

Designing Online Assessment: Principles and Practices



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Introduction to Designing Online Assessment

Design meaningful, learner-centred, and technology-enabled assessment experiences.

Begin with learning outcomes and competencies not with digital tools.

Move beyond digitising traditional paper-based examinations.

Select assessment methods that measure application, analysis, creativity, collaboration, and reflection.

Introduction to Designing Online Assessment

Ensure accessibility, inclusiveness, fairness, and academic integrity.

Provide timely, constructive, and actionable feedback.

Use assessment evidence to improve teaching and support learner's growth.

Leverage technology to enhance learning, not just to conduct examinations.

Why Design Online Assessment?

Align assessment
with digital and
blended learning
environments.

Measure
competencies, not
just content recall.

Promote active,
authentic, and
meaningful learning
experiences.

Why Design Online Assessment?

Provide continuous,
timely, and
personalised
feedback.

Support self-
assessment, peer
assessment, and
learner autonomy.

Improve accessibility,
flexibility, and
inclusivity for diverse
learners.

Why Design Online Assessment?

Use learning analytics to monitor progress and inform teaching.

Encourage academic integrity through authentic assessment tasks.

Prepare learners with 21st-century skills.

Matching the Assessment Task to the Learning Outcome

ONLINE ASSESSMENT FORMATS



Source: Online assessment formats (created by the author with assistance from OpenAI ChatGPT)

Matching the Assessment Task to the Learning Outcome

Assessment Method	Best Used To Assess	Good Online Practice
Auto-graded quizzes (MCQs)	Recall and conceptual understanding	Use as low-stakes formative assessment with multiple attempts and immediate feedback. Include application-based questions instead of only factual recall.

Matching the Assessment Task to the Learning Outcome

Assessment Method	Best Used To Assess	Good Online Practice
Open-book assignments/ essays	Analysis, interpretation and argumentation	Break into stages: proposal, draft, final submission and reflection to improve authenticity and reduce plagiarism.
Case or scenario based assessment	Application and problem solving	Use authentic, local and context specific cases rather than generic examples.

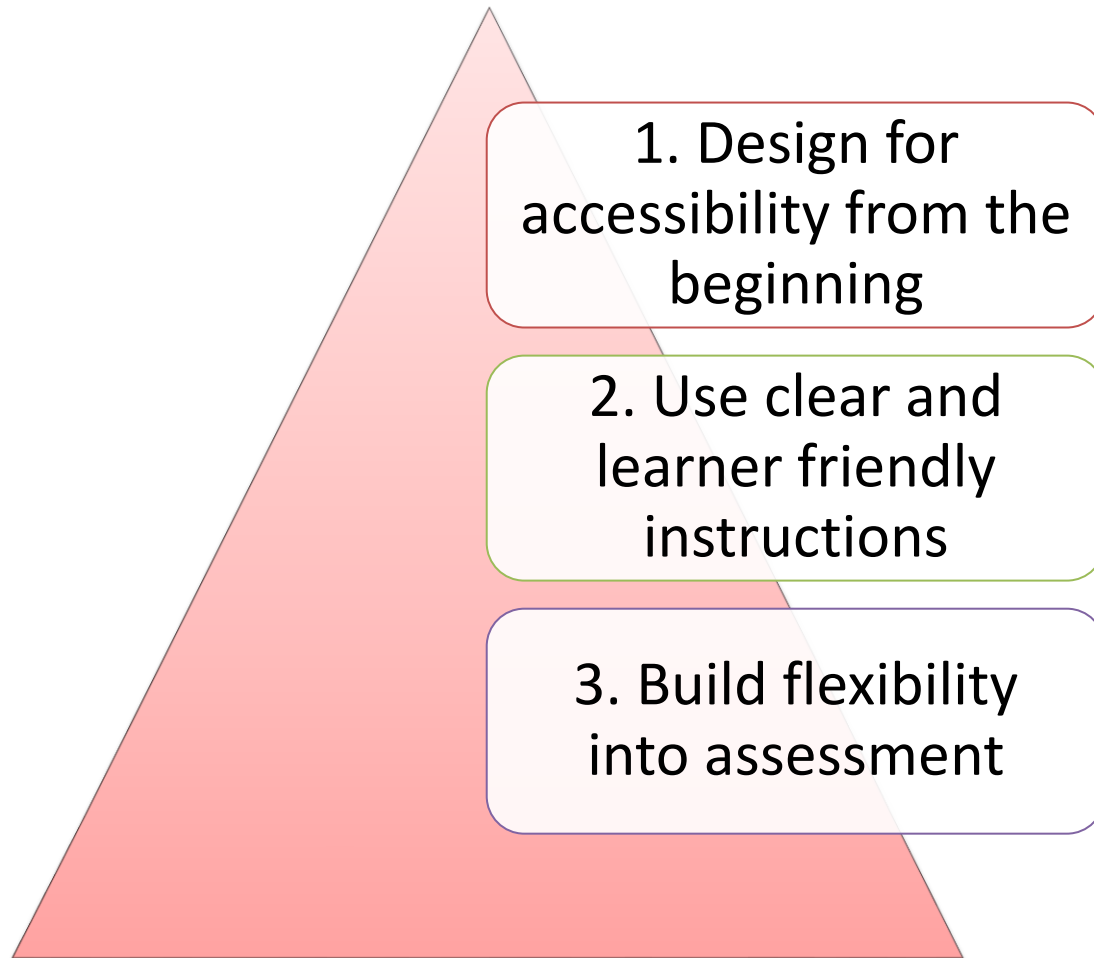
Matching the Assessment Task to the Learning Outcome

