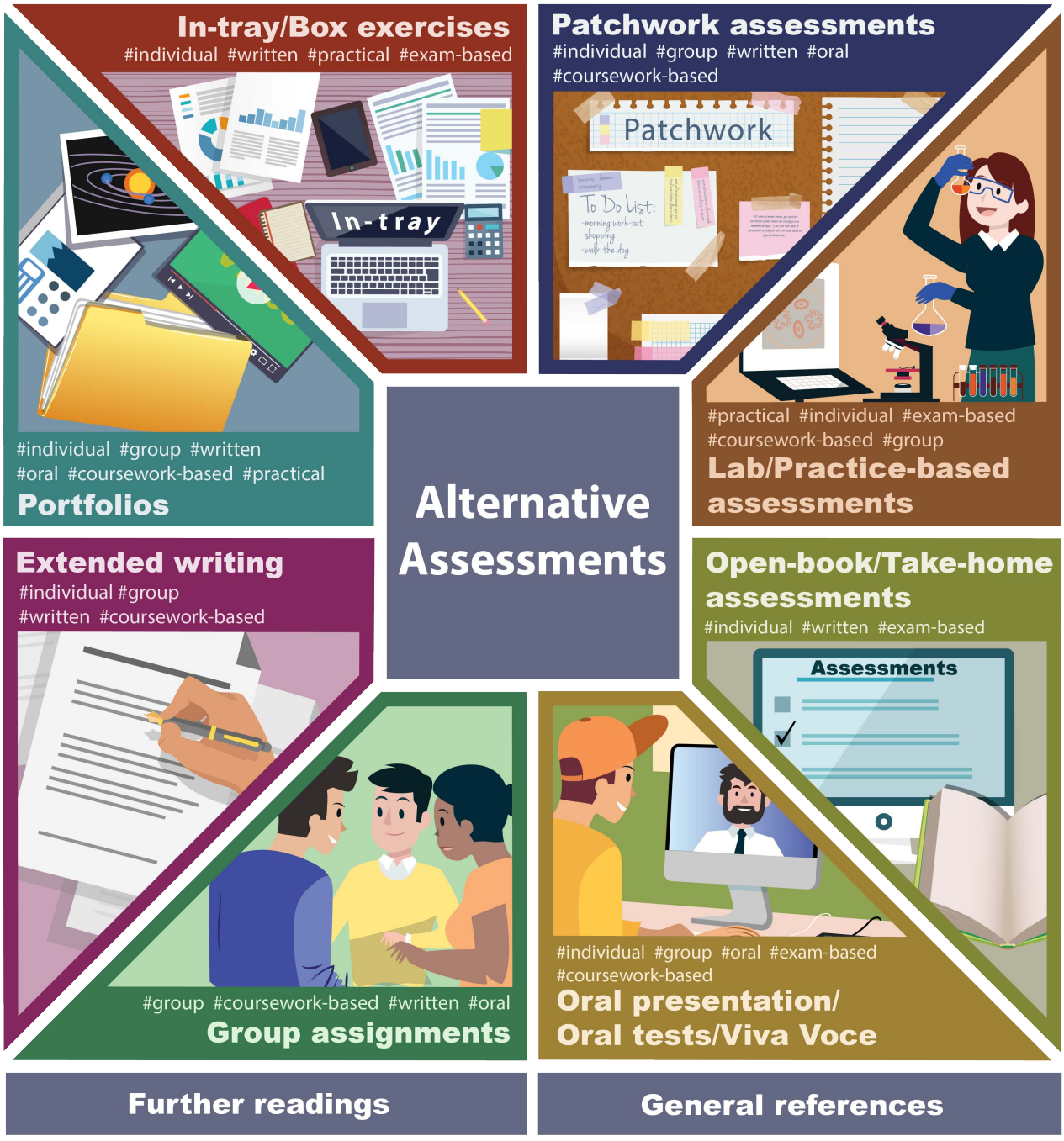
Alternative Assessments

Alternative assessments, as compared to traditional assessments, are designed to assess students' performance in achieving the intended learning outcomes, often in novel or authentic contexts and with a focus on higher-order capabilities instead of what they know and can recall.

Read more about the advantages of, and general notes on, constructing alternative assessments

This interactive PDF introduces eight types of alternative assessments, as well as when to use them, how to design them, and some pointers to other resources. Also hash tagged for each assessment type are settings in which the type of assessments can be applied, such as individual, group, written, oral, exam-based, coursework-based, and practical.

