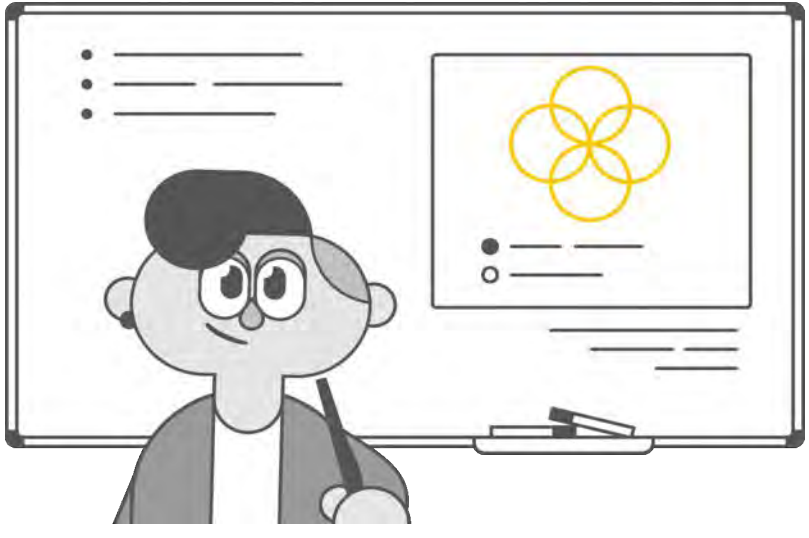
Student-Centered Language Assessment: Lowering Barriers and Increasing Opportunities

Ryan Munson, Lindsay Addington, and Marivi Walker

Agenda

- Introductions
- Duolingo English Test (Overview)
- Duolingo English Test (Validity & Reliability)
- Graduate Data (Trends from 2021)
- Institutional Perspective: Florida Tech
- Use in Practice (Students & Institutions)
- Q&A



Introductions

Presenters

Ryan Munson
United States Engagement
ryan@duolingo.com

Marivi Walker
Florida Tech
mvwalker@fit.edu

Lindsay Addington
United States Engagement
lindsay@duolingo.com

MISSION

Use technology to lower barriers and increase opportunities for English language learners everywhere.

duolingo english test

duolingo english test overview

Accessible - Test has been taken in 200+ countries and costs $49 USD

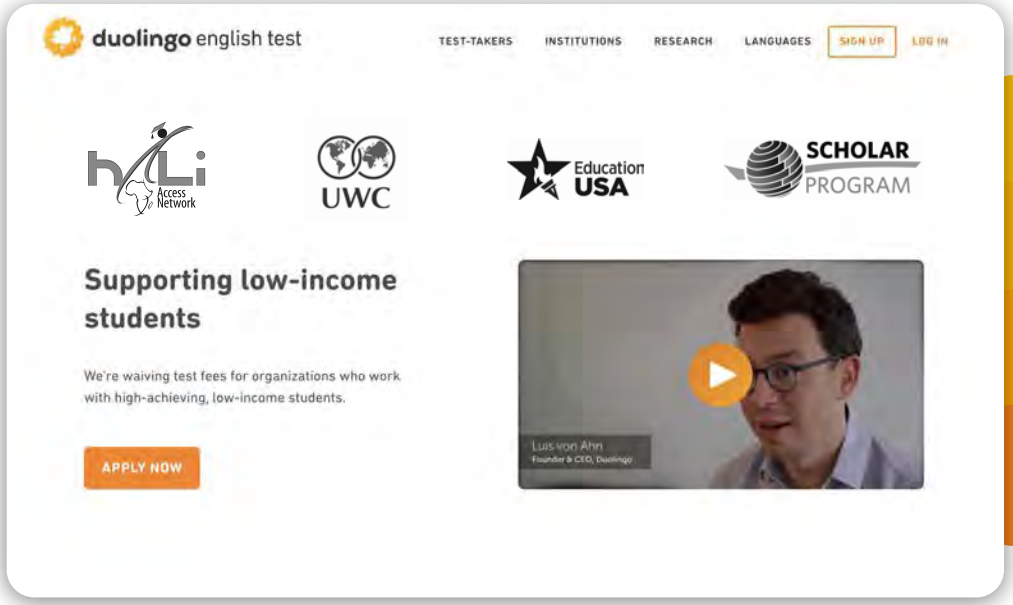
Comprehensive - Includes scores, video interview, and writing sample

Fast - Certified results available in 2 days

Reliable - Research supports use in high-stakes decisions

Secure - Remote proctoring, AI, browser lockdown, adaptive test, and more

Access Program 2020-21



70+ countries

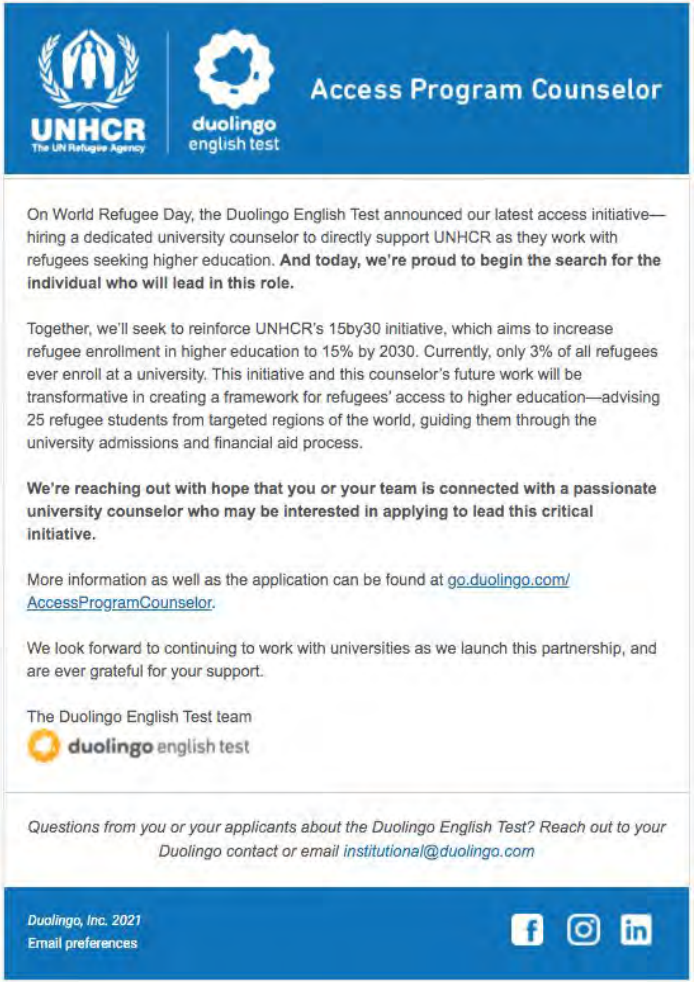
150+ counselors / orgs

3,000+ direct use

10,000+ offered to universities

englishtest.duolingo.com/access

NEW! Duolingo English Test partnership with UNHCR



UNHCR
The UN Refugee Agency

duolingo
english test

Access Program Counselor

On World Refugee Day, the Duolingo English Test announced our latest access initiative—hiring a dedicated university counselor to directly support UNHCR as they work with refugees seeking higher education. **And today, we're proud to begin the search for the individual who will lead in this role.**

Together, we'll seek to reinforce UNHCR's 15by30 initiative, which aims to increase refugee enrollment in higher education to 15% by 2030. Currently, only 3% of all refugees ever enroll at a university. This initiative and this counselor's future work will be transformative in creating a framework for refugees' access to higher education—advising 25 refugee students from targeted regions of the world, guiding them through the university admissions and financial aid process.