Assessment Method	Best Used To Assess	Good Online Practice
E-portfolios	Growth, reflection and self-regulated learning	Collect evidence of learning over time instead of judging students through one assignment.
Simulations/ Virtual labs	Practical skills and competency	Ideal for science, vocational and professional education where students demonstrate performance.

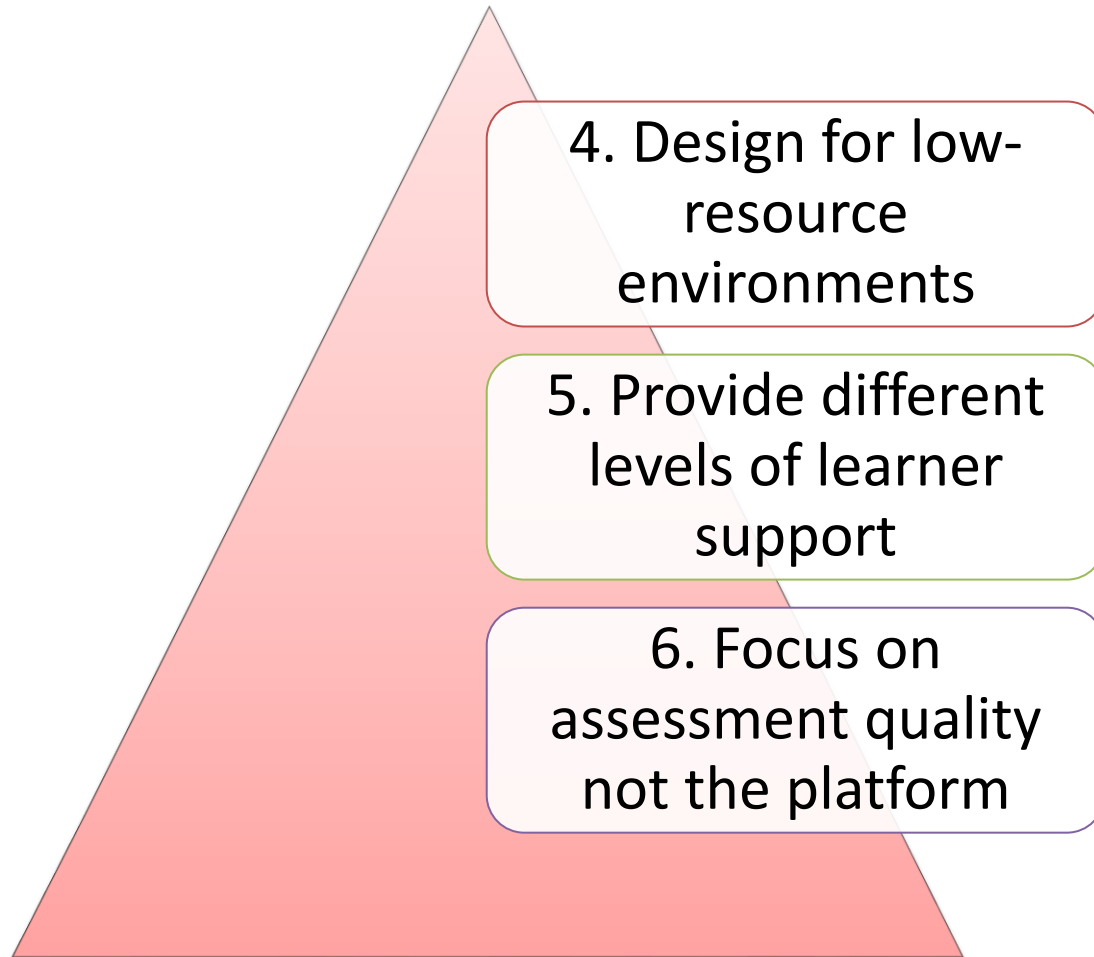
Matching the Assessment Task to the Learning Outcome

