COVID-19 Education & Employment Impact:
The Growing Importance of Upskilling

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Actionable Take-Aways

The following educational trends will follow the needs in the workforce as a result of the impact of COVID-19 and the recovery process. Institutions should consider the following actions.

<table>
<thead>
<tr>
<th>Create Alternative Credential Programs</th>
<th>Partner with Industry</th>
<th>Launch High-Impact Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rationale:</strong></td>
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<tr>
<td>• Speed-to-market with emerging skills</td>
<td>• Employers are looking to address skills gaps of current employees</td>
<td>• Programs should have entry pathways for career changers due to the higher number of students in this category</td>
</tr>
<tr>
<td>• Students need up-skilling and re-skilling in key areas, not necessarily full degree programs</td>
<td>• IT, Data, and Security are strong focus areas in multiple fields</td>
<td>• All jobs need increased focus on IT due to the &quot;digital transformation,&quot; with special needs in data, cybersecurity, programming languages</td>
</tr>
<tr>
<td>• Student uncertainty in a time of big changes leads to lower commitment levels for long-term and large financial investments in education</td>
<td>• Employers are looking to fulfill needs of their workforce, but do not have the expertise in education – partnerships are key</td>
<td>• Healthcare focus is on nursing specializations and a surging need for Speech-Language Pathologists</td>
</tr>
<tr>
<td>• Students are looking for flexibility</td>
<td></td>
<td>• All business areas report a growing need for Project Management, Process &amp; Analysis, and Strategy</td>
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</table>


Actionable Take-Aways (Continued)

Institutions should consider the skills and field sub-areas on the following slides to operationalize the emerging or focused skills to existing degrees in the following ways:

• Adjusting the core curriculum through relevant assignments or projects
• Adding new concentrations or tracks to programs
• Adding in-demand industry certifications as part of the curriculum
• Partnering with industry field leaders for specialized upskilling or reskilling
• Launching alternative credential programs that target these areas.
COVID-19 Employment Impact
## Navigating New Skills
- Separation of critical skills and roles
- Transition from designing for efficiency to designing for resilience
- Increase in organization complexity

- **Skills gaps** will become apparent in the workplace, with employers seeking current employees and new hires that are flexible to upskilling.
- Employees will seek educational opportunities to **quickly upskill**.
- These educational opportunities will most likely be in the form of **alternative credentialing**.

## Data Trends
- Expanded data collection and use

- As employers collect more data, this will drive the need for more within the data fields (data science, data analytics, etc.)
- Employees might need to **upskill within a data specialty area**

## Changing Roles
- 32% of organizations are replacing full-time employees with contingent workers
- (De-)Humanization of employees

- Contingent workers are more cost-saving and flexible. This requires remaining full-time employees to **upskill to fit changing organization needs**.
- More employers are viewing employees as “workers first and people second.” Other employers are recognizing the humanitarian crisis of the pandemic.

## Social Roles
- Physical and mental well-being are areas employers are focused on to assist their current workforce
- Flexible work systems will continue beyond the immediate pandemic crisis and will need additional infrastructure and IT support

- Employees and applicants will judge organizations by how they handled the pandemic

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As of **September 4, 2020**, total job postings in the US decreased by **21.7%** since January 1, 2020.

- **Education & Health Services** -9.0%
- **Manufacturing** -20.8%
- **Financial Activities** -29.8%
- **Leisure & Hospitality** -39.7%
- **Professional & Business Services** -42.1%

**Source:** Burning Glass Technologies
COVID-19 Employment Impact

These sectors represent the top 3 industries where demand exceeds supply, reinforcing that these continue to be great priority areas for growth and innovation.

<table>
<thead>
<tr>
<th>Healthcare/ Nursing</th>
<th>Job Postings</th>
<th>Demand vs. Supply</th>
<th>Most In-Demand Fields</th>
</tr>
</thead>
</table>
| ▪ Increased demand during the COVID-19 crisis with highest number of job postings of all industries | Demand > Supply by 44% | ▪ Registered Nurses  
▪ Other Nursing Specialties (Intensive/Critical Care Nurse, Medical Surgery RN, OR RN, etc.)  
▪ Speech-Language Pathologists |

<table>
<thead>
<tr>
<th>Business</th>
<th>Job Postings</th>
<th>Demand vs. Supply</th>
<th>Most In-Demand Fields</th>
</tr>
</thead>
</table>
| ▪ Industries where business occupations’ unemployment rates are lowest including: Educational Services, Information, Management of Companies/Enterprises, Transportation & Warehousing, Utilities, and Wholesale Trade | Demand > Supply by 21% | ▪ Project Management  
▪ Business Process & Analysis  
▪ Business Strategy |

<table>
<thead>
<tr>
<th>Information Technology</th>
<th>Job Postings</th>
<th>Demand vs. Supply</th>
<th>Most In-Demand Fields</th>
</tr>
</thead>
</table>
| ▪ Due to recent increases in online shopping, demand in multiple areas of IT has grown, from web development to cybersecurity | Demand > Supply by 17% | ▪ All job fields growing due to digital transformation  
▪ Programming Languages  
▪ Software Development, Skills, & Credentials |
COVID-19 Employment & Economic Recovery
COVID-19 Employment and Economic Recovery