We're reaching out with hope that you or your team is connected with a passionate university counselor who may be interested in applying to lead this critical initiative.

More information as well as the application can be found at go.duolingo.com/AccessProgramCounselor.

We look forward to continuing to work with universities as we launch this partnership, and are ever grateful for your support.

The Duolingo English Test team

duolingo english test

Questions from you or your applicants about the Duolingo English Test? Reach out to your Duolingo contact or email institutional@duolingo.com

Duolingo, Inc. 2021
Email preferences

International acceptance

3,000+ U.S. programs

200+ Canadian programs

150+ UK programs

50+ Irish programs

30+ Australian programs

What we're seeing

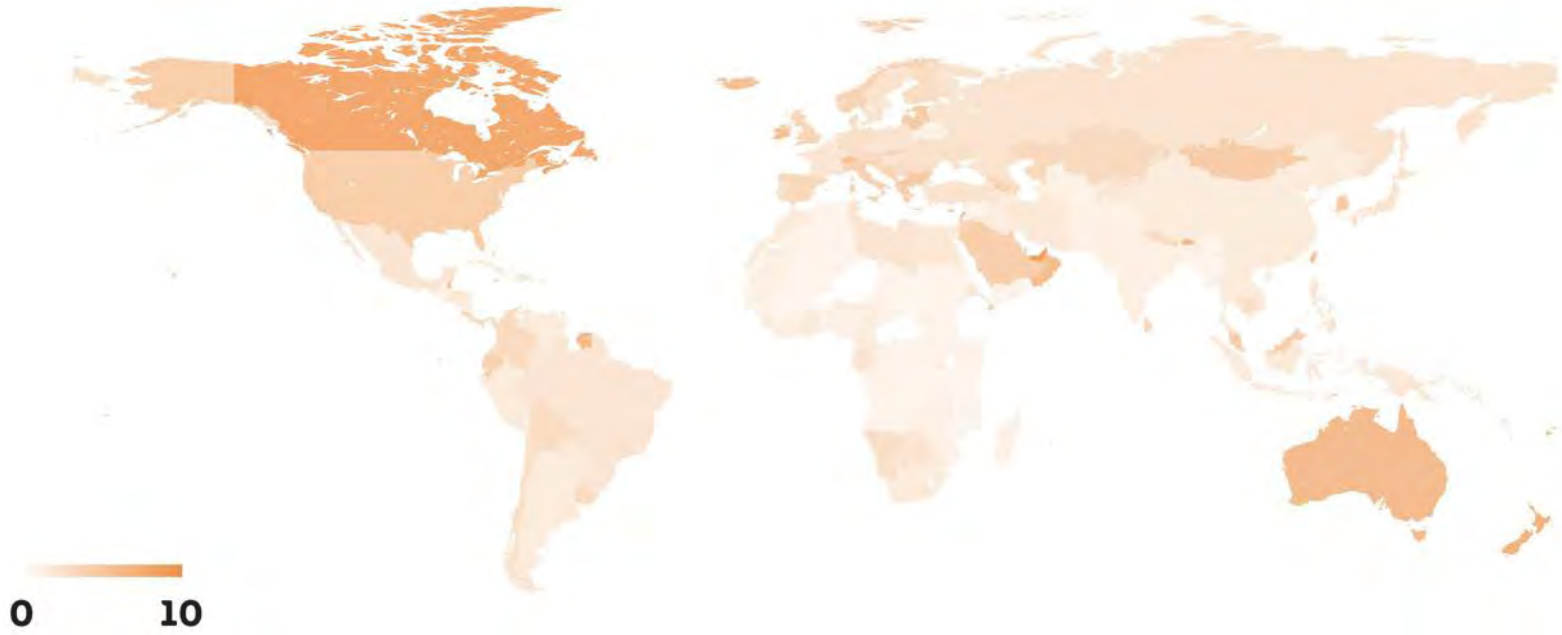
+2,000

New accepting institutions in 2020. Over **3,500** programs now accept the Duolingo English Test

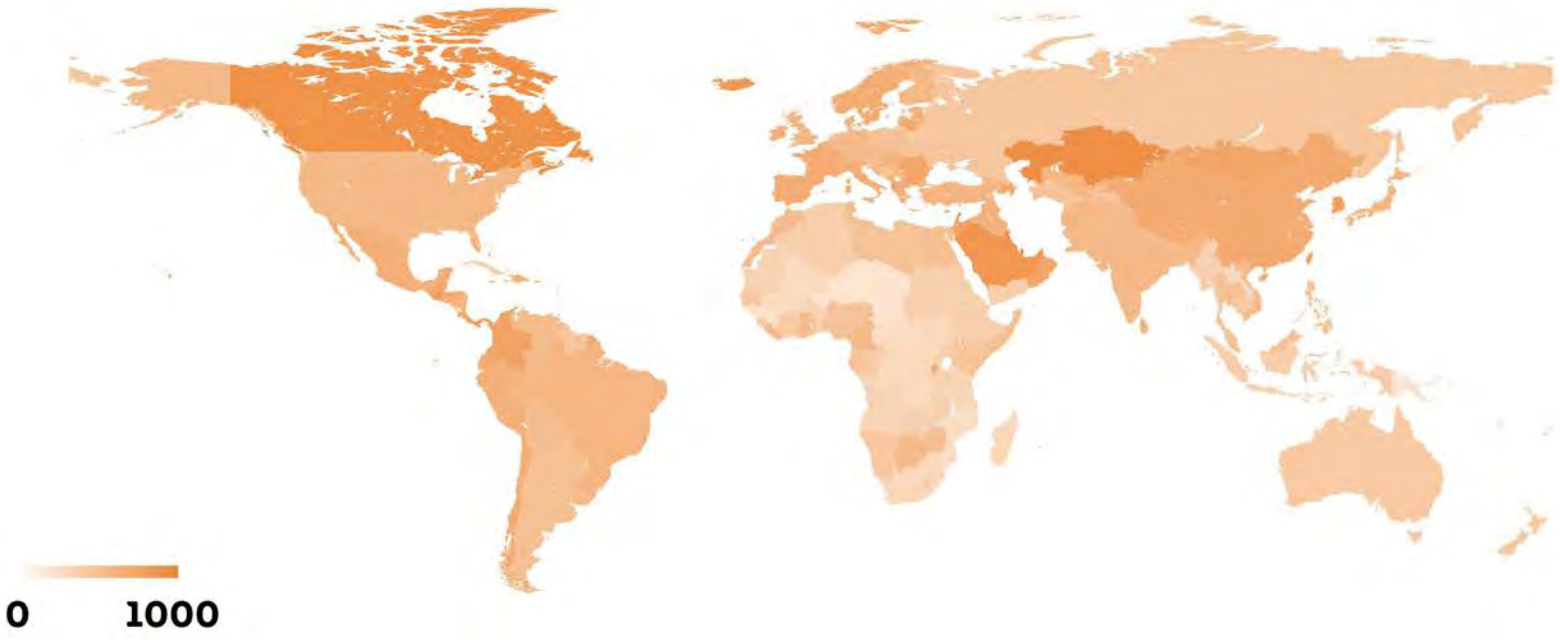
+2,000%

YTD increase in test volume. Large increases coming from China, Korea, Brazil, Mexico, India, Kazakhstan

test centers per million people



duolingo test takers per million people



Validity & Reliability

More researchers, more research

Dr. Alina von Davier
Chief of Assessment

- PhD in Mathematics from Otto von Guericke University Magdeberg
- President of the International Association of Computer Adaptive Testing
- Board Director, Assoc. of Test Publishers