Assessment Method	Best Used To Assess	Good Online Practice
Peer assessment	Evaluative judgment and collaboration	Use clear rubrics and provide calibration training before peer review.
Group projects	Collaboration, synthesis and teamwork	Include individual reflections or contribution logs to ensure accountability.
Data analysis	Critical thinking and evaluation	Use authentic datasets, documents, images that require independent analysis.

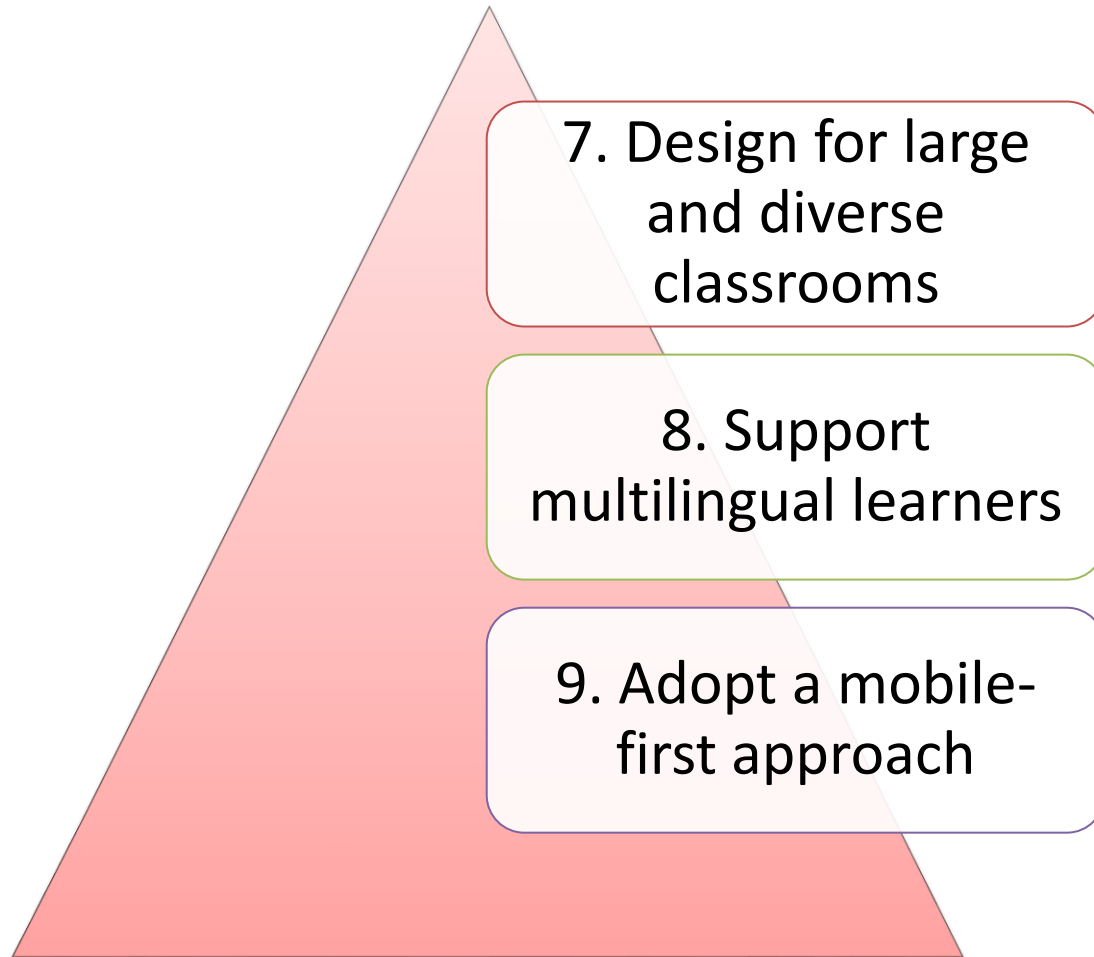
Designing Online Assessments for Real Classrooms