Please click on the type of alternative assessments that you are interested in in the following diagram.



Portfolios

#individual #group #written #oral
#coursework-based #practical

What are portfolios?
Portfolios are collections of artefacts students submitted in hardcopy and/or electronic form to provide systematic evidence of their achievement of the subject intended learning outcomes.

When to use portfolios?
Portfolios

- are particularly useful in practical or applied subject disciplines, where students can present wide-ranging evidence of their achievement of learning outcomes, including text, images, videos, audio, podcasts, practice notebooks, etc.
- can be used to capture students' academic skills, knowledge and learning development over a considerable time period
- can be used to demonstrate students' higher-order capabilities in critical synthesis, reflection, creativity, communication skills, and in the case of a group setting, teamwork in presenting their learning outcomes
- are useful for designing and recording dialogic feedback processes, especially in electronic form
- can be used to promote a sense of student voice/ownership, thereby deterring plagiarism and upholding academic integrity

How to design portfolios?

- Individual portfolios: Ask students to prepare their own portfolios to illustrate their best performance and learning progression over time, which can also be used as modern CVs showcasing authentic examples of students' skills to prospective employers (Example: Assessing internship experiences using video blogs)
- Group portfolios: Get students into groups and ask them to create visual documentaries that critically evaluate the latest trend or development in the discipline; encourage them to interview researchers in their faculty or practitioners in the industries, for example, radiographers (Examples: Students creating YouTube interviews with researchers; Video assignments can boost student engagement; Visual International Politics Student Movies)

Points to note when using portfolios

- Provide clear guidance for students to prepare their portfolios, e.g., expected length and structure, maximum file size and duration for video/audio materials, if included, to assure reasonable workload for both students in preparation and teachers in grading
- In the case of electronic portfolios, offer resources to help students with the related technical skills (Examples: Video making using Panopto; Basic tutorial for making documentary videos; Platforms: Wordpress, LinkedIn, Microsoft OneNote)
- Provide students with the assessment rubric and examples of work to help them better understand what they are expected to show in the portfolio (A rubric example designed for marking portfolios, Teaching with rubrics)
- Assign an appropriate weighting to each assessment component in the portfolio, while considering the overall assessment load for students studying multiple subjects

Further readings:

Brown, M., Anderson, B., Simpson, M. & Suddaby, G. (2007). *Showcasing Mahara: A new open source eportfolio*. In ICT: Providing choices for learners and learning. Proceedings ASCILITE Singapore 2007.

Chan, S. (2009). *E-portfolios using mobile phones and social networking sites: Workplace skill acquisition and identity formation*. In Same places, different spaces. Proceedings ASCILITE Auckland 2009.

The University of New South Wales. (n.d.). *Assessing with ePortfolios*. https://teaching.unsw.edu.au/assessing-eportfolios

Patchwork assessments

#individual #group #written #oral #coursework-based

What are patchwork assessments?

Patchwork assessments are summative assessments (patchwork) that require students to critically reflect, evaluate and integrate what they have learned from a variety of smaller, formative assessments (patches) that they completed at various critical learning moments during the course.

When to use patchwork assessments?

Patchwork assessments

- are particularly useful in subject disciplines where students need to reflect and integrate their practice/experiences with theory at critical learning moments, e.g., clinical placements, work-integrated education, etc.
- can be used to support flexible and student-focused pedagogies, e.g., flipped classroom, collaborative learning, project/problem-based learning which engage students in ongoing and cumulative production of materials for assessments
- can be used to encourage sharing, discussion, peer review, and formative feedback processes to be threaded throughout the course, which are adaptable to digital production
- can be used to demonstrate students' higher-order capabilities, e.g., critical synthesis, reflection, creativity, communication skills, and in the case of a group setting, teamwork in completing the assessments
- can be used to promote a sense of student voice/ownership, thereby deterring plagiarism and upholding academic integrity

How to design patchwork assessments?

