrations students did not see the first time**.

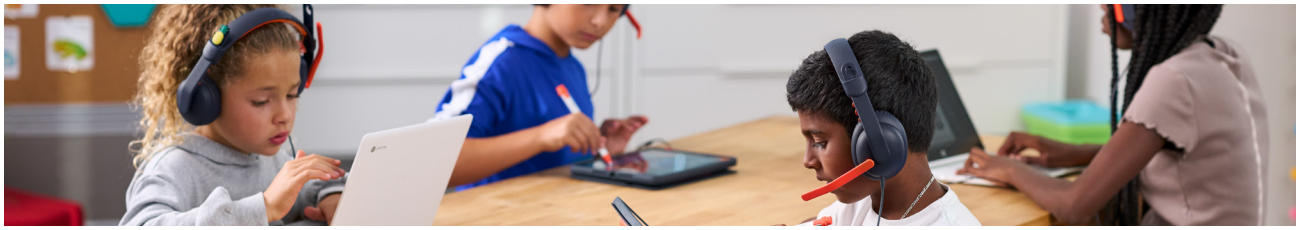
**On any given day, how many times do you typically repeat demonstrations and instructions to ensure they are seen and heard?**



These repetitions and stoppages not only slow down instruction, but they also distract students. The typical teacher estimates that **it takes 2 minutes to regain students' attention each time a lesson is paused** to repeat a demonstration or instructions. For a teacher who pauses for this reason 3x a day so students can hear, and twice daily so students can see, **30 hours of instructional time is lost to distraction during a typical 180-day school year**. Beyond the numbers, these challenges can contribute to overall educator fatigue and add another dimension to broader learning disruptions.

> *"As educational leaders, it's essential to introduce teachers to the vast potential of educational technology, empowering them to harness tools specifically designed to enhance instructional time and maximize their effectiveness in the classroom."*
>
> **- JASON SORICH, PRINCIPAL AT LEDESMA ELEMENTARY SCHOOL**

The more often teachers need to repeat instructions and demonstrations so all students can see and hear what's going on, the longer it takes them to regain students' attention. While teachers who pause instruction fewer than 3 times weekly need a median of 2 minutes to regain students' attention each time, **those who pause instruction more frequently than that say it takes 3 minutes—or 50% longer—to get the class back on track after each interruption**. Effective edtech tools can be an important part of the solution when students can't hear or see during instruction.



## Helping Students Hear the Teacher

Headsets with microphones can make classroom conversations and instruction more audible by amplifying the voices of teachers and students. They can also reduce noise-related distractions during testing and other situations in which students work independently during class time.

**"A good pair of headphones can be a game-changer for students who need to focus in noisy classrooms or during online lessons,"** a school technology director in Pennsylvania wrote in response to an open-ended survey question. "It's not just about blocking out distractions, but also about immersing themselves in the learning experience."

