

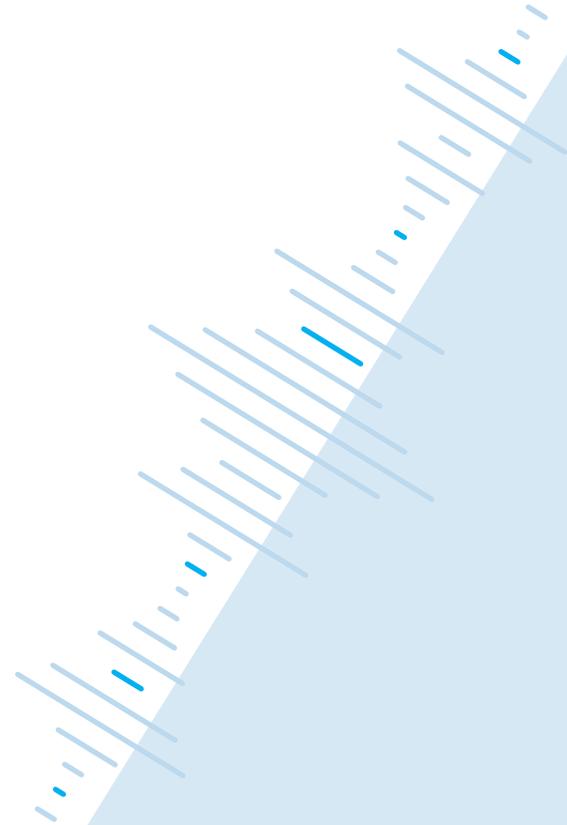
REIMAGINING EDUCATION WITH HIGH-QUALITY AUDIO

*Drive Student Engagement and Focus While Learning
from Anywhere*

FROST & SULLIVAN EBOOK
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THE FUTURE OF EDUCATION

Education today is undergoing a fast and fundamental change. Responding to the massive impact on the education system, brought on by the COVID-19 pandemic, requires making long term, sustainable changes. The future of education must be resilient, equitable and high quality.

Out of crises often emerge new opportunities for innovation and improvement. The long term implications to invest in better education for every child hinge on making huge leaps that enhance learning in more **connected**, **digitized** and **efficient** ways.



TECHNOLOGY

Technology is more essential than ever to share information and to keep students connected and engaged—in physical classrooms and virtual environments.



UNIVERSAL ACCESS

Universal access to consistent, high quality education is essential to ensure no child is left behind.



FLEXIBILITY

Flexibility is necessary to ensure continuity amid any setbacks and potential disruptive events.

We should seize the opportunity to **FIND NEW WAYS TO ADDRESS THE LEARNING CRISIS** and bring about a set of solutions previously considered difficult or impossible to implement.

—United Nations, 2020

THE HYBRID LEARNING IMPERATIVE— IMPROVING ENGAGEMENT AND INCLUSIVITY

As many K-12 schools and higher education institutions across the globe transition to remote learning, the need for rapid digital transformation has never been greater. Even before COVID-19, digitization of education was already underway. The pandemic, combined with significant advances in digital education technologies, has become a catalyst for transformative changes in the future of education.

Adoption of robust online learning tools has become a table stake today. It will not only prepare educational institutions better for disaster recovery but also become a sustainable means to improve the quality and reach of education.

In some regions, like the US, the flexibility of in-person and online learning is also helping educational institutions to comply with inclusion and diversity mandates. In addition, positive student experiences impact many for-profit as well as public educational institutions that must meet average student attendance and grade/scoring thresholds to ensure funding.

Regardless of the path that each educational school system takes in the future, the impact of digital technologies in **ENABLING STUDENTS TO STAY CONNECTED, ENGAGED, AND ENERGIZED** has reshaped learning forever.

As students and educators are transitioning to remote learning, the adoption of video conferencing, learning-management platforms, and virtual assessment tools has skyrocketed. Beyond replicating a physical class/lecture through audio video capabilities, learning institutions are now using a range of collaboration tools and engagement methods that promote inclusion, personalization and intelligence.

HYBRID LEARNING: CHANGING THE WHAT, WHY AND HOW OF EDUCATION



EQUITY AND INCLUSION for the most vulnerable and marginalized population groups, including those with disabilities and the socioeconomically disadvantaged.



