

# Reimagining higher education as a student-centered experience



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### Introduction

The global public health crisis has demonstrated that higher education can be agile and responsive. The decision to close campuses and shift to remote learning may have been swift, but the impact on constituent expectations and campus experiences will be long-lasting. Faculty continue to enhance their teaching practices for the post-COVID classroom, and institutional responsiveness has gone beyond teaching and learning to innovate throughout the student lifecycle—from remote recruiting to virtual graduation—and across all aspects of campus operations, such as crowd intelligence or COVID contact tracing. With heightened confidence in their ability to adapt and broader receptivity on campus to embrace change, institutions are accelerating their shift to student-centered engagement.

Unlike remote learning, student-centered engagement was not catalyzed by campus closures. Institutions had started many initiatives well before the pandemic. Higher education stakeholders worldwide have begun to develop a compelling and widely held vision for a true student-centered ecosystem—a model where students have agency over their lifelong learning journey and stewardship over their unified learning record, where they can permit their credits and competencies to be shared, stacked, and discovered to match them with opportunities that may advance their academic and professional goals. Many envision this model as a <u>learning GPS</u> that guides each learner from where they are to where they hope to be, aligning the experiences they seek to personalized routes.

Though this is not a novel vision, it has proven to be elusive. Our learning roadways have not been mapped. The mile markers of progress and even the rules of the road have yet to be defined. There are many cultural and technological shifts that need to happen before this vision can be realized, and we recognize the need for patience and partnership during the journey of tackling these challenges and implementing the changes necessary to give learners this power.

In the interim, there are rich possibilities for making institutional processes more studentcentered and engagement more personalized. This paper explores the "why" behind the urgency of adopting student-centered models, shares a perspective on how institutions can use technology to advance personalization, and explains what Microsoft is doing to enable all higher education institutions to engage and empower a diverse new generation of learners.

### Why student-centered learning is the future of higher education

#### The meaning of "student-centered"

Adopting a student-centered approach is not new, but it is necessary. Today's higher education students are more diverse and digitally minded than ever before, representing an increasing variety of backgrounds, abilities, races, ages, and income levels. They are used to digital engagement in other areas of their lives-entertainment, retail, and social media—and expect the same from education. A report from the Economist Intelligence Unit (EIU) finds that "the Generation Z student population is the most dynamic, with the highest tech expectations."1 Students' digital profiles follow them wherever they go, learning their preferences and behaviors to offer more customized products, experiences, and recommendations. As the commercial



world becomes increasingly centered around consumer data and personalization, students are beginning to desire the same experience in their learning environments.

"Student-centered" will take various meanings across departments and may take on different names, but regardless of how it is labeled, the goal is to optimize the outcome and experience for the individual by meeting the needs of their life stage and lifestyle. We are learning from university research on the effectiveness of user-centered design, and many institutions are identifying various personas and their associated journey maps. This requires institutions to make technology investments to become more agile. Adapting to students is a mindset shift that stands in contrast to historical investments in areas like SIS, ERP, and LMS that prioritized preserving institutional process and tradition.

<sup>&</sup>lt;sup>1</sup>Elattening the Multimodal Learning Curve: A Faculty Playbook | Economist. Intelligence Unit (2020)

The degree to which institutions can quickly, easily, and affordably tailor their processes and messages to match the personal needs and expectations of individuals—students, faculty, alumni, and even <u>parents</u> from the diverse communities they serve—will define the level to which they can build affinity to attract the learners, faculty, grants, and gifts that contribute to their reputation.

### Evolving student expectations and demographics

The benefits of a student-centered ecosystem last far beyond graduation, helping to prepare students for an evolving and increasingly digital workforce. Around the globe, technological skills are in higher demand than ever before, and employers are looking to the next generation of students to close that gap—with 87% of executives and managers anticipating or already experiencing a skills gap.<sup>2</sup> More than 800 million people require new skills for their current jobs, and a majority of students require preparation for jobs that do not yet exist.<sup>3</sup> Given that the skills gaps is projected to cost the United States \$1.2 trillion in lost economic output over the next decade, educational attainment and skills development will be critical to restoring the economy.<sup>4</sup> Students expect higher education to prepare them for this changing world.

