HIGHLIGHTS

Charting the Future of Assessments
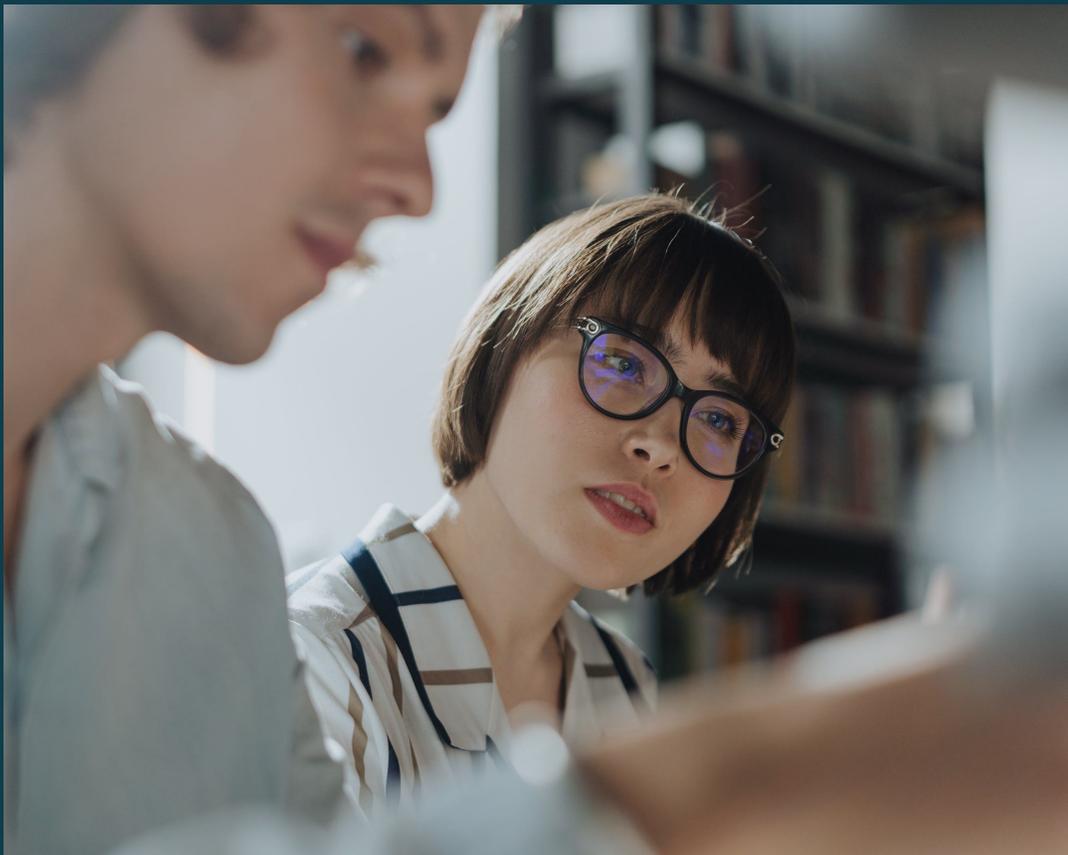
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We will measure what matters, not what's easy to measure.

**THE FUTURE OF ASSESSMENT
WILL INVOLVE A PARADIGM SHIFT**

01	Skills for the future	The most valued skills for the future are hard-to-measure skills.
02	Innovative measures	In the future, changes in measurement focus will support both academic and workplace settings.
03	Methodological breakthroughs in testing operations	Technology and science will make it possible to improve the methods for how we measure skills.
04	Feedback	Personalized insights provide more value to test-takers than just a score.

The most valued skills for the future are hard-to-measure skills.

SKILLS IN DEMAND

Cognitive and meta-cognitive skills	**Social and emotional skills**	**Practical and physical skills**
critical thinking	empathy	technology literacy
creative thinking	self-efficacy	using new information and communication technology devices
curiosity	responsibility	
life-long learning	collaboration	
self-regulation	active listening	
analytical thinking	leadership and social influence	
dependability and attention to detail	resilience	
agility	flexibility	
	motivation and self-awareness	

Sources: OECD (2021), AI and the Future of Skills, Volume 1: Capabilities and Assessments, Educational Research and Innovation. Paris: OECD Publishing. https://doi.org/10.1787/5ee71f34-en; WEF (2023) Future of Jobs Report 2023. Switzerland: World Economic Forum. https://www.weforum.org/publications/the-future-of-jobs-report-2023/

AI will have a direct impact on the future of workplace skills.

