Designing open-book exams: Guidance on the Pedagogy

Rationale
This summary resource is intended to support staff at Trinity with pedagogical guidance on the use of open-book assessments.

The pedagogy of open-book exams
Open-book exams allow candidates to refer to class notes, textbooks, primary or secondary readings or access the internet, either over a number of hours/days or in a timed exam. Open-book exams typically consist of multiple-choice questions, short answer questions, or longer essay-style questions. Their pedagogical function is different to that of traditional unseen, real-time exams because of the access students have to a range of primary and secondary material. Accordingly, questions that solely assess knowledge recall or require reproduction of factual content are less likely to be suitable for either take home offline exams or real time online exams. Questions for these exams should be designed as 'open-book' questions. These are typically better suited to assessing higher-order cognitive processing (e.g. analysing, evaluating, synthesizing or creating) rather than lower-order cognitive processing (e.g. reproducing or describing).

Approaches that are more suitable to open-book exams include questions that address:

- Conceptual understanding
- Critical thinking
- Building or modification of knowledge
- Application of knowledge through analysis and/or critical thinking
- Synthesis, analysis or creation of knowledge
- Problem solving/ evidence of calculation process
- Interpretation or critique of sources or concepts
- Creative and/or reflective thinking

Question formats that generally translate well to an open-book context include:

- Scenario-based, application-based or case-based questions.
- Questions requiring students to apply their critical reasoning skills in response to a trigger scenario.
- Questions requiring students to consider scenarios from a professional/ patient/alternative perspective e.g. an expert advisor or key decision maker).
- Questions replicating real-world conditions or drawing on legal or administrative issues, clinical or professional standards, industry regulations or ethical considerations.
- Questions requiring interpretation or application of qualitative or quantitative data, evidence or frameworks.

Maximising academic integrity and deterring plagiarism/unauthorised collaboration

Open-book exams carry an increased risk of plagiarism or unauthorised collaboration between students. While is it impossible to address these challenges completely, the following strategies may alleviate the associated risks:

1. Integrate an honour statement into the setting/instructions of the open-book exam.
2. Use TurnItIn (via Blackboard+) for similarity reports.
3. Acknowledge potential for a follow-up oral/viva exam.
4. Restrict word limits to discourage copy/pasting or the inclusion of irrelevant information. (Tighter word limits can also increase cognitive engagement of students with a task.)
5. Add Part 2/Part B sections to questions in order to personalise student responses.
6. Require a personal artefact, e.g. ask for an annotated bibliography, screenshot of search histories, picture of handwritten notes, calculation evidence or a brief personal reflection.
7. Curtail references to a baseline set of articles/sources and limit students to using these to support their response to an assessment task.

Pedagogic considerations for open-book exams at Trinity

The use of open-book exams in an assessment diet should draw on the following pedagogic considerations:

1. **Learning Outcomes:** Align open-book exams with module/programme learning outcomes (LOs).
2. **Redundancy**: Where LOs have been demonstrated elsewhere in the programme, it is not essential that they be reassessed.
3. **Assessment Load:** Reduce the overall load of assessment where academically defensible. For example, consider consolidating outstanding LOs in a single open-book exam rather than in multiple exams.
4. **Workload:** Align open book exams with ECTS weightings. Redesigned/repurposed assessment should not increase assessment workload.
5. **Standards:** Ensure that redesigned/repurposed assessment upholds academic standards.
6. **Academic Integrity:** Discuss modifications to assessment strategy with external examiners.
7. **Rubrics:** Reflect modifications to assessment strategy in updated rubrics and task guidelines, and share with students and staff.
8. **Inclusivity:** Take account of reasonable adjustments for students with additional needs.
9. **Practice:** Give students the opportunity to see or practice relevant sample open-book questions.
10. **Communications:** Communicate clearly any modifications to assessment practice to staff and students. Build the estimated time to complete an open-book exam into a workload calculation and clarify that calculation with students.

See also: Repurposing Face-To-Face Exam Questions to Open-Book Exams.