And those students are becoming more diverse. The profile of the "average" college student is changing. The traditional, "collegeage" student population is on the decline, expected to peak in 2025.<sup>5</sup> Older adults and other lifelong learners are a growing demographic critical to closing the skills gap. Racial and ethnic diversity are also on the rise, with the percentage of undergraduate students of color increasing from 29.6% to 45.2% between 1996 and 2016.<sup>6</sup> Institutions are



<sup>&</sup>lt;sup>2</sup> How companies are reskilling to address skill gaps | McKinsey (Feb 2020) <sup>3</sup> Microsoft Global Skills Initiative | Microsoft (2021)

<sup>&</sup>lt;sup>4</sup>Projecting Future Skill Shortages Through 2029 - AAF | American Action. Forum (July 2019)

<sup>&</sup>lt;sup>5</sup>Higher education enrollment: Inevitable decline or online opportunity? | McKinsey

<sup>&</sup>lt;sup>6</sup> The Changing Student Demographics in 2020 | Comevo (Jan 2020)

seeing an increase in first-generation college students, now representing nearly one-third of higher education student populations,<sup>7</sup> as well as learners of different abilities, who represent 1 billion people across the globe.<sup>8</sup> These demographic changes mean institutions need to invest in understanding and responding to the unique needs of these students.

Personalized experiences that address these needs are particularly important at a time when the abrupt shift to remote learning has taken a heavy toll on student engagement and academic preparedness. Despite instructors' heroic efforts to rapidly translate the classroom experience online, an Economist Intelligence Unit report commissioned by Microsoft found that 60% of faculty have witnessed a drop in engagement and student focus since the beginning of the pandemic.<sup>9</sup> 60% of students do not feel academically prepared for the year ahead, and nearly half of students are extremely concerned about their job prospects post-graduation.<sup>10</sup>

### Security threats and financial pressure

Not only do higher education institutions need to meet the needs of a diverse set of learners, but they also have to confront the fact that the education sector is a rich target for cybercriminals. The threat to data privacy and security has been further complicated by remote learning. In September 2020, Microsoft Intelligence reported that the education industry accounted for 62% of malicious attacks,<sup>11</sup> with cyberattacks on institutions exposing over 1.3 million identities in 2019 alone.<sup>12</sup> With data breaches costing the industry \$3.9 million on average in 2020,<sup>13</sup> this growing threat indicates a strong need for institutions to prioritize privacy, security, and compliance to protect student and institutional data, academic research, and institutional reputation.

Underlying these challenges, higher education must also manage financial pressures accelerated by the pandemic. According to a report by NPR, enrollment in institutions of higher education fell 11% between 2011 and 2019,14 with a 9.5% decline in international student enrollment from 2014 to 2018.<sup>15</sup> That trend accelerated rapidly during the 2020-2021 academic year when enrollment in undergraduate programs fell by 3.6% in one year alone—representing 560,000 students.<sup>16</sup> Hardest hit were students graduating from high-poverty high schools, with a 32.6% decline in graduates attending higher education institutions.<sup>17</sup> Students are less likely to put down high tuition fees for remote options, so institutions need to figure out how to continue attracting students in this new paradigm. Ultimately, it's a student-centered ecosystem that helps institutions achieve that differentiation.

<sup>10</sup> <u>Ibid.</u>

<sup>&</sup>lt;sup>7</sup>2020 Trends in Higher Education | Hubspot (2020)

<sup>&</sup>lt;u><sup>8</sup>Global Diversity & Inclusion Report | Microsoft (2020)</u>

<sup>&</sup>lt;sup>9</sup> Flattening the Multimodal Learning Curve: A Faculty Playbook | Economist. Intelligence Unit (2020)

<sup>&</sup>lt;sup>11</sup>Microsoft Security Threat Intelligence | Microsoft (Sept 2020)

<sup>&</sup>lt;sup>12</sup> Education Data Breaches Double in First Half of 2017 | Campus Technology (Sept 2017)