- Identify critical learning moments that correspond to the subject intended learning outcomes and associate them with individual patches and patchwork integrated for assessment; if appropriate, allow students to select patches themselves from a wider pool to stimulate their reflection and critical thinking
- Encourage students to make use of diverse forms (e.g., text, images, videos, audio, podcasts, etc.) to prepare their patches and the integration of these patches into a meaningful patchwork
- Introduce self, peer, or teacher formative assessment to each small patch created by individuals or groups; and the final patchwork (e.g., a reflective analysis of selected patches) having a considerable weighting for the course in the absence of exams

- Consider having each small patch contribute to the overall assessment grade in one of the following ways: (i) students submitting their best patches, (ii) averaging the grades given to the submitted patches, or (iii) giving a grade holistically across the individual patches

Points to note when using patchwork assessments

- Clearly articulate the skills students will develop via the patchwork assessment, and build their confidence by offering them preparatory sessions on, for example, reflective writing, peer review and feedback, critical thinking, etc.
- Provide students with the rubric and examples of work to help them better understand what they are expected to show in the patches and patchwork (see Teaching with rubrics)
- If digital production is required, offer resources to help students with related technical skills (e.g., Video making using Panopto; Platforms: Wordpress, Microsoft OneNote)
- Attend to operational issues as early as in the design stage, e.g., the organisation and form of patches — how many patches the patchwork assessment should consist of, how they are introduced and when, etc.
- Assign an appropriate weighting to each assessment component in the patchwork, while considering the overall assessment load for students studying multiple subjects

Further readings:

Jones-Devitt, S., Lawton, M., & Mayne, W. (n.d.). *HEA Patchwork Assessment Practice Guide*. https://www.heacademy.ac.uk/knowledge-hub/patchwork-assessment-practice-guide

Silva-Fletcher, A., May, H., Magnier, K. & May, S. (2014). Teacher development: A patchwork text approach to enhancing critical reflection in veterinary and paraveterinary educators. *Journal of Veterinary Medical Education,* 41 (2): 146-154.

Group assignments

#group #coursework-based #written #oral

What are group assignments?

Group assignments put students in groups to work collaboratively on a case study, a topic, or other assessment tasks, in and out of the classroom, over a period of time in a course.

When to use group assignments?

Group assignments

- are particularly useful for developing and assessing students' critical thinking and integration of concepts and materials from different modules, and soft skills (e.g., communication and teamwork)
- can be used to serve both formative and summative assessment needs
- enable students to know each other and increase their sense of belonging, especially for new students
- can be used to encourage students to engage in their learning actively and form their own learning communities

How to design group assignments?

- Incorporate group assignments into other alternative assessment tasks, e.g., case studies, projects, and presentations, with individual components (e.g., personal reflection) to reflect individual contribution (An example of art projects)
- Design tasks that require students to practise/demonstrate complex problem solving, extensive research, critical thinking, collaboration, and leadership for group assignments
- Include assessment criteria that measure students' performance on the group process (e.g., collaborative problem solving, conflict management), products (e.g., written reports, presentations), group achievements, and/or individual contributions to group work
- Assign appropriate weightings for different assessment criteria and use rubrics to ensure fairness and reliability of grading (see Guide to developing rubrics for assessments, A rubric example on group work, Evaluating rubrics)
- Utilise technology to facilitate the communication, collaboration, and progress monitoring among students in the group (Example: A case study of using MS Team to facilitate group work)

Points to note when using group assignments

- Provide clear and explicit guidelines on group work, e.g., expected roles and responsibilities, and how they can seek help from teachers when problems arise
- Create some milestones or opportunities (e.g., group presentations, consultations with lecturers) for students to present their interim work and get formative feedback from teachers and peers to enhance their work before the final submission
- Provide a clear rubric to help manage students' expectations on the academic standard and performance required; the rubric can also be used in peer and self-assessment for collecting feedback within the group (see Teaching with rubrics)
- Explain the principles of academic integrity related to group work (e.g., avoid multiple submission, do not copy written work among group members); include requirements for maintaining academic conduct in group assignment guidelines (see Example statements for group project guideline, Policy on promoting academic integrity in PolyU)

Further readings:

The University of New South Wales. (n.d.). *Assessing by Group Work*. https://teaching.unsw.edu.au/assessing-group-work

Farrell, V., Ravalli, G., Farrell, G., Kindler, P., & Hall, D. (2012). Capstone project: fair, just and accountable assessment. In *Proceedings of the 17th ACM annual conference on Innovation and technology in computer science education* (pp. 168-173).

Mellor, T. (2012). Group work assessment: some key considerations in developing good practice. *Planet, 25* (1), 16-20.

Lab/Practice-based assessments

#practical #individual #group #exam-based #coursework-based

What are lab/practice-based assessments?

Lab/Practice-based assessments measure students' mastery of experimental or practical skills in laboratory/studio, field work or other practical sessions.

When to use lab/practice-based assessments?

