Empower Everyone to Build Transformative Solutions

Microsoft Power Platform for Higher Education
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The COVID pandemic accelerated transformation in higher education

The pandemic has accelerated the pace and expanded the scale of change across higher education. Coupled with budget uncertainties, institutions are now exploring new business models, embracing new ways of teaching, learning and working, and reimagining the campus experience. Higher Education leaders are leading transformation across teaching and learning, student engagement, remote operations, and a secure and connected campus experience.

Technology has a critical role in driving this transformation. Many are now using technology to rethink and redefine traditional teaching and learning approaches and undergo broader institutional innovation.

While this effort is still underway for many, its effects are already being felt, as 85% of faculty are convinced the pandemic accelerated the future of the online learning revolution by a decade.¹

Prior to the pandemic, 85% of higher education institutions did not systematically collect, integrate, and use data from across systems and sources and 83% of institutions largely relied on manual processes.

$4.5B was invested in education technology over the first half of 2020¹

85% of faculty are convinced the pandemic accelerated the future of the online learning revolution by a decade¹

References: [Economist Intelligence Unit, 2020]
To succeed, many institutions need agile solutions to tackle big challenges

• Many students are re-evaluating the value of paying full tuition for a hybrid learning experience. Today, students expect more personalized learning experiences, driven by innovative engagement from other industries, like retail. However, solely hosting lectures as online meetings is leaving some students behind and leading to almost half of students stating the pandemic has worsened their ability to remain engaged in class¹.

• While the COVID pandemic was a specific challenge, it won’t be the only unforeseen crisis faced by higher education institutions. To succeed and thrive, schools need to be able to better adapt and respond to any challenge. One way they can do so is by accelerating solution development time, so new apps and tools can be developed in weeks, rather than months.

• Institutions can find solutions to automate and optimize processes while maximizing resources. This is especially critical today, as colleges and universities around the world may be facing lower enrollment rates with the changing landscape.

References: ¹Economist Intelligence Unit, 2020
Now, there’s an opportunity to empower everyone to turn ideas into impactful solutions

The entire community can come together and find solutions to large, overarching problems faced by many colleges and universities today, such as:

- **Enhancing the digital class experience**, to improve student engagement and sentiment as hybrid teaching and learning continues to take place.

- **Improving institutional agility** by empowering everyone to quickly develop digital solutions without technical experience.

- **Optimizing operational and cost efficiencies** to maximize institutional resources and find ways to do more with less.
Institutions need a broader, more agile strategy that drives success when facing any future challenge.

There are different steps your university can take to continue to meet strategic outcomes while adapting to new challenges swiftly.

- Digitizing processes through new applications and solutions that work across devices.
- Automating previously manual workflows to find time for more high-value efforts.
- Leveraging and sharing live data insights through interactive dashboards that collect data from multiple sources.
- Using chatbots to quickly answer questions and provide key information at scale.
Put the power of technology in the hands of your entire community

The Power Platform is comprised of four products that enables everyone in your community to build, operate, and deploy configured solutions.

- **Power Apps**
  Create configured apps to simplify administrative tasks or classroom management.

- **Power Automate**
  Expedite time-consuming tasks like assessments, compliance, and more.

- **Power BI**
  Get actionable, data-driven insights about students or key school processes.

- **Power Virtual Agents**
  Employ chatbots to answer questions, learn from responses, and give insights.
Tackle complex problems quickly and easily by using tools compatible with Microsoft Teams

Dataverse for Teams is a low-code data storage that empowers everyone to build, integrate, and use Power Platform apps directly in Microsoft Teams, as well as:

- Unlock rich data types with enterprise capabilities, and one-click solution deployment.
- Share, find, and install configured Power Platform solutions directly from the Teams app store.
- Leverage built-in security and governance capabilities to ease work for IT admins.
- Use apps, chatbots, reporting, and, automations embedded in Teams, on any platform.
Power Apps makes it easier to build configured apps that meet the needs of students, faculty, and staff

Democratizing software development enables everyone across the institution to innovate and create new solutions to unique problems. Now, it’s easier to do so than ever with Microsoft Power Apps.

Power Apps empowers students, faculty, and staff to build powerful applications without software development expertise or a technical background. Instead of writing code from scratch, users can leverage pre-built application templates that can easily be configured for their institution with drag-and-drop simplicity, accelerating time spent developing and deploying apps from a matter of months to a matter of minutes.

With Power Apps, app developers can easily scale solutions to every member of the campus community with confidence knowing that the application governance, security, and quality are actively maintained. This helps effectively expand the bandwidth of your IT team, so that they can channel their efforts towards other higher-value tasks such as monitoring evolving digital environments and maximizing their institution’s security and privacy posture.