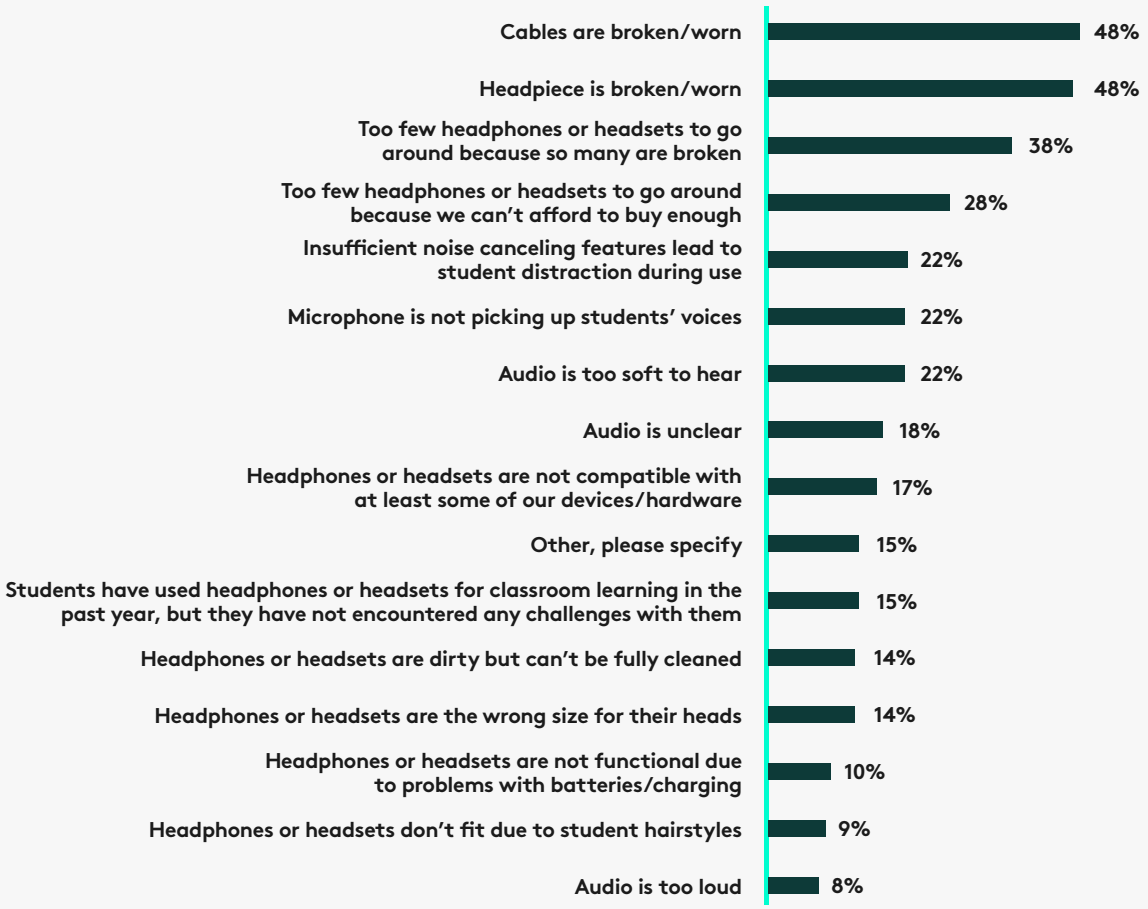
Survey results suggest that headsets are widely available, with 85% of survey respondents saying their students have used this technology for learning in the past year.

However, headsets are not always well-designed for a classroom setting.

Among respondents whose students use headsets for learning, 85% say they have encountered technical challenges.

"Our school offers headphones to each student at least once a year, but due to budgeting constraints, we are unable to afford great-quality headphones," a Florida elementary school teacher wrote in response to an open-ended survey question. "This presents a problem because they break easily, and students cannot replace them. When doing work on the computer that requires audio, this becomes disruptive, and the students cannot stay focused."

**In the past year, what challenges with headphones or headsets have you or your students encountered at school? Select all that apply.**