Dr. Jill Burstein
Principal Assessment Scientist

- PdD in Linguistics, CUNY
- Previously developed automated writing evaluation technologies; conducted writing analytics/achievement research
- Specializes in natural language processing and computational linguistics

Dr. Antony John Kunnan
Principal Assessment Scientist

- PhD in Applied Linguistics, UCLA
- Honorary Professor, Univ. of Hong Kong
- Author of Evaluating Language Assessments (Routledge, 2018), co-editor of Language Assessment Quarterly

Dr. J.R. Lockwood
Principal Assessment Scientist

- PhD in Statistics, CMU
- Previously conducted research at RAND and ETS
- Specializes in statistics, psychometrics, latent variable modeling, and data analysis

Dr. Geoff LaFlair
Senior Assessment Scientist
- PhD in Applied Linguistics, NAU
- Published in Language Testing, Applied Linguistics, The Modern Language Journal, and Transactions of the Association for Computational Linguistics

Dr. Yigal Attali
Principal Assessment Scientist
- PhD in Cognitive Psychology, The Hebrew Univ. of Jerusalem
- Extensive experience in development of innovative edu technology solutions, automated scoring, and automated item generation

Ramsey Cardwell
Assessment Scientist
- PhD candidate in Educational Measurement, UNC Greensboro
- Previously interned at College Board and Medical Council of Canada
- Presented at AERA, NCME, AAAL, and AALA

Dr. Sarah Goodwin
Assessment Scientist
- PhD in Applied Linguistics, Georgia State University
- Developed English and Spanish items for the University of Michigan and Michigan State University
- Specializes in item development, examinee response processes, corpus linguistics, listening, and writing

Dr. Yena Park
Assessment Scientist
- PhD in Second Language Studies, Indiana University
- Research interests include listening, speaking, and integrated tasks in L2 assessment
- Extensive experience in test development

technical advisory board

Micheline Chalhoub-Deville

- Professor, Educational Research Methodology, UNC at Greensboro
- President, International Language Testing Association
- Formerly, served on the TOEFL® Committee of Examiners, the TOEFL® Policy Board, and the British Council Assessment Board

Eunice Eunhee Jang

- Professor, Department of Applied Psychology and Human Development, University of Toronto
- Specializations in diagnostic language assessment and technology-rich learning and assessment.
- Current research includes AI-infused assessment systems supporting literacy development and international student success

Bryan Smith

- Associate Professor, English, Arizona State University
- Researcher in computer-assisted language learning
- Editor of CALICO Journal, an international journal devoted to research and discussion on technology and language learning

Stephen Sireci

- Distinguished Professor, Psychometrics and Director of the Center for Educational Assessment, UMass Amherst
- Researcher in educational test development particularly issues of validity, standard setting
- Vice President of the National Council of Measurement in Education (NCME).

Brian Junker

- Professor of Statistics and Data Science, Carnegie Mellon University
- Extensive experience in applying modern statistics and statistical psychometrics to challenging problems in assessment
- Co-chair, Design and Analysis Committee, National Assessment of Educational Progress

Construct Validity

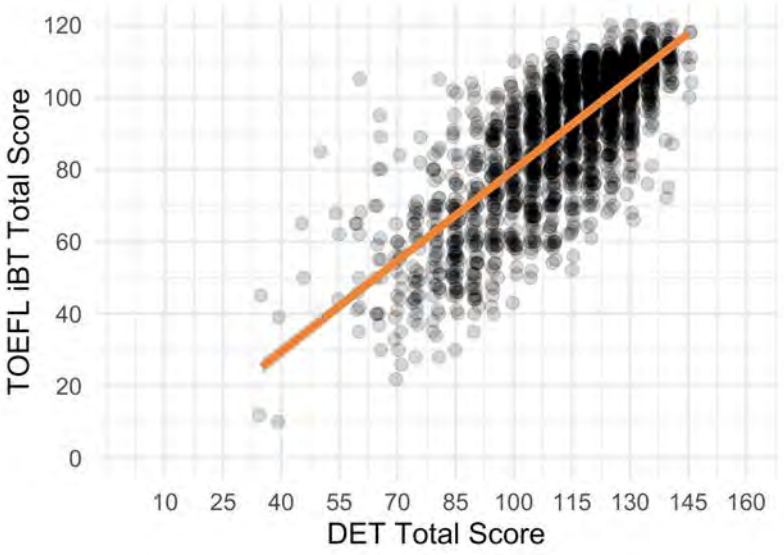
Scale	CEFR	Descriptors
10 | 55	A1 | A2	• Can understand very basic English words and phrases. • Can understand straightforward information and express themselves in familiar contexts.
60 | 85	B1	• Can understand the main points of concrete speech or writing on routine matters such as work and school. • Can describe experiences, ambitions, opinions, and plans, although with some awkwardness or hesitation.
90 | 115	B2	• Can fulfill most communication goals, even on unfamiliar topics. Can understand the main ideas of both concrete and abstract writing. • Can interact with proficient speakers fairly easily.
120 | 160	C1 | C2	• Can understand a variety of demanding written and spoken language including some specialized language use situations. • Can grasp implicit, figurative, pragmatic, and idiomatic language. • Can use language flexibly and effectively for most social, academic, and professional purposes.

Alignment to IELTS & TOEFL

CORRELATION

Relationship	**r**	**n**
**TOEFL ↔ IELTS*	*.73*	*1,153*
DET ↔ IELTS	*.78*	991
DET ↔ TOEFL	.77	2,139