<sup>&</sup>lt;sup>13</sup> <u>Cyberattacks Pose Credit Risks for Higher Education | Inside Higher Ed (Mar</u> <u>2021)</u>

<sup>&</sup>lt;sup>14</sup> 'Losing A Generation': Fall College Enrollment Plummets For 1st-Year Students | NPR (Dec 2020)

<sup>&</sup>lt;sup>15</sup> 2020 Trends in Higher Education | Hubspot (2020)

<sup>&</sup>lt;sup>16</sup> <u>'Losing A Generation': Fall College Enrollment Plummets For 1st-Year</u> <u>Students | NPR (Dec 2020)</u>

<sup>17</sup> Ibid.



#### How we can respond

Achieving a student-centered ecosystem requires the traditional blend of people, process, and technology. While process and technology can be tightly linked, there is no question that people come first. Leadership must drive the commitment to studentcentered practices, and cross-functional groups must work together to understand the segments they seek to serve and allow the aspirations and frustrations of those personas to drive their reimagined offering. With the importance of people and process established, this section will focus on the core technologies that enable organizational agility and support personalized engagement.

### Agility is not a product, and personalization is not an app

Higher education institutions are accustomed to thinking of technology as a set of products. New devices are procured, specific applications are deployed. This is a key area where a mindset shift is necessary: the goal

is not to add another disconnected data set, nor to ask users to learn another new tool. A better approach is to unify the data you already have, extract insight from that data, and then deliver it in a timely and relevant way to the people who will benefit most within the tools they already use. The goal is to turn your "back-end" into an intelligent infrastructure and add dynamic engagement into the "front-ends" people already use. For instance, this infrastructure could recognize a sudden change in a student's activity and send an alert that appears in the LMS, asking the professor to note any observations. This example involves no net new app acquisition and no net new tool for the professor to usebut new capabilities and more personalized engagement are enabled.

### Data intelligence drives personalization

Establishing this intelligent infrastructure requires institutions to develop a holistic picture of learners, which in turn requires technology that unites data across systems and over time. To understand the use of data intelligence in the context of education, it's useful to examine how the nature of data has evolved over the past couple decades. At the most basic level, data is a *system of record*—a collection of the information institutions know about their students, faculty, and staff, along with operational data. Institutions use this information to tailor interactions with constituents, such as targeted email or SMS communication. At this level, the data platform becomes a *system of engagement*, tying data to tangible actions.

The next level is a *system of influence*, which generates insights based on available data and helps to predict future patterns. Institutions can arrive at data-driven conclusions about which students might be at risk for falling grades or how retention rates might fluctuate. This represents an impressive level of analytical power compared to a mere system of record, but it still doesn't approach a true *system of intelligence*. At this final level, insight and action become automated. The system recommends actions based on data-driven insights and then takes those actions where possible. Whether that means automatically generating a study package customized to a student's specific needs or prescribing steps that might help improve retention and completion, the point is that the system automates response. This is the foundation for genuinely personalized experience.

### A system of intelligence requires unified data

The quality of insights enabled by data intelligence are heavily reliant on the data provided. Institutions looking to improve their AI and analytics capabilities should first examine their data estate. When student data is siloed or fragmented, it's difficult to gain a complete picture of a student, let alone generate useful insights and recommendations. Without a unified data platform, you're stuck at a system of engagement or even a system of record.

Once you do unify your data, you can tap into enormous potential that many industries have already capitalized on. The use of data in sectors like retail and entertainment has put pressure on higher education to make the most of data as well. Students expect the



same innovative engagement they get from entertainment and retail—like tailored shopping or streaming recommendations—to carry over to education. By bringing disparate information together from multiple sources and imbuing that data with intelligence, institutions can build a system of intelligence and gain a 360-degree picture of their students across the lifecycle.

With a system of intelligence in place, institutions can give students the digital engagement they expect, helping to maintain affinity and mitigate the lack of engagement brought on by remote learning. From innovative hybrid learning experiences to cutting-edge tools that make AI accessible to everyone, the possibilities for developing a truly studentcentered ecosystem are endless.