Higher levels of education
- 63% of workers with at least a bachelor’s degree worked entirely from home

Professional jobs and industry sectors able to work remotely
- Sectors ranging from tech to finance to public service are not directly impacted by the shutdown

Some industries will continue to thrive as their products or services directly support work, education, health, or simply daily life in a pandemic
- Technology
- Retail
- Software

Lower levels of education
- Among workers with a high school degree or less, 20% worked entirely from home, as did 27% of workers who have completed some college or an associate degree

Remote work not possible
- Sectors where remote work is not possible, including hotels, travel, entertainment and restaurants, have workers facing shortened hours or outright unemployment

For some industries there is no end in sight to the economic turmoil
- Travel
- Leisure/Entertainment
- Hospitality
- Food Services
COVID-19 Employment and Economic Recovery

• According to a recent survey we conducted with Google, workers in Healthcare and Education feel more secure in their jobs compared to those in other industries, so their desired learning is focused on upskilling to stay relevant and competitive in the marketplace.

• However, those in other industries are most interested in switching industries completely and we need to make sure we are targeting them appropriately with messaging related to a career switch.

• Strada Center for Consumer Insights Public Viewpoint survey also finds that workers in Business, Education, and Healthcare are the least likely to change fields, while workers in Information Technology, Finance, and Manufacturing jobs are the most likely to change fields.

• According to Pearson’s Global Learner Survey, the majority of people in the U.S. are rethinking their career.

The COVID-19 pandemic has made me rethink my career path 54%

I’m worried that I may have to change industries or career fields because of the COVID-19 pandemic 51%
COVID-19 Employment and Economic Recovery

- Workers who are looking to change fields are most interested in transitioning into Business and IT
- The most important reason for wanting to change fields was to improve finances
- The credentials most attractive to them are bootcamps and certificates
Addressing Upskilling & Skills Gaps
High unemployment will likely increase the skills gap, as employers won’t be able to hire everyone back, can afford to be picky, and will favor workers with future skills. By seeking candidates with high-growth premium skills, companies will have a unique opportunity during the recovery to build the workforce they need for the future.

<table>
<thead>
<tr>
<th>Skills Gap</th>
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</thead>
<tbody>
<tr>
<td>The divide between an organization’s skill needs and the current capabilities of its workforce or jobseekers</td>
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<table>
<thead>
<tr>
<th>Upskilling</th>
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<tbody>
<tr>
<td>The process of learning new skills or of teaching workers new skills at their current jobs</td>
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<th>Reskilling</th>
</tr>
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<tbody>
<tr>
<td>The process of learning new skills in order to perform a different job, or of training people to do a different job</td>
</tr>
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Addressing Upskilling & Skills Gap

Increasing New Skills

- Only 16% of new hires possess the skills needed for their current jobs and the jobs of the future
- Existing roles may require up to 10 new skills by 2021
- The number of skills required for a single job is increasing by 10% year over year
The World Economic Forum estimates that 42 percent of the skills required from the global workforce will change between 2018 and 2022.

By 2022, no less than 54 percent of all employees will require significant reskilling and upskilling.

Gartner TalentNeuron data finds over 30% of the skills needed three years ago will soon be irrelevant.
Addressing Upskilling & Skills Gap

• Pearson’s Global Learner Survey finds that uncertainty and insecurity with the job market has driven the need for upskilling. 45% of those surveyed found themselves in need of further education due to a change in their job/job status.

• Of those who found themselves in need of further education, new skills, changes in technology, and job insecurity were the main causes.

among those employed who found themselves in need of further education

- 45%
  Found a need of further education because their job/job status changed
- 41%
  Skills needed that hadn't been learned in school or college
- 39%
  Required to use a new form of technology or a new software in job
- 33%
  Concerned with losing/have lost job
Prior to the pandemic, it was clear that skills such as digital literacy, numeracy, creative problem solving, and emotional intelligence were increasingly in demand in the era of the Fourth Industrial Revolution.

**Automation** is being adopted and implemented at an increased rapid rate due to the pandemic, making the need for **IT and digital skills** imperative for the future job market.

In the first quarter of 2020, IT skills that were most in demand revolved around structures and systems due to the rapid shift to remote work; now, the data suggests that businesses are more confident to return to new product and project development.

Burning Glass data from post-COVID job postings, April 1 through August 25, find that **15 of the top 20 skills being requested are soft skills**.

This concurs with a report by Deloitte Access Economics finding **two-thirds of all jobs by 2030 will be made up of soft-skill-intensive occupations**, so developing and enhancing soft skills now will be key to finding employment in the future job market.
Shorter programs could be especially useful to students right now; students may be far less willing to sign up for long-term program commitments due to lifestyle and employment changes.

In a post-pandemic economy where education consumers are looking to upskill at a lower cost and shorter time frame, it makes sense that demand for certificates, bootcamps, and microcredentials would grow.

