

Trends & Insights

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2020: Innovation as the New Global Education

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During the past 20 years, the world witnessed many important changes and transformations, from the globalization and information era, to the knowledge and digital era. By 2020, the world was in the midst of the fourth industrial revolution. Then came COVID-19, challenging almost all activities in nearly every country. Education was not exempt. From one day to the next, thousands of schools and millions of teachers, students, and parents had to find ways to continue their classes. After some anxiety and chaos, schools around the world have found their way into this new reality. While the global public health crisis has exponentially pushed the innovation curve, innovation has been a major force in international education for many years.

INTERNATIONALIZATION BEFORE COVID-19

Since the early 1980s, the goal of higher education internationalization has been to improve the missions of teaching and learning, research, and knowledge transfer by “integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education” (Knight 2015, 2). Historically, the main strategies to become an internationalized institution were student mobility programs and international student recruitment. Through these strategies, students from many countries would learn from each other’s cultures and acquire the skills needed to interact and work in a rapidly evolving, globally competitive world.

Mobility programs became the most traditional activity of international education. However, after decades of great initiatives, involving universities around the world signing collaboration agreements and allocating funding for study abroad scholarships, recent reports show that student mobility has remained at fairly low numbers of participation worldwide. Across the world, there are also continuous, noticeable imbalances with where

mobile students go. The Organisation for Economic Co-operation and Development (OECD 2020) reported an average of 8.8 percent of international student mobility in Europe as of 2017. This indicator shows the percentage of foreign tertiary students as a proportion of the total tertiary students enrolled in a country. In Latin American countries, the number is considerably lower. Mexico, for instance, reported its student mobility rate to be as low as 0.6 percent (OECD 2020).

Since the 1990s, a more comprehensive view of internationalization has led to wider collaboration between universities, with research projects that included international components. Also, the concept of “Internationalization at Home” emerged as an alternative for the high percentage of students who could not participate in an exchange experience. Internationalization of the curriculum helped to achieve the goal of students having a global perspective without leaving their home institution.

In a reflection piece, Brandenburg and de Wit (2011) called for educators and practitioners to rethink and redefine the internationalization of higher education. They stated that global educators

were “no longer the spearhead of innovation but, rather, defenders of traditions” (Brandenburg and de Wit 2011, 16). Universities cannot continue to integrate a global dimension into their missions with the same strategies used when the concept of internationalization was born.

EDUCATION CHALLENGES IN A DIGITAL ERA

During the past 2 decades, the world has experienced unprecedented economic and social changes. Technology has become an essential tool for social and economic development. Societies are facing the emergence of a digital era, also known as the fourth industrial revolution or “Industry 4.0” (World Economic Forum 2018). This era is characterized by the automation and massification of technologies such as artificial intelligence, Internet of Things, cloud computing, big data, and smart robotics, among many others. According to the World Economic Forum (2018), this digital transformation and automation is predicted to cause almost 40 percent of current jobs to disappear in the years to come.

Two of the most frequent challenges in relation to the anticipated loss of jobs involve the skills and curriculum needed for the future. These challenges should come as no surprise to international educators, since they have been on the internationalization agenda for years.

Skills for the Future

In its report *The Future of Jobs*, the World Economic Forum (2018) predicted that millions of jobs will be lost due to automation. The jobs that will be created and those that remain will require workers with soft skills. “Soft skills” refer to aptitudes that are mostly intrinsic to human activities and cannot be automated, such as creativity, communication, critical thinking, leadership, negotiation, resilience, flexibility, and problem-solving, among others. These skills cannot be learned or replicated by robots (for now). According to Deanna Pate (2020), group manager at LinkedIn, of the 50,000 skills identified in LinkedIn’s database, the five most in-demand skills in 2019 were: creativity, persuasion, collaboration, adaptability, and time management—all soft skills.

Educators, employers, and international stakeholders, such as the OECD, the World Bank, and the World Economic Forum, agree that these skills often are not acquired at school even though they are needed in almost every discipline. Employers around the world are having trouble finding candidates with high proficiency in both technical and soft skills, with the lack of soft skills being the more difficult issue to solve among candidates (Friedman 2019).

While they may be defined as different concepts, global skills and soft skills are, in a sense, related skills, since they focus on similar objectives. One of the main goals of global education has been that students acquire global skills that prepare them to work and collaborate in a global and intercultural world. Likewise, soft skills are needed for people to succeed in the workforce. In the digital era, both global and soft skills are key for individuals looking to be competitive for the jobs of the future.

Curricula for the Future

As mentioned, technology is moving at lightning speed and is essential to economic and social development. The faster technology advances, the more technical skills and cutting-edge knowledge become relevant for employment. A significant amount of the technology-related knowledge that is currently being developed in global companies and innovative firms in the private sector has not been incorporated into the curricula of university programs (Schultz 2019).

The fact that many curricula have not been updated for years (in some cases, for decades) has disconnected higher education institutions from the needs of the private sector. Students often are not acquiring the technical skills and knowledge needed for the future. As new jobs appear on the market, thousands of vacancies remain unfilled due to the lack of people with specialized skills and technical knowledge (Mourshed, Farrell, and Barton 2012). Therefore, internationalization of the curriculum is more valuable than ever.

Internationalizing the curriculum enables students to interact with people from different backgrounds in order to share knowledge and contrast experiences, which strengthens soft skills as mentioned previously.

