LEADERS IN
DIGITAL TRANSFORMATION
OF EDUCATION
The COVID-19 pandemic showed just how much things can change – and how quickly. Like everyone else, learning communities scrambled to adapt. System leaders responded with energy and creativity in the face of a historic shift to remote and hybrid learning. For many, it was the ultimate test of efforts already underway to transform pedagogy, culture and technology. Their achievements light the way forward as schools continue to prepare students for the unknown careers and challenges of the future.

Spurred by an unprecedented global event, the new era of digital learning is here, for better or worse. The pandemic sent many education systems headlong into an incredible and often difficult journey. For every challenge along the way, there have been many gratifying successes. Those with a higher focus on digital transformation were better positioned for this extraordinary crisis, yet what carried many education systems through was creativity, ingenuity and a willingness to learn.

It’s time to build on the accumulated knowledge of the last years and move forward to create a future where every education system thrives under duress, and where not even a pandemic can derail learning.

With the help of strong partnerships and trust, education leaders can use proven best practice to drive the holistic and systemic change that’s needed to power post-pandemic economic recovery.

For governments, this is an important inflection point. As they invest to rebuild their economies, they will emphasize job creation in future-facing industries and initiatives that speed their transition to a knowledge-based economy. Learning technologies will be vital to achieving these objectives. Successfully deployed, they are a powerful way to improve education at every level and develop a skilled workforce that can compete globally. Yet in many nations, digital transformation in education lags far behind industry.

Change is a difficult process, particularly in large, legacy environments like national education systems. Setting a strategy and bringing everyone on board is not easy. But as the pandemic experience has demonstrated, necessity is a powerful motivator to transform education in and beyond the classroom. And when it comes to preparing for the unexpected, there’s no better time than now.

To achieve true digital transformation, there is a need for large-scale collaboration to bring the best ideas, tools, and partnerships forward. All stakeholders must align to enable change: government leaders, curriculum publishers, equipment manufacturers, technology providers, school and university leaders, and the educators themselves.

Empowering students and teachers in an uncertain world
Leaders in Digital Transformation of Education is a movement founded on international cooperation, facilitating dialogue, and the sharing of best-practice. The aim is to accelerate digital transformation in a collaborative environment, supported by insights from the technology industry.

Leaders in Digital Transformation of Education helps nations at every stage of their transformation journey to learn from each other and navigate their way forward. At the core of the movement lies the belief that every education system can benefit from insight into the world’s most successful strategies – whether to accelerate transformation or to expand an advanced strategy.

To realize this mission, education leaders who share a passion for student learning must rally to redefine education in the digital era.

The program is anchored by the Education Transformation Framework, a summary of decades of evidence-based research that identifies the critical components required for successful system-wide digital learning transformation in education.

Microsoft was founded on the principle that people can do remarkable things when technology is within reach. As devices and technology become more accessible and capabilities grow, new education models will unlock learning for all students. Closing the skills gap and empowering every student on the planet to achieve more.

As the COVID-19 pandemic swept the world, every part of human life was affected. Schools and universities closed. Whole cohorts went online to learn, and education was transformed overnight. This unusual event highlighted a simple but often forgotten truth: that the one constant in life is change.

Even before the pandemic, the fourth industrial revolution was ushering in profound systemic change and helping to enable digital transformation in education. A more ubiquitous and mobile internet, smaller and more powerful sensors, robotics, artificial intelligence and machine learning – all these offer exciting possibilities for educators and students.

And the skills they help to sharpen are vital in a world where old professions constantly give way to new ones as industries evolve.
Technology: challenge & solution

In this world, new technologies will dramatically change the nature of work across all industries and occupations. Every worker will be expected to adapt continuously. Learning new skills will be essential to staying relevant and employable. And every nation will need a dynamic education system that makes such re-skilling more accessible to address the economic challenges presented by an aging population.

It’s a big responsibility – and one where technology can be a powerful aid. Traditionally, education systems have been slow to realize the potential of technology to rethink education and create more efficient and effective schools.

But the benefits are persuasive: immersive technology experiences enrich teaching and learning and can help to nurture both emerging skillsets and the mindset needed for an ever-changing job market.

Better use of data can help school leaders reduce costs and improve student learning outcomes. And with the right digital infrastructure in place, learning itself is more resilient to systemic shocks like the pandemic, helping students participate during natural disasters, bad weather or illness.

“When I think about data – actionable, relevant data – making decisions without the data is a little bit like driving without windshield wipers, because you can’t see well enough to go as fast as you could, to get where you need to go, if you don’t have a clear view.”

Cathy Cavanaugh, Chief Experience Officer at The University of Florida Lastinger Center

Embracing new models for learning

Like most visionary changes, getting started is often the hard part. Many policymakers are uncertain of the right path to travel. And yet, all around the world, there are beacons of brilliance to guide us. Visionary schools, education systems and governments have embraced the promise of digital transformation of education with great success. Their learning has never been more needed as the world’s nations take steps to revitalize their economies.

These visionaries have created new models for teaching and learning that are flexible and personalized. They’ve shown how technology can help solve teacher shortages. They’ve tackled student dropout rates. They’re using data for better decision making and student interventions. And they’re using technology to teach problem-solving and creative and computational thinking, to better equip students for tomorrow’s economy.

Maximizing learning outcomes through digital transformation

The Leaders in Digital Transformation of Education program brings these visionaries together in a global movement to harness the power of learning technologies through public/private co-operation. Facilitated by Microsoft, Leaders in Digital Transformation of Education shares best practices through a forum of select global leaders and expert stakeholders to inspire nations at every stage of transformation.

This forum strives to help every learning community and nation build knowledge and human capital for the benefit of all.

