

### Online education:

# a game changing ecosystem

From kindergarten to university, students and education providers truly embrace the «learning anywhere, anytime» concept of digital education in a range of formats. Online learning can help to reduce inequalities in education experienced by disadvantaged groups, such as those living in rural areas, those with disabilities, or girls who are prevented from attending schools. Technology-powered learning formats like mobile friendly experiences meet students and teachers where they are enabling adaptive education.

Online education allows students and teachers to connect using a variety of solutions:

### Virtual classroom

Students can connect to the teacher individually, using multiple remote channels, be it a web browser, mobile app, or a tablet.

### Collaborative learning spaces

Higher education institutions join forces and create a shared learning library, supplementing their curriculum with top courses, research, and academic materials from other universities

### **Assessment and** evaluation

Online testing and evaluation of a student's skills in order to achieve completion and certification in a particular course.

### Virtual exchange programs

Students, as well as faculty staff members, can attend online seminars and academic meetings.

### **Massive Open Online Courses (MOOC)**

These courses can involve hundreds or even thousands of learners distributed across multiple locations.

# **Key facts**



### \$188 billion

value of the global online education market in 2019. This figure is expected to grow at a CAGR of 9% by 20251.



of students believe that online education is better than or equal to on-campus options<sup>2</sup>.



# 15 million

girls of primary-school age might never enter a real classroom in sub-Saharan Africa<sup>3</sup>



# One third

of students in the United States take at least one online course4.

- <sup>1</sup> Global Online Education Market Size,
- Status And Forecast 2019-202
- 2019 Online Education Trends Report
- 4 U.S. Department of Education January



# Enhancing safety for online education

To protect the reputation of the institution and the value of an online degree, online education providers need to ensure that:

- > Only registered users can access the platform and classes,
- > Credits or certifications are earned by the right student and not by a fraudulent, non-authorized individual,
- > Class attendance is monitored,
- > Users give their consent to share personal data,
- > Personal data and privacy are protected at all times,

A secure and convenient method of identifying and authenticating the user during his learning experience is central to each of these needs.

> Verification methods such as biometric user verification and behavioral biometrics can solve this critical identification challenge in distance education.



# Trusted digital identities

In a digital world where educational institutions are increasingly offering courses online, the need to securely onboard and verify identity is now critical.

Digital tasks such as signing into learning platforms, accessing a shared library, or taking an exam all rely on students having a trusted digital identity and being able to prove who they are.

For online education providers, identity verification is a way to give access to knowledge through new channels, and take advantage of other benefits:



### **Secure access**

A multi-layered identity verification approach helps to mitigate identity fraud, theft of confidential information, and the associated financial losses.



### **Enhance educational** services

Online learning provides a wealth of information, knowledge, and educational resources, increasing opportunities for learning in and beyond the classroom.



### Protect the value of the accreditation

Reduce the number of unsanctioned learners by proving that the authenticated student is the one who is taking the exam.

To be successful, online education providers must ensure that both the student and instructor registration are not only digital and scalable but also secure.



# Identity verification solutions

Designing a secure, compliant, and seamless identity verification solution involves a variety of different means such as:



#### **ID** documents

Individuals use their smartphone to capture their ID document, passport, or driver's license. The data is then verified for authenticity with a trusted third-party or a root of trust.



#### Selfie

The individual uses their smartphone to capture a selfie and perform a liveness detection test. The selfie is compared with the portrait from the ID document and optionally with a root of trust to provide the highest level of assurance.



### **Fingerprints**

Smartphone cameras can also be used to capture and verify user fingerprints in a contactless and non-intrusive manner.



### Video KYC

A live video chat between individuals and agents can provide a more interactive, guided way to capture and verify a student's identity.

### Use cases



# Student/Instructor Enrollment

Student ID doc scan

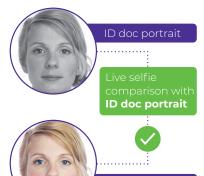
ID doc is authenticated against security features



- > Document template check
- > Document to portrait check
- > Text and barcode
- > Font
- > Photocopy check
- > Screenshot check
- > Known forgeries
- > Hologram
- > Image manipulation

Student biometric capture

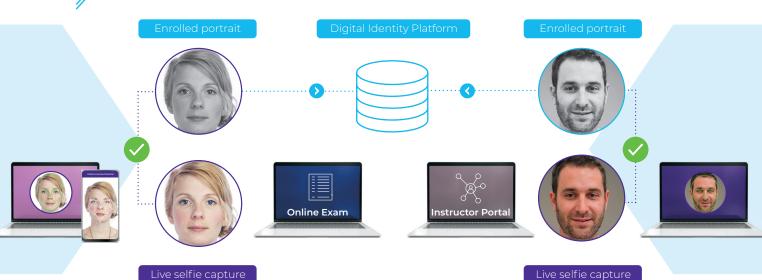




Live selfie capture



# Student / Instructor Authentication





Live selfie comparison

with enrolled portrait

Student biometric

capture

Instructor

biometric capture

Live selfie comparison

with enrolled portrait

Instructors logs-in

to Instructor Portal

Student starts

online exams