## What the Microsoft solution looks like

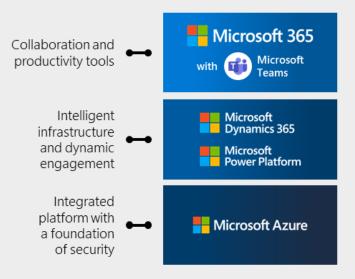
Developing that student-centered ecosystem requires an agile technological foundation. Microsoft is deeply committed to higher education and helping students, faculty, and institutions around the globe succeed. Microsoft is well-positioned to support institutions for three key reasons:

- It is our <u>mission</u> to "empower every person and organization on the planet to achieve more." Connecting learners with education is critical to realizing that vision.
- 2. The global skills gap immensely impacts Microsoft's growth potential. Microsoft's business results are directly tied to the global supply of technical and non-technical talent with twenty-first century skills.

 We are in a singular position to help. Microsoft's global presence, established footprint in both consumer and enterprise technology, and relationships with institutions worldwide uniquely position us to connect learners with lifelong education opportunities.

Microsoft is unique in that we are the only vendor that provides the intelligent infrastructure, the dynamic engagement layer, and the collaboration and productivity tools for teaching, learning, and work in a single, integrated platform with security at its foundation. Our integrated cloud brings your data together securely and privately to organize, automate, and improve student interactions and experiences.

With that in mind, let's dive into the technology that supports a student-centered ecosystem, spread over three key areas: data-driven tools built on an integrated cloud, an engaging collaboration platform for teaching and learning, and a foundation of security and accessibility.



#### Microsoft's integrated cloud

### Data-driven tools built on an integrated cloud

#### Integrated cloud and unified data

Microsoft's idea of an "integrated cloud" fundamentally means that our productivity, collaboration, and business application suites have been built on the same underlying data platform in Microsoft Azure. Cloud solutions cannot be stitched together with complex middleware layers, they must be built from the ground up with intent. Because Microsoft's cloud was built with intent, it reduces operational cost, drives greater agility, and allows a level of personalization that is unique in the industry. With data-driven personalization as the North Star, Microsoft enables you to spend more time improving KPIs and less time working on integrations that may fall short of enabling your institution's goals.

Microsoft's comprehensive set of cloud solutions (Microsoft Azure, Microsoft Dynamics 365, and Microsoft 365) provides a unified experience. All the tools you need are integrated, and users get a robust set of productivity tools including a central hub for work and learning in Microsoft Teams, which connects users to an array of apps and tools. Because our comprehensive technology stack covers everything from cloud storage to collaboration to productivity to ERP and CRM, you can reduce cost and complexity across the board. All of our technologies interoperate naturally, with analytics integrated across the entire cloud.

Our common data model, Dataverse, integrates with your existing systems. Start small with one workload as a trial and add other workloads over time, or deploy the full solution all at once. Whichever route you choose, we customize deployment for your systems and requirements. Dataverse includes a base set of standard tables that cover typical scenarios—such as student status, program level, course history, area of interest, and many more—but you can also create custom tables specific to your institution. Both standard and custom tables within Dataverse provide a secure, cloud-based, and central storage option for your data.

Along with Dataverse, School Data Sync (SDS) is another crucial solution for unifying your data. SDS reads rosters from your Student Information System and creates classes and groups accordingly in Azure Active Directory, Microsoft Teams, Intune for Education, and third-party applications. This automated class structure is particularly beneficial for remote and hybrid learning, since it allows IT teams and faculty to avoid manual generation and updating of class teams.

On Microsoft's integrated cloud, your data becomes readily usable for a variety of applications, including Microsoft Teams, Dynamics 365, Power Platform, and more. With your data speaking a common language, developing cutting-edge education solutions and harnessing analytics becomes easier than ever before. Course-specific chatbots, artificial intelligence, customizable apps, and other innovative tools become accessible to those outside the walls of the IT department.

#### Get a 360-degree view of students

When you connect your SIS and LMS data to Dynamics 365, every enrolled student has a record including contact information, notes, academic history, and more. The relationship feature shows connections to users like advisors, parents, and professors, and the record also includes risk profiles and the option to send notifications to students who might be faltering before it's too late. Similarly, Insights in Microsoft Teams uses at-a-glance data views to help faculty catch up on students' activity, from assignment turn-in to class conversations to social-emotional status. With spotlights on important trends, the Insights dashboard saves time on planning, feedback, and intervention where needed.