DET ↔ TOEFL



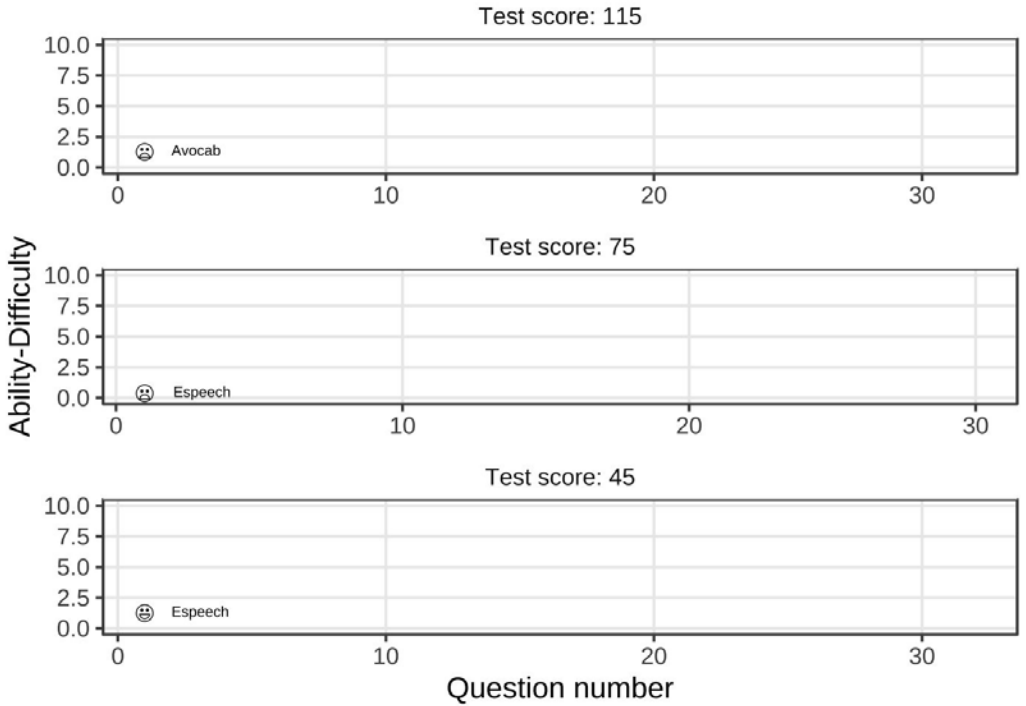
*ETS, 2010

Scale and concordance

Duolingo	IELTS
85-90	5.5
95-100	6
105-110	6.5
115-120	7
125-130	7.5
135-140	8
145-150	8.5
155-160	9

	TOEFL
150-160	120
145	119
140	116-118
135	113-115
130	108-112
125	103-107
120	97-102

Computer Adaptive Testing



Note: item types are equally represented in the test, to represent all skills
Each format is shown 3–7 times (6 on average)

Reliability

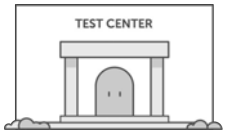
- **Internal consistency:** how well the questions work together to measure the component of language
- **Test-retest**: two different test scores for the same people within 30 days

Subscore	Internal consistency	Test-retest reliability
Literacy	0.89	0.82
Conversation	0.93	0.80
Comprehension	0.95	0.78
Production	0.76	0.83

Note: The closer the value of these are to 1.00 the better. Internal consistency was calculated using split-half reliability methods.

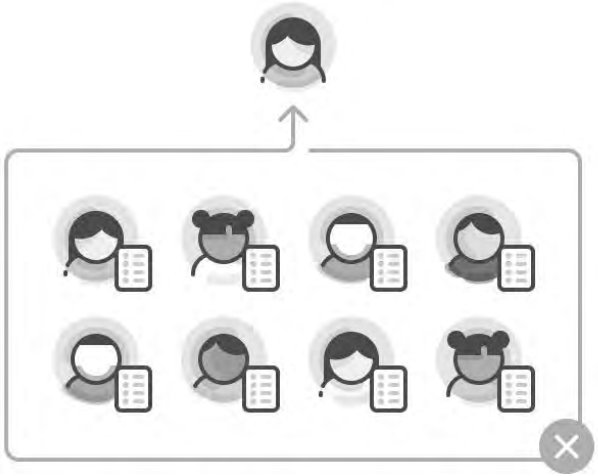
Digital-first means unique security advantages

- Large item bank means we’re not worried about item exposure
- No supply-chain risks (e.g. bribed printers)
- ML assistance and behaviour database grows with every test taker
- Adaptive digital delivery eliminates test theft problems
- We can easily collect test session and test taker video/audio recordings



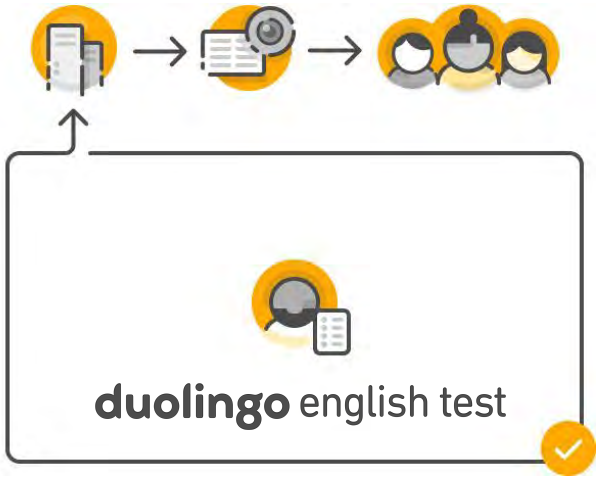
vs

Human proctoring



1:25

Varies depending on the test and center, but on average, 1 proctor is tasked with supervising ~25 test-takers



Multiple:1

Each test session is individually reviewed by multiple highly trained proctors after test completion

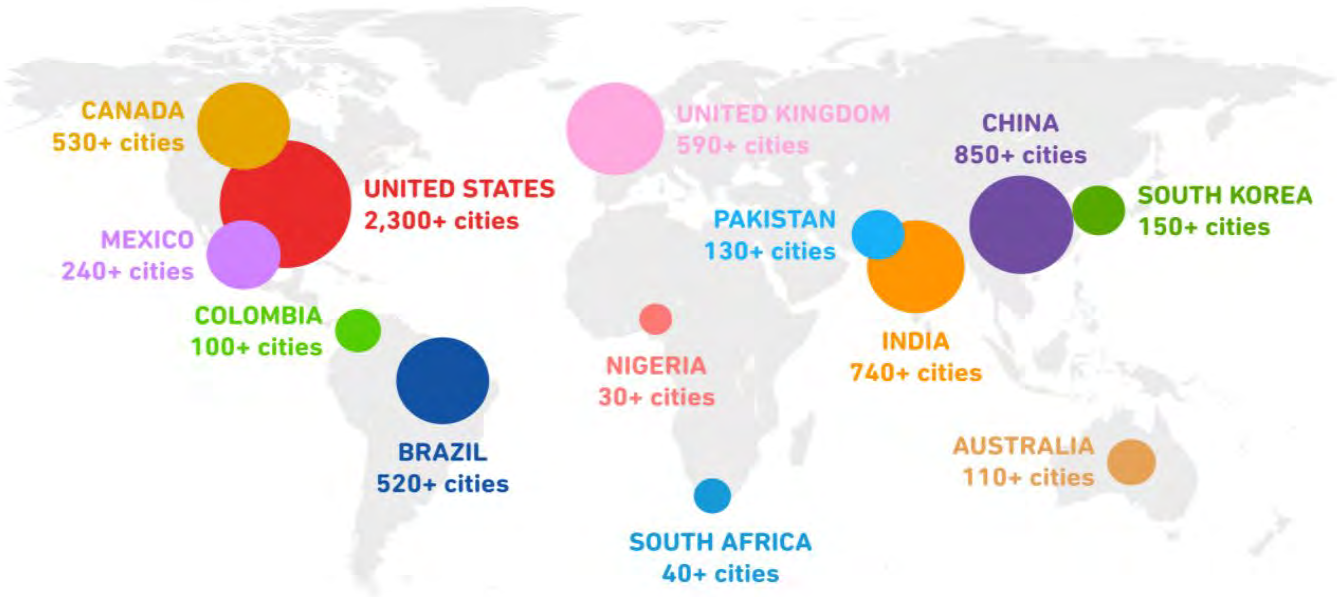
2021 Graduate Data

test-taker data & insights

Snapshot: Number of Duolingo English Test taker cities in a range of countries and regions