As many colleges and universities are continuing to use a hybrid learning approach, most institutions allow faculty, staff, and students the freedom to use their own personal devices for teaching, learning, and work. Since Power Apps, and all Power Platform products, work across platforms, all configured applications can be used on different operating systems, including Windows, Android, and iOS.
Developed an app that allows faculty researchers to report the progress of their research and grant portfolios and summarizes in configured dashboards using Power BI.

Purdue University

“With our new app built on Power Apps and Power BI, we could catch and report mistakes in real time, and faculty could report more accurate projections and the University could immediately see system-wide impact and make more informed decisions”

KEN SANDEL
Senior Director of Sponsored Program Services

Source: Purdue University Case Study
Power Automate democratizes automation across the institution

Many institutions have digitized previously manual processes; however, faculty and staff are still spending an unnecessary amount of time on tedious tasks that require multiple tools and software. With Power Automate faculty and staff can easily build automated workflows that require multiple digital tools.

This helps improve overall productivity and create more time for everyone to focus on more impactful activities. For example, faculty members can grade hundreds of assignments at the click of a button by developing an automated workflow, saving them time to focus on providing more individualized attention to their students.

Power Automate makes it easy for all members of your institution to quickly implement these relevant, time-saving solutions. Any Power Automate user can use plug-and-play Power Automate templates that have been designed by other institutions and curated by Microsoft for their own specific needs.

While many colleges and universities are working with a hybrid environment of both cloud and on-premise systems, Power Automate helps alleviate this burden. Users can bridge the gap and orchestrate automation between on-premise software and cloud-based services with over 350 API connectors included with the product.
Indiana University

“I built the ticket system using Power Automate, Forms, and Teams in literally two days. I didn’t want a single student to come to me after the exam and say, ‘I was out there by myself, and I couldn’t get help.’ Thanks to our solution, that never happened”

AMY KINSE
Senior Lecturer

Developed automated workflows that scheduled students for virtual exams, shared exam instructions, and routed all troubleshooting requests to IT teams.

- Used Power Automate to simultaneously post student schedules for eight virtual exam rooms
- Ensured troubleshooting requests were routed to the proper proctors through Power Automate
- Built entire solution in Microsoft Teams in two days

Source: Indiana University Case Study
Power BI empowers institutions to make data-driven decisions

Every higher education institution is collecting heaps of different data from students, researchers, grants, and more. To help better understand and use this data, Microsoft provides Microsoft Power BI, a collection of software services, apps, and connectors that work together to unify unrelated sources of data into coherent, visually immersive, and interactive insights.

Power BI fosters an engaging data experience for students, faculty and staff that empowers them to develop unique data connections, present data in new and exciting ways—like through interactive reports—and quickly identify anomalies all with little to no technical experience using drag and drop visualizations.

By having the entire community use Power BI, you can help encourage a data-driven culture in your institution where everyone is constantly developing data literacy and making decisions that are supported by real-time data.

Power BI not only gives a bird-eye perspective on the current conditions at an institution or in a classroom, but it also enables more granular and specific views on data sets. This can help give a narrow sense of how each individual student is progressing and allow for faculty and staff to intervene earlier when data indicates systemic and/or behavioral anomalies — such as attendance drops or suspicious digital activity — subsequentially keeping the campus community secure and successful.
Visualizes real-time data in configured dashboards to monitor student performance, diversity and inclusion, and the institution’s performance in comparison to a peers.

King’s College London

“The improved transparency has been extremely beneficial. It has led to a much deeper shared understanding of our organization and greater consensus around what we need to prioritize moving forward”

RICHARD SALTER
Director of Analytics

- Built a collection of interactive dashboards that could show various visualizations of school data, including bar charts, time series plots, scatter plots, and more
- Enabled over 2,000 staff members to use reports and insights for data-driven decision making in daily work
- Minimized time spent accessing data so analysts can spend more time on higher value efforts

Source: King’s College London Case Study
Power Virtual Agents simplifies bot creation for any education scenario

As universities continue to evolve their digital experience, it is becoming increasingly important to keep students engaged, connected, and informed at anytime and anywhere. With Power Virtual Agents, students can receive support and find the answers to common questions in a matter of minutes.

Power Virtual Agents makes it easy for institutions to quickly deploy chat bots across different digital hubs and spaces, like websites, collaboration tools, and on mobile devices. Users can confidently engage with these bots knowing they’ll understand and reply with natural language that’s easy to comprehend.