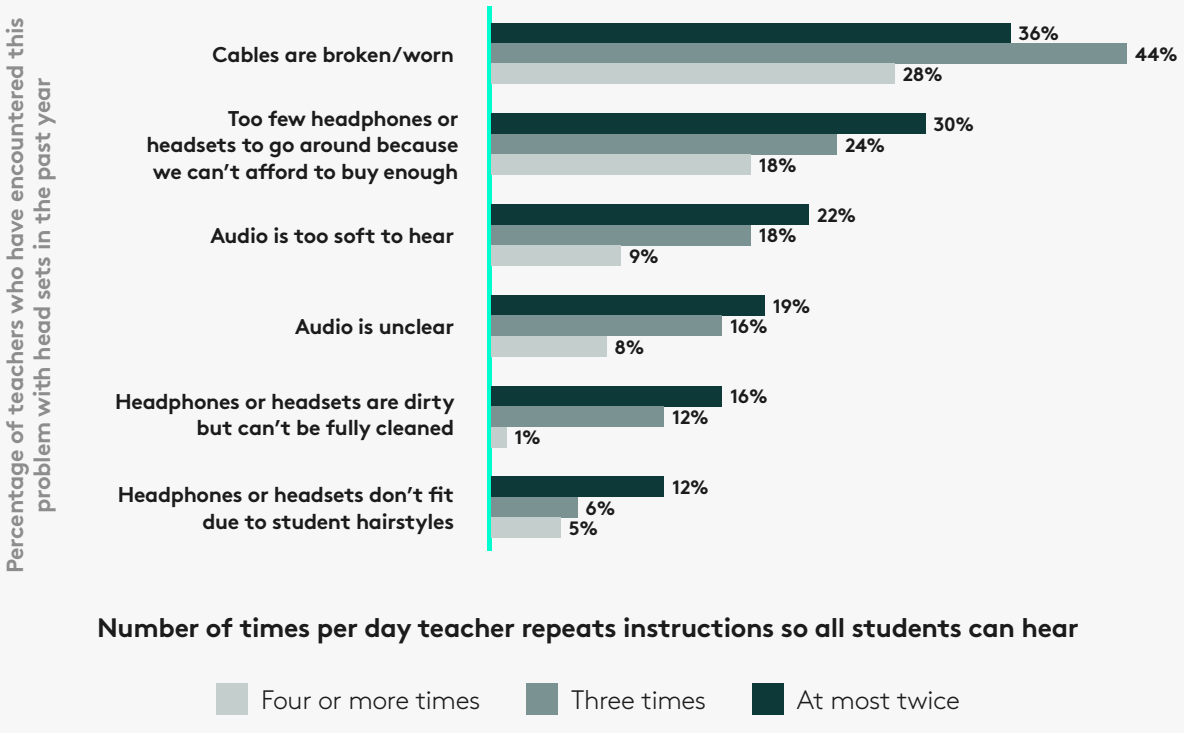



**Broken or malfunctioning cables are among the most common headset problems**, with roughly half of educators saying they have encountered this challenge. 36% of teachers who repeat instructions 4x daily or more report this problem, compared to 28% of teachers who repeat instructions up to 2x daily. Other headset challenges more common among teachers who repeat instructions more than 2x daily include audio that is soft or unclear, dirty headsets that can't be cleaned, headsets that fit poorly, and the inability to afford enough headsets to go around.

*"Understanding user feedback is crucial. We need to know what teachers, schools, and districts are seeing on the ground in order to design generations of ever-improving solutions."*

**- JAMES WILEY, VICE PRESIDENT, PRODUCT AND RESEARCH AT LISTEDTECH**

## Headphone-related challenges that are more common among teachers who repeat instructions three or more times a day so all students can hear




## Helping Students See the Teacher

Vision problems are an ongoing challenge in classrooms and schools.

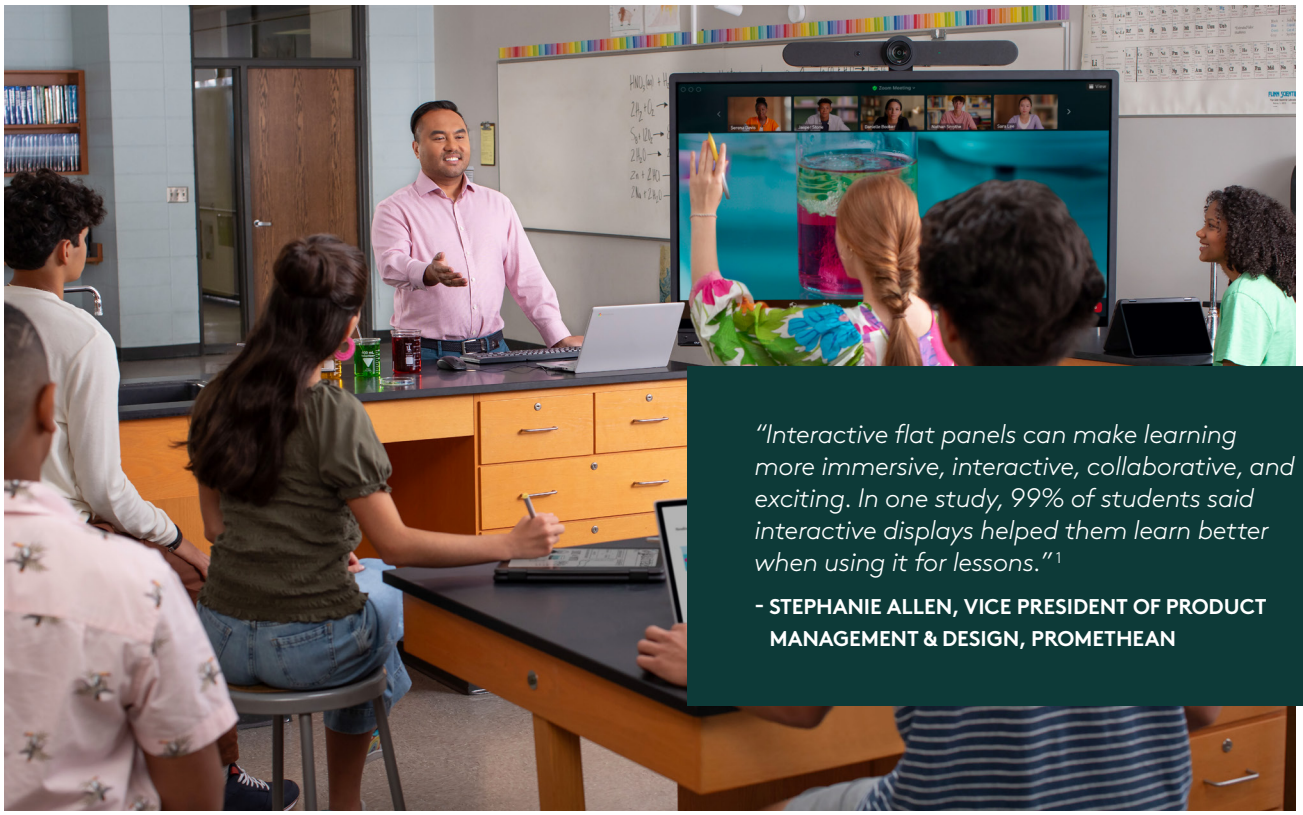
Video conferencing cameras, content cameras, and interactive flat panels can help by magnifying demonstrations and content. **77% of teachers who use these tools say this technology reduces the amount of time they spend moving around the classroom and repeating demonstrations so that all students can see**.