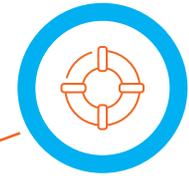
IMPROVED QUALITY AND RELEVANCY of education via curriculum that can be easily updated in real time rather than reprinting expensive and environmentally unfriendly textbook materials; frequent and effective online teacher training.



LOWER COSTS with significant savings in physical resources required lowering tuition; travel time savings for students as well as educators.



GREATER ENGAGEMENT with the use of multimedia technologies that make learning more robust and interactive providing students with opportunities for flipped classrooms and blended learning.



DISASTER RECOVERY and resiliency in times of crises.

NAVIGATING THE NEW NORMAL IN EDUCATION



ONLINE LEARNING GAINS POPULARITY

FINDINGS FROM A UK BASED SURVEY



Only a little over **50%** of the students invited to attend schools after reopening did attend **classes in-person**

Online learning has made it easier to recruit teachers

Job applications increased by

5X



As a result of the shift to online learning, the percentage of senior leaders and teachers

planning to leave the profession has halved since 2019

FINDINGS FROM A US BASED SURVEY



61% of students surveyed said, when properly designed, **online courses can be just as legitimate** as face-to-face courses



Two thirds

of students said they would **welcome more online education** after the pandemic ends



Approximately **half** of the professors responded that **online education is an effective teaching method**, and they are better prepared to teach online, **up from approximately 38% in May**

Source: National Foundation for Educational Research (NFER) survey, July 2020

Source: Chegg, October 2020

WHY ROBUST AUDIO MATTERS

The success of online learning has three critical technology elements—video, audio and content sharing. While video and content have played a pivotal role in ensuring the teacher student connection, the power of high-quality audio has often been overlooked.

Effective learning hinges on student engagement regardless of where learning takes place. In a recent survey of educators, more than 50% responded that “keeping students engaged digitally” and “student participation” are the top challenges they faced during remote learning. (Microsoft, 2020)

Poor Audio Exacerbates Learning Fatigue

The shift to online learning has not been without challenges. Long hours of online classes mean students need to focus harder to process non-verbal cues like facial expressions, body language and the tone and pitch of the voice; often leading to learning fatigue. Poor audio can be a further drain on students' emotional and mental well-being.

Be it audio delays from bad internet connectivity or multiple participants speaking at the same time or background noises coming from each participant's location, audio challenges can have a negative impact on health by increasing the stress levels. Learning in the classroom, physical or virtual, in the presence of noise is more difficult than ever. Students learning from their homes or dorm rooms with noisy backgrounds or in cafés or classrooms with surrounding chitchat, struggle to concentrate and get tired easily. The result—students lose their focus, motivation and cognitive processing.

BAD AUDIO LEADS TO BAD OUTCOMES



The implications of poor audio are far too many. **HIGH PERFORMANCE AUDIO IS FOUNDATIONAL** for effective interactions, focus and knowledge retention.

Source: EPOS: Understanding Sound Experience Study, 2020

HARNESSING THE POWER OF HIGH-QUALITY AUDIO— ALLOW EVERY VOICE TO BE HEARD

Remote learning requires creating a compelling, engaging, and inclusive environment. The need for better connectivity and robust audio, video devices to enable seamless teaching and learning has never been greater.

Today, many educators and students are engaging in remote learning under challenging circumstances. Lack of quiet surroundings negatively impacts their teaching and learning experience. For online learning, laptop audio can often lead to a broken experience. Moreover, many rely on low-cost consumer-grade headsets that deliver sub-par audio and lead to frustrating experiences. In addition, consumer grade headsets have questionable durability and performance and can't be supported or managed centrally.

In recent years, [the significant benefits associated with pairing professional headsets with next-generation learning software](#)

[and services have created a firm foundation for educators and students alike.](#) As education leaders and technology decision makers prepare for the future of learning, they are making crisp and clear audio experiences a high priority for ensuring engagement and better learning.

