Staying Ahead of the Game: Securing Your Assessments in the age of AI

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Outcomes

Understand the benefits of computer-based assessment in mitigating cheating and theft threats

Become familiar with locked-down browsers and what they do

Experience a test taken in a secure test environment

Reflect on how UQ College has implemented systems and processes to secure assessment.

Assessment Considerations

1. What are we assessing and why?

2. How will students be assessed?

3. What resources are required?

4. What challenges exist?

UQ College Context

Bridging English (BE) – our Direct Entry Program

Students: UQ pathway

Course length: 10-30 weeks of study

Formative assessment: every 5 weeks; in-class; self-study in LMS

High-stakes summative assessment: end of program

Online (computer based) testing

Lack of score variation between modalities

Online exams offer various methods for mitigating cheating

Favourable ratings from students for online exams

Staff preferred online for ease of completion and logistics

Interface of test is an enabler or barrier in online exams

- Butler-Henderson & Crawford (2020)

Threats to score validity

Table 8.1. Categories of Score Validity Threats Due to Cheating

Using pre-knowledge about the test
Receiving expert help while taking the test
Using unauthorized test aids or assistance
Using a proxy test taker
Tampering with testing software or stored test results
Copying answers from another test taker during the test
Manipulating testing rules

Table 8.2. Categories of Score Validity Threats Due to Test Content Theft

Stealing test files before, during, or after an exam
Stealing questions using digital photography
Stealing questions by capturing test content electronically
Memorizing test content for subsequent recording or sharing
Transcribing questions verbally into a recording device
Obtaining test material from a trusted insider
Manipulating testing rules

Threats to score validity

8.2   A testing organization should continuously analyze the risk of cheating and theft threats and <u>adopt</u>, <u>implement</u>, and <u>maintain appropriate solutions</u> for those threats that carry the highest risk.

International Test Commission and Association of Test Publishers (2022), p95

Mitigating Misconduct

Prevention

Lockdown environment

Randomised questions

Inability to backtrack

Strict timings

Identity: biometrics/authentication

Computer adaptive testing

Deterrence

Stack (2015); Hylton, Levy, & Dringus (2016); Daffin Jnr, & Jones (2018)

Mitigating Misconduct

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Deterrence

Proctoring/invigilation

Stiff penalties for cheating

Conduct statements

Stack (2015); Hylton, Levy, & Dringus (2016); Daffin Jnr, & Jones (2018)

Locked-down Browser

What is it?

A browser-based environment that only permits users to do certain actions and limits access to other computer functions

Examples: Safe Exam Browser, Respondus, ExamSoft

* A lockdown browser is not an assessment

Benefits

Ability to modify settings to include/exclude certain software or functionality

Force full screen display

Restrict users accessing non-authorized tools

Blocks multiple monitors

Prevents content exposure

Clears data on exit

Locked-down Browser

Considerations

Student requires administrative access to install (BYOD)

Requires certain technical specifications to run

May have conflicts with other software, especially virus protection

May have software vulnerabilities to dedicated hacking efforts , e.g. running in VM

Safe Exam Browser

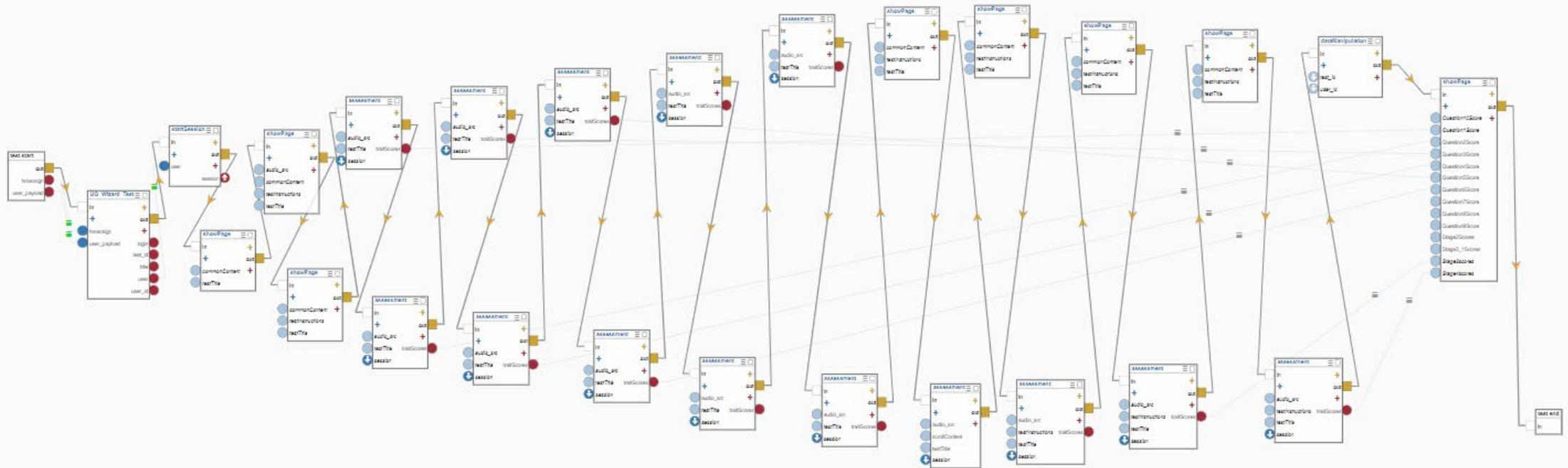Download and install **Safe Exam Browser**

