

Student Achievement Tab How-to's

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What is student achievement and why is it important?

Student achievement can be viewed from two perspectives. The first perspective is to view achievement in terms of enrollment, or the number of students who pass a course. The second perspective examines student achievement in terms of whether they mastered or attained course learning objectives.

Enrollment numbers include the number of students who graduate from the course, the number of non-grads, and the final average grade of the class. These enrollment numbers may be used to identify the causes for non-graduation. These numbers may also be compared over time to locate possible problems prior to class convening, such as lack of prerequisite knowledge, student concerns, or overall course concerns.

Although the final average grade of a class is recorded to look at overall student performance, the percent of students who mastered, or attained, the individual objectives (terminal objectives and enabling objectives) are also recorded to find which units and/or lessons are the most difficult for the students. The percentages for the individual objectives can provide information about areas in the course where students may need extra help and may require modification or extra instruction.

Student enrollment and achievement data can help course developers identify problem areas in courses. Developers can look at how students perform in terms of the course overall and in terms of individual objectives. If there are sections of the course where achievement is consistently low, higher prerequisites, more instruction, additional course materials, or different instructional strategies may be possible solutions.

How do I select a classroom type?

There are three classroom types. Choose the classroom type that describes your course.

- **Traditional Classroom** is a classroom that does not meet the specifications listed for an Introductory Automated Electronic Classroom (I-AEC) or for an Advanced Automated Electronic Classroom (A-AEC).
- **Introductory Automated Electronic Classroom (I-AEC)** is a classroom where the instructor has a computer subsystem, a presentation system, and a local area network (LAN).

Source: Chief of Naval Education and Training Integration Training Working Group; December Conference Materials; NMCI/AEC's PowerPoint slide 13; available online at <https://www.cnet.navy.mil/cnet/rtwg/dec.htm>.

- **Advanced Automated Electronic Classroom (A-AEC)** is a classroom where the instructor uses a variety of technologies, such as an electronic podium, interactive dry write board, digital projection system, document camera, and individual computer work stations.

Source: Chief of Naval Education and Training Integrated Navy Training Requirements and Planning Databases (INTRPD) Summit; Education and Training Strategies (ETS) Division PowerPoint slide 6; available online at https://cnet.navy.mil/netpdtc/intrpd/summit_briefs.htm.

How do I determine a minimum passing score for the class?

The minimum passing score is the lowest possible score that a student can achieve in a course and still graduate. The minimum passing score for a course is determined by the Course Curriculum Model Manager (CCMM) and approved in the testing plan. For "A" schools, the minimum passing score is between 63 and 75. The minimum passing score for a course is determined after careful consideration of acceptable understanding/performance and job performance criticality. The grading scale is a guideline to determine the minimum passing score for a course. A minimum passing score for a course may be justifiably lowered to meet immediate manpower needs if errors in performance are less critical than no performance at all.

Source: CeTARS Web site, available at http://wwwnt.cnet.navy.mil/cetars/help_home.htm; NAVEDTRA 135B, C-4.

How do I analyze student enrollment information?

There are five steps in conducting an analysis of enrollment information. Click on the steps below to guide you in analyzing student enrollment information:

1. [Enter class information.](#)
2. [Enter enrollment information](#)
3. [Analyze reasons for non-grads and low enrollment.](#)
4. [Analyze reasons for a high or low number of Academic Review Boards \(ARBs\).](#)
5. [Analyze reasons for students not passing the course or having a low class average score.](#)

1. Enter class information.

Enter information about the class, including the minimum passing score and classroom type. Refer to the question above, "How do I determine a minimum passing score for the class?"

2. Enter enrollment information.

Enter information about student enrollment. You may obtain the information from reports generated at the schoolhouse. Definitions for the information requested are below.

- **Starting enrollment** is the number of students enrolled in a course on the first day of class.
- **Non-grads, Academic:** An academic non-grad is a student who fails to complete a course due to his/her inability to meet the curriculum's educational requirements.

Source: CeTARS Help Homepage, available at http://wwwnt.cnet.navy.mil/cetars/help_home.htm

- **Non-grads, Non-academic:** A non-academic non-grad is a student who fails to complete a course due to factors not related to their academic performance.

Source: CeTARS Help Homepage, available at http://wwwnt.cnet.navy.mil/cetars/help_home.htm

- **Non-grads, Disenrolled:** A disenrolled non-grad is a student who is administratively removed from training for a variety of reasons, such as cancellation of a class or course, a student's inability to meet prerequisites, or withdrawal by parent command.

Source: CeTARS Help Homepage, available at http://wwwnt.cnet.navy.mil/cetars/help_home.htm

- **Graduates** are the number of students who have successfully completed a course of instruction.

Source: CeTARS Help Homepage, available at http://wwwnt.cnet.navy.mil/cetars/help_home.htm

- **Academic Review Board (ARB):** A board who meets to evaluate a student's progress through a course. They make recommendations when the student is having difficulty achieving the course objectives.

Source: CeTARS Help Homepage, available at http://wwwnt.cnet.navy.mil/cetars/help_home.htm

- **Average Final Grade:** The average of the final grades of all of the students enrolled at the end of the course.

3. Analyze reasons for non-grads and low enrollment.

Non-grads may be divided into three categories: academic, non-academic, and disenrolled. For all three of these categories, students do not complete the course. It is important to examine the number of students that fall into each of these categories. To determine whether there is a concern about each of the three non-grad categories, compare the percent of non-grads in the class with the Acceptable Percentage of Non-grads determined by the administrator.