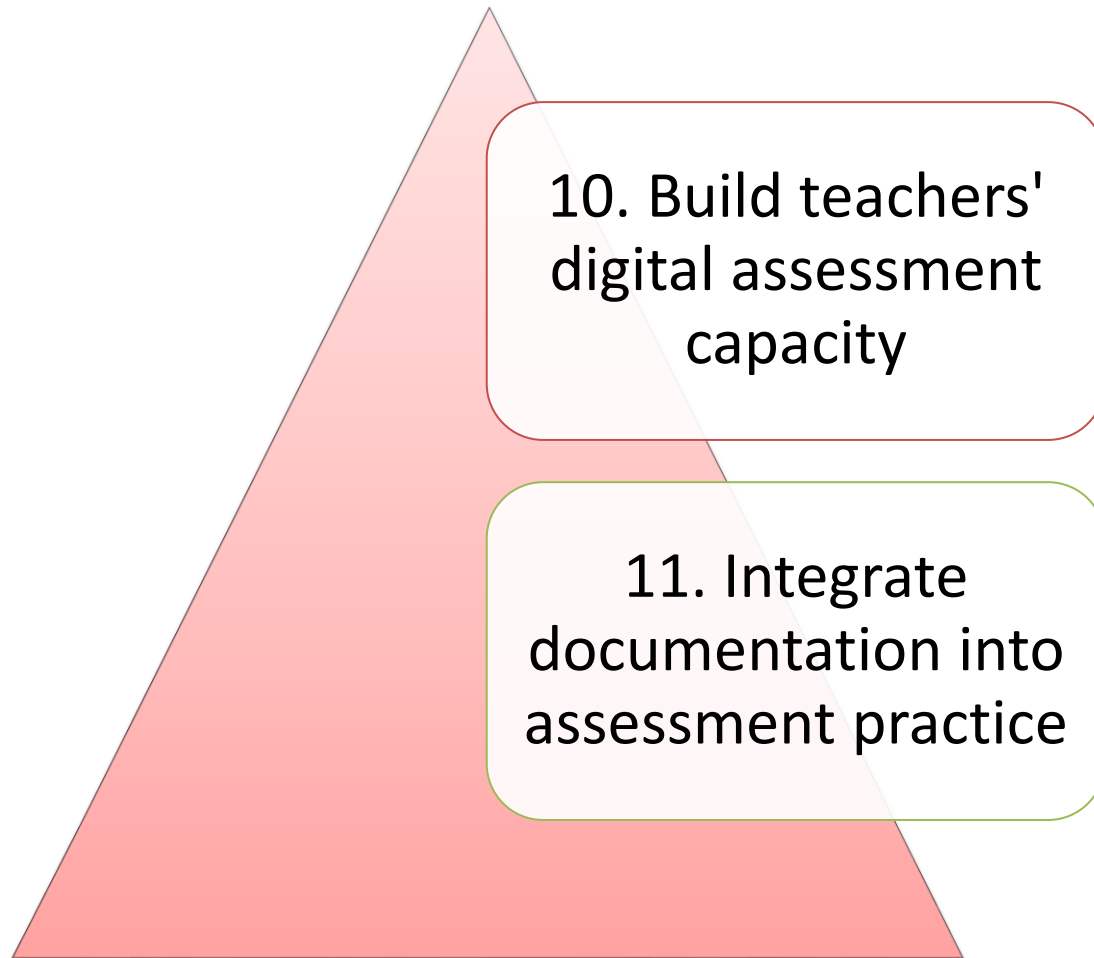
Designing Online Assessments for Real Classrooms



