

Digital Transformation in Education Future-Ready Skills



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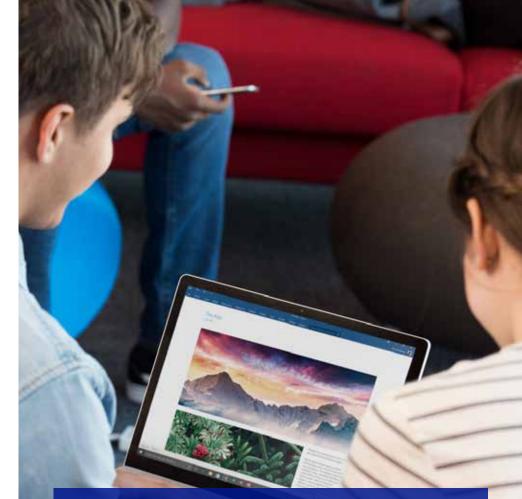
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#### The world for our students is complex and changing quickly.

It's increasingly difficult to think of a position or career that is untouched by technology. Today, nearly half of jobs require some technology skills. In a decade, that percentage will rise even more.

In fact, labor economists predict that in less than 10 years, **77% of jobs will require deep and specific technical skills**. And a staggering 65% of today's primary school students will perform jobs that haven't been invented yet.

In order to compete in new and emerging economies and the careers of tomorrow, **Microsoft has developed multiple platforms and devices** to equip students with the training they need to succeed.



## 77%

of jobs in the next ten years will require some sort of technology skills or training.



### Building Future-Ready Skills

Preparing students for future success isn't simply about developing particular skill sets, or understanding specific technology.

The goal is to spark early learning and inspire students with technology, while establishing the key non-technical skills that employers seek

Creativity Critical Thinking Computational Thinking Communication Collaboration

Often referred to as the 5Cs, these represent key non-technical skills students must develop in order to achieve 3Es

Employability Entrepreneurship Economic development

In addition to developing the non-technical skills required in the workforce today, Microsoft aims to prepare students for the technological demands of tomorrow.

## Future-Ready Solutions

Microsoft offers many solutions for establishing future-ready skills. And to encourage "learning by doing," there are a variety of ways to incorporate design, engineering and computational thinking into everyday curriculum.



Hacking STEM allows teachers to build affordable inquiry and project-based activities to visualize data across science, technology, engineering, and math (STEM) curriculum.

Lesson plans are middle school standards-based, and written by teachers for teachers.



MakeCode teaches physical computing on a Learn-to-Code platform. Part of the growing "Maker Ed" movement in schools, it encourages learning through trial and error.

Windows 10 Apps and Experiences inspires creativity with amazing apps for learning available from the Microsoft Store.



Minecraft: Education Edition is an immersive, engaging, and collaborative approach to coding instruction that promotes learning across all subjects and grade levels. It also features STEM applications ranging from foundational math to advanced computer science. Students and teachers can deepen the Minecraft experience further by connecting to learn-to-code platforms like Tynker, Scratch, and MakeCode.

#### The Microsoft Imagine Academy

**The Imagine Academy** is a complete technology education solution. It connects staff, teachers, students, employers, and local communities through leadingedge technology skills development. The Academy is open to a variety of academic institutions, including: K-12 schools, vocational schools, correspondence schools, junior colleges, colleges, universities, and scientific/technical schools.

The Academy also provides professional development resources for staff and educators. And finally, it equips students at every level with the IT skills needed for successful careers in today's workforce.

Key areas of study and learning pathways include:

→ Computer Science

 $\bigcirc$  Productivity

→ Data Science

→ IT Infrastructure



#### Industry Certifications

According to an IDC Study from 2016, 91% of hiring managers consider employee certification as a criterion for hiring. And there is a particularly high demand for individuals who can work on Microsoft technologies in the workplace. With Microsoft skills and certifications becoming increasingly preferred (or required) on job announcements around the globe, Microsoft offers a wide range of certification programs.

For more information on the specific certification programs available, visit www.microsoft. com/en-us/education/imagine-academy/ certification/default.aspx

#### The Microsoft Professional Program

The professional program is designed to help higher education students **attain resumeworthy credentials for careers in the software engineering, programming, IT and data science fields.** The program offers rigorous curricula with an emphasis on hands-on, real-world problem solving.

It also embraces open source learning, is technology agnostic, and recognizes that people work in heterogeneous technology environments. Upon program completion, graduates receive a digitally-validated certificate.

All together, these programs and solutions provide comprehensive technology training, skills and validation for educators and students, to prepare the next generation for success.

# Real-world success



#### North Carolina Public Schools create system-wide change

In 2010, North Carolina Public Schools became the first partner to deploy Microsoft Imagine Academy in all high schools, statewide. Their goal was to develop a pipeline of information workers, in order to attract new business and higher paying jobs to the state.

Since its inception, 234,000 certifications have been earned in the state. In addition to increasing the number of yearly certifications (from 16 to 58,485 annually), the state has successfully created a pathway to two-year community college for high-schoolers statewide.

# Get started

Future-Ready skills for your classroom are within reach.



#### Identify your priorities



Choose solutions that best fit your needs



Talk with your Microsoft rep who can connect you with the right partners

#### Sources and References

Case Studies:

https://customers.microsoft.com/Pages/CustomerStory.aspx?recid=2393

Bureau of Labor Statistics: http://www.bls.gov/ooh/computer-and-information-technology/home.htm

Global Demand for Industry Certification Statistics: Indeed.com

Global Youth Unemployment rate: http://www.un.org/youthenvoy/employment/

