



השגחה בבחינות מקוונות Proctoring online Exams

<u>אתגר ההשגחה</u> על בחינות ביתיות בכתיבה חופשית













תהליך הבחינה...

שלבים בתהליך הבחינה...

— Authenticat	te Candidate ——	Control En	vironment —	11	Proctor Session	
Email Verification	ID Verification	Browser Tolerance	Secure Browser	Auto (Al-Based)	Record & Review	Live (Human-led)
•		•		•		
Ø		Ø	Ø	•	•	
Ø	⊘	⊘	Ø	•	Ø	Ø
	Before t	the test		-		
				- During the test		

Credit: https://mettl.com/online-remote-proctoring



ניטור הנבחנים

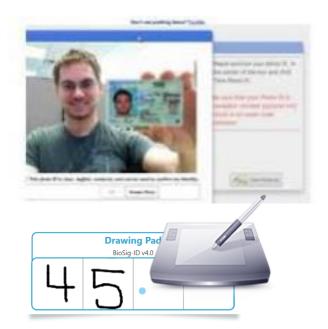
מאפיינים טכנולוגים בולטים בשירותים קיימים

אשר עלו בעת סקירת פתרון להשגחה בבחינות מרוחקות עצמאיות

- Fully automatic (AI) proctoring
- Live proctoring (\$\$\$)
- Media Record & review
- Secure browser
- Mobile phone usage prevention (?)

- Frequent ID checks
- 360 Cameras
- Biometric keystrokes
- Audio identity test
- Plagiarism detection
- Wearables (video camera glasses)