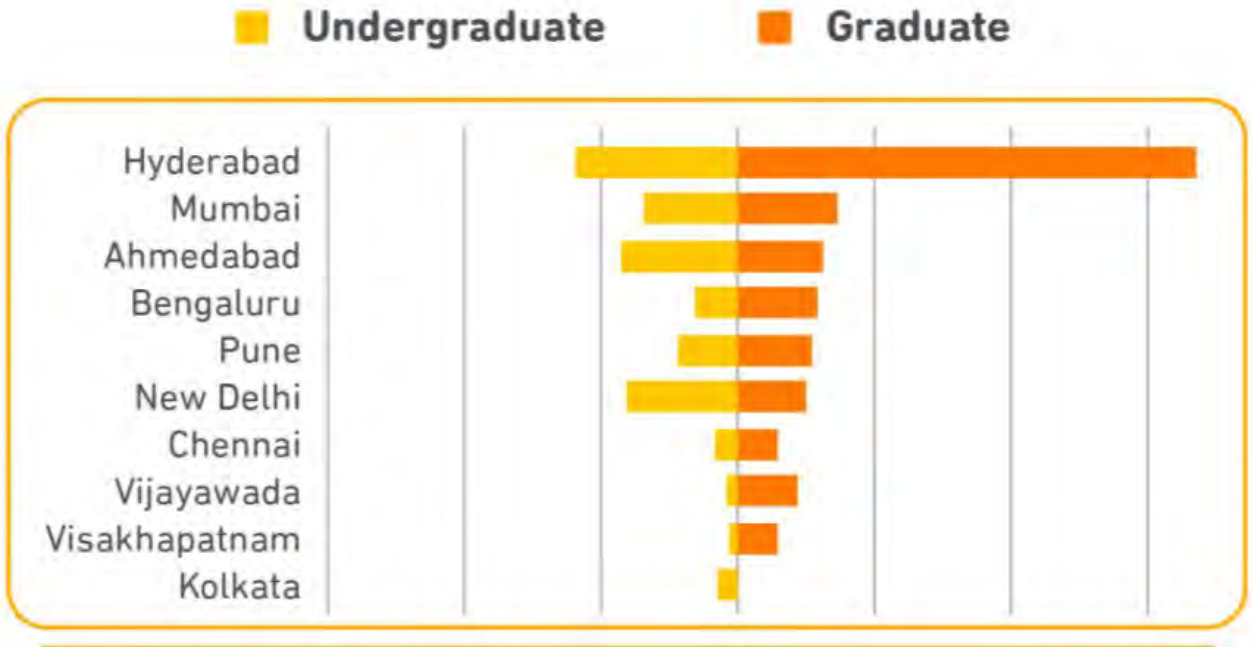
12,000+

Test Taker Cities

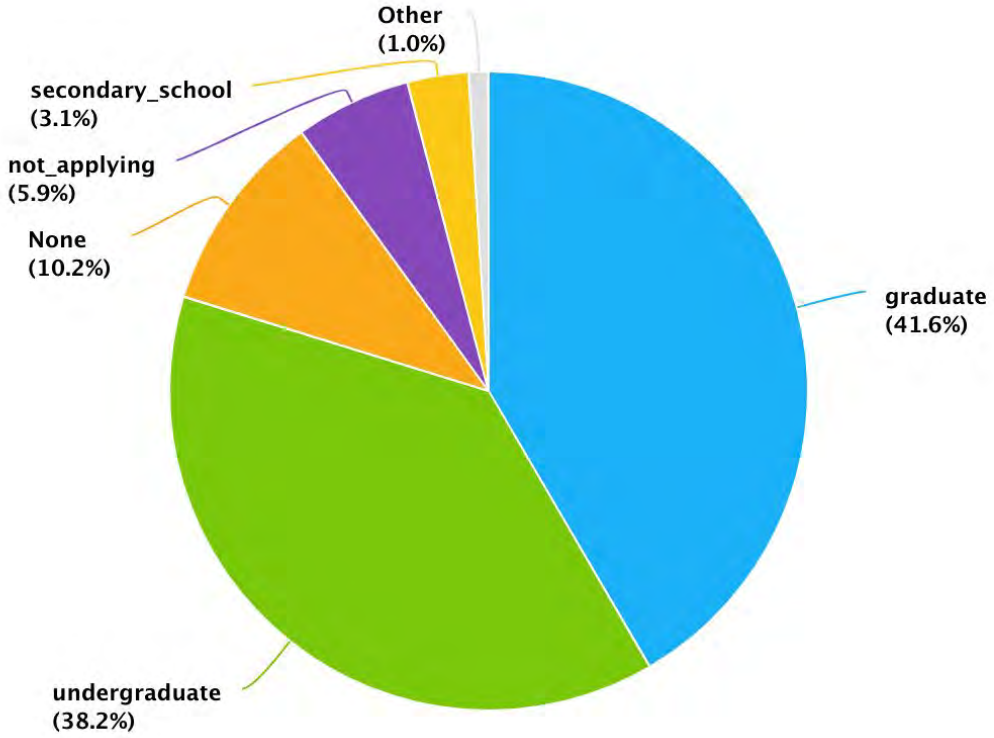


India insights

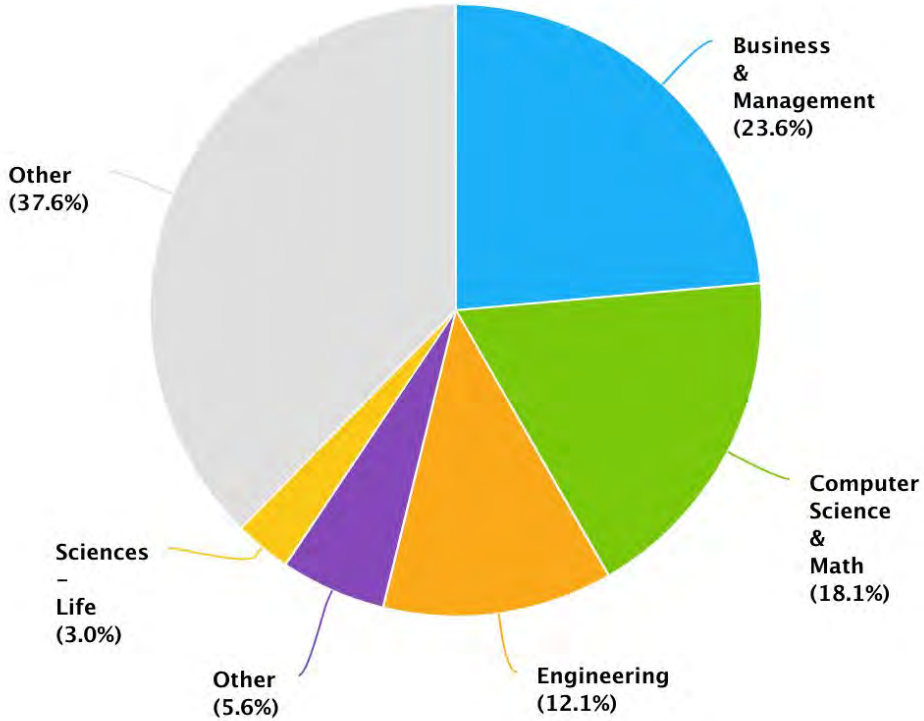
India
740+ Cities



Test-taker intent: Academic Level September - October 2021



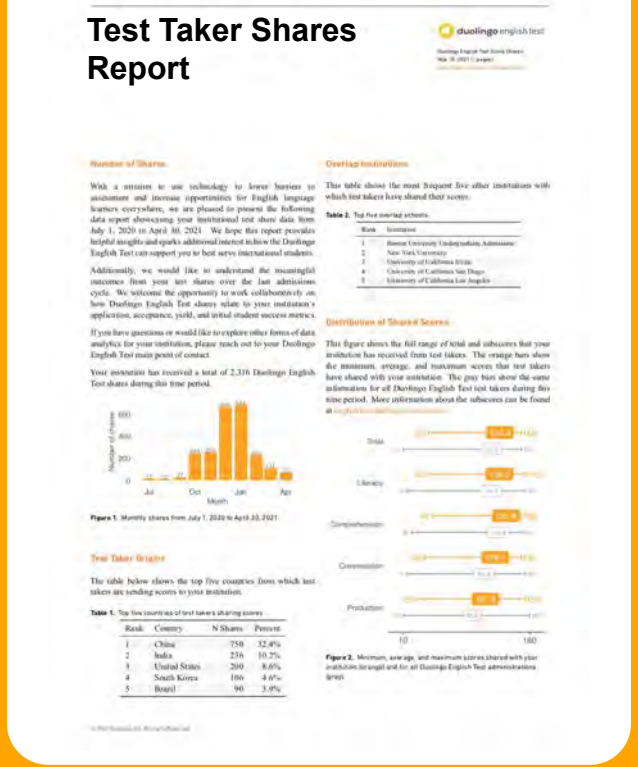
Graduate test-taker intent: Field of Study September - October 2021



COLLABORATIVE PARTNERS

Institutional test share reports - New in 2022

- ➜ End of admission cycle test-taker summary
- ➜ Top countries of test takers
- ➜ Overlapping institutions for score sends



Test Taker Shares Report

duolingo english test

Number of Shares

With a mission to use technology to lower barriers to assessment and increase opportunities for English language learners everywhere, we are pleased to present the following data report showcasing your institutional test share data from July 1, 2020 to April 30, 2021. We hope this report provides helpful insights and sparks additional interest in how the Duolingo English Test can support you to best serve international students.

Additionally, we would like to understand the meaningful outcomes from your test shares over the last admissions cycle. We welcome the opportunity to work collaboratively on how Duolingo English Test shares relate to your institution's application, acceptance, yield, and initial student success metrics.

If you have questions or would like to explore other forms of data analytics for your institution, please reach out to your Duolingo English Test main point of contact.

Your institution has received a total of 2,336 Duolingo English Test shares during this time period.

Figure 1. Monthly shares from July 1, 2020 to April 30, 2021

Test Taker Origin

The table below shows the top five countries from which test takers are sending scores to your institution.

Table 1. Top five countries of test takers sharing scores

Rank	Country	N Shares	Percent
1	China	750	32.4%
2	India	236	10.2%
3	United States	200	8.6%
4	South Korea	186	8.0%
5	Brazil	90	3.9%

Overlap Institutions

This table shows the most frequent five other institutions with which test takers have shared their scores.

Table 2. Top five overlap schools.

Rank	Institution
1	Boston University Undergraduate Admissions
2	New York University
3	University of California Irvine
4	University of California San Diego
5	University of California Los Angeles

Distribution of Shared Scores

This figure shows the full range of total and subscores that your institution has received from test takers. The orange bars show the minimum, average, and maximum scores that test takers have shared with your institution. The gray bars show the same information for all Duolingo English Test test takers during this time period. More information about the subscores can be found at

Figure 2. Minimum, average, and maximum scores shared with your institution (orange) and for all Duolingo English Test administrations (gray).

Institutional Perspective: Florida Tech

Institutional Overview

FLORIDA TECH
FLORIDA'S STEM UNIVERSITY™

FLORIDA INSTITUTE OF TECHNOLOGY, MELBOURNE FL
....on Florida's Space Coast

Why the Duolingo English Test?

FLORIDA TECH
FLORIDA'S STEM UNIVERSITY™

- Accessibility
- Low cost to student
- Ease for student
- Quick turnaround of results
- Fee waivers available
- High level security
- Excellent technical support and customer service

Process to Accept?

FLORIDA TECH
FLORIDA'S STEM UNIVERSITY™

Florida Tech began to accept DET in Spring 2019 after visiting the Pittsburgh office and subsequent approval by English & Languages Division, School of Arts & Communication.

