

In-Class Notes: Assessments in Online Mathematics Courses in Post-Secondary Education

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Course: Online Mathematics Pedagogy

Topic: Assessments in Online Mathematics Courses in Post-Secondary Edu

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Intro

- Importance of assessments in education
- Essential for measuring student progress and understanding
- Helps instructors refine teaching methods
- Challenges in online mathematics assessments
- Ensuring academic integrity
- Overcoming technical difficulties
- Maintaining student engagement

Types of Assessments

1. *Formative Assessments*

- Purpose: ongoing feedback to support student learning
- Examples: quizzes, discussion boards (DB), problem-solving sessions
- Benefits: identify student difficulties early, guide instructional adjustments

2. *Summative Assessments*

- Purpose: evaluate student learning at the end of an instructional period
- Examples: final exams, projects
- Benefits: measure overall achievement, inform future course design

Challenges in Online Math Assessments

1. *Academic Integrity*

- Issues: cheating, collaboration without permission
- Solutions: proctoring software, honor codes, randomized question pools
- My experience: Proctoring software can create stress, but clear communication of its purpose helps alleviate concerns

2. *Technical Difficulties*

- Issues: connectivity, software compatibility, device issues

- Solutions: tech support, practice tests, ensuring access to necessary resources
- My experience: Providing practice tests helps students familiarize themselves with the format and reduces technical issues during actual assessments

3. Student Engagement

- Issues: motivation, participation, isolation
- Solutions: interactive content, frequent feedback, peer collaboration opportunities
- My experience: Interactive content, like real-time polls and breakout sessions, significantly boosts engagement

Best Practices

1. Clear Instruction

- Importance of detailed guidelines
- Use of rubrics for transparency and fairness
- My experience: Rubrics not only clarify expectations but also streamline grading and provide consistent feedback.

2. Variety of Assessment Methods

- Benefits: catering to different learning styles and preferences
- Incorporating both formative and summative assessments
- My experience: A mix of assessment types keeps students engaged and accommodates various strengths.

3. Freq Feedback

- Importance for student improvement and learning
- Use of automated and personalized feedback
- My experience: Personalized feedback on assignments fosters a better instructor-student connection and encourages improvement.

Conclusion

- Importance of assessments, types, challenges, best practices
- Future directions in online mathematics assessments
- Increasing use of AI for personalized learning
- Enhanced tech solutions for integrity and engagement

Reflection:

- Check unfamiliar terms: proctoring, rubric
- Review challenges and solutions section for deeper understanding

- Personal experience highlights:
- The stress of proctoring software can be mitigated with proper explanation and support.
- Practice tests are invaluable for minimizing technical issues.
- Interactive elements in online assessments enhance student engagement significantly.
- Detailed rubrics clarify expectations and streamline grading.