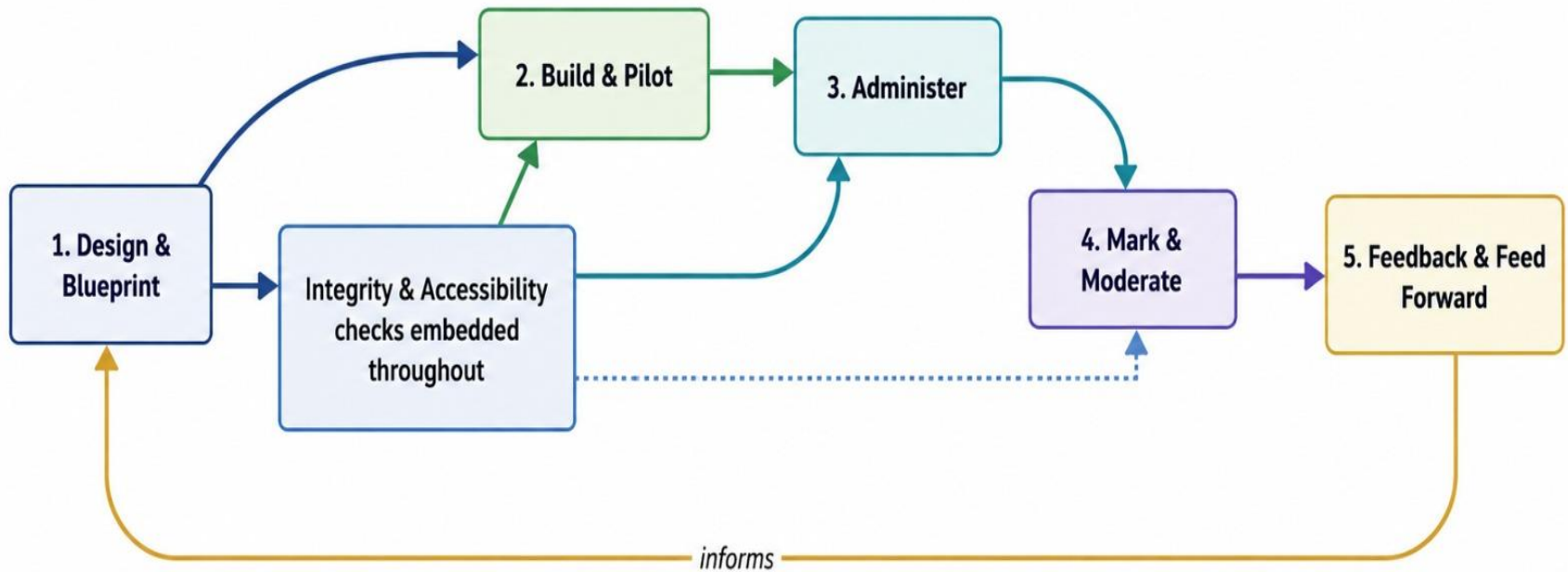
Designing Online Assessments for Real Classrooms



Designing Online Assessments for Real Classrooms



The Assessment lifecycle



The Assessment lifecycle

Phase	Core question	Faculty responsibility
Design and Blueprint	Does the task require the cognitive level the outcome demands?	Map outcomes to task, select format
Build and Pilot	Does the task work technically and pedagogically at scale?	Build in LMS, run with a small group or colleagues

The Assessment lifecycle

Phase	Core question	Faculty responsibility
Administer	Is the task accessible, secure, and fair under real conditions?	Communicate expectations, monitor, support
Mark and Moderate	Is the judgment consistent, defensible, and evidence-based?	Apply rubric, participate in moderation

The Assessment lifecycle

Phase	Core question	Faculty responsibility
Feedback and Feed-forward	Does the student know what to do differently next time?	Return timely, actionable feedback

The Principles of Assessment, their Practice and alignment with NEP 2020 and NCF-SE 2023

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF-SE 2023
1. Assessment should drive learning, not merely measure it.	As teachers, we should design online assessments that help students learn while they are being assessed. Every quiz, discussion forum, reflective journal, or digital activity should provide opportunities for practice, feedback, and improvement—not just generate marks	Both advocate a shift from assessment of learning to assessment for and as learning, making assessment an integral part of the teaching-learning process.

