


Assessment

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Assessment


- Establish Clear Learning Objectives:
 - Clearly define the learning objectives or goals for each lesson, unit, or course.
 - Learning objectives should be specific, measurable, achievable, relevant, and timebound (SMART).
 - They serve as the foundation for assessment activities.



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Assessment of student learning outcomes


- Assessment of student learning outcomes is the systematic gathering of information about student learning and the factors that affect learning, undertaken with the resources, time, and expertise available, for the purpose of improving the learning



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Assessment


- Select Appropriate Assessment Methods
 - Choose assessment methods that align with the learning objectives and course content.
 - Consider a mix of formative assessments (ongoing assessments during instruction) and summative assessments (evaluations at the end of a unit or course).
 - Common assessment methods include quizzes, tests, exams, essays, projects, presentations, performances, portfolios, and observations



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Assessment of student learning outcomes


- Assessment of student learning outcomes is a critical component of the teaching and learning process, helping educators gauge the effectiveness of their instruction and students' mastery of course content.
- Here's a guide to assessing student learning outcomes effectively:



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Assessment


- Use a Variety of Assessment Techniques
 - Incorporate a variety of assessment techniques to capture different aspects of student learning.
 - Mix traditional assessments with authentic assessments that require students to apply their knowledge and skills in real-world contexts.
 - Consider using performance-based assessments, peer assessments, self assessments, and rubrics to provide a comprehensive picture of student learning.



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Assessment


- Provide Timely and Constructive Feedback:
 - Offer timely and constructive feedback to students on their performance.
 - Feedback should be specific, actionable, and focused on helping students understand their strengths and areas for improvement.
 - Use a mix of written feedback, verbal feedback, and peer feedback to support student learning and growth..



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Assessment


- Monitor Student Progress:
 - Continuously monitor student progress throughout the course using formative assessments.
 - Use informal checks for understanding, classroom discussions, quizzes, and homework assignments to assess student comprehension and identify areas of difficulty.



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Assessment


- Use Rubrics and Grading Criteria:
 - Develop clear and transparent rubrics and grading criteria to evaluate student work.
 - Clearly communicate expectations to students and provide criteria for assessing their performance.
 - Rubrics help standardize assessment and ensure consistency and fairness in grading.



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Assessment


- Adjust Instruction Based on Assessment Data:
 - Use assessment data to inform instructional decisions and adjust teaching strategies as needed.
 - Identify areas where students are struggling and provide additional support, clarification, or reteaching.
 - Recognize areas where students have achieved mastery and offer opportunities for enrichment or extension activities.



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Assessment


- Promote Student Engagement in Assessment:
 - Involve students in the assessment process by incorporating self-assessment and peer assessment activities.
 - Encourage students to reflect on their own learning progress, set goals, and monitor their performance.
 - Peer assessment fosters collaboration, communication, and critical thinking skills.



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Assessment


- Document and Analyze Assessment Results:
 - Keep records of assessment results and analyze data to evaluate student performance and identify trends over time.
 - Use assessment data to inform curriculum planning, instructional design, and program improvement efforts.
 - Share assessment findings with stakeholders, including students, parents, and colleagues.



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Assessment


- Reflect on Assessment Practices:
 - Reflect on your assessment practices regularly and seek feedback from students and colleagues.
 - Evaluate the effectiveness of assessment methods in measuring student learning outcomes and make adjustments as needed to improve teaching and learning.



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Formative Assessment


- Formative assessment occurs throughout a course or lesson and serves as a "check point" for student learning throughout the discussion of a topic
- It is often not graded and done anonymously



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Diagnostic Assessment


- Diagnostic Assessment- can help you identify your students' current knowledge of a subject, their skill sets, and capabilities, and to clarify misconceptions before teaching takes place.
- Knowing students' strengths and weaknesses can help you better plan what to teach and how to teach it



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Formative Assessment


- Formative assessment helps us understand what is going on with our students
- Formative assessment allows us to re-group and address learning problems as they occur, which leads to a better learning process