It provides an environment where governments that share a commitment to the digital transformation of education can work together on joint projects and research and support each other in effectively implementing proven strategies. For nations just beginning their transformation, or looking to take the next step, Leaders in Digital Transformation of Education provides opportunities to learn from each other and to move forward with confidence.

Through the power of proven execution and collaboration, we’re building a holistic perspective on how to transform education through technology, and helping others put it into practice and drive systemic change.

“You can give people experiences that they just couldn’t have in the real world. We can take our students on field trips to the moon, into the heart of the sun. We can put them in little Shakespeare plays, all of which you couldn’t do in real life. So, we suddenly have technology that can enhance our students’ minds and broaden that experience.”

Paul Feldman, Chief Executive at Jisc
Leaders in Digital Transformation of Education is anchored by the Microsoft Education Transformation Framework - a research-based fast-track system-wide transformation plan and offered to governments globally.

Members of Leaders in Digital Transformation of Education may benefit from one or more of the program’s Transformation Accelerators, based on their goals and the specific challenges they face in their systems:

- **Education Data and AI**
  Promoting the effective and ethical use of data and AI in education, as well as developing modern data architectures for national and global education reporting and analytics.

- **Computer Science Curriculum Toolkit**
  Redesigning computer science policy, teaching, and learning.

- **Online Professional Development for Teachers**
  Remote training platforms and strategies designed for educators.

- **Showcase Education System**
  Developing innovative model schools.

By participating in Leaders in Digital Transformation of Education, you will join an invaluable network of like-minded government leaders all focused on transforming education through digital innovation.

As a member of the Leaders in Digital Transformation of Education program you will gain:

- Improved information, ideas, and insights, with access to research, tools, and best practice.
- Greater efficiencies through collaboration opportunities for research and joint projects.
- Better understanding of global technology trends from the technology industry with the ability to identify new solutions required.
- Use of the collective wisdom of global education leader community and recognition for your work and contribution.
- Ability to lead in regional workshops and join a digital global network for ongoing conversation with government leaders.

“I’ve been having these conversations about technology adoption in education for many years and I think one of the reasons why it’s so difficult for governments and schools and even teachers to agree to use technology, rather than in other sectors where it seems to be a lot easier to adopt technology, is because there’s so much more at stake in education. We’re dealing with children’s schooling. A child only has one opportunity to have their education and we certainly don’t want to mess it up by purchasing and using technology that doesn’t work. So what governments and schools are rightly asking for is evidence that technology actually works. Whether it saves teachers time, whether it helps motivate students...”

Kristen Weatherby, Educational Consultant and Researcher
Here are some of the exciting digital transformation successes from leading countries.

**Senegal successfully delivers remote learning to its more than 3.5 million students**

Initially, Senegal’s partnership with Microsoft aimed to restructure and modernize the country’s National Education Information and Management System known as SIMEN, in order to address a geographically dispersed educational system that would often generate very different learning outcomes for students across school districts. With the onset of COVID-19, the plan shifted and the new platform quickly became the main vehicle for a statewide transition to remote learning, enforced by distribution of devices and Microsoft-supported training for teachers.

**Global private schools group Cognita drives learner-centered online solutions for its 55,000 students**

Cognita uses Microsoft educational technologies to empower its more than 7,500 faculty, staff, and administrators to create inspiring learning environments for students across 82 schools in 11 countries. During the COVID-19 health crisis, Cognita used its online platform to encourage collaboration between educators across the entire school network in order to generate quick responses to fast-paced changes, establishing student wellbeing and the continuation of learning as its main objectives.

**UAE Ministry of Education expands distance learning initiative using Microsoft Teams**

At the start of 2020, the UAE Ministry of Education was able to expand their smart learning ecosystem – originally built to facilitate home schooling and children with severe illnesses – by integrating Microsoft Teams as a remote learning tool for teachers and students to use during COVID-19 restrictions. A consistent training program for teachers along with customer support for Teams users ensured that the plan worked, with Teams reaching an average of approximately 350K active daily users.

**The City of Helsinki maximizes learning outcomes using AI and learning analytics**

Helsinki, Finland’s biggest school system, has been using AI and learning analytics to advance its digitalization strategy since it was first developed back in 2016. The city has chosen Microsoft Azure as the “brain” of its AI hub in order to build a secure and integrated system and leverage Azure’s extensive range of AI and other useful components. Another reason for the choice was Helsinki’s commitment to the ethical use of AI and transparent learning analytics, that ultimately would enable students to unlock their full potential.

**Nebraska Department of Education’s new cloud-based system generates actionable insights for schools**

Using Microsoft Azure, the Nebraska Department of Education (NDE) has created a cloud-based Statewide Longitudinal Data System (SLDS) in order to consolidate datasets and streamline data flows between hundreds of public and private entities. The new platform employs data analytics to deliver actionable insights to state, district, and school leaders, administrators, and educators, with plans to introduce AI, machine learning, and predictive analytics for timely interventions.

“Remote learning has required us to bring all of these different global perspectives in the area of ed tech and using technology together, to improve the learning experience for our children everywhere.”

Margaret Kubicek, Director of Communications at Cognita
Join the Leaders in Digital Transformation of Education program

Visit Aka.ms/ldte

“Our goal is that every student will achieve his or her full potential, this is why we do everything. All students come from different backgrounds and have different skill sets. The education system has to personalize learning and needs knowledge to be able to address this. Finland isn’t a country rich in oil or other natural resources; we have to build knowledge capital amongst our citizens. Our goal is not to lose any student in the education process.”

Pasi Silander,
Head of ICT Development Programs, AI & Data Analytics,
City of Helsinki, Education Division