Lab/Practice-based assessments

- are particularly useful in assessing technical and manipulative skills in using laboratory/technical equipment and computer software in the discipline, skills of scientific inquiry, clinical practices, as well as understanding of procedures, abstract concepts and theories underlying those skills and practices
- can be used to serve both formative and summative assessment needs
- can be used to extend and enhance students' understanding of theoretical concepts by finding out how they operate in practical contexts
- can be used to develop specific skills and capabilities required in laboratory/studio/workplace settings that are relevant to the discipline

How to design lab/practice-based assessments?

- Apply direct observation in practical sessions to assess students' manipulative, observational, and interpretative skills
- Consider arranging small practical assessments throughout the course so that students can receive constructive feedback from peers or teachers before the final practical assessment
- Provide the experimental design and procedure for students to follow in assessing their ability to carry out specific manipulative tasks; and if appropriate, ask students to design experiments to assess their experimental design skills (Read more: Lab learning, Studio-based learning)
- Use lab notebooks and reports to assess students' abilities in observation, interpretation and reflection; collect lab notebooks at random to encourage students to complete them routinely
- Ask students to turn their lab reports to articles in the form of local newspapers, or instructions/guidelines, for other students to carry out the same experiment (Read more: Strategies for lab notebooks and reports)

Points to note when using lab/practice-based assessments

- Teach lab report writing skills explicitly, provide a report template for students, and give opportunities for students to practise report writing
- Use rubrics to explain the assessment criteria and standards to students and what they are expected to perform in lab and practical sessions and assessment tasks (See rubrics and other information for Direct observation; Practical experiments; Teaching with rubrics)
- Structure and plan inquiry activities in a trajectory that helps students develop a higher level of independence and autonomy in their lab/practical work (Read more information on Structuring the level of inquiry in your classroom)
- Explain appropriate practices to uphold academic integrity and ethics associated with lab/practical-based assessment and reinforce them from time to time (Read more: Strategies for reducing academic dishonesty in lab)
- In case an online lab/practice-based assessment is required, consider how to achieve and assess the learning outcomes rather than replicating face-to-face activities online; plan ways to provide sufficient feedback to students (Case studies: Online lab-based group with OneNote; Online stimulated case vivas to assess clinical skills)

Further readings:

Academic Development Centre, The University of Warwick. (n.d.). *Laboratory notebooks and reports*. https://warwick.ac.uk/fac/cross_fac/academic-development/assessmentdesign/methods/labreports

The Quality Assurance Agency for Higher Education. (2020). *COVID-19: Thematic Guidance. Practice and Lab-based Assessment*. https://www.qaa.ac.uk/docs/qaa/guidance/covid-19-thematic-guidance-practice-lab-based-assessment.pdf

The University of New South Wales. (n.d.). *Assessing Laboratory Learning*. https://teaching.unsw.edu.au/assessing-laboratory-learning

York University. (n.d.). *Academic Dishonesty in Laboratory*. https://teachingcommons.yorku.ca/resources/teaching-strategies/academic-integrity/academic-dishonesty-in-laboratory-environments/

Extended writing

#individual #group #written #coursework-based

What is extended writing?

Extended writing is a form of written assessment that includes extended components that can be used to assess higher-order learning outcomes with relatively easy adaptation and high flexibility.

When to use extended writing?

Extended writing can be used to

- engage students in deeper learning
- support student development of higher-order learning outcomes, e.g., creative and independent thinking
- provide evidence of students' levels of sophisticated understanding of the topic areas covered
- assess communication competence in different forms (e.g., when students are asked to give an oral presentation based on a written assignment)

How to design extended writing?

- Ask students to include their personal reflection in the essay (e.g., have them add their own views or adopt a personal position based on selected reference sources)
- Incorporate other assessment task into the written work (e.g., ask students to give oral presentations in teams before handing in individual written assignments) that are relevant to assessing different learning outcomes
- Modify traditional written work requirements (e.g., use shorter word constraints) to reward students' deeper thinking
- Set evaluative and authentic tasks for which students need to carefully choose and evaluate different sources of materials on a given topic (e.g., ask students to locate three websites that explain a diet theory, then contrast the views expressed in these sources with an observed phenomenon, and make recommendations for public health)
- Break the writing task into multiple stages for students to submit their interim work and get formative feedback from teachers and peers to enhance their work before the final submission. This also saves teachers' time for marking and grading students' final work

Points to note when using extended writing

- Use rubrics to provide clear guidance of the academic standard and performance expectation on the extended assessment tasks especially when they are novel and unfamiliar to students (see Teaching with rubrics)
- Set a reasonable word limit for each part of the writing (main part plus reflection) to make the marking more manageable
- Consider offering 'exemplars' (examples of work) to help students understand what a piece of alternative form of good essay should look like