SURVEY ON THE IMPACT OF AI ON SKILLS
% respondents that agreed with the following statements

85%
Due to AI, most employees will need to update their skills.

83%
AI will require workers to have both technical and human skills.

83%
AI will require a re-evaluation of skills we consider essential.

80%
AI will amplify the need for career shifts, upskilling and self-reinvention.

72%
AI will create new job opportunities that don't exist today.

Source: ETS Human Progress Study, September 2023. Q: "How much do you agree or disagree with the following statements (Strongly disagree/somewhat disagree/somewhat agree/strongly agree).

In the future, changes in measurement focus will support both academic and workforce settings.

02.
Innovative measures

CHANGES IN MEASUREMENT FOCUS

From:

tests

subjective interviews

self-report rating

other-report assessments

To:

"testless" assessments based on traces of engagement in a variety of environments

gamified and interactive experiences

authentic assessments of valued skills in relevant immersive environments

03.
Methodological breakthroughs in testing operations

Technology and science will make it possible to improve the methods for how we measure skills.

THE IMPACT OF AI AND TECHNOLOGY ON ASSESSMENT

Today

Tests are primarily authored by test developers and pre-tested with real test-takers.

The Future

Through generative AI, many elements of the test development cycle (including personalized feedback) **will become more efficient.**

Employing ethical AI **will remove bias in assessments.**

ADVANCEMENTS SPAN THE ENTIRE ASSESSMENT OPERATIONS PROCESS

Design

designing around test purposes and administrative constraints

developing test items (i.e. test questions)

assembling test forms

Administration

delivering and administering assessments

all aspects of security

quality control over the entire process

item banking

Scoring

reviewing assessments

scoring

reporting scores

evaluating tests

Global survey respondents indicate trust in AI when used in assessments.

% Respondents who agreed with the following statements

72%
I would trust guidance from an assessment on which skills to improve from AI

66%
I would trust a learning assessment that was scored by AI

66%
I would trust a learning assessment that was created by AI

SOURCE: ETS Human Progress Study (September, 2023).

Assessments need to deliver more meaningful and actionable feedback beyond the score to learners.

PERFORMANCE FEEDBACK FACILITATES LEARNING AND PROGRESS

Combining assessment, feedback and Intelligent tutoring

**03
Intelligent tutoring**

The learning experience should be more interactive and collaborative between learners, teachers, peers and AI.

FEEDBACK LOOP

**01
Assessment**

Skill-based assessment should be designed to enable performance feedback, not just a score

**02
Performance feedback**

Digital assessments should provide feedback that is clear, accessible and accommodating of diverse student needs

BENEFITS OF FEEDBACK-BASED ASSESSMENTS

Percentage respondents reporting increased likelihood of various sentiments resulting from assessment feedback

A	Be motivated to acquire new skills or knowledge
B	Feel more confident in my abilities
C	Feel more confident pursuing new employment or job opportunities
D	Feel prepared to face challenges
E	Feel recognized for my personal performance
F	See a direct link between skill development and career advancement
G	Feel less stressed about the future
H	Stay with my current employer