However, 1 in 5 teachers in grades 3–12 say they lack access to a document or whiteboard camera, or a smartboard or an interactive flat panel. Only 10% of classrooms in the typical district or school are equipped with a whiteboard camera, and 50% offer content cameras, according to survey respondents.

An older technology that can help increase visibility—the projector—is more common than cameras. A previous survey commissioned by Logitech and conducted by the EdWeek Research Center in 2022 found that **66% of teachers describe projectors as "must-have" hardware accessories in their classrooms**.

In a response to an open-ended survey question, an elementary technology teacher in New Hampshire explained how this technology helps her ensure that her instruction is visible to her students:

"I have a portable projector that I use to project my lessons on a basic, everyday whiteboard. While projecting my screen, I demonstrate to students what I would like for them to do in my technology classes, repeating and modeling multiple times. I keep my own device on a single-device rolling podium ... **that puts my individual screen and keyboard in a visible position for students no matter where they are seated**."



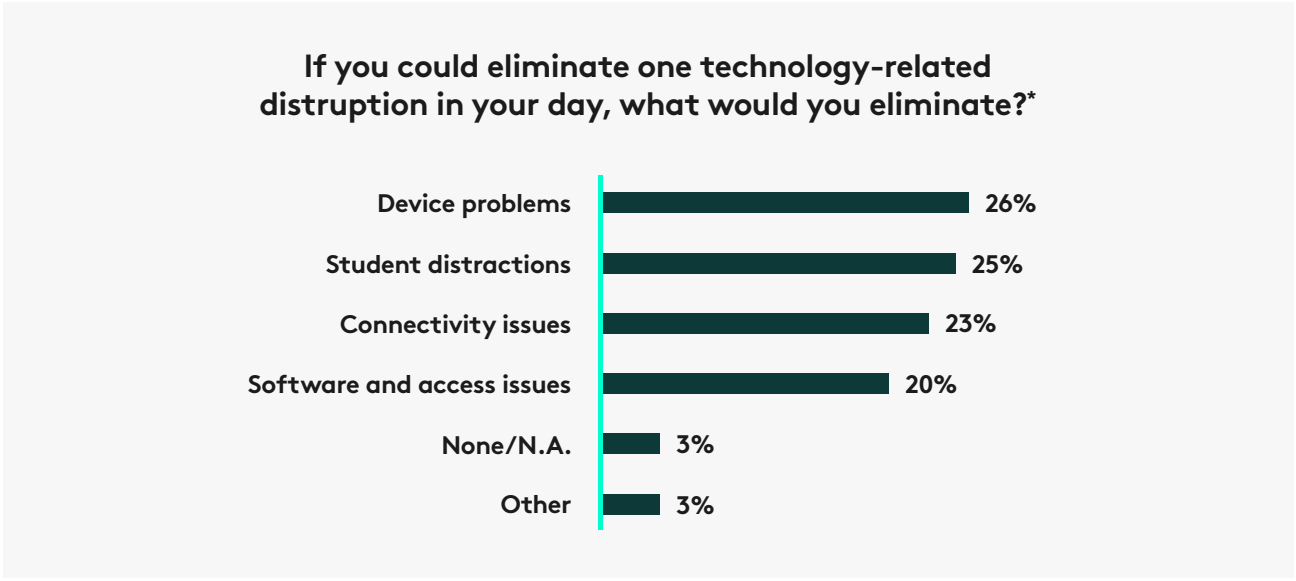
*"Interactive flat panels can make learning more immersive, interactive, collaborative, and exciting. In one study, 99% of students said interactive displays helped them learn better when using it for lessons."*[1]

**- STEPHANIE ALLEN, VICE PRESIDENT OF PRODUCT MANAGEMENT & DESIGN, PROMETHEAN**

## Without the Right Edtech, Disruptions Can Skyrocket

Edtech has the potential to restore learning time not only by making instruction more audible and visible, but by making devices easier for students to use for seatwork, testing, and other classroom tasks. But devices can also present challenges and cause disruptions.