This visibility is available across the entire student journey. Recruitment dashboards track the flow of applicants, including a lead record for every applicant with status, lead score, and desired major. Access to transcripts, test scores, and more are available under a single header, plus contact info and notes entered by other CRM users. Once students are enrolled, comprehensive information about course participation, grades, and extracurricular activity becomes available. And once students graduate, Dynamics 365 also provides a database to keep track of all donors and alumni. Each entry has a dedicated profile page with contact information and preferences, such as whether they prefer to be contacted by phone or email. From the first time a prospective student engages with your institution until long after they graduate, you can keep track of who they are, what they need, and how they're progressing.

### Quickly spin up apps, chatbots, and other solutions tailored for education

A 360-degree view of students is just the beginning of the possibilities facilitated by the integrated cloud. Power Apps, Power Automate, and Power Virtual Agents enable faculty, admins, and students—even those without formal coding experience—to create low-to-no-code apps and chatbots tailored for their courses. From tracking class resources to measuring engagement levels to auto-sending notifications and calendar events, the options are limitless. Solutions can be as simple as a flow that notifies a professor when a student completes a quiz, or when augmented by Azure's Al capabilities, as advanced as an



Al-infused bot that leverages Azure machine learning to create personalized study packages.

Complementing an existing Dynamics 365 instance, you can also leverage installable education scenarios with extensions, dashboards, sample data, and other tools. These scenarios include: an advisor dashboard that provides top and bottom performing students and at-a-glance views of students in need of support; an accomplishment extension to capture extracurricular work; and rich reporting on internships, grants, and scholarships. Another key scenario is the student portal, which you can customize to match your institution's brand. Students can access the portal to search the knowledge base, submit help tickets, register for classes, view completion toward program requirements, connect with advisors, apply for scholarships, download key resources, read campus updates, and more.

#### Redirect resources toward students

Ultimately, Power Platform and Dynamics 365 save time and money on operations by making decisions easier and automating processes, so that you can focus resources on student success and wellbeing instead. In addition to aggregating student information, Power BI visualizes key metrics and trends from across your institution—including departmental budget use, grant and donor statistics, email campaign engagement, and more—to provide predictive insights in accessible dashboards. This allows institutional executives and other stakeholders to make decisions based on actionable, readily available data.

The other Power Platform components also offer a range of possibilities for making operations more efficient outside the classroom. For instance, the free financial impact Power App collects data pertaining to sponsored research programs, enabling researchers and faculty to submit the projected loss effort and reason by grant, employee, or pay period. The Return to School solution, including portals and dashboards built through Power Apps and Power BI, helps schools reopen responsibly, intelligently monitor risks, and complete contact tracing. Other universities have used Power Virtual Agents to make chatbots that walk students through course modules and give prompts for studying. These are just a few examples of how Power Platform can streamline processes across campus or in the digital space.

Finally, Dynamics 365 offers a full suite of CRM and ERP solutions to simplify administration plus education-specific tools like business partner dashboards, sample dashboards and Unified Interface apps, and system views for entities like students, faculty, and courses. Dynamics 365 Customer Service enables admins to take support requests from students, faculty, employees, parents, alumni, and even business partners; each ticket contains a wealth of data to help resolve the case, including timestamped notes and actions. Together, these solutions free up time for faculty and staff to focus on students instead of repetitive administrative tasks.

> Northumbria University implemented Dynamics 365 to make data accessible, save time for IT and support staff, and reimagine the student journey through a modern portal.

"We have seen a huge impact for staff and students. The Student Portal usage stats are huge, and the students are going to the self-service options first, which is exactly what we want them to do."