First “test” group were members of our Crew team. They had been admitted but were competing in the European championships and could not schedule alternative testing . DET made it very easy for them to test over the summer while on the road for the Fall 2019 cycle.

Using the Test & Score Criteria

Scores received via:

Slate integration

- Scores electronically uploaded, ELP automatically satisfied if DET score of 100 or 120 for GSA

DET dashboard allows verification and ensures secure certified results for institutions

Application Trends

FLORIDA TECH
FLORIDA'S STEM UNIVERSITY™

Academic Year	Test Scores Received (UG & Grad)
2018-19	2
2019-20	10
2020-21	281
2021-22 (to date)	1556
2022-23 (to date)	34

Lessons Learned

FLORIDA TECH
FLORIDA'S STEM UNIVERSITY™

- No difference in academic performance for those who provided DET vs. any other ELP score- did not affect retention
- Glad we pushed DET approval - signed on early - 100% ready to offer international students an easy solution in 2020 and our AY 2020-2021 enrollments did not suffer, quite the contrary (remote access + on-campus)
- You can never have too many methods of demonstrating ELP.

Test Taker Shares Report for Florida Institute of Technology - Graduate

duolingo english test

Number of Shares

With a mission to use technology to lower barriers to assessment and increase opportunities for English language learners everywhere, we are pleased to present the following data report showcasing your institutional test share data from January 1, 2021 to November 15, 2021. We hope this report provides helpful insights and sparks additional interest in how the Duolingo English Test can support you to best serve international students.

Additionally, we would like to understand the meaningful outcomes from your test shares over the last admissions cycle. We welcome the opportunity to work collaboratively on how Duolingo English Test shares relate to your institution's application, acceptance, yield, and initial student success metrics.

If you have questions or would like to explore other forms of data analytics for your institution, please reach out to your Duolingo English Test main point of contact.

Your institution has received a total of 731 Duolingo English Test shares during this time period.

Figure 1. Monthly shares from January 1, 2021 to November 15, 2021

Test Taker Origins

The table below shows the top five countries from which test takers are sending scores to your institution:

Table 1. Top five countries of test takers sharing scores

Rank	Country	N Shares	Percent
1	India	561	76.7%
2	Iran	48	6.6%
3	United States	25	3.4%
4	Saudi Arabia	11	1.5%
5	Bangladesh	10	1.4%

Overlap Institutions

This table shows the most frequent five other institutions with which test takers have shared their scores.

Table 2. Top five overlap schools

Rank	Institution
1	University of New Haven Graduate Admissions
2	University of North Texas
3	Cleveland State University
4	New Jersey Institute of Technology
5	Arizona State University

Distribution of Shared Scores

This figure shows the full range of total and subscores that your institution has received from test takers. The orange bars show the minimum, average, and maximum scores that test takers have shared with your institution. The gray bars show the same information for all Duolingo English Test test takers during the July 1, 2020 to April 30, 2021 time period. More information about the subscores can be found at englishtest.duolingo.com/scores.