Hybrid learning means students and teachers can be anywhere on a given day—in the classroom, at home, in the cafeteria, or on the go. In addition, many schools are currently operating with new protocols in place that involves cohorting, alternating schedules, and staggered schedules. The constant change of locations means there is a greater degree of instability and variability in their learning environments. Professional headsets provide stable experiences that, regardless of the level of noise, ensure uninterrupted teaching for educators and strong student engagement.

GOOD QUALITY AUDIO ALLEVIATES COMMUNICATION PAIN POINTS

37%



believe that the right audio tools can **reduce miscommunication** to a great extent

40%



feel that they would significantly **reduce the need to repeatedly clarify** information

37%



believe good audio would **prevent participants from missing critical information** to a great extent

Source: EPOS: Understanding Sound Experience Study, 2020

CREATE BETTER SOUND EXPERIENCES REGARDLESS OF WHERE LEARNING TAKES PLACE



IN-CLASSROOM

- Drive more engaging individual and small group learning on classroom computers and tablets
- Allow students to learn at their own pace
- Improve focus and reduce distractions to others
- Allow teachers to be clearly heard throughout the room

VIRTUAL

- Increase engagement and focus
- Offer clarity and clear recognition of verbal instructions
- Give all students a voice
- Eliminate miscommunication and repeated instructions

BLENDED

- Let everyone hear and be heard, no matter where they are located
- Drive efficiency and coordination as instructors can speak to all students at the same time, or individually
- Foster participation allowing remote students to more fully participate in activities and discussions
- Reduce background noises and other distractions from remote students, allowing in-class student more concentration

GROWING CHOICE AND VARYING CONSIDERATIONS

The choice of professional headsets continues to increase, expanding the array of offerings that best fit the changing needs of educators and students. A wide array of solutions, that allow for clear, crisp audio by varying personas, are providing educators and students more choice.

Universal Considerations for Best-in-Class Audio

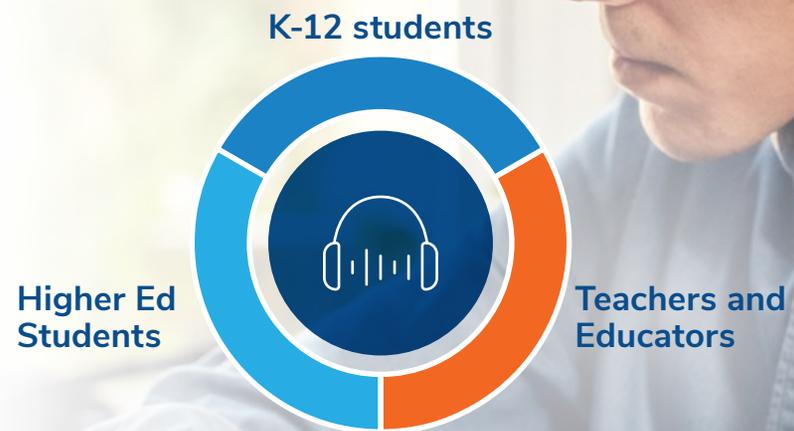
HIGH-QUALITY—Regardless of where and when learning takes place, today's Active noise-cancelling (ANC) headsets tune out background noise to offer clear audio and a distraction-free experience.

NATURAL EXPERIENCES—The right headsets fill the gap with an easy, natural audio that does not tire the users and yet gets them as close as possible to the in-class experience.

EASY TO USE—As students and teachers grapple with multiple devices and technologies for remote learning across smartphones, tablets, computers and software they look for simple, easy to deploy and use headsets that intelligently pair with multiple communication solutions.

ERGONOMIC DESIGN—Today's learning requires several hours of headset use, sometimes from different locations, which means students and teachers need superior lightweight comfort and portability.

MOBILITY—Remote learning allows unprecedented mobility. The demand for wireless connectivity continues to grow along with technology improvements in wireless headsets that allow users to integrate their mobile and PC-based communications easily for both learning as well as personal use.



