



The Expanding Test Taker “Dataverse”

John Weiner | Lifelong Learner Holdings
Maxim Morin | Medical Council of Canada

Moderator: Isabelle Gonthier | PSI

#CLEAR2023AEC



Meet the presenters

- John Weiner, Chief Science Officer, Lifelong Learner Holdings
- Maxim Morin, Senior Manager, Assessment, Medical Council of Canada
- Moderator: Isabelle Gonthier, Chief Assessment Officer, PSI





Mapping the Test Taker Dataverse

John Weiner

#CLEAR2023AEC

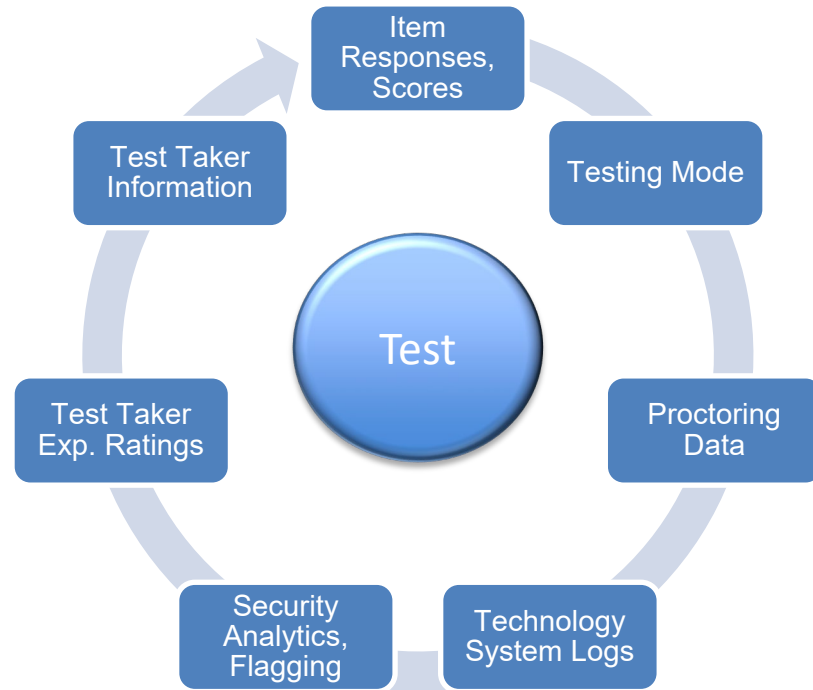


The TT digital footprint is expanding

In the beginning, there was the test...

...then came technology and systems to automate processes and store information.

- Content Mgmt. sys.
- Testing system
- Proctoring system
- Credential Mgmt. sys.



J. Weiner, Oct. 2023



These data enable quality assurance in measurement and test taker exp

Testing mode/proctoring data	Analyze cross-mode comparability, inform security analyses
Technology system log data disruptions	Monitor session disruptions, “complete” test/valid score
Security analytics and proctor data	Inform enforcement action, test development & psychometrics, tech system needs
Test taker experience ratings, feedback	Program evaluation, potential impact on performance, fairness, organization brand
Test taker information	Analyze bias, accessibility, fairness

J. Weiner, Oct. 2023



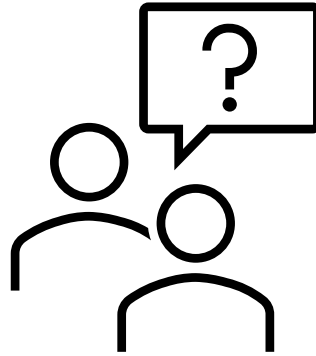
Uses of these data raise additional considerations

- Data privacy regulations, test taker rights
 - ATP privacy bulletin series; TBA Guidelines Ch. 9
- Test dev and psychometric practices expanded to include tech, test taker and security data
- Multi-disciplinary team management (Tech, Ops, Psych)
- Demonstrate ROI for added costs to collect data, create and manage accessible “data lakes”

J. Weiner, Oct. 2023



Q&A Discussion





Expanding the test taker digital footprint: a necessity?