68%	67%	65%	64%	59%	59%	50%	37%
A	B	C	D	E	F	G	H
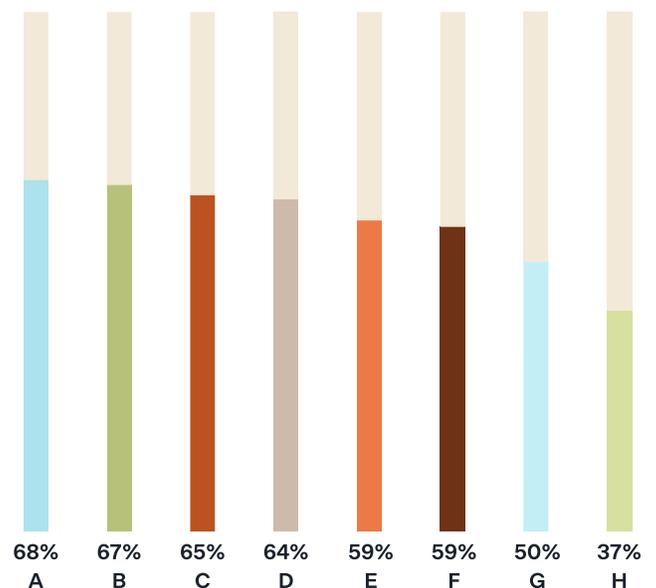
SOURCE: ETS Human Progress Study (September, 2023). Questions: "If you were able to take skills assessments and receive guidance as a pathway for career growth, would you be more or less likely to do or feel any of the following?" (Less likely/No change/More likely).

The future of assessment will enhance the learning experience and power human progress.

Technology and AI enable us to change how assessments operate and how in-demand skills are measured.

Assessments will be more of a two-way street where learners may provide information to teachers or policy-makers on their skill levels, and learners receive guidance on their strengths and gaps.

More personalized assessments will advance quality and equity in education, resulting in learning of more transferable skills promoting learning and performance for people worldwide.

THE SOLUTION

THE PROBLEM

Educational testing doesn't maximize assessment benefits.

Driver	Future Change
Technology and science	Advancements will make creating, administering and scoring much more efficient while minimizing biases.
Performance feedback	Insights will fuel individual learning and skill gains.
Demand for lifelong learning	Assessments will expand to workplace settings and create more paths to success.
Perception shift of scores	Scores will not be viewed as the end goal, but a facilitator of growth and progress.
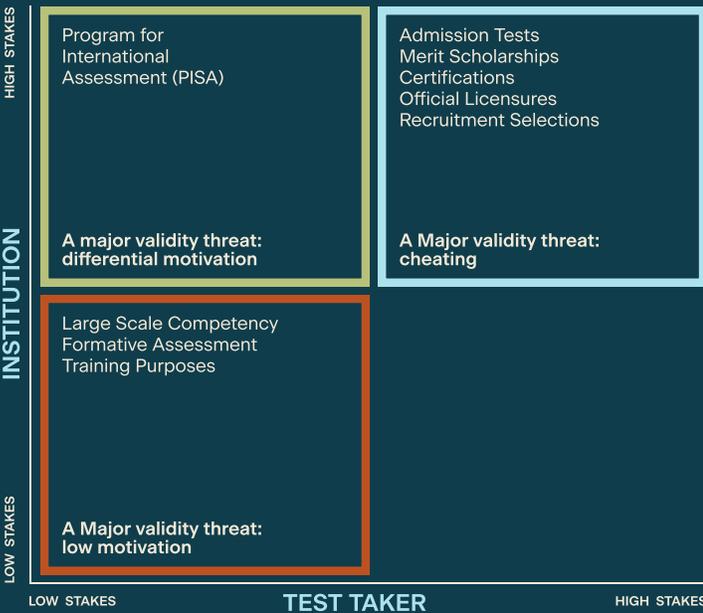
The future must address the threats to both low- and high-stakes assessments

HIGH STAKES	Program for International Assessment (PISA) **A major validity threat: differential motivation**	Admission Tests Merit Scholarships Certifications Official Licensures Recruitment Selections **A Major validity threat: cheating**
LOW STAKES	Large Scale Competency Formative Assessment Training Purposes **A Major validity threat: low motivation**	

INSTITUTION

LOW STAKES   **TEST TAKER**   HIGH STAKES

Future assessments will open doors to opportunities.

Percentage of respondents who agree with the following statements

LEARNING ASSESSMENTS CAN:	AGREE	STRONGLY AGREE
Help individuals achieve better job opportunities and career advancement	85%	40%
Contribute significantly to boosting individual self-esteem	84%	37%
Can contribute significantly to boosting overall career satisfaction	84%	38%
Provide valuable opportunities for advancement	84%	34%
Effectively measure skills relevant to emerging industries and job roles	83%	35%
Bridge the skills gap to provide equal opportunities for advancement (e.g., across different backgrounds such as socioeconomic, racial, gender, etc.)	82%	34%