A WIDE ARRAY OF SOLUTIONS ADDRESS AUDIO NEEDS ACROSS USER SEGMENTS

K-12 STUDENTS

Ensure Unencumbered Concentration

- ▶ Light weight and comfortable headsets for multiple hours of wear
- ▶ Wired headsets for stationary work to help keep young students at (tethered to) their desks
- ▶ Flexibility
 - Available in multiple wearing styles, single or double ear
 - Available at affordable price points
- ▶ Integration with cloud-based management software for classroom devices

HIGHER ED STUDENTS

Deliver Form + Function

- ▶ Durable to be carried anywhere (in classrooms, dorm rooms, student and media centers, coffee shops, at home, on the train)
- ▶ Connect to multiple devices (computers, tablets, mobile phones) via USB, Bluetooth®, and audio cables
- ▶ Multiple form factors and colors—headband, ear hook, neckband, single and double ear, in-ear, on-ear, over-ear at multiple price points to fit all budgets
- ▶ Leading edge technology—speakers, mics, software, supporting materials
- ▶ Fast charging with talk-time that lasts all day
- ▶ Cloud-based management software for university computers (e.g., in labs, libraries and media centers, etc.)

TEACHERS AND EDUCATORS

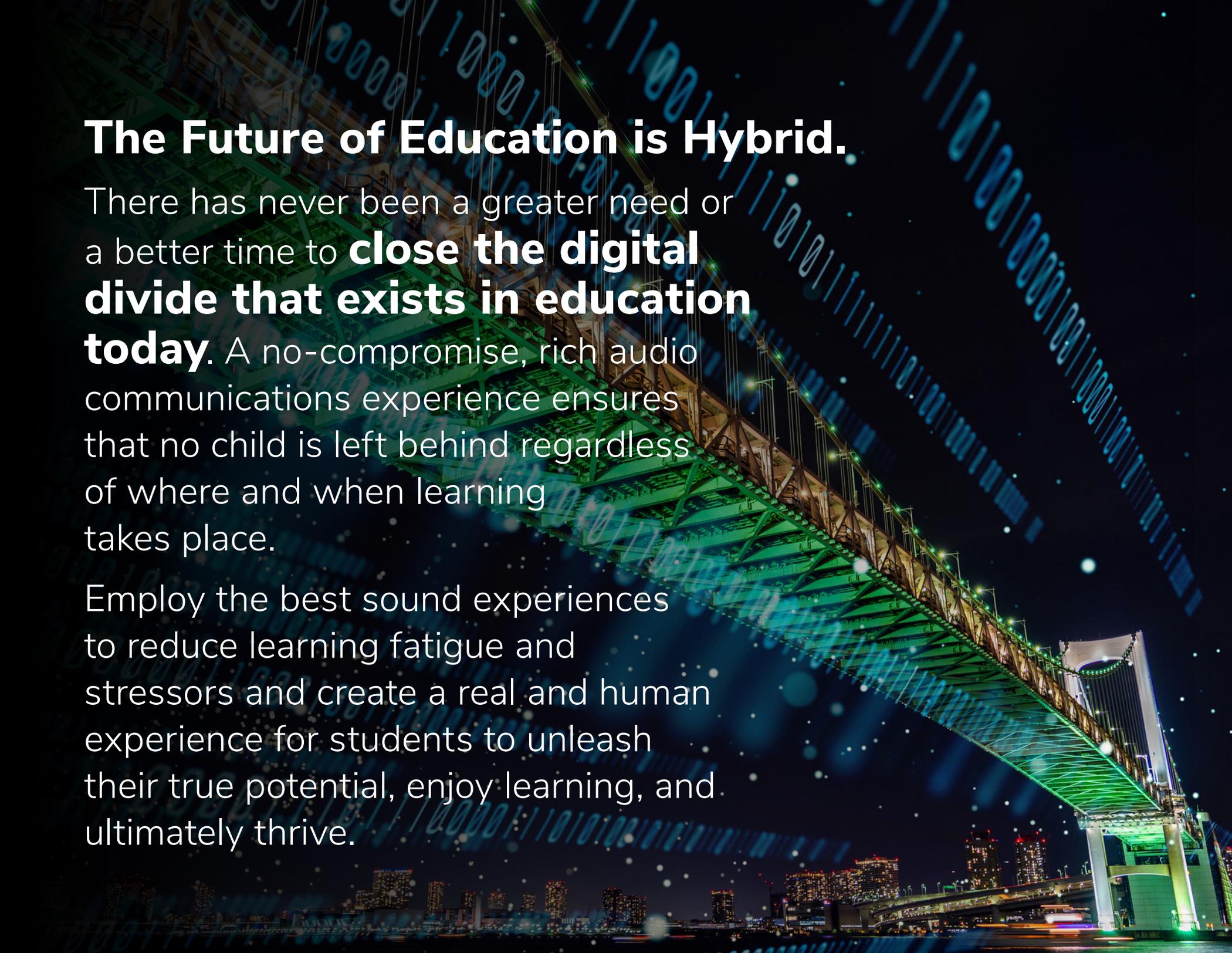
Prepare for the Next Era of Learning

- ▶ Anytime anywhere—Headsets when in front of screens; Speakerphones when in front of class and screens
- ▶ Flexible connectivity for wired and wireless—easily connect via USB or Bluetooth
- ▶ Wide audio pick-up range
- ▶ Mobility for use anywhere
- ▶ All day talk-time and long battery life
- ▶ Any-to-any compatibility and tight integration with multiple software and cloud services (Microsoft, Google, Zoom)
- ▶ Unified management and analytics for educators to get IT support, including product upgrades and proactive problem resolution
- ▶ Leveraging the latest developments in AI and machine learning that separate human voices from extraneous sounds

The Future of Education is Hybrid.

There has never been a greater need or a better time to **close the digital divide that exists in education today**. A no-compromise, rich audio communications experience ensures that no child is left behind regardless of where and when learning takes place.

Employ the best sound experiences to reduce learning fatigue and stressors and create a real and human experience for students to unleash their true potential, enjoy learning, and ultimately thrive.



VENDOR SPOTLIGHT: EPOS

Better Learning Begins with High-Quality Audio

Today's leading-edge audio devices and software are transforming the learning experience. As a pioneer in auditory experiences, EPOS has come to be recognized as a flagship provider of high-end audio and video solutions for business professionals, online learning and the gaming community.