#CLEAR2023AEC

Maxim Morin

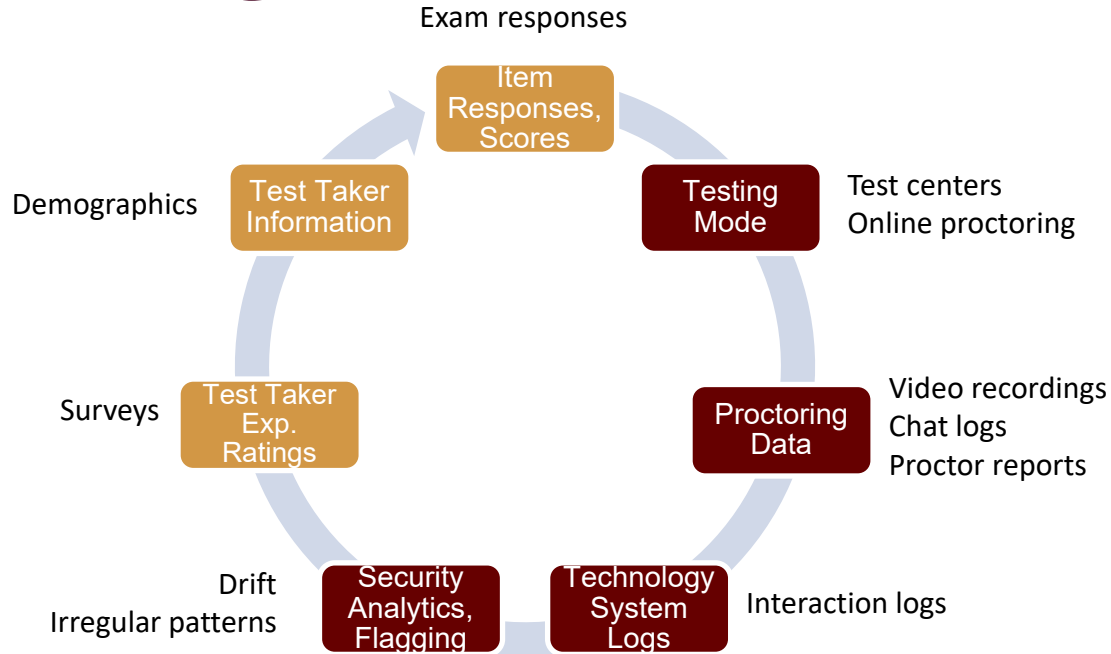


Background

- At the Medical Council of Canada, we assess medical students and graduates through their route to licensure.
- In 2020, we rapidly introduced an online testing option as an alternative to test centers.



Augmenting data sources



Always

Since the introduction to online proctoring



Exam experience

- Survey reports
 - Good satisfaction overall, but a little better for test centres. The gap is getting smaller over time
- Incident reports: more frequent with online proctoring
- Interaction logs
 - More technical disruptions (e.g., disconnections, lagging) with online proctoring

Exam Year	Disconnections		
	0	1	> 1
2020	47 %	35 %	18 %
2021	76 %	20 %	32 %
2022	83 %	15 %	2 %



Validation – Test centres vs online

- Score concordance
 - Regression analyses conducted over three years: variance in scores are explained mostly by demographic information, not delivery modality
- Threats to exam validity (JATT paper*)
 - Different candidate experience, but no impact on candidate performance



Operational uses

- Investigating incidents
 - Videos, chat logs, system logs, etc.
- Psychometric monitoring
- Enhancing security measures





Discussion

#CLEAR2023AEC



Discussion Topics

- Where have we made good progress and where are the opportunities to leverage Test Taker data?
- What are the challenges to be addressed in leveraging Test Taker data?
- What role will AI play in the expanding Dataverse?



References

ITC & ATP (2022). **Guidelines for Technology-Based Assessment**
<https://atpu.memberclicks.net/atp-white-papers>

Morin, M., Alves, C., & De Champlain, A. (2022). **The show must go on: Lessons learned from using remote proctoring in a high-stakes medical licensing exam program in response to severe disruption.** *Journal of Applied Testing Technology*, Vol 23(Special Issue), 15-35.

Weiner, J.A. & Henderson, D. (2022). **Online Remote Proctored Delivery of High Stakes Tests: Issues and Research.** *Journal of Applied Testing Technology*, Vol 23(Special Issue), 1-4.





Speaker Contact Information

John Weiner

John.weiner@lifelonglearner.com

Maxim Morin

mmorin@mcc.ca

#CLEAR2023AEC





Thank You

#CLEAR2023AEC