> **Camilla Gregory,** Senior Business Analyst

### An engaging collaboration platform for teaching and learning

#### Integrate with your LMS and other thirdparty apps

Even before the pandemic forced a shift to online classes, remote and hybrid learning were becoming a critical part of higher education. The flexibility of virtual options creates a more inclusive learning experience, helping students surmount obstacles like weather, illness, and limited transportation. After the pandemic ends, hybrid learning infrastructure will continue to be an important differentiator for institutions. For many, that infrastructure is spread across a variety of point solutions. For instance, you may use a standalone app for virtual classes and video conferencing, and that app may not integrate smoothly with your LMS. With faculty relying on a range of thirdparty apps and productivity tools, it can be confusing for students to keep up with all the technology required for their course load.

Microsoft Teams simplifies the experience by bringing the apps you need together into one place. Taking advantage of hundreds of connectors built specifically for Teams, students and faculty can access third-party apps like Flipgrid, Adobe Creative Cloud, Quizlet, SurveyMonkey, and many other relevant tools directly from the Teams interface. They can also open Teams meetings from learning management systems like Canvas, Blackboard, Schoology, Brightspace, and Moodle. And the Microsoft solutions discussed earlier, including custom Power Platform apps and automations, are also available with Teams.



### Access a complete virtual classroom and collaboration space

In addition to integration with thirdparty apps, Microsoft Teams functions as a virtual classroom in its own right. The video conferencing capability enables live class sessions for up to 1,000 students, complete with features like meeting chat, hand-raising, custom backgrounds, and live captions. Faculty can present slideshows and other content or use Microsoft Whiteboard and OneNote to write notes and sketch ideas. Innovative views like Together Mode make students feel connected, simulating the experience of an in-person classroom.

Outside of class sessions, students and faculty can communicate via chat, either in one-on-one conversations or in channels auto-generated by School Data Sync for the course in question. You can also build hands-on virtual labs using Azure Lab Services and surface them in Microsoft Teams. These labs can be accessed on both desktop and mobile, allowing for experiential learning even when students are remote.

Beyond class sessions and chat, Teams also offers a full assignment workflow. Faculty can assign tasks, post readings, build quizzes, and easily manage assignment timelines, instructions, and resources. The grades tab allows faculty to track student progress, fill out feedback and grade points for specific assignments, and return grades to students. Because Teams integrates with productivity apps like Word and PowerPoint, instructors can add comments to files or make edits without even leaving Teams.

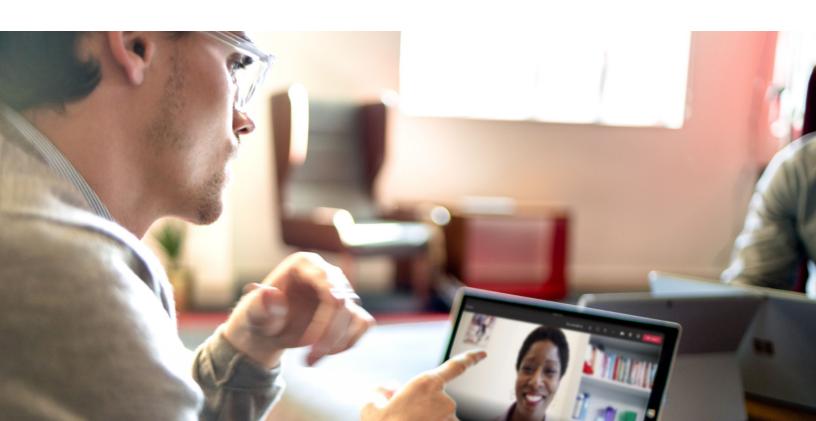
For students, these features are perfect for live collaboration on projects or social

activities such as campus clubs, student government, and extracurricular activities. Whether students need to collaborate on a group project, coordinate schedules for a club event, or poll a large team, they can do it all in Teams. The integration with Outlook's calendar means they can view upcoming classes, school activities, and other events in a single view.

#### Give students AI-driven career guidance

Students need support finding an academic path that matches their interests and translating that path into marketable skills for the real world. On the institutional side, career offices need support scaling their services to a broad and diverse student population while personalizing guidance to individual students. With Career Coach, an app built directly into Microsoft Teams and powered by LinkedIn, students are empowered to plan and direct their own career paths with tailored guidance matched to their individual strengths, interests, and needs. Starting in their first year of studies and extending through employment, Career Coach helps students discover their career path in parallel with their studies, developing realworld skills while building their career network, from day one.