Figure 2. Minimum, average, and maximum scores shared with your institution (orange) and for all Duolingo English Test administrations (gray)

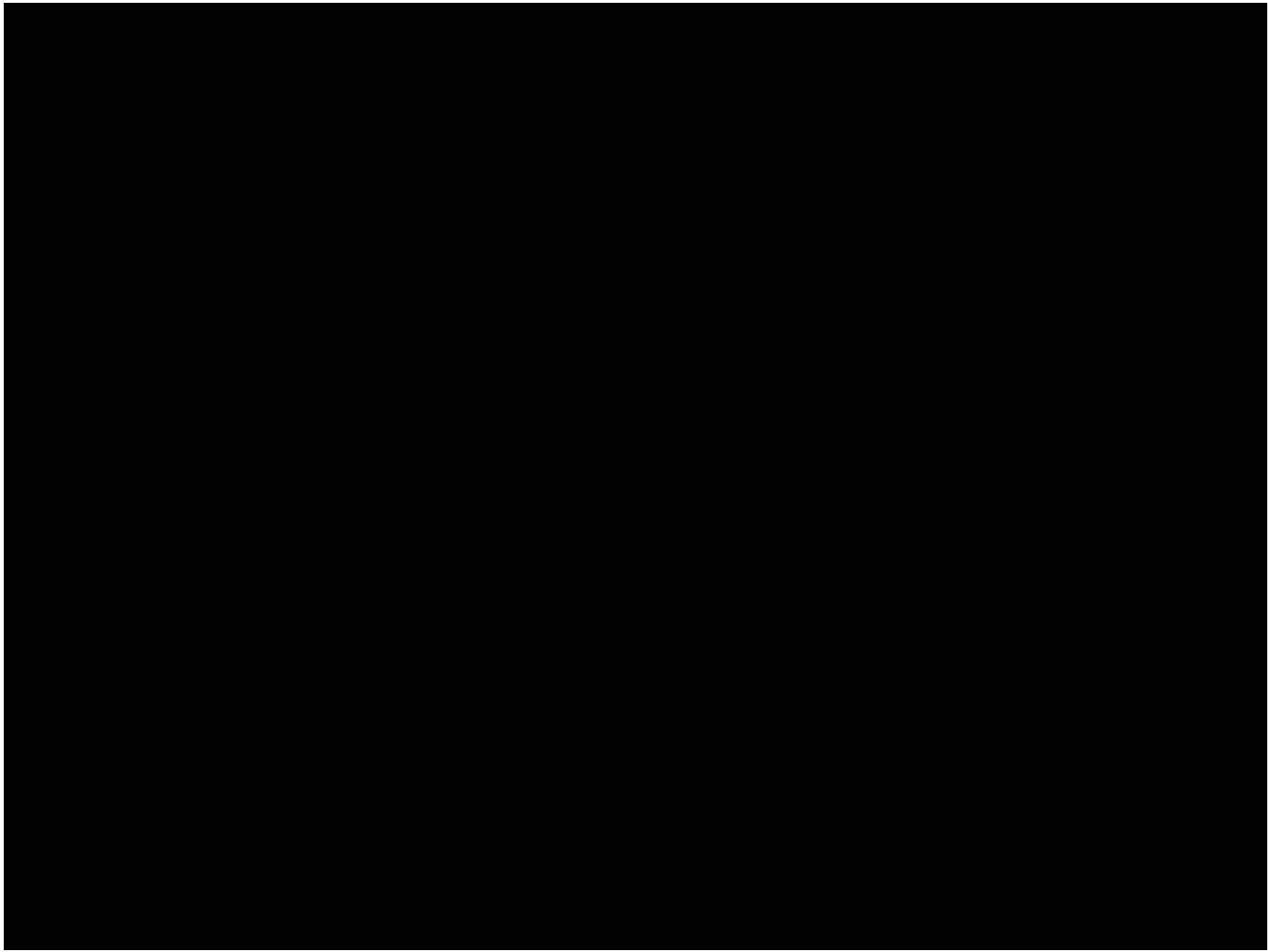
©2021 Duolingo, Inc. All rights reserved

FLORIDA TECH

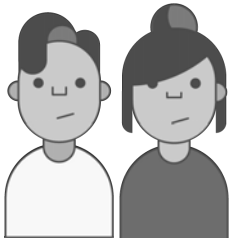
FLORIDA'S STEM UNIVERSITY™

Test Data Reports - Coming in 2022

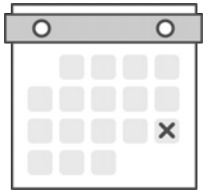
Use in Practice: Test Taker Journey



Traditional Testing

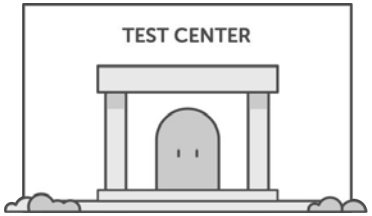


Students need to take an English test



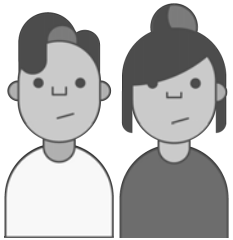
Book a date

Travel to test center- sometimes to a different city or country

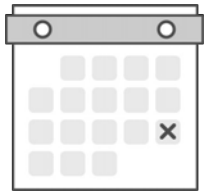


+3 hours to take a test

Duolingo English Test



Students need to take an English test



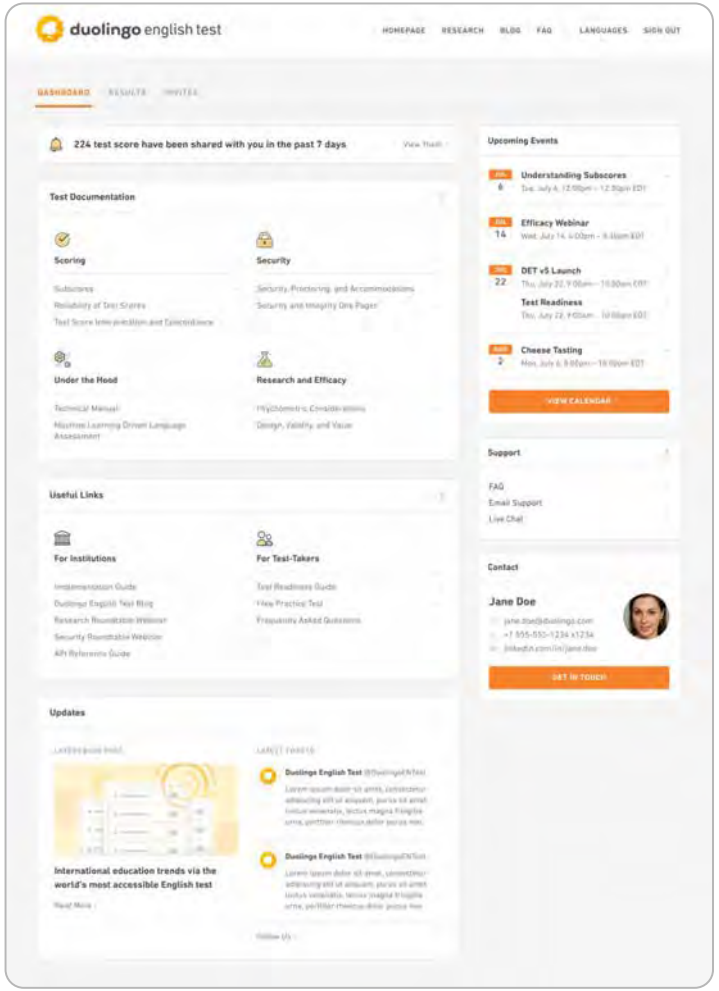
Take the test any day you want, any time you want