This process leads to increased global awareness and intercultural competence as well as creative problem-solving, critical thinking, and an understanding of the impacts of science and technology from divergent perspectives (Barker 2011). However, there is still work to be done in internationalizing curricula, particularly in science, technology, engineering, and mathematics (STEM) disciplines, which account for only 6.8 percent of all internationalized programs (Zapp and Lerch 2020). Universities must find new ways to address the skills gap and update their curricula, and internationalization should be part of the process.

THE WORLD AFTER COVID-19: INNOVATION

Before 2020, technology-based businesses and innovative global companies were already transforming economies and changing people's habits. Many people now expect to order products and services (whether a taxi, food, or a movie ticket) from their smartphones. However, the pace of technological adoption was slower for some sectors, and the transition to digitalization around the world depended mostly on national efforts.

With COVID-19, more communities have experienced a fast-tracking of digitalization never before imagined. Thousands of schools have had to adapt and innovate to solve the lack of face-to-face classes. Businesses that have never used technology were left with no option but to update their services in order to survive. Companies that could operate remotely continued their business operations with employees teleworking.

One word to define the world after COVID-19 would undoubtedly be “innovation.” Post-COVID-19, the world will have a new normal, and innovation will be at its foundation. Those who do not adapt to the innovation process will be left behind. Again, higher education will not be exempt from the new reality.

Given this new normal, new skills and cutting-edge knowledge are needed more than ever. The following recommendations can help universities adapt to this new, disruptive world and are now more essential than ever before:

- **Develop curricula focused on the technology of the future.** During COVID-19, some

technological solutions, such as 3D printing, were possible thanks to the creative collaboration between universities and the private sector. Many of these technologies are not yet incorporated in the curriculum. To help solve this problem, U.S. universities are signing collaborative agreements with private companies (mostly companies in the technology sector) to deliver more innovative, updated curricula in a faster way.

- **Shorten the length of traditional four-year programs.** The World Economic Forum has frequently stated that “skills, not degrees, may be the reality of the future” (e.g., Fuglsang Østergaard and Graafland Nordlund 2019). Implementing modularized and disaggregated degrees, flexible pathways, micro-credentials and shorter programs should become a more common practice, since a four- to five-year-long program may not be practical for all students in a rapidly changing world.
- **Expand alternatives to learn and validate soft skills and global learning.** As companies invest in research and development, more knowledge is created outside of academia. In the past, companies provided access to this knowledge through academies, courses, and open-access repositories. Universities need to recognize and credentialize this “informal learning” acquired outside of degree programs and increase learning opportunities without the need for more physical classrooms.

In the face of the fourth industrial revolution and a new world where innovation will be at the center of survival, it is imperative that universities innovate in every aspect of teaching and learning, facing the fact that knowledge access and the types of skills expected of graduates are completely different from when universities were first founded.

A MEXICAN INITIATIVE DRIVING INNOVATION

A recent initiative in Mexico has proven that the previous recommendations are possible. At the end of 2019, the state of Jalisco, Mexico, through its Ministry of Innovation, Science and Technology, created the Open Platform for Innovation (“PLAi” for its acronym in Spanish) with the goal of increasing Jalisco’s competitiveness by developing

talent and building the new skills demanded of the future workforce.

PLAi works as a collaborative platform to deliver short-term learning and training programs and ready-to-offer courses focused on the digital era and cutting-edge knowledge. It provides an official validation or credentialization for the programs. These programs are delivered faster through alliances with local and global universities, private companies, NGOs, other governments, and individual experts.

Because PLAi was designed to offer face-to-face, hybrid, and online learning options, when COVID-19 arrived, PLAi was not only able to continue its regular activities, but also help other education institutions. Quickly, PLAi set up an emergency plan that consisted of three strategies: (1) provide support for video conferencing; (2) help teachers to convert their face-to-face courses to online; and (3) organize a set of technologies and tools that could be useful for teaching and learning during the crisis.

Also, in collaboration with a private local university and the consulting firm McKinsey & Company, a short training program called “11 Decisions to Be a Resilient Company” was rapidly structured and delivered to more than 800 people.

In a few weeks, PLAi was able to reach thousands of people and help dozens of higher education and learning institutions and companies. This would not have been possible without the original concept of an innovative institution that could quickly deliver results.

CONCLUSION

Before COVID-19, the innovation economy was already beginning to move forward. Robots, artificial intelligence, big data, computer algorithms, and other technologies were increasingly part of daily life. This global health crisis has clearly emphasized the importance of creativity and innovation in economic, health, and educational activities. Internationalization at higher education institutions cannot remain the same post-COVID-19. Internationalization will need to look to new paradigms of global education. Does it mean learning intercultural skills? Does it mean learning how to

quickly innovate and create solutions for crises through collaborations with international students and scholars, possibly through virtual platforms?

With COVID-19, new perspectives are being put on the table. Although it is too early to define the exact changes to come, it is expected that international education strategies will be affected. The educational challenges of the digital era will become more pressing than ever before.

Innovations in technology, training in technical knowledge and skills, recognition of soft skills, and internationalizing the curriculum will help to address the evolving challenges of the new digital era. In the future, universities may be places where everyone who wants to, whether enrolled or not, can learn from any professor, expert, or company around the world, where artificial intelligence and algorithms can help students set their own individual pathway and interests, and where everyone will use a variety of global resources to access and share the most recent knowledge.

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