The Principles of Assessment, their Practice and alignment with NEP 2020 and NCF-SE 2023

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF-SE 2023
2. Assessment must measure competencies, not information recall.	In an online environment, where information is readily available, move beyond memory-based questions. We need to design authentic tasks such as case analyses, investigations, projects, simulations, portfolios, and problem-solving activities that require learners to apply, analyse, evaluate, and create	Supports competency-based education by assessing conceptual understanding, critical thinking, creativity, and application of knowledge.

The Principles of Assessment, their Practice and alignment with NEP 2020 and NCF-SE 2023

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF-SE 2023
3. Assessment should be constructively aligned.	We need to ensure that learning outcomes, digital learning activities, and assessment tasks are aligned. If the intended outcome is critical thinking, our online assessment should require analysis and reasoning and not simple multiple-choice recall	Reinforces outcome-based, competency-driven teaching and assessment.

The Principles of Assessment, their Practice and alignment with NEP 2020 and NCF-SE 2023

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF-SE 2023
4. Assessment should be continuous and evidence-based.	We ought to collect evidence of learning throughout the course using online quizzes, polls, discussion boards, collaborative documents, digital portfolios, observations, and reflective journals rather than depending solely on a final examination	Encourages continuous, comprehensive, and developmental assessment.

The Principles of Assessment, their Practice and alignment with NEP 2020 and NCF-SE 2023

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF-SE 2023
5. Feedback should be timely and feed forward.	It is important to provide prompt digital feedback through rubrics, audio or video comments, automated feedback, and one-to-one interactions that guide learners on how to improve future performance	Feedback becomes a tool for improving learning rather than simply justifying grades

The Principles of Assessment, their Practice and alignment with NEP 2020 and NCF-SE 2023

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF-SE 2023
6. Assessment should promote learner agency.	It is recommended that we engage learners in self-assessment, peer assessment, reflection, and goal setting using digital tools, enabling them to monitor and regulate their own learning	Promotes learner autonomy, meta cognition, and lifelong learning

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF- SE 2023
7. Assessment should be transparent and ethical.	We need to communicate learning outcomes, assessment criteria, rubrics, timelines, and expectations clearly before the assessment. We also design tasks that encourage originality and uphold academic integrity. Rather than relying only on online proctoring, we must create authentic, open-book, application-based assessments that reduce opportunities for plagiarism.	Supports fairness, transparency, ethical conduct, and responsible use of technology.

The Principles of Assessment, their Practice and alignment with NEP 2020 and NCF-SE 2023

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF-SE 2023
8. Assessment should be inclusive and accessible.	It is crucial that online assessments accommodate diverse learners by providing flexible submission options, accessible formats, multilingual resources where appropriate, and reasonable accommodations for learners with disabilities	Reflects the commitment to equity, inclusion, and universal access.