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Summative Assessment


- Summative assessment typically takes place after we believe student learning has taken place (e.g., final exams, research papers, etc.),
- when it is too late to make adjustments to teaching methods, etc.
- Summative assessment evaluates and/or grades the final outcome, rather than the process, of student learning



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Assessment

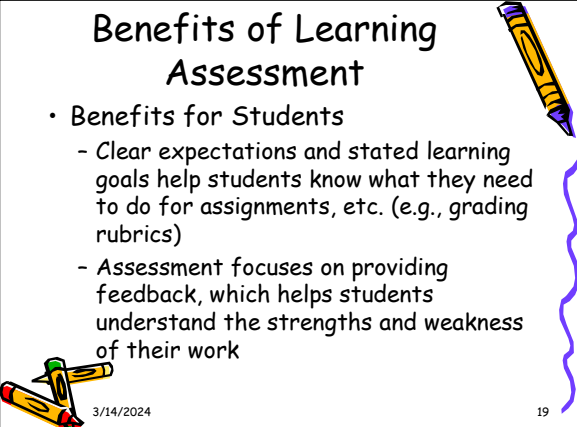
- Should You Use Summative or Formative Assessment?
 - Formative assessment allows you to "test the learning waters"
 - Summative assessment provides a final reading of how well learning outcomes were met



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Benefits of Learning Assessment

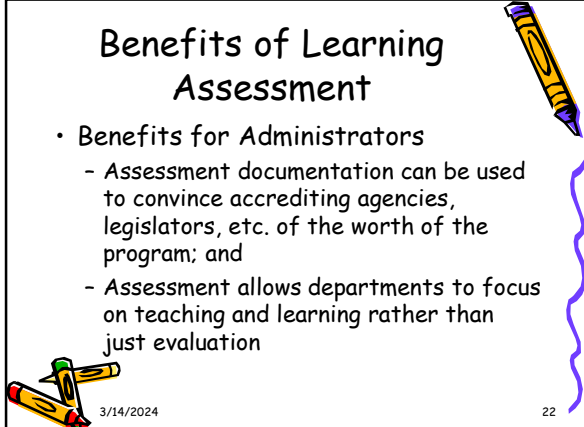
- **Benefits for Students**
 - Clear expectations and stated learning goals help students know what they need to do for assignments, etc. (e.g., grading rubrics)
 - Assessment focuses on providing feedback, which helps students understand the strengths and weakness of their work



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Benefits of Learning Assessment

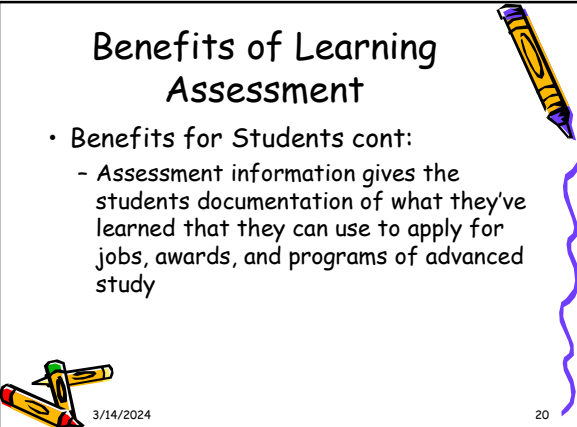
- **Benefits for Administrators**
 - Assessment documentation can be used to convince accrediting agencies, legislators, etc. of the worth of the program; and
 - Assessment allows departments to focus on teaching and learning rather than just evaluation



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Benefits of Learning Assessment

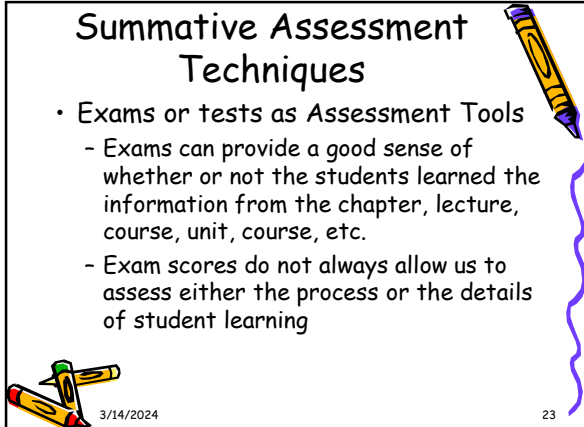
- **Benefits for Students cont:**
 - Assessment information gives the students documentation of what they've learned that they can use to apply for jobs, awards, and programs of advanced study