Further readings:

Edinburgh Napier University. (n.d.). *Enhance Quick guide: Alternative to essays*. https://staff.napier.ac.uk/services/dlte/Documents/6%20Alternatives%20to%20Essays%20Quick%20Guide.pdf

Sambell, K. & Brown, S. (2020). *The changing landscape of assessment: some possible replacements for unseen, time-constrained, face-to-face invigilated exams*. Covid-19 Assessment Collection. https://sally-brown.net/download/3148/

The University of New South Wales. (n.d.). *Assessing by Extended Writing*. https://teaching.unsw.edu.au/assessing-extended-writing

In-tray/Box exercises

#individual #written #exam-based #practical

What are in-tray/box exercises?

In-tray/Box exercises are a type of open-book assessments which present students with a collection of resources to review before the exam without telling them what question(s) they will be asked. When the question is presented, students need to draw on the resources given to support their choices of actions/recommendations.

When to use in-tray/box exercises?

In-tray/Box exercises

- can be used to assess students' higher-order capabilities, e.g., in analysing and evaluating lots of information within a limited time, then applying what they learnt to prioritise their workload and make decisions under time pressure in the exam
- are designed to allow more time for preparation than in traditional exams
- can be used to mitigate against plagiarism and unfairness when preparation is adequate, and questions are unknown

How to design in-tray/box exercises?

- Design a task that gives students a particular problem to solve in a situation and provide them with relevant materials they need
- Give students enough time to review and understand the materials without revealing the questions to be asked in the coming task
- Then present the questions to the students and give them a time limit to answer the questions

- In the exam, have students explain which information they have read will be useful, ask them to formulate their answers to the questions that are usually about responding to a particular situation in making an informed recommendation
- See two examples quoted from the University College London:
  Example 1: Teachers can ask students to read pre-released materials, e.g., a case study, which students are then asked to critique. Teachers then ask students to design a proposal or a policy plan with guidelines for citizens to address public health issues in an unpredictable pandemic situation.
  Example 2: In a nursing exam, students can be provided with a typical ward managers in-box for the day and be asked to draw up staff rotas, drug rounds, etc. for the day in consideration of an authentic context (e.g., a road traffic accident) and say how their work plans/priorities will need to change and why.

Points to note when using in-tray/box exercises

- Provide students with the rubric and examples of work to help them better understand how and what they are expected to perform during assessment (see Teaching with rubrics)
- Assign appropriate weightings to different assessment components, while considering the overall assessment load for students studying multiple subjects

Further readings:

University College London. (n.d.). *Designing effective online assessment: In-tray/box exercises*. https://www.ucl.ac.uk/teaching-learning/education-planning-2020-21/planning-your-assessments/designing-effective-online-assessment

University of Kent. (n.d.). *In-tray (e-tray) exercises*. https://www.kent.ac.uk/ces/student/assessmentaptitude.html

Open-book/Take-home assessments

#individual #written #exam-based

What are open-book/take-home assessments?

Open-book assessments allow students to access learning materials during assessment time. It can also be in the form of take-home assignments, tests, or examinations that provide students with questions in advance or that are to be completed off campus.

When to use open-book/take-home assessments?

Open-book/Take-home assessments

- are particularly useful in assessing students' higher-order capabilities by requiring them to demonstrate thorough understanding, application and synthesis of knowledge, as well as analytical and evaluative skills in novel and real-life contexts
- can be used to help focus students' learning on understanding rather than memorisation
- can be used when you want students to access, complete, and submit the assessment online within a limited time period
- can be used to provide students with opportunities to apply their knowledge to analyse and evaluate the questions/problems presented to them

How to design open-book/take-home assessments?

- Use case-based questions that require the application of critical reasoning skills in response to problem-based or real-life scenarios
- Use multi-tiered questions or problem sets that have several parts, each leading from one part to the next, with increasing demand for students to integrate and apply their knowledge, skills, and understanding
- For questions involving calculations on available data, give students slightly different problem contexts and/or datasets, ask students to interpret their calculations and explain how they would need further data for decision making
- For MC or fill-in-the-blank types of questions, prepare and use a pool of quality questions, randomise them and set a tight time-limit to reduce the chance of cheating among students
- For some examples of open-book assessments, visit Examples for Designing Open-Book Assessments for Replacing Conventional Examinations