While career departments may vary in their regional or subject focus, Career Coach provides equitable access to broad career resources by empowering students to build comprehensive profiles and career searches based on skills, field of study, industries, companies, and locations. In concert with institutional guidance, Career Coach helps students find relevant courses at their institution and through Microsoft Learn, with seamless integration support for LinkedIn Learning. These free online courses teach the latest technological skills, allowing students to earn certifications and develop the competencies they need to thrive in an increasingly digital workforce. Once the right courses and credentials are matched to a student, Career Coach provides guidance on building a network for advice and support while recommending activities to connect with classmates and alumni. By personalizing network-building support for all students, Career Coach improves equitable access to



invaluable career connections, improving academic outcomes while helping close the skills gap.

Microsoft mines data from LinkedIn to understand career pathways, so that insights can be directly incorporated into an institution's daily collaboration environment. This equips learners with the ability to manage that information under a lifelong personal account that aggregates information with other learning experiences to build a comprehensive competency profile. Learners can share this profile to discover new employment and education opportunities, growing and repeating this cycle throughout their education and career. Microsoft's proven ability to support hundreds of millions of users and securely connect much of the world's population with education and employment opportunities is truly unique.

<u>Florida State University's Campus</u> <u>Reimagined Initiative</u> transformed the student experience with collaboration through Microsoft Teams and engagement solutions through Power Platform.

"It made just so much more sense to incorporate Teams into the class, and there's so much more flexibility. You know, every app that you create is like recreating the wheel. With Teams, we decide what we want to do, and then we find the technology that can support that. . . Teams created this broad palette of possibility that we can draw from, and it has been a phenomenal resource."

#### Dr. Solveig Brown

Campus Reimagined's Learning and Assessment expert

### A foundation of security and accessibility

#### Security, privacy, and compliance

As cyber-criminal threats grow more sophisticated and higher education institutions are seen as "soft targets," the need for new methods of detection and protection are more important than ever. The burgeoning challenges presented by the transition from solely on-campus learning to remote and hybrid makes it crucial for schools to overhaul their security models to protect students, data, and devices wherever they are located. Microsoft's zero-trust approach applies a strict protocol to all incoming access requests, whether in-network or out. The "never trust, always verify" stance assumes ill intent of every connection attempt, authenticates access based on multiple data points (user ID, device health, location), and encrypts every session start to finish. For schools to avoid attacks from digital criminals, this model is an essential way to safeguard identities, personal data, proprietary research, and more.

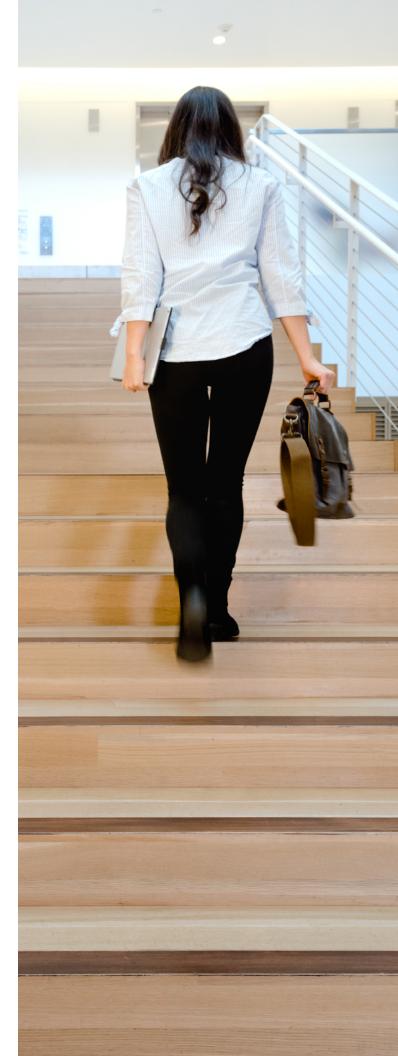
With over \$1 billion invested in security research and development per year and over 3,500 security experts working around the clock, Microsoft is dedicated to keeping your institutional data safe. Microsoft's integrated cloud platform provides a holistic portrait of your current security pain points and enables you to take quick action. Threat identification and termination can be customized and even automated, taking stress off busy IT teams. And Microsoft is dedicated to never use your data for commercial purposes, disclose it to the government, or even access it at all without express permission. You maintain complete control over where your data is stored and who gets to see it.