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Summative Assessment Techniques

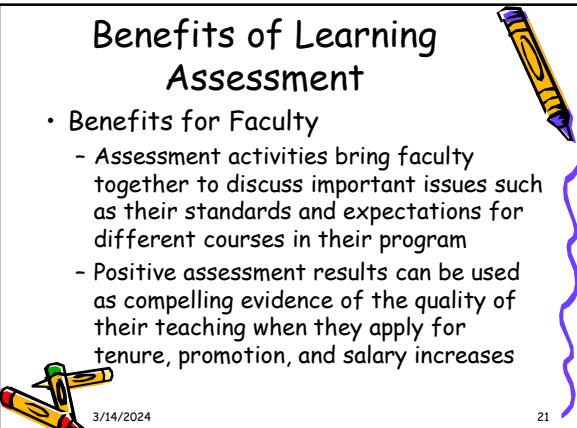
- **Exams or tests as Assessment Tools**
 - Exams can provide a good sense of whether or not the students learned the information from the chapter, lecture, course, unit, course, etc.
 - Exam scores do not always allow us to assess either the process or the details of student learning



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Benefits of Learning Assessment

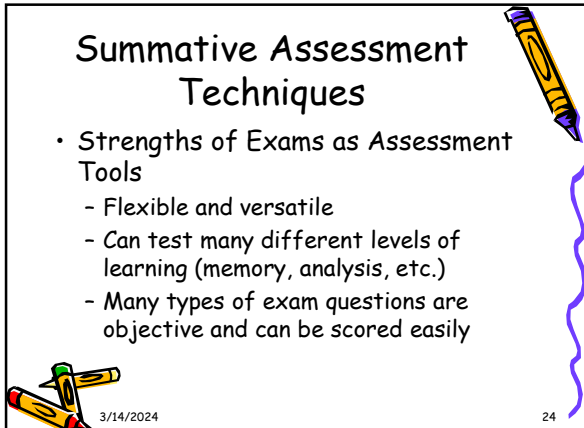
- **Benefits for Faculty**
 - Assessment activities bring faculty together to discuss important issues such as their standards and expectations for different courses in their program
 - Positive assessment results can be used as compelling evidence of the quality of their teaching when they apply for tenure, promotion, and salary increases



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Summative Assessment Techniques

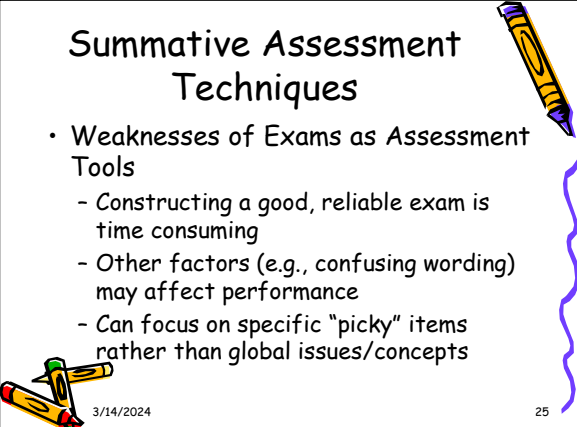
- **Strengths of Exams as Assessment Tools**
 - Flexible and versatile
 - Can test many different levels of learning (memory, analysis, etc.)
 - Many types of exam questions are objective and can be scored easily



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Summative Assessment Techniques