Pearson Advance will help to address immediate skill gaps and employment preparedness.

Connections with employers will be even more critical than before – this is where Accelerated Pathways can help.

Employers’ needs are rapidly changing, and the educational marketplace needs to expand to include more industry-aligned alternatives to traditional degrees.

As students reconsider their education needs, it will be critical to demonstrate the value that our programs can offer during this period of economic uncertainty.

In addition to providing data on program graduates’ career outcomes, it will be essential to monitor and assess program offerings to ensure alignment with employer demand.

The upskilling/reskilling movement presents a unique opportunity for our partners to innovate and grow, ensuring their students are set up for success in the post-pandemic market.

With Pearson Pathways, current and prospective students can discover the right courses, certificates, or programs to help them fill their skills gaps and achieve their goals.
Key Focus Areas:
Healthcare, Business, and Information Technology
Some jobs have survived the pandemic better than others. Which are they? Why are they resilient to the crisis? What jobs and skills will be in demand when the pandemic is over?

Knowing these answers will help the workforce and businesses adjust themselves to the new job landscape. It will also help the education system produce much-needed human resources for future job markets.

The following slides look at the key focus areas of Healthcare, Business, and Information Technology to show which occupations and skills are in demand now and show indicators of longevity after the pandemic is over.

Institutions should consider adding these skills to existing degrees through adjustments to the core curriculum, adding new concentrations or tracks in programs, adding in-demand industry certifications, partnering with industry field leaders (for upskilling or reskilling), and/or by launching alternative credential programs that target these areas.
Healthcare

• Increased demand during the COVID-19 crisis with the **highest number of job postings of all industries.**

• **Demand for healthcare practitioners is greater than the supply by 44%.** In terms of industry, this has the biggest demand discrepancy, double that of the next highest industry, which is business.

• The highest demand appears to be with **Registered Nurses** and other **nursing specialties** (such as intensive/critical care nurse, medical surgery registered nurse, operating room registered nurse, etc.); **Speech-Language Pathologists** are also in high demand.

• 50% of healthcare execs feel ¼+ of healthcare will move to **virtual delivery** by 2040.

• 94% of survey respondents expect that next-gen data and interoperability solutions will enable **widespread data sharing.**
Healthcare

Skills to Focus
- Telehealth
- Telemetry
- Medical/Clinical Informatics
- Mental Health
- Treatment Planning
- Home Health
- Speech & Language Disorders

Jobs with Longevity
- Health Information Manager
- Registered Nurses
- Mental Health Counselors
- Speech-Language Pathologists
Business

• Business-related occupations span across all industries. Industries where these occupations’ unemployment rates are lowest include:
  • Educational Services
  • Information, Management of Companies and Enterprises
  • Transportation and Warehousing
  • Utilities
  • Wholesale Trade

• Job posting demand in business and financial operations is the second highest industry demand discrepancy, greater than the supply by 21%.

• Across business job postings, there is high demand for project management, business process and analysis, financial analysis, and business strategy credentials.
Companies must adopt digital business models at their core to compete in a post-COVID world.

**Empower Stakeholders**
Use technology to respond to the needs and priorities of a broader set of stakeholders.

**Transform Business**
Reorient investments and initiatives to drive sustained, long-term value for the company and beyond.

**Change Systems**
Create new models to address global challenges through new markets and enable systemic change.

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**Skills to Focus**
- Project Management
- Business Process and Analysis
- Financial Analysis
- Business Strategy
- Machine Learning
- Customer Relationship Management
- Change Management

**Jobs with Longevity**
- Supply Chain Management
- Business/Management Analyst
- Operations Manager
- Project Manager
Information Technology

• Due to recent increases in online commerce, demand in multiple areas of IT has grown, from web development to cybersecurity.

• With larger sections of the workforce and education sectors working virtually, there is a growing demand for security, networking, and cloud computing.

• There is growing demand in all job fields due to digital transformation, but those that stand out in job postings have shown increased demand in programming languages and other software skills and credentials.
During the COVID-19 pandemic, technology is playing a crucial role in keeping our society functional in a time of lockdowns and quarantines. These technologies will have a long-lasting impact beyond COVID-19 as the world adapts to its new normal.

**Skills to Focus**
- Machine Learning
- Cybersecurity
- Cloud Solutions
- Web Analytics
- Software Development Tools

**Jobs with Longevity**
- Cyber/Information Security Engineer/Analyst
- Software Developer/Engineer
- Computer Systems Engineer/Architect
- Network/Systems Administrator
Andrea Marcinkus
Senior Academic Strategist
Pearson Online Learning Services

Andrea conducts primary and secondary academic research to assist in the production of high-quality and executable online degree programs and implementation strategies in a complex learning ecosystem. She partners with internal and external high-level stakeholders to implement efficient and effective programs and manage the quality assurance of implementation.

Cheryl Kimis
Associate Director Market Research
Pearson Online Learning Services

Cheryl partners with internal and external resources to identify business needs and research objectives. She also manages the strategy and execution of quantitative and qualitative research projects and the research specialists in these functions.
ALWAYS LEARNING