If there are a high number of students in any of these categories, it is important to determine why these students are not finishing the course. Many of the reasons that students do not complete a course are related to them not having prerequisite skills. Also, many students may be leaving because of concerns with the course or with their quality of life.

For the course revision process, you would want to pay particular attention to those students who are in the academic non-grads category. Select the reasons that apply to this offering of the course. You may want to enter information related to the areas of prerequisites, course and student concerns in the text boxes.

Source: NAVEDTRA 135B, Appendix B and Appendix H.

4. Analyze reasons for a high or low number of Academic Review Boards (ARBs).

An Academic Review Board (ARB) convenes to discuss a student who is having difficulty achieving the course objectives. This board evaluates the student's progress and makes recommendations about ways the student can progress.

An ARB provides a method for dealing with students' academic difficulties. If learners are having more difficulty than in previous offerings, the number of ARBs may increase. But, if the course is not challenging or assessments are compromised, ARBs may decrease. To determine whether there are large numbers or exceptionally small numbers of ARBs for a

class offering, compare the number of ARBs for several course offerings in the Longitudinal Analysis tab of this module.

- **Analyze reasons for a large number of Academic Review Boards (ARBs).**
Since Academic Review Boards convene when students are not achieving the objectives, a large number indicates that many students are not achieving the objectives in their current class setting. If this is the case, it is important to understand the reasons why these Boards are being held and revise the course according to these reasons. Select the reasons that apply to this offering of the course. You may want to enter information in the text boxes.
- **Analyze reasons for an exceptionally small number of Academic Review Boards (ARB).**
It is anticipated that some students will have difficulty with the objectives and Academic Review Boards will be held. Therefore, an exceptionally small number of Academic Review Boards may be a indication that something is wrong in the testing and/or Academic Review Board process. Select the reasons that apply to this offering of the course. You may want to enter information in the text boxes.

5. Analyze reasons for students not passing the course or having a low class average score.

When most or all of the students are not performing well in a course, it may be an indication that there is a problem with the course in general.

- **Compare the number of students passing and percentages of non-grads with the Acceptable Percentage of Non-grads.**
The Acceptable Percentage of Non-grads is the percentage set by the administrator that is deemed to be the maximum percentage of students who do not graduate from a course. If the number of students who do not pass the course exceeds the Acceptable Percentage of Non-grads, you would want to examine broad issues related to the course.
- **Compare the final average score with the minimum passing score.**
The minimum passing score is the score that is deemed to be the minimum score that students should receive to pass the course. If the average final grade for the class is low when compared to the minimum passing score, there may be general concerns for the course.
- **Identify the reasons for students not passing the course or having a low class average.**
If the comparisons discussed above indicate a general problem with the course, examine the overarching issues of the course, such as the appropriateness of requirements and training materials.

How do I determine a Minimal Acceptable Passing Percentage (MAPP)?

The Minimal Acceptable Passing Percentage (MAPP) is the lowest acceptable percentage of students who should master the objectives on a given test. The MAPP can vary, depending on the objectives being assessed.

When determining the MAPP for a test, factors to consider are the timing of the test in the process of the students learning the objectives and the criticality of the objectives. For example, the MAPP of a test in which the objectives were previously assessed would be higher than for a test given after the initial presentation of the objectives. Since the students have had more opportunities to practice the objectives and learn more applications of the objectives, more

students should pass the objectives. Also, tests with objectives with high criticality scores should have a higher MAPP than tests with objectives with low criticality scores.

How do I analyze student achievement of course learning objectives?

There are five steps in conducting an analysis of student achievement information. Click on the steps below to guide you in analyzing student achievement of course learning objectives:

1. [Enter test information.](#)
2. [Enter percentages of students passing for each objective on each test.](#)
3. [Compare the percentage of students passing each objective with the criticality score of the objective.](#)
4. [Analyze objectives designated as strengths.](#)
5. [Analyze objectives designated as opportunities.](#)

1. Enter test information.

Enter information about the test, including the test number, test name, date test was administered, and Minimal Acceptable Passing Percentage. Refer to the question above, "How do I determine a Minimal Acceptable Passing Percentage?" Also, select all of the units and/or lessons for which the test will assess.

2. Enter percentages of students passing for each objective on each test.

The objectives for the units and/or lessons you selected in Step 1 are displayed on the screen. Enter the percent of the students who passed each objective on each test. You may obtain this information from reports generated at your schoolhouse.

Note: The module will identify whether the objectives are "strengths" or "opportunities." A strength is an area of the course which should be continued or modeled. An opportunity is an area of a course which may be considered for the revision process. The module will designate those objectives with scores which are equal to or above the Minimal Acceptable Passing Percentage as a strength and those that are below the Minimal Acceptable Passing Percentage as an opportunity.

3. Compare the percentage of students passing each objective with the criticality score of the objective.

In prioritizing your review of objectives that were designated as opportunities, it is important to consider the criticality score of the objectives. Your first concern will be to examine those objectives with high criticality scores that were designated as opportunities. You will then want to review any other objectives that were designated as opportunities. In addition, you may want to review any other objectives with high criticality scores, although they may have been designated as strengths.

4. Analyze objectives designated as strengths.

Review individual objectives designated as strengths reflecting on the instructional strategies and class activities that were used and the events that occurred. These activities should be maintained and integrated into those areas that were designated as opportunities. Enter these activities into the text box provided.

5. Analyze objectives designated as opportunities.

Following the prioritization described earlier, review individual objectives designated as opportunities by reflecting on the instructional strategies and class activities that were used and the events that occurred. These activities should be examined and possibly modified. Enter these activities into the text box provided.