EPOS builds on the legacy of Sennheiser Communications, the former joint venture between Sennheiser Electronics GmbH & Co KG and Demant A/S and is today part of the Demant Group—a world-leading audio and hearing technology group. As such, it builds on more than 115 years of experience of working with innovation and sound.

EPOS' industry leading audio communication solutions span a complete portfolio of easy to use, flexible endpoints, native integration, unified management services, and AI and analytics capabilities. From remote learning to meetings its comprehensive line of wired and wireless headsets are allowing educational institutions around the world to communicate and collaborate better.

EPOS offers options for every student, educator and administrator.



**ADAPT
100 & 300 SERIES**

For K-12 and higher education



**IMPACT 100, 200, 600,
MB PRO SERIES**

For K-12 and higher education



**EXPAND
30 SERIES**

Speakerphones for instructors

EPOS: CHECKING ALL THE BOXES

- ✓ Flexibility
- ✓ Durability
- ✓ Multi-year warranty
- ✓ Active Noise Cancellation
- ✓ Passive noise dampening
- ✓ Echo cancellation
- ✓ Soft on-ear acoustic comfort
- ✓ Bluetooth support
- ✓ Long talk time
- ✓ Security and sound safety with EPOS ActiveGard
- ✓ Centralized support, manageability, provisioning, reporting & analytics with EPOS Manager
- ✓ Compatible with leading UC platforms including Microsoft Teams, Zoom and Google Meet

CALL TO ACTION: TRANSFORM LEARNING FOR THE FUTURE

As K-12 and higher education leaders and technology decision makers you must ensure that you adapt to tomorrow's hybrid learning environments by empowering each educator and student to hear and be heard and to stay engaged and energized.

Invest today in a unified set of audio solutions that do not compromise on performance, quality, flexibility and support and offer:

- ✓ Ease of use with exceptional audio experiences that ensure engagement and inclusivity
- ✓ The benefits of video-first unified communications (Microsoft Teams, Zoom and Google Meet) combined with HD audio quality
- ✓ Student safety for volume bursts and comfort for minimized fatigue
- ✓ Cost effectiveness for end-to-end enablement across the educational system
- ✓ Flexibility and scale to evolve with changing needs
- ✓ Any-to-any capability and compatibility with leading education and collaboration software
- ✓ Remote device management and control for IT admins



For more information visit

www.eposaudio.com/en/dk/audio-in-education



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