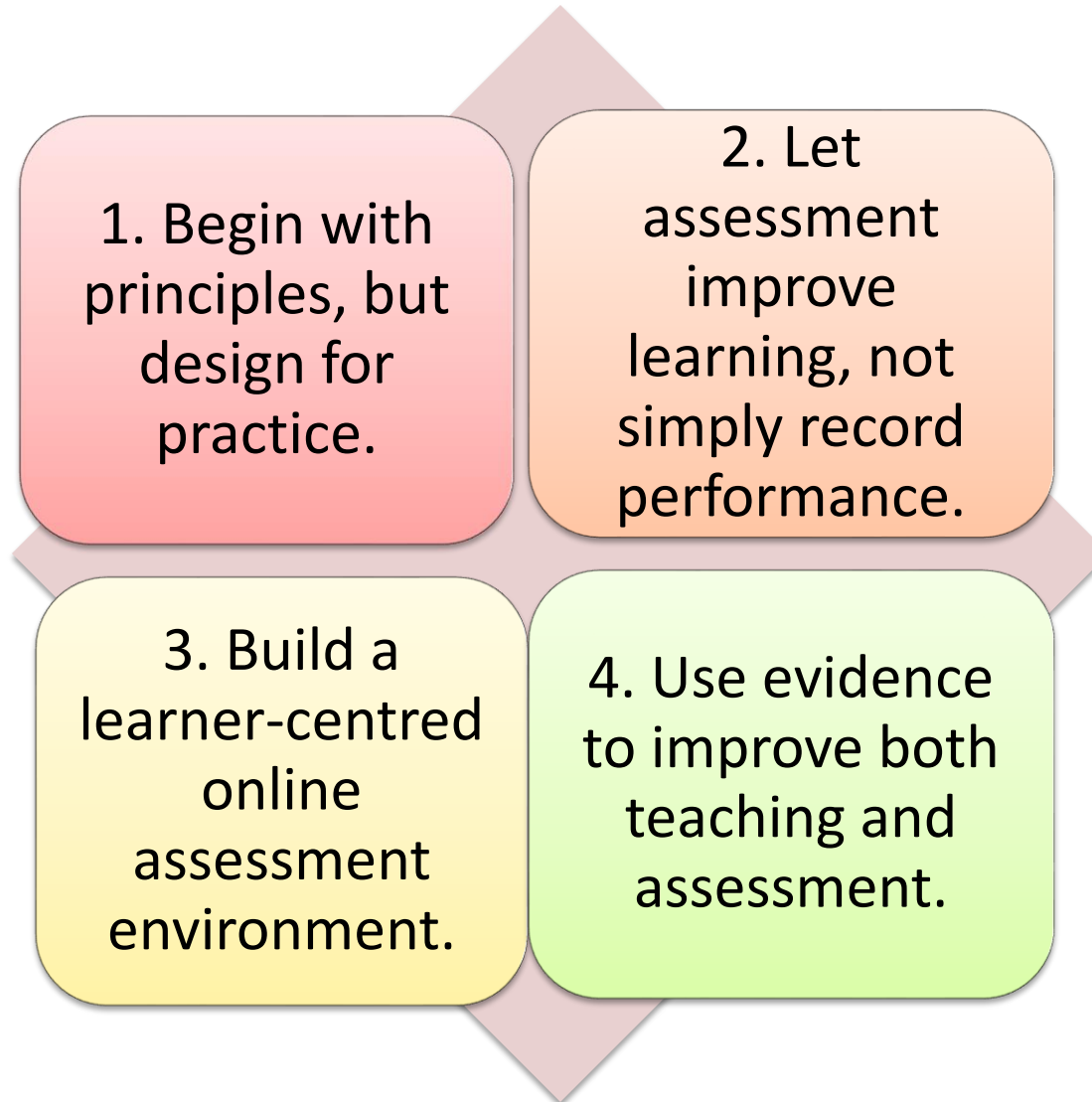
The Principles of Assessment, their Practice and alignment with NEP 2020 and NCF-SE 2023

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF-SE 2023
9. Assessment should use multiple methods.	It would be advisable to combine synchronous and asynchronous assessment through quizzes, projects, presentations, discussion forums, e-portfolios, peer review, oral examinations, simulations, and performance tasks to capture different dimensions of learning.	Encourages diverse evidence of learning rather than dependence on a single examination