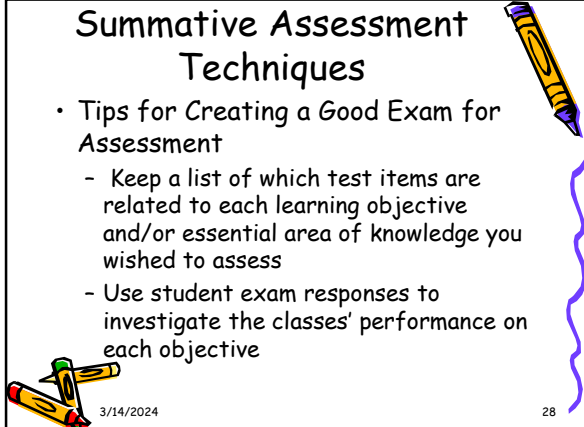
- Weaknesses of Exams as Assessment Tools
 - Constructing a good, reliable exam is time consuming
 - Other factors (e.g., confusing wording) may affect performance
 - Can focus on specific "picky" items rather than global issues/concepts



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Summative Assessment Techniques

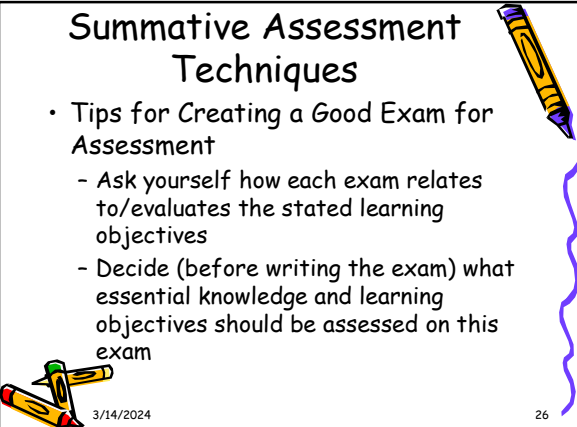
- Tips for Creating a Good Exam for Assessment
 - Keep a list of which test items are related to each learning objective and/or essential area of knowledge you wished to assess
 - Use student exam responses to investigate the classes' performance on each objective



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Summative Assessment Techniques

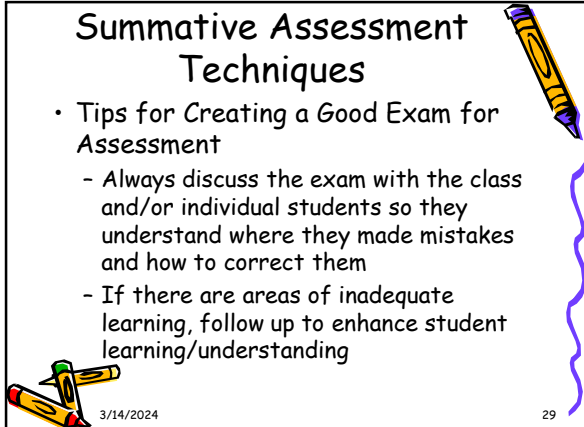
- Tips for Creating a Good Exam for Assessment
 - Ask yourself how each exam relates to/evaluates the stated learning objectives
 - Decide (before writing the exam) what essential knowledge and learning objectives should be assessed on this exam



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Summative Assessment Techniques

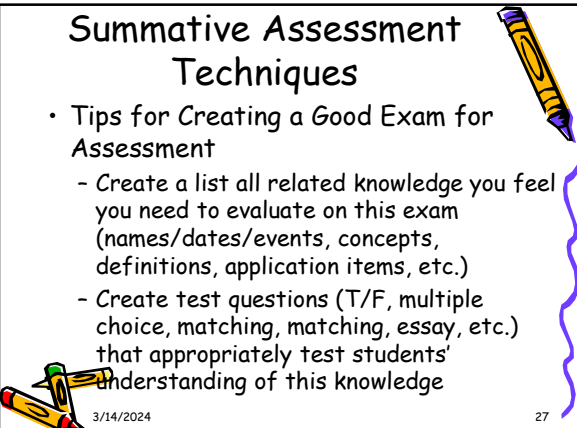
- Tips for Creating a Good Exam for Assessment
 - Always discuss the exam with the class and/or individual students so they understand where they made mistakes and how to correct them
 - If there are areas of inadequate learning, follow up to enhance student learning/understanding