These bots can leverage built-in AI capabilities to pull any-and-all information from across the institution’s systems, such as documents, websites, and other relevant materials directly to compile pre-built topics and use them in responses. These capabilities also save teams time in both ramp-up and updates as the AI is constantly building new question-response relationships and expanding its knowledge base.

Power Virtual Agents bots also help facilitate navigation of knowledge libraries for the entire community. This allows users to enjoy chat environments that fast-track resolution for common requests such as IT troubleshooting, concept questions, and degree application information.
University of New South Wales

“The best way to inspire people to become motivated to learn is to create a collective community of people learning together. Teams provided the engagement, and rich communication followed.”

DAVID KELLERMAN
Senior Lecturer

Deployed an AI-enabled chat bot that recognized the relationship between concepts and answers to provide relevant answers and resources to student inquiries.

- Leveraged AI capabilities to build a bot that continuously learns in order to provide answers to more complex questions over time
- Forecasted student performance using Power BI to monitor real-time predictive analytics
- Automated creation of personalized study packs for each student based on predictive analytics and individual performance assessment

Source: University of South Wales Case Study
Partner with an organization deeply invested in education worldwide

1,000+ free learning modules to help teach technology skills.¹

400+ engineers building education specific technologies.

$1.4B+ in software and services donated to 90,000+ nonprofits.²

150M+ students, faculty, and teachers using Microsoft Education products worldwide.³

13M+ learners reached in the first three months of the global skills initiative.⁴

References:
February 2020

A Magic
Quadrant Leader in
Analytics & BI
Platforms*

*Gartner “Magic Quadrant for Analytics and Business Intelligence Platforms,” by James Richardson, Rita Sallam, Kurt Schlegel, Austin Kronz, Julian Sun 11 February 2020

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September 2020

Magic Quadrant for Enterprise Low-Code Application Platforms*


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Microsoft Positioned as a Leader in The Forrester Wave™: Enterprise BI Platforms (Vendor-Managed), Q3 2019*

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Microsoft Positioned as a Leader in The Forrester Wave™: Low-Code Development Platforms for AD&D Professionals, Q1 2019*

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Next steps

Learn more about how the Power Platform can help your institution by visiting the Power Platform web page.

Access self-guided training resources that help your educators, staff, and students learn how to effectively use Power Platform.

Share the Power Platform Udacity course that teaches attendees how to build an app without coding experience.

See what else you can do with Dataverse for Teams at Dataverse web page.

And you can start using Power Platform today by adding the products directly to Microsoft Teams.
Closing
# Power Platform Examples

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This is a small collection of examples of awesome solutions developed by institutions using Power Platform products. Feel free to click directly on the links to the right to see different examples.
Group messaging application

Six Degrees of Change created a mobile app that made it easy to draft and send personalized messages to groups of students.
Johns Hopkins COVID-19 dashboards

Johns Hopkins University is tracking and sharing real-time updates of new COVID cases and testing efforts for students, faculty, and staff.
University Waterloo used PowerBI to visualize how many people were on campus in a given building at all times of the day.
Tacoma Public Schools used Power Apps, Power Automate, and Power BI to better record, understand, and act on student reading assessment data.
Gonzaga University quickly created interactive reports and dashboards based on pre-existing templates to help surface key system information, including server health, update statues, and software inventory across the institution.
University of South Florida staff members developed a report to show where classes are located across campus to help better plan and coordinate student helper shift scheduling and swapping.
Hugh Baird College tracks key metrics across entire student lifecycle, from applications, to retention, to better predict student outcomes and understand when intervention may be needed.
Microsoft Return to School solution components

<Brief write up of what the R2S Solution is>

1. Faculty & Student Web App
   An app that allows faculty and students to receive day passes after meeting health pre-screen
   - Faculty
   - Of Age Students
   - Parents (on behalf of minors)
   - Contractors

2. Re-opening Operations App
   An app to manage and monitor school reopening and infections status
   - District or school re-opening team
   - COVID testing team
   - IT administrators

3. Dashboards & Analytics
   Visualize and track school openings, attendance COVID cases, and more
   - District & school leadership
   - District or school re-opening team
   - Parents & community
Faculty and student re-opening pass

As part of Microsoft’s back-to-school application, student and teachers can sign in and receive day passes for school entry after ensuring they meet certain health criteria, all from their phone.
District re-opening operations app

Microsoft’s back to school app empowers district and school leaders to manage and monitor school reopening and infections statuses from a single location.
District re-opening operations dashboard

Microsoft

The final component of the back-to-school application empowers school leaders, educators, and parents to visualize and track school openings, attendance, COVID cases, and more.