When asked to identify the technology-related disruption they would want to eliminate from their day, **26% of educators pointed to problems with their devices, such as glitching, uncharged or broken devices.**




*400 responses to this open-ended survey question were coded to the categories in the chart above. Categories were created based on the disruptions respondents mentioned most often. Respondents are teachers.

**85% of survey respondents say that hardware accessories such as headphones, styluses, and mice can increase instructional time by making devices like Chromebooks, iPads, tablets, or laptops easier for students to use**. 69% say students face more learning disruptions when they try to use software, apps, or devices without the relevant hardware accessories.

*"When hardware accessories work as they're intended, this can greatly enhance the ease of use, benefits, and versatility of devices. The Works With Chromebook program was created to expand access to these tools, instill purchase confidence, and offer students the best tech-rich learning experience possible by making accessories just work."*

**- KEVIN NGO, PROGRAM MANAGER, WORKS WITH CHROMEBOOK, CHROMEOS PERIPHERALS**

## Equal Accessory Access Reduces Disruption

The right types of hardware—including mice and headsets—make a difference. But they aren't always available to educators in sufficient supply for their classrooms. For example, **teachers who say their schools cannot afford to buy enough headsets for all their students spend 5x as long troubleshooting tech problems (10 minutes daily) than do those who have a sufficient number of these items (2 minutes daily)**.

Yet less than half of teachers and tech directors report that all of their students have access to functioning hardware accessories during class.

> *"Technology can enable educators to create powerful learning experiences for their students and support effective instruction, under the right conditions. To realize technology's full potential, districts and schools should create internal structures to consistently collaborate across departments, and include teacher and student representatives to understand their perspective in the classroom. This allows teams to identify their ideal conditions and establish a repeatable, systematic approach to tech integration that leads to effective use."*
>
> **- SIERRA NOAKES, DIRECTOR OF EDTECH EVALUATION AND CONTRACTING AT DIGITAL PROMISE**

Improved access to hardware accessories has the potential to make things easier for the administrators who are responsible for technology in schools by reducing the amount of time they spend on troubleshooting. **School-based technology directors say they spend about 10 minutes a day—the equivalent of 30 hours per school year—troubleshooting tech** problems that occur when devices are used without mice, styluses, headphones, and other hardware accessories. In some schools, this problem is compounded by the fact that tech directors double as technology teachers:

"I teach computer and STEAM lab and middle school math as well as holding the technology manager position for the entire school," a technology director/teacher in Kentucky wrote in response to an open-ended survey question. "My classes often get disrupted from other classes having tech issue[s]."

Hardware accessories can address some of these tech issues by making devices more functional and easier to use.

And, in responding to an open-ended survey question, a school technology director in Pennsylvania suggested that these tools have the potential to play an even more important role:

> *"Success in digital learning often comes down to insightful tools that bridge the gap between a technology and a user, so that they can create, engage, and explore in a way that feels intuitive."*
>
> **- HENGJIE WANG CEO & CO-FOUNDER, KAMI**

**"I've noticed that having the right hardware accessories can make all the difference in [students'] learning journey**. Access to quality hardware accessories like mice and styluses can enhance the overall learning experience. These tools can help students interact with digital content in a more intuitive and engaging way, making complex concepts more accessible and fun to learn. By providing students with the right hardware accessories, we can help bridge the gap between technology and learning, setting them up for success in the digital age. It's a small investment that can make a big impact on their educational journey."

## Conclusion

Instructional time is a precious resource. Routine interruptions threaten to chisel away at this limited commodity. Edtech that is easy to use, beneficial for seeing or hearing, or both can restore lost instructional time. Solutions including hardware accessories may maximize valuable classroom time by reducing the need to repeat demonstrations and instructions. However, an ongoing risk is that the technology itself can lead to time loss if teachers cannot access a sufficient number of the right tools. But when every teacher and student has access to the right edtech, these tools have the potential to disrupt disruptions.

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[1] Amolo, Sharon & Dees, Elizabeth. (2007). "The Influence of Interactive Whiteboards on 5th Grade Student Perceptions and Learning Experience." Valdosta State University.



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