THEME 01

New horizon of education

EDUCATION | FUTURE OF WORK | DISRUPTION

The changing labor landscape demands a quick response from education systems to provide people with accurate qualifications. However, traditional education systems do not allow for rapid updates in curricula. As a result, new and sometimes radical initiatives are rising, which are geared towards a new horizon of what and how we educate our youngsters.

Our observations

- This year, CBS News reported that the wages of graduates have barely increased, while student loan debt has climbed to a historical record of $1.5 trillion in the U.S. The average U.S. household with student debt now owes about $48,000. According to Pew Research, only about half of student loan holders think the lifetime financial benefits of their bachelor's degree outweigh the costs.

- A conventional degree is no longer the only way to get a job that pays well. Business insider and Glass-door, for example, report that many of America's most popular companies to work for don't require a college degree. Earlier this year, Apple CEO Tim Cook stated that half of Apple's employees do not have a four-year-degree because there is a mismatch between the skills learned in the conventional education system and those needed in business. Moreover, LinkedIn has found that certain positions are more likely to be filled by non-college graduates than others.

- 42 is a tuition-free, non-profit coding school, which opened its doors in Paris in 2013, founded and funded by French billionaire Xavier Niel. The name is a reference to the book *The Hitchhiker's Guide to the Galaxy*, in which the number 42 is "the Answer to the Ultimate Question of Life, the Universe, and Everything". They offer project-based learning without teachers, students proceed based upon their personal level of progress, there are no classrooms, it is open 24/7 and no degree is needed to enter the school. They claim that their graduates have a 100% job guarantee. World-wide, there are now 20 campuses with this model.

- Kahn Academy was created in 2008 and offers free educational material that helps in the learning of, for example, statistics, history or a foreign language. It aims to complement conventional education. Just as in many educational apps or games, the course level is personalized in the sense that students can work their way through levels. In this way, Kahn Academy tries to employ some of the largely unused possibilities of (online) personalized learning that are already at hand. In the long run, they aim to make much more (online) education free in order for young people to have less debt when they start their career and to offer more possibilities to upskill one's talent.

- Coursera is an American online learning platform that offers MOOCS and, since 2017, programs with a degree. They offer content from high profile universities such as Princeton, Stanford and Duke University. They have also partnered up with high profile organizations such as IBM, MOMA, Google and several governments. Coursera also offers courses for the corporate sector and their customers include L'Oréal, Boston Consulting Group, and Axis Bank. This platform makes it easier for students to upskill their qualifications by taking some courses that fit their career path instead of having to do an entire new and often expensive study.

- Ubiquity University is an online university that mostly anticipates the need for soft skills in the labor market by offering online courses in, for example, critical thinking, problem-solving or emotional intelligence. They offer so-called competency-based credentialing, of which they claim it "is fast gaining traction among educators, CEOs and companies worldwide as the best way to assess talent and making hiring decisions." Anything from taking only one course to attaining a full degree is possible. A big part of these degrees can be made up of courses from other universities. A student pays as he goes, can study anywhere and at his own pace.

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Connecting the dots

Initiatives that offer education outside conventional educational systems (e.g. universities, high schools) are on the rise. Many are motivated to offer education that anticipates new developments in the labor market (e.g. the need for coding skills, critical thinking skills) or meets the needs of students, such as avoiding high loans, being able to "shop" only the courses that are considered beneficial and studying whenever, wherever. These alternative ways to study break with the idea that a degree should be obtained within a traditional education system with, for example, accreditation procedures, fixed programs, three to four years of continuous studying (mostly) at one university and often high admission standards. Coding school 42, for example, doesn't have teachers, is open 24/7 and no degree is required to enter the program. Ubiquity University responds to the trend of valuing skills more than knowledge and Coursera offers students a collection of courses from universities and companies that students can enroll in without having to complete a whole study program. Hiring employees without a conventional degree is on the rise as well. This is motivated by dissatisfaction with the competences and knowledge of graduates, an observed mismatch with their needs or skills gap. Compared to these new initiatives, the curricula of conventional education systems often look outdated and changes are far more slowly implemented. Several factors contribute to their rather inflexible nature. First, new methods, topics or curricula need to be thoroughly tested in terms of effectiveness and pedagogical implications, and the relevance of new items needs to be agreed upon before implementation. This often takes years (e.g. new methods or topics need to be tested in pilots over a long period of time). Second, educators need to be retrained which, again, takes a lot of time, money and effort. Third, before, for example, a bachelor's program can be executed by a university, it needs to earn accreditation, which means a lot of rules and quality standards need to be met. When a university wants to change a bachelor's program or offer a new one, this extensive procedure needs to be followed all over again. The benefits of these thorough precautions regarding change in traditional education systems is obvious: it is the best way we know to make sure our youngsters get a qualitative and solid education. However, it is also obvious that this way of organizing education is less suited to anticipate the rapid changes that come with technological developments. This explains the surge of new initiatives that are not bound to such extensive procedures, as well as the trend of hiring employees regardless of their education.

The bridge to close the gap between the flexibility of alternative education and the quality guarantee of traditional education systems is still a long way off. For some specific new qualifications, such as coding, this lack of insight into the quality of alternative education is less problematic. Coding is a pretty straightforward skill of which companies can easily check whether a potential future employee masters it or not. The quality of competences such as critical thinking and emotional intelligence is a lot harder to estimate, which makes it harder for alternative education to achieve success in these areas. This is partly because these competences might be less generic than they are often portrayed. Critical thinking, for example, might rely on very different skills in the context of a food company than in, for example, legislation. Nevertheless, when traditional education doesn't offer such topics, alternative education is the only option for students and employers to turn to.

Implications

- **As we wrote before, EdTech might incrementally improve basic education (primary, secondary, high school), but is it not likely that basic education will be radically disrupted by alternative education initiatives anytime soon. This is simply because the quality guarantee in terms of pedagogy and effectiveness will remain the first priority for policymakers and caretakers alike when it comes to minors. However, due to high student loans and questionable job guarantees regarding college and university degrees, it is likely that students will increasingly look for alternative options after finishing their basic education.**
- **Alternative education initiatives can have great success in areas that can prove their usefulness easily (e.g. coding). In these cases, alternative educational initiatives can respond quickly to the rapidly changing demands of the labor market when, for the time being, traditional education systems cannot.**
- **Single courses offered on online platforms such as Coursera anticipate the continuous need for upskilling our competences throughout our entire career. Many traditional universities or colleges do not offer such possibilities outside of their three to four year programs, mostly due to the heavy procedures and quality demands they have to meet before they can make a change.**
- **Companies are now connected more easily to education through platforms such as Coursera. When education systems fail to prepare their youngsters for the future of work, companies might take on a more pro-active role, offering training programs themselves.**

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