- Windows:
https://github.com/SafeExamBrowser/seb-win-refactoring/releases/download/v3.5.0/SEB_3.5.0.544_SetupBundle.exe

- Mac:
https://github.com/SafeExamBrowser/seb-mac/releases/tag/3.2.5

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Exam.net https://exam.net/

Web-based assessment platform
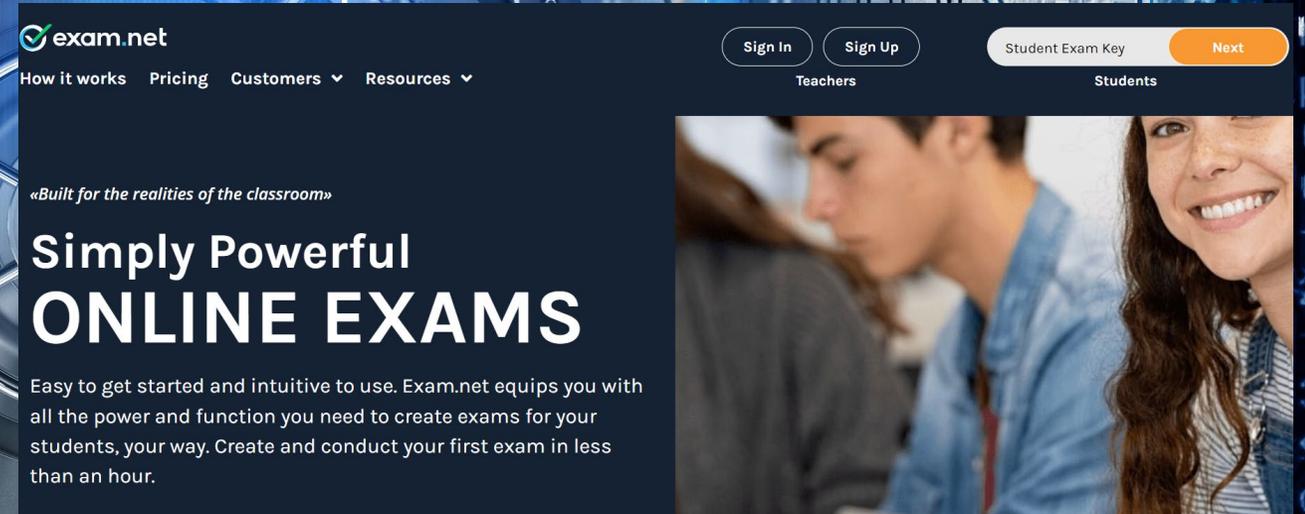
Includes test-builder

Free for students

Fee for institute licence

Generous 75-day trial period

Integrates with SEB; has own LDB software

Variety of security settings when deploying tests

Ability to resume tests/assessments

Sample Assessments

Without lockdown browser software

Writing –key: **Psm7PC**

* explanation and unlock immediately security setting

Reading –key: **CjHCyC**

* Notify teacher; don't lock

With SEB lockdown browser installed:

Reading –key: **gmpbLg**

Writing –key: **8jsATS**

Securing our assessment

1. BYOD policy and agreement
2. Assessment preparation module (H5P) - install and test Safe Exam Browser
3. Practice/In-class practice tests/ test simulations
4. Single sign on and MFA authentication used
5. Tests completed in locked-down browser using Exam.net or Concerto
6. Randomised items, strict timings
7. Invigilated; support team; additional testing
8. Strict policy, conduct statement.

Dev: Adaptive testing (R/L)

BE Assessment

2022-23	Students	Test Sessions	Academic Misconduct
Total	1591	9546	3
Online	1091	6546	3
F2F	491	2946	0

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References

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Questions?

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