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Summative Assessment Techniques

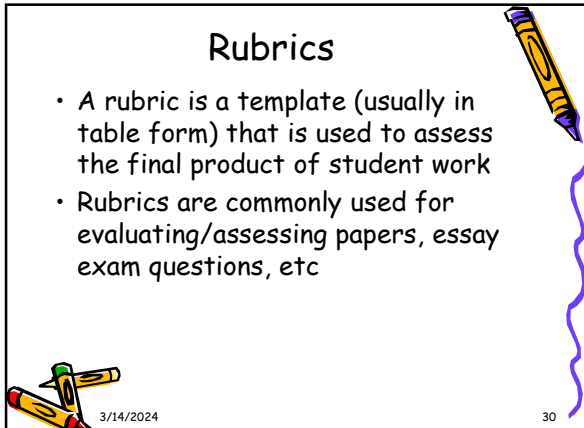
- Tips for Creating a Good Exam for Assessment
 - Create a list all related knowledge you feel you need to evaluate on this exam (names/dates/events, concepts, definitions, application items, etc.)
 - Create test questions (T/F, multiple choice, matching, matching, essay, etc.) that appropriately test students' understanding of this knowledge



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Rubrics

- A rubric is a template (usually in table form) that is used to assess the final product of student work
- Rubrics are commonly used for evaluating/assessing papers, essay exam questions, etc



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Rubrics

- Rubrics help make the grading of papers, etc. more objective and help keep the assessment of different students' work more consistent
- Rubrics provide specific and detailed feedback for the students



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Formative Assessment

- These types of assessment are relatively easy to work into most class sessions
- They can be pre-planned or created on the spot, when you feel there is a need to clarify if your students "got it"



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Advantages of Rubrics

- When rubrics are made available to students prior to the due date, they assist students in understanding your expectations
- Rubrics contribute to consistency among multiple graders



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Formative Assessment

When Should You Use Formative Assessment?

- There is no exact answer for this, but here are some general guidelines:
 - At the end of a topic/lesson
 - Weekly or even daily
 - After absences from class (such as Spring Break)
 - When your class has that "lost look"



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Advantages of Rubrics

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"Muddiest Point" Exercise

- "Muddiest Point" exercises are active learning activities typically conducted at the end of a topic, unit or class period
- In a "Muddiest Point" exercise, students are anonymously asked to report what idea, topic, etc. about the previous lesson was confusing/unclear



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"Muddiest Point" Exercise

- After instructors have collected all "Muddiest Point" responses, these are read and analyzed to see what areas of the lesson or assignments students are unclear about



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Non-Graded Quizzes

- Be sure to provide students with the correct answers to the quiz items, so they can learn from their mistakes



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Debriefing a "Muddiest Point" Exercise

- It is important to provide follow-up and feedback regarding student responses.
- Here are some ways to do that:
 - Start off the next lecture by clarifying confusing topics
 - Re-teach larger sections of material as necessary
 - Provide simple explanations, etc. on the course website



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Student-Generated Exam Questions

- In this assessment activity, students (either alone, in pairs, or in groups) are asked to generate potential exam questions
- This helps you assess student learning as well as their expectations for an upcoming exam



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Non-Graded Quizzes

- Non-graded quizzes can provide great feedback on student learning
- These are non-threatening and nonpunitive, so students tend to like them
- Non-graded quizzes can be given in a variety of formats (paper & pencil, questions in a PowerPoint presentation, etc.)



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Student-Generated Exam Questions

- Having students create potential exam questions helps you assess:
 - If students can identify key concepts;
 - What your students see as fair or reasonable exam questions; and
 - How well the students can answer these questions



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Student-Generated Exam Questions

- Be sure to discuss the answers to each question with the class
- Also discuss with the class which questions are too easy, too hard, or reasonable questions similar to those that they will actually see on the upcoming exam



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Questions



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