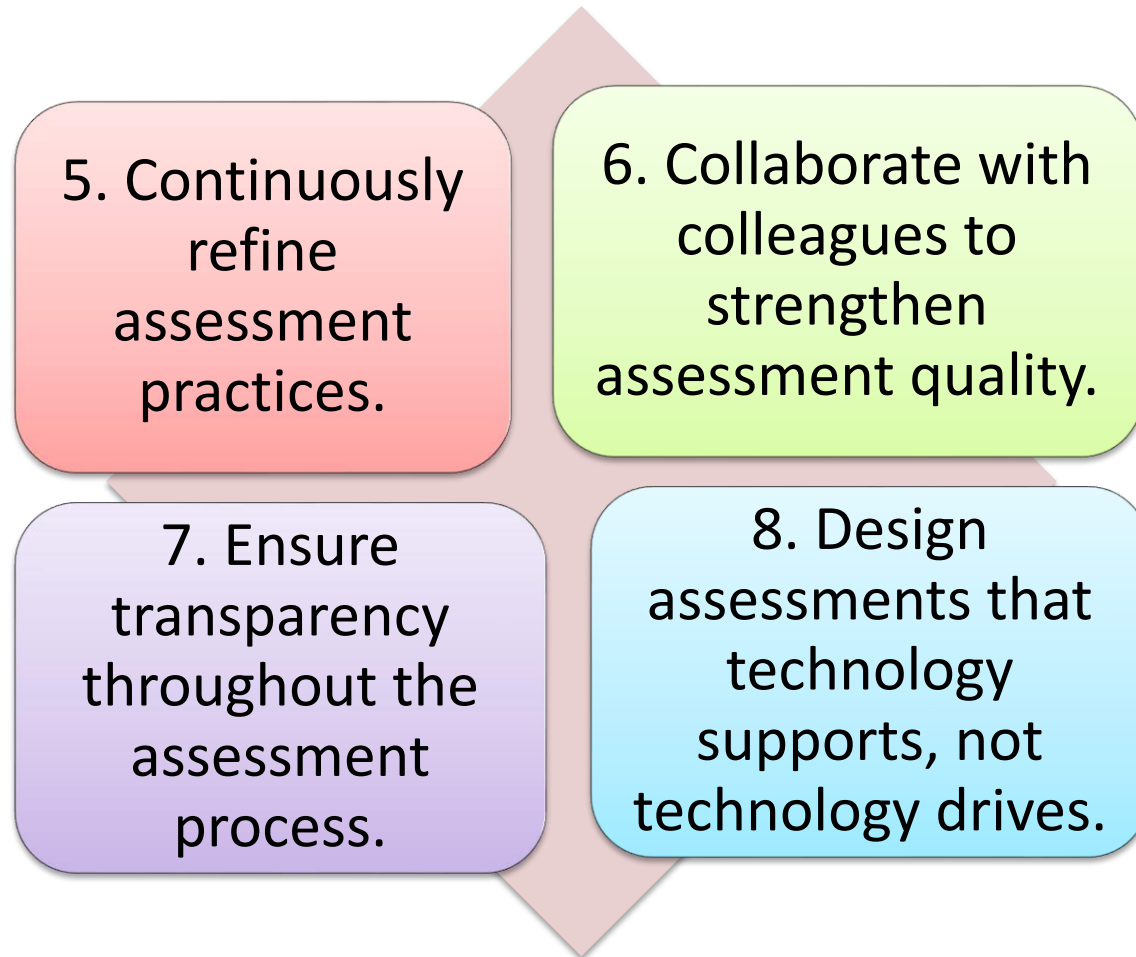
The Principles of Assessment, their Practice and alignment with NEP 2020 and NCF-SE 2023

Assessment Principle Themes	Translation into Practice	Alignment with NEP 2020 and NCF-SE 2023
10. Assessment data should improve teaching.	It is also important to analyse data from Learning Management Systems, quiz analytics, participation records, and learner performance to identify misconceptions, personalise instruction, and improve future teaching	Assessment evidence informs instructional decisions and supports personalised learning.

Integrating Principles and Practice in Online Assessment



Integrating Principles and Practice in Online Assessment



Integrating Principles and Practice in Online Assessment

9. Build a culture of trust and academic integrity.

10. View assessment as an institutional responsibility.

Conclusion

Focus on the competency—not the technology.

Design for authenticity rather than surveillance..

Use feedback to improve future learning.

Conclusion

Prioritise assessment design over plagiarism detection.

Ensure accessibility and inclusion from the outset.

Recognise that every assessment shapes learning.

References

- Assessment Principles & Practices:** Biggs & Tang (2011); Boud (2000); Boud & Associates (2010); Brown & Race (2013); Gibbs & Simpson (2004); Nicol & Macfarlane-Dick (2006); Wiliam (2011).
- Assessment Lifecycle:** Quality Matters (2023); Advance HE (2020); Melbourne CSHE; OECD (2023).
- Designing Online Assessment:** Quality Matters; UNESCO (2023); OECD (2023); Nicol (2007); Boud & Falchikov (2006).
- Competency-Based Assessment:** NEP 2020; NCF-SE 2023; Biggs & Tang (2011).
- Accessibility & Inclusive Assessment:** UNESCO (2023); NCF-SE 2023; Quality Matters (2023).
- Academic Integrity & Authentic Assessment:** Boud & Falchikov (2006); Wiggins (1998); Quality Matters (2023).
- Feedback & Feedforward:** Nicol & Macfarlane-Dick (2006); Evans (2013); Gibbs & Simpson (2004).

*Thank
you*

The background is a solid light beige color. It is decorated with several small, faint, circular floral motifs scattered across the surface. There are also small, colorful dots in shades of green, yellow, and pink. A few small white flowers are also visible. The text "Thank you" is written in a dark blue, elegant cursive font. The word "Thank" is on the top line and "you" is on the bottom line. A small green leafy branch is positioned to the right of the word "Thank", and another similar branch is positioned to the left of the word "you".