

THE SIGNIFICANCE OF E-ASSESSMENT IN NATIONAL EDUCATION STRATEGIES

Around the world, assessment is increasingly viewed not only as a mechanism for measuring learning outcomes, but also as a tool for educational governance and human capital development. International research shows that strong assessment systems support evidence-based policy making and help countries build more competitive and inclusive education systems.

Azerbaijan's experience reflects this trend. In 1992, the State Student Admission Commission, now the State Examination Center, was established as part of a major institutional reform. The country moved from highly subjective university-administered examinations to a centralized merit-based system built on transparency, objectivity and equal opportunity. Today, the SEC supports not only university admissions, but also civil service recruitment, leadership development programmes and other talent identification mechanisms.

Over the years, the SEC has developed a comprehensive assessment infrastructure, including item banks, e-marking systems, automated candidate allocation and a wide range of digital services. These systems help ensure fairness, consistency and public trust.

In my view, the key question is not how advanced the technology is. The real question is whether assessment helps society identify talent and provide equal access to educational and professional opportunities. That is why assessment should be viewed as a strategic national institution.

EMERGING TRENDS IN E-ASSESSMENT TECHNOLOGY

Internationally, we are witnessing a shift from simply digitising examinations to building integrated assessment ecosystems that combine delivery platforms, analytics, accessibility, security and increasingly AI-enabled services.

Azerbaijan is moving in the same direction. Digital tools are becoming deeply embedded throughout the education system. Schools are adopting electronic platforms, students are becoming more digitally literate, and public expectations regarding digital services continue to grow. Within this environment, the SEC is exploring opportunities for large-scale digital assessment and evaluating the readiness of regional infrastructure to support such a transition.

At the same time, our experience shows that technology alone does not guarantee quality. Every technological solution must support reliability, comparability of results and public trust.

For this reason, we see technology not as an objective in itself, but as a tool for building more efficient and equitable assessment systems.

ENHANCING EXAM SECURITY IN THE DIGITAL AGE

Globally, the discussion on exam security is evolving. Traditionally, security focused on protecting examination materials. Today, it increasingly focuses on protecting trust in assessment systems as a whole.

At the SEC, security is embedded throughout the assessment lifecycle. It begins with item development and secure test construction, continues through examination administration, and extends to scoring and reporting.

One example is our e-marking system. Candidate responses are anonymized and independently evaluated through a calibrated process involving multiple assessors, continuous quality monitoring and statistical analysis. To date, approximately 45 million written responses have been processed through this system, involving around 2,000 trained assessors.

My colleague will also deliver a presentation specifically on the e-Marker system during the conference, and I would like to invite you to attend it and learn more about our experience in this field.

The digital age creates new risks, but it also provides new opportunities through analytics, authentication technologies and intelligent monitoring systems. At the same time, although some international exams use digital solutions, there may still be concerns about their transparency and reliability. This is especially important for online exams or exams taken outside official test centres. Certificates obtained in this way may therefore need careful verification.

The challenge is not simply to make examinations digital. The challenge is to make them secure, fair and trustworthy.

PROMOTING ACCESSIBILITY THROUGH TECH-ENABLED SOLUTIONS

Internationally, accessibility is increasingly discussed through the concept of Universal Design—creating systems that work for the widest possible range of users from the outset.

In Azerbaijan, digital transformation has become a national priority, and the SEC plays an active role in this process. Through our online services, citizens can register for examinations, access results, submit applications and use a range of digital services. We have also introduced an Azerbaijani-language AI-powered Chatbot to improve access to information and support users throughout the assessment process.

Beyond examinations, the SEC manages large national education databases and supports integration with other government systems, simplifying interactions between citizens, educational institutions and public authorities. In addition, I would like to note that in 2025, the Digital Development Concept of the Republic of Azerbaijan was approved by the relevant Decree of the President of the Republic of Azerbaijan. In line with this concept, the State Examination Center is also taking purposeful steps toward the digitalization of its activities, services, and examinations it conducts.

Our view is that technology should expand opportunities rather than create new barriers. Accessibility is therefore not only a technical challenge—it is a matter of fairness.

BEST PRACTICES FOR IMPLEMENTING E-ASSESSMENT AT SCALE

Many assessment innovations begin as successful pilot projects. The global challenge is how to move from pilots to sustainable national-scale implementation.

The SEC administers a wide range of high-stakes examinations that influence educational and professional opportunities for large numbers of citizens. Every year, around 700,000 individuals go through the assessment process in 45 different types of exams at our center. For this reason, our approach to large-scale digital assessment focuses not only on technology, but also on infrastructure, operational resilience, security and staff readiness.

We are currently conducting feasibility studies and working with international partners to evaluate different technological solutions and implementation models.

Our experience suggests that technology can be deployed relatively quickly. Building trust in a new assessment system takes much longer. That is why digital transformation must be carefully managed and implemented step by step.

LEVERAGING AI IN MODERN ASSESSMENT

Across the assessment community, AI is moving rapidly from experimentation to implementation. The debate is no longer whether AI can be used, but how it can be used responsibly.

The SEC already operates a mature e-marking environment and is exploring several AI-enabled applications. One promising area is hybrid scoring, where candidate responses are independently evaluated by both human assessors and AI systems. When the scores align, the result is accepted; when they differ, additional expert review is triggered.

We are also exploring AI-supported item generation and AI-based security solutions for digital assessment environments.

At the same time, we believe that transparency, fairness and accountability must remain fundamental principles. AI can support professional judgment, but responsibility for assessment decisions must remain human.