Points to note when using open-book/take-home assessments

- Write instructions that are clear and explicit, e.g., clarify whether students should complete the take-home assignment without help from others or they can work with classmates
- Go through the grading criteria and the rubrics for open-book assessments with students beforehand; make sure students are clear about the assessment criteria (see Teaching with rubrics)
- Follow similar academic integrity requirements, e.g., plagiarism check via Turnitin, to ensure assessment fairness

Further readings:

The Hong Kong Polytechnic University. (2020). *Designing open-book take-home assessments.* https://edc.polyu.edu.hk/news/1.html

The Hong Kong Polytechnic University. (2020). *Examples for designing open-book assessments*. https://www.polyu.edu.hk/onlineteaching/images/guidelines/Examples_for_Designing_Open-Book_Assessments.pdf

Oral presentations/Oral tests/Viva Voce

#individual #group #oral #exam-based #coursework-based

What are oral presentations/oral tests/Viva Voce?

Oral presentations and viva are assessments in which students need to answer questions raised by the teacher(s), examiner(s), or peers online or in person. Students need to demonstrate they have sufficient knowledge of a topic to pass the assessment.

When to use oral presentations/oral tests/Viva Voce?

Oral presentations/Oral tests/Viva Voce can be used

- to train students in the skills of answering questions, defending their ideas, and giving persuasive explanations, which are skills needed in authentic situations in the workplace

- to check student's understanding and reduce plagiarism concerns after students have submitted their written assignments
- as part of a de-briefing session after a practical has been observed
- to assess students' level of speaking and listening proficiency

How to design oral presentations/oral tests/Viva Voce?

- Consider scaffolding student learning with a series of authentic assessment tasks which culminate in interactive oral assessments
- Start with asking probing questions to initiate and engage students in conversation (e.g., How do you think ….? What method did you use …?)
- Ask prompting questions that require clarification (e.g., What do you think this relates to?)
- Ask questions that put students on the defence and check if they have considered alternatives (e.g. Wouldn't another hypothesis be more suitable than the one you made?)
- Ask challenging questions to assess students' deep understanding of a topic/an area (e.g., Can you justify why your method is better than …?)
- Plan for sufficient time for students to respond

Points to note when using oral presentations/oral tests/Viva Voce

- Provide students with the rubric and examples of previous oral assessments to help them better understand what they are expected to do for their oral assessment (Sample rubrics: Oral presentation 1, Oral presentation 2; see also Teaching with rubrics)
- Provide students with guidance on how best to undertake an oral assessment as well as practice opportunities with feedback to help build their confidence
- In case it is necessary to conduct the oral assessment online, carry out prior testing to tackle technical issues
- Assign appropriate weightings to different assessment components, while considering the overall assessment load for students studying multiple subjects

Further readings:

The University of Hong Kong. (n.d.). *Oral assessment*. https://ar.cetl.hku.hk/am_orals.htm

UK Council for Graduate Education. (n.d.). *Conducting Vivas Online: A Guide for Institutions and Candidates*. http://www.ukcge.ac.uk/media/download.aspx?MediaId=2252

University College London. (n.d.). *Designing effective online assessments.* https://www.ucl.ac.uk/teaching-learning/education-planning-2020-21/planning-your-assessments/designing-effective-online-assessment

General references:

Carroll, J. & Appleton, J. (2001). *Plagiarism: A good practice guide*. JISC report. https://i.unisa.edu.au/siteassets/staff/tiu/documents/plagiarism---a-good-practice-guide-by-oxford-brookes-university.pdf

CTL, Brigham Young University. (n.d.). *Using alternative assessments*. https://ctl.byu.edu/using-alternative-assessments

Lee, A. (2008). *Designing out plagiarism: a brief guide for busy academics*.

Sambell, K. & Brown, S. (2020). *Contingency planning: exploring rapid alternatives to face to face assessment*. https://sally-brown.net/2020/03/13/assessment-alternatives-at-a-time-of-university-closures

Sambell, K. & Brown, S. (2020). *Fifty tips for replacements for time-constrained, invigilated on-site exams*. https://sally-brown.net/download/3131/

Sambell, K. & Brown, S. (2020). *The changing landscape of assessment: some possible replacements for unseen, time-constrained, face-to-face invigilated exams*. Covid-19 Assessment Collection https://sally-brown.net/download/3148/

University College London. (n.d.). *Designing effective online assessment*. https://www.ucl.ac.uk/teaching-learning/education-planning-2020-21/planning-your-assessments/designing-effective-online-assessment#

Thank you for reading and we wish you all the best in your teaching!