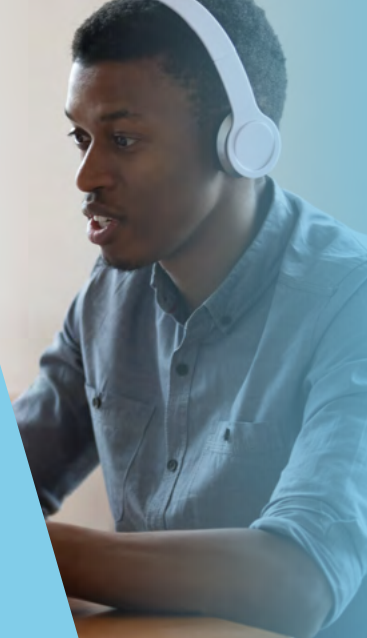


# Preparing students for an ever-changing workplace and economy

Globalisation, technology and an information-driven economy have put the spotlight on the types of skills we need today from education and for the workplace.

Our research has focused on identifying these '21<sup>st</sup> century skills' and exploring how they can be taught and assessed.



## What are 21<sup>st</sup> century skills?

There have been many attempts to define and systemise these highly valued skills into frameworks. Our analysis has identified six commonly cited skills: collaboration, communication, creativity, critical thinking, digital literacy and problem solving.

	enGauge	European Parliament	P21	OECD	ATC21S	Skills Builder
Collaboration	✓	✓	✓	✓	✓	✓
Communication/ social skills	✓	✓	✓	✓	✓	✓
Creativity	✓		✓		✓	✓
Critical thinking	✓		✓		✓	
Digital/ICT literacy	✓	✓	✓	✓	✓	
Problem solving			✓		✓	✓

*Summary and matching of most commonly cited frameworks<sup>1</sup> to key 21<sup>st</sup> century skills*

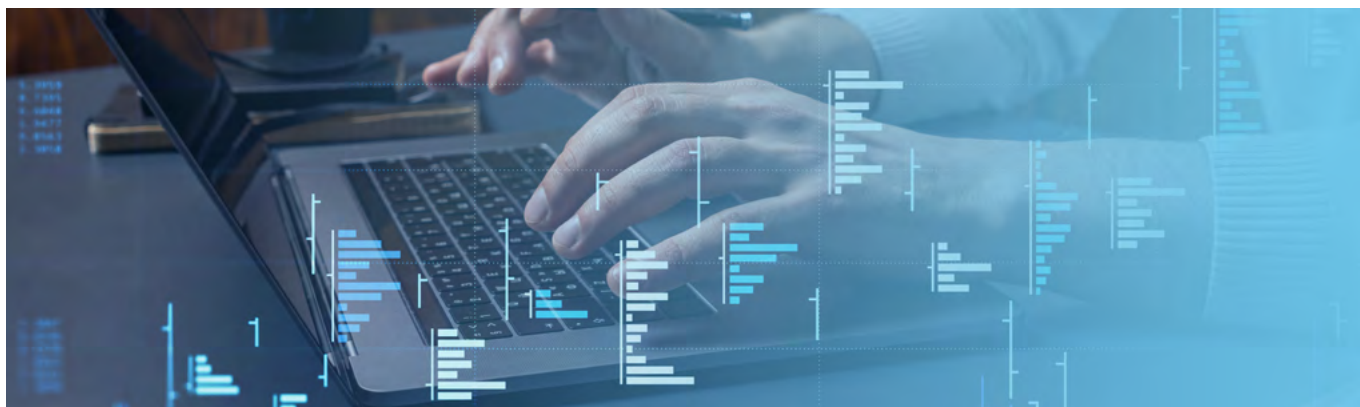
## Key questions

How can we assess students' competency in these skills via high-stakes exams?

Do we educate children for the workplace through skills development, or do we focus on a knowledge-based curriculum?

How can we integrate 21<sup>st</sup> century skills into the current curriculum?

<sup>1</sup> See [e-iji.net/dosyalar/iji\\_2018\\_3\\_1.pdf](http://e-iji.net/dosyalar/iji_2018_3_1.pdf)  
[skillsbuilder.org/universal-framework](http://skillsbuilder.org/universal-framework)



## Teaching and assessing 21<sup>st</sup> century skills

Each skill requires its own definition and assessment technique. For example, approaches to defining and assessing a skill such as creativity can vary depending on whether the focus is on aspects of the creative process or on creative products and outputs (eg works of art or creative performances).

The research evidence also highlights challenges when separating these skills for teaching and assessment. Collaboration and communication skills may be assessed by observing group work, problem solving or

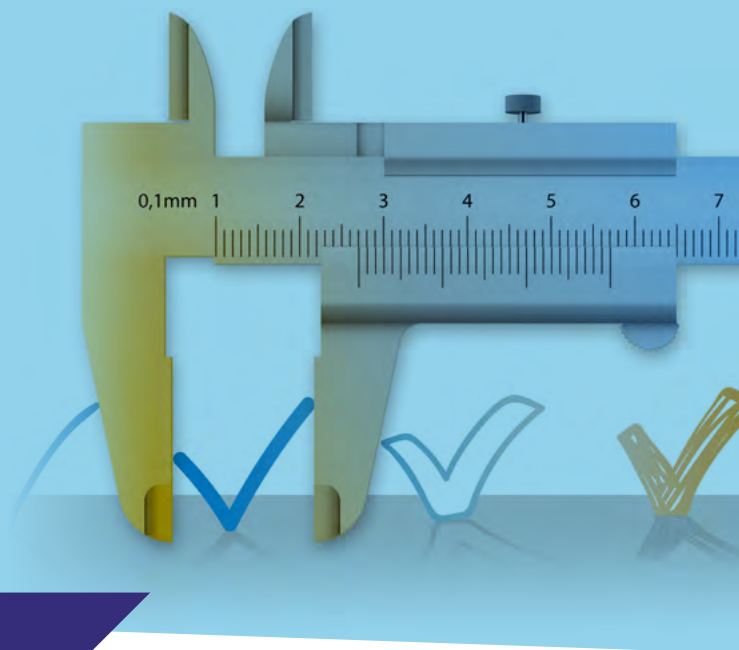
through web-based collaboration tools, but difficulties can arise in terms of measuring individual performances within those activities.

AQA's own research team developed a collaborative problem-solving [assessment toolkit](#) for use in the classroom, whereby measurement is through teacher-reported feedback, self-assessment and peer assessment. This approach demonstrates a potential solution to the complex dynamic of individual vs group assessment.

## Next steps

Our aim is to build beyond theories and frameworks for 21<sup>st</sup> century skills towards clear recommendations for teaching and learning. In the next stage of our research, we will engage directly with teachers and students to gain insight into their experiences and perspectives. This valuable feedback should help to shape some pragmatic solutions.

Importantly, we are also analysing where these skills already feature in our AQA qualifications and assessments so as to further highlight them.



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