Test anywhere you have internet access and a computer

Use in Practice: Institutional Experience

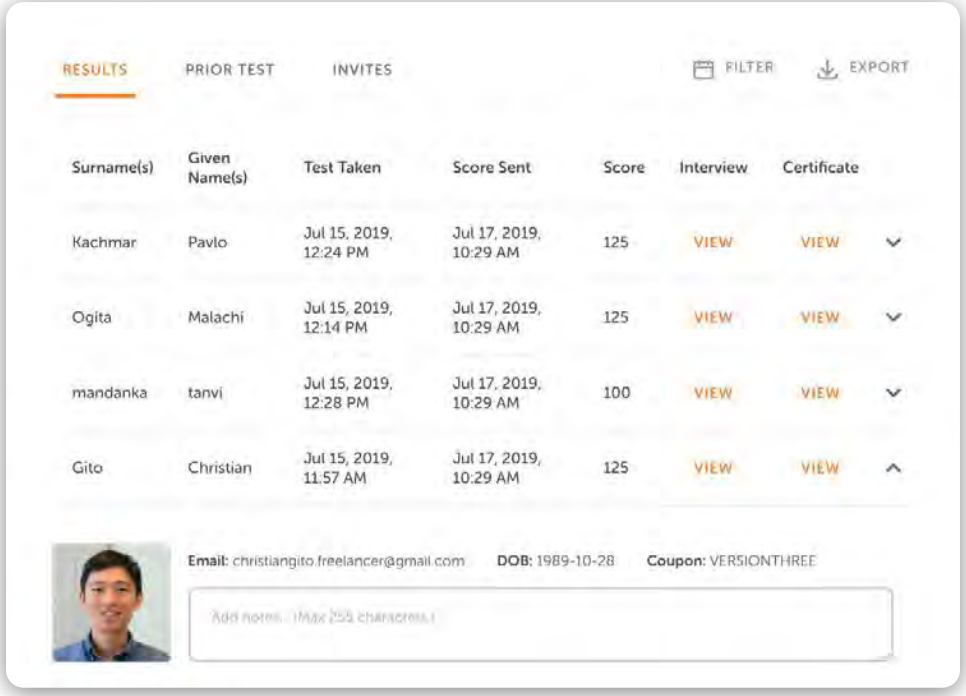
Institutional resource center

englishtest.duolingo.com/dashboard



DASHBOARD

Receiving Results



DASHBOARD

Video and Writing Sample

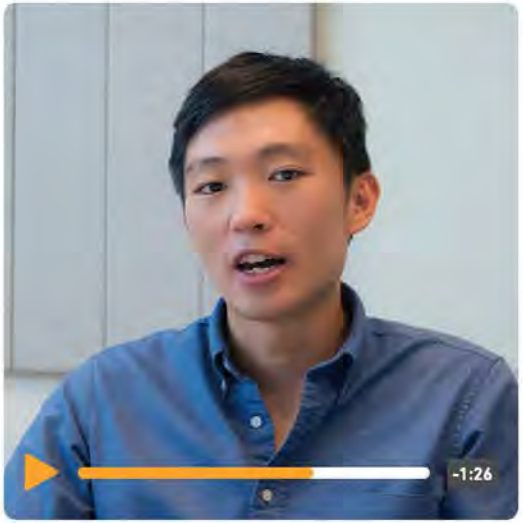
125

Li, David
September 15, 2019

VIDEO INTERVIEW

Describe the last place you visited with your family or close friends. What did you like most about this place? How could the place be improved for the people who visit there?

‹ 1 of 2 ›

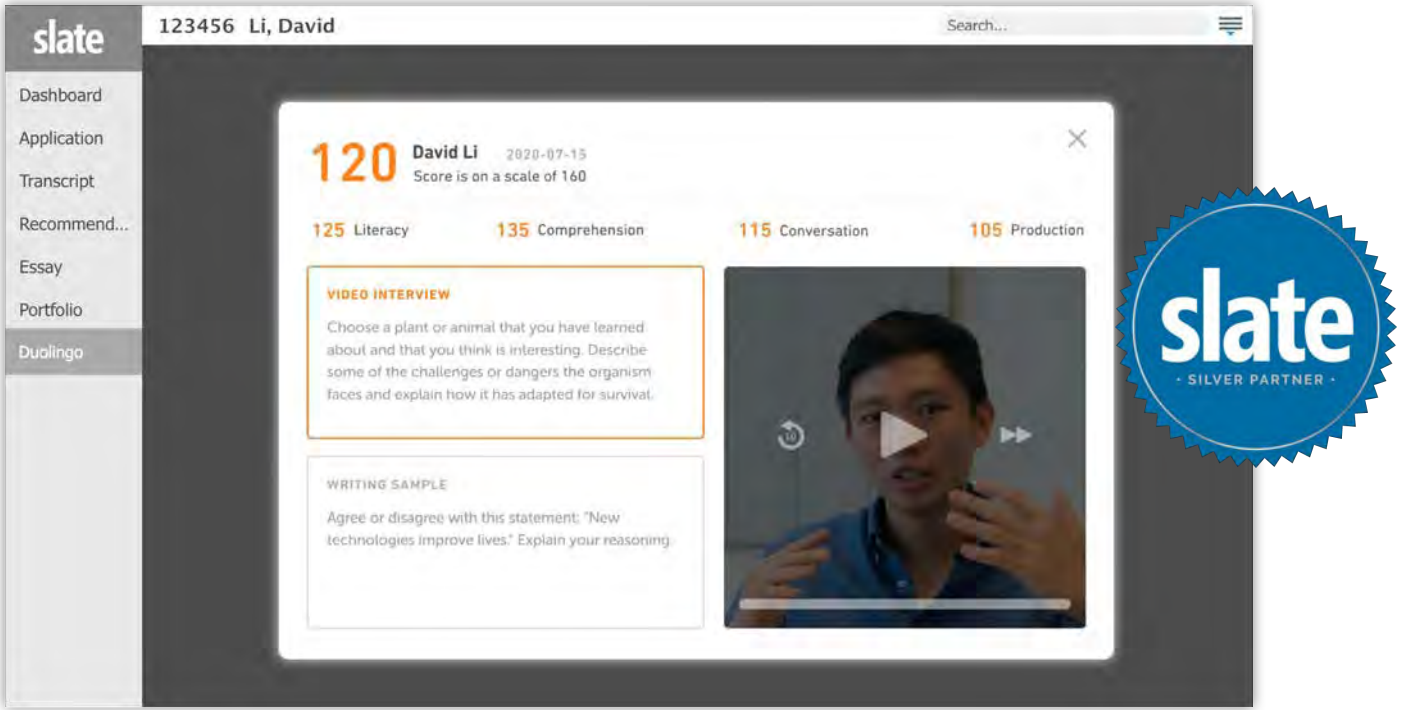


‹ 2 of 2 ›

RESPONSE

Money isn't always the only motivation for having a job. Other important reasons include the desire to be productive and to contribute to society. Many people truly enjoy utilizing their skills and serving people who need their assistance. I would keep a job even if I didn't need one to live so that I could remain connected to the world.

Slate and other CRM integrations



THE END

thanks!
questions?

institutional@duolingo.com