In addition, Azure offers the broadest compliance offerings of any cloud platform, with 90+ certifications for global and regional standards, including FERPA and HIPAA. Microsoft collaborates with governments and standards bodies worldwide to stay ahead of evolving regulations, doing as much of the compliance work as possible so that you don't have to. For the compliance work you are responsible for, Azure offers a range of tools and controls that allow you to easily search your data, pull information relevant for audits, maintain data hygiene, and simplify and automate governance institution-wide.

#### Accessibility and inclusivity by design

Microsoft solutions come with accessibility built-in, not bolted on. Windows, Microsoft 365, and Microsoft Teams come with a range of accessibility features to make learning easier for every student—including those who have learning disabilities, need accommodations for vision and hearing, or are English Language Learners.

- Vision: Screen-reading, speech-to-text, Seeing AI, Magnifier, and more
- **Hearing:** Live captions and meeting transcriptions with translation
- **Neurodiversity:** Immersive Reader, Focus Assist, and more tools to improve comprehension
- **Mental Health:** Minimize visual distractions and organize your to-dos easily
- Learning: Learning Tools to make reading and writing more accessible
- Mobility: Type with your voice or a pointing device, and click with your eyes through interoperability with eye tracking devices



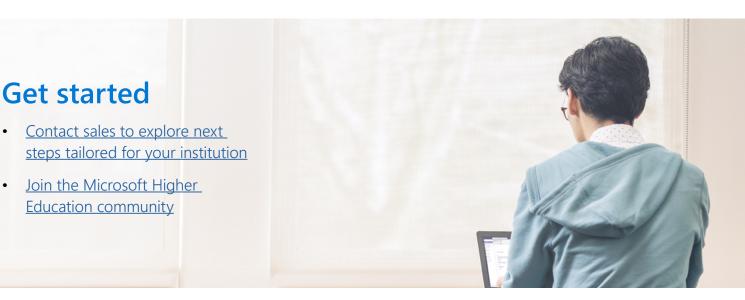
### Conclusion

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As we head into the next wave of higher education, many possibilities await us. The pandemic has brought endless challenges while also opening our eyes to new opportunities for more equitable, engaging, and fulfilling educational experiences. The student journey is expanding, creating the chance for every learner to become a lifelong learner as the world demands news skills and curiosity drives us toward deeper understanding. Traditional models for funding education are ripe for revision, encouraging new ways of valuing learning and democratizing access to skills, credentials, and experiences. Beyond graduation, employers and job seekers are eager to find their match, unveiling new opportunities for highlighting academic performance over prestige. And of course, the student-centered ecosystem we've introduced in this paper is just the beginning of an exciting future for personalized experiences in higher education.

At Microsoft, we're here to support institutions in navigating that future. Our mission for education is to empower every student on the planet to achieve more. We are deeply invested in education worldwide with decades of partnerships across institutions and over 150 million students and instructors using Microsoft Education products around the globe. Through our partnerships with nonprofits, we've donated over \$1.2 billion in software and services to over 90,000 organizations, and we've built more than 1,000 free learning paths to help teach technology skills. On the development team, we have over 400 engineers dedicated to building educationspecific technologies designed to keep learners, instructors, and institutions equipped with the most advanced education tools. Using Microsoft technologies as a foundation, you can rely on our vast partner ecosystem to extend your capabilities and build solutions customized for your needs. We're here to help you develop a truly student-centered higher education ecosystem, both in this new hybrid learning paradigm and in the future.



Microsoft Contributors: Suzanne Kalberer, Senior Product Marketing Manager, Education Rob Curtin, Director, Higher Education Jim Chase, Director of Business Applications for US Education

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