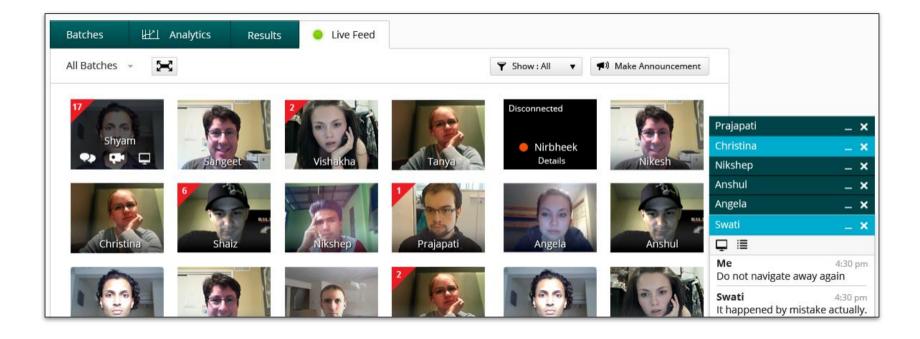
זיהוי ראשוני של הנבחן





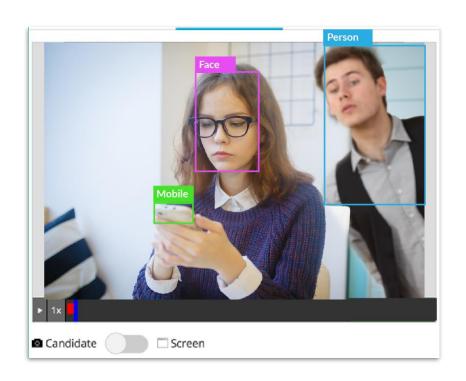


מעקב מולטימדיה אחר הנבחנים בזמן הבחינה



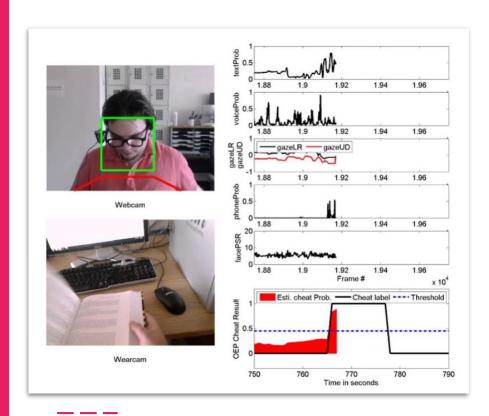
זיהוי ופענוח פעילות חשודה

מבוסס מערכות פענוח תמונה/וידאו



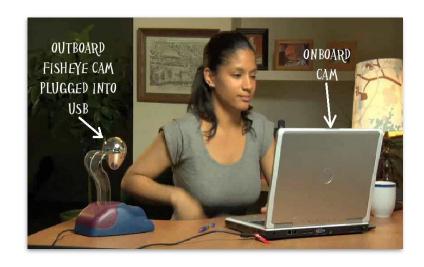
משקפי וידאו

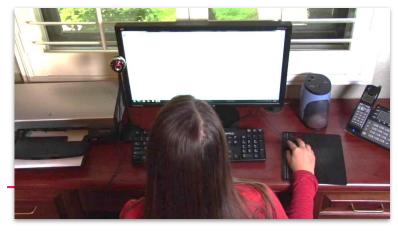
ניטור מתקדם



צילום הסביבה

ניטור מתקדם





סקירת חברות Proctoring סקירת חברות

Proctoring השוואת בין תכונות של שירותי

Company	<u>TeSLA</u>	Respondus	Examity	eProctoring	Proctorio	ProctorU	Smowl	Mettl	<u>Proctortrack</u>	ProctorFree
chnology	Open source	Proprietary	Proprietary							
Country	Europe	US	US	US	US	US	Spain	India	US	US
Used by Institutes		1500	500		400	1000		2000		
Automation	Y	Υ	Y	Y	Y	Y	Y	Y	Y	Y
Live person		Υ	Y		Y	Y		Y	Y	
Own exams	Υ									
Support math										
Video/Audio recording	Y	Υ	Y	Y	Y	Y	Y			
Snapshots of User		Υ		Y			Y		Y	
Exam screen recording						Y		Y	Y	
Face recognition	Υ				Y		Y		Y	
Al video detections				Y	Y	Y	Y	Y	Y	
Voice verification										
ID checks		Υ	Y	Y	Y	Y	Y	Y	Y	
Keystroke biometrics	Υ		Y			Y	Y			
Safe exam browser				Y				Y		
Lockdown browser		Υ			Y	Y			Y	
Browser extension						Y				
Moodle integration		Υ	Y	Y	Y	Y	Y			Υ
360 Camera			Y							
Mobile phone detection								Y		
Plagiarism detection	Υ				Y					
Record & review		Υ		Y	Y	Y	Y	Y		Y
Payment gateway						Y		Y		
Personal questions						Y		Y		
GDPR compliant					Y		Some			
Accessibility					Y					
Location detection							Υ			

- ★ Exams
- ★ Student webcam monitor
- ★ Biometric keystrokes
- ★ Face recognition
- ★ Audio identity test
- ★ Forensic Analysis
 (Stylometry)
- ★ Plagiarism





An Adaptive Trust-based e-assessment System for Learning

Overview

Call submitted

Horizon2020 - INFORMATION AND COMMUNICATION TECHNOLOGIES

Topic: Technologies for better human learning and teaching.

Type: Innovation Action, with Large Scale Pilots.



Project Number: 688520 – TESLA – H2020-ICT-2015/H2020-ICT-2015 Agreement Number: 688520

Tomax



- **★** Exams
- ★ Student webcam monitor

Israeli company



Respondus

(used by 65%)

- Own Exams service
- Safe browser
- Student webcam monitor
- AI proctoring
- LockDown Browser

Respondus'

Assessment Tools for Learning Systems



CUSTOMER LOGIN

PRODUCTS

SUPPORT & RESOURCES

COMPANY

PRODUCTS

Respondus 4.0

Videos

Webinars

Guides

Trial

Pricing

Articles

LockDown Browser

Monitor

StudyMate

Test Bank Network



Respondus is a powerful tool for creating and managing exams that can be printed to paper or published directly to Blackboard Learn, Brightspace, Canvas, Moodle, and other learning systems. Exams can be created offline using a familiar Windows environment, or moved from one LMS to another. Whether you are a veteran of online testing or relatively new to it, Respondus will save you hours on each project.

Authoring Features

- Distinct user environments (called "personalities") for Blackboard Learn, Brightspace, Canvas, Moodle, and IMS QTI (see system requirements)
- · Create exams and assessments offline using a Windows interface
- Supports up to 15 question types, including calculated and algorithmic formats
- Import questions from MS Word (including embedded images), rich-text, QTI, and tab/comma delimited formats
- Access to thousands of Respondus-compatible publisher test banks FREE to instructors who adopt a participating textbook

VIEW MORE

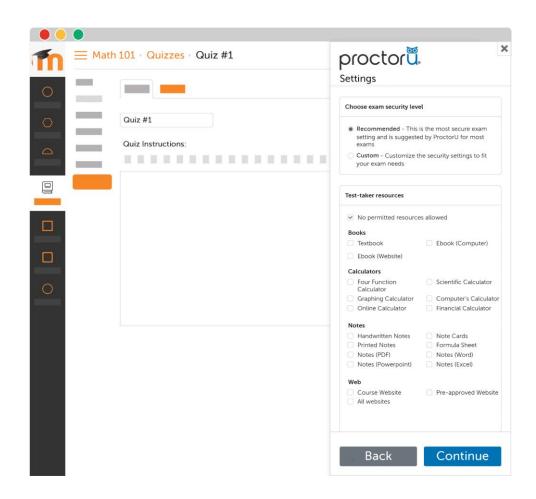
Preview, Publish and Printing Features

- · Preview questions before publishing them to the LMS
- Publish exams and assessments directly to an online course (media files are automatically uploaded)

