Choosing the Right Assessment Method:  
Pre-Test/Post-Test Evaluation

Pre-test/post-test evaluation is one of three assessment tools that is strongly recommended for use by faculty because it is a concise and effective direct evaluation that brings about reasonable dialogue to improve student learning.

Definition:

A pre-test/post-test evaluation is an assessment tool that is administered at the beginning and at the end of a course. As a direct evaluation of student learning, this tool is used to assess the progress students make throughout the semester in total or in selected component areas of a course. Typically, faculty utilize exams or rubrics to conduct this type of assessment.

For assessment, it is recommended that faculty use standardized exams or rubrics across all sections of a course. This practice affords all faculty with clear guidelines about departmental standards/expectations, what content to emphasize, and the level of difficulty expected for each topic.

Advantages:

- Monitor student progression and learning throughout a course or program.
- Administering a test of entry behavior or learning can determine whether assumed prerequisites to a course have been achieved.
- Useful for determining where skill and knowledge deficiencies exist and where they are most frequently developed.

Disadvantages:

- Faculty must agree on protocol.
- More time consuming for students.
- Specific progress during the middle of the term is not available.
- Some students may drop out of the course before the post-test has been conducted, resulting in post-test results that may be higher than they should be because those who remained in the course were more successful.
- If the pre-test group scored so low that their scores can only increase, the information gained from the post-test will be less useful.
Developing a Pre/Post Test

- Create 10 to 15 questions that could test students’ knowledge of a learning outcome at the end of a course.
  - If a course has more than one section, the faculty teaching the course should meet to create these questions.
  - When creating the questions, ensure that the level of difficulty of each question is appropriate for the students’ skill levels.
- Select at least five questions from the questions that were created to use in the assessment of the student learning outcome. The selected questions should be ones that students will be interested in. Student motivation to excel on both the pre- and post-test is key and using interesting questions can encourage their motivation to try their best.
- Determine when the pre-test and post-test should be given. Faculty teaching different sections of a course should agree on the approximately the same date for both the pre-test and the post-test. Questions on the pre-test and post-test should be the exact same.
  - Pre-tests should be administered when students have gained some, but not all relevant knowledge of the course topics.
  - Post-tests should be given as close to the end of a course as possible.
- Pre-test/post-test assessment questions are difficult to embed into graded course exams. Since the same questions will be used at the beginning and at the end of the semester, instructors may cause some student anxiety if they choose to include the questions on an exam that occurs at the beginning of the semester, when students are not yet expected to know all the material for the specific pre-test questions.
  - It is recommended that instructors give pre-test/post-test assessments as in-class non-graded assignments or as extra credit opportunities.
- Ensure that students provide their names and ID numbers on both the pre-test and the post-test. Results will be less meaningful if you cannot match up a student’s pre-test with the same student’s post-test.