ProctorU

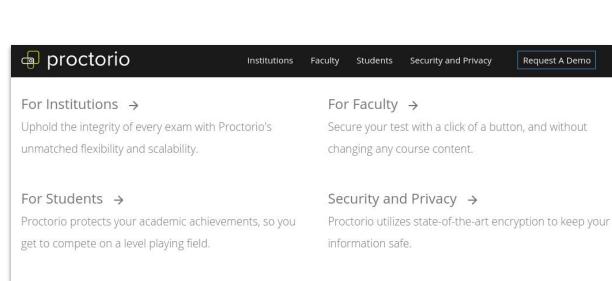
- ★ AI-powered auto
- ★ live proctoring
- ★ ID authentication
- ★ Safe browser
- ★ Student webcam monitor

Moodle + LTI



Proctorio

- **★** Exams
- ★ Safe browser
- ★ Student webcam monitor



Get up to twenty
free proctored exams
when you add Proctorio
to a course today!

REQUEST A DEMO

Examity

- Exams
- Safe browser
- Student webcam monitor
- Challenge questions
- Biometric keystrokes



Online Proctoring V FairExam® Levels V examiLINK® Integration V

FAQs V Contact Us Q











Level AA: Auto-Authentication

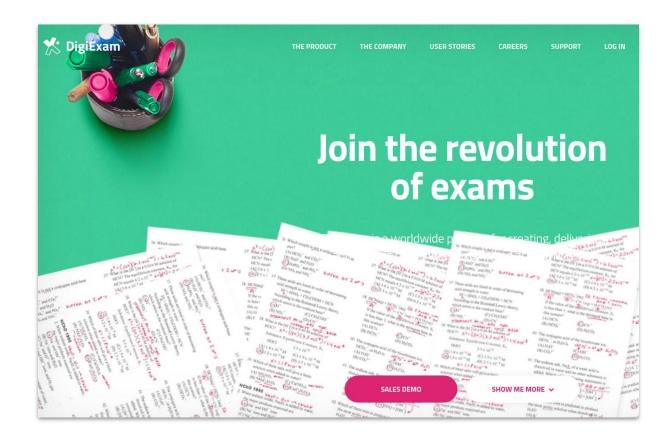
Designed for lower stakes assessments and meeting accepted standards. Testtakers snap pictures of their ID and face, answer challenge questions and enter a biometric keystroke signature to verify identity.

View our live authentication and online proctoring solution



DigiExam

- ★ Exams
- ★ Safe browser
- ★ Student webcam monitor
- ★ Challenge questions
- ★ Biometric keystrokes



eProctoring

- ★ Own exams
- ★ Safe browser
- ★ Student webcam monitor
- ★ AI monitoring



ספר דיגיטלי חדש

התגוננות בפני רמאויות והעתקה במבחנים מקוונים

Phillip Dawson @phillipdawson



Submitted my book "Defending Assessment Security in a Digital World: Preventing E-Cheating and Supporting Academic Integrity in Higher Education" to Routledge yesterday! Hope we can get it out ASAP, lots in there for the COVID-19 online shift

Defending Assessment Security in a Digital World: Preventing E-Cheating and Supporting Academic Integrity in Higher Education

Phillip Dawson

List of chapt	ers	
Chapter 1.	E-cheating	8
Chapter 2.	Assessment security	24
Chapter 3.	The e-cheating lifecycle and how to disrupt it	41
Chapter 4.	Cybersecurity, e-cheating and assessment security	59
Chapter 5.	Lessons from e-cheating in games and gambling	69
Chapter 6.	E-cheating, assessment security and artificial intelligence	81
Chapter 7.	Surveillance and the weaponization of academic integrity	94
Chapter 8.	Metrics and standards for assessment security	103
Chapter 9.	Structuring and designing assessment for security	121
Chapter 10.	Conclusion: Securing assessment against e-cheating	133

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שמירה על טוהר בחינות בכתיבה חופשית מרחוק בקנה מידה גדול

- מה היא מערכת הקלט המתאימה לבחינות בכתיבה חופשית מרחוק ולבקרתן?
 - 🧡 כיצד מוודאים כי הנבחן משתמש רק בחומר העזר המותר בבחינה?
 - ?כיצד בודקים שהנבחן אינו מתקשר לעזרה לאנשים אחרים
- איך מוודאים שהנבחן אינו נעזר באינטרנט או בכלי תקשורת אחרים כדי לפתור את רבחינה?
 - (אלפי נבחנים) נדרש פתרון בעלות נמוכה ופתרון המאפשר התקנה בהיקף גבוה
 - ?כיצד מזהים את הנבחן לאורך כל הבחינה

