

NDTAC | Tip Sheet

Selecting Appropriate Pre-Posttests

This tip sheet is intended as a brief tool for administrators of Title I, Part D (Part D) programs who may be choosing a new pre-posttest for a facility (or facilities) or for those who wish to evaluate existing testing procedures.¹ It highlights issues to consider when beginning the selection of an appropriate pre-posttest to administer to students receiving educational services in juvenile justice and child welfare settings. Part D programs receive funds to provide supplemental educational services to youth who are neglected or delinquent (N or D) and must report data on student educational outcomes in the annual Consolidated State Performance Report (CSPR). Reporting requirements include collecting data on academic gains using pre-posttest data in reading and mathematics.² The considerations and questions in this tip sheet also may be used to help State, facility, and school administrators choose pre-posttests in academic areas outside of reading and mathematics.

What Are the Purposes of “Pre-Post Testing”?

There are primarily three types of assessments: diagnostic, formative, and summative.

- *Diagnostic* assessment occurs *before* instruction to help educators determine students' current academic strengths and weaknesses in particular areas (e.g., reading comprehension) and to inform decisions about whether, what, and how to teach specific content.
- *Formative* assessment occurs *during* instruction to help educators determine how well students are learning specific concepts and how instruction should be adjusted to better support learning (e.g., How well are students learning specific mathematical concepts? What instructional supports are needed to improve students' understanding of these concepts?).
- *Summative* assessment occurs *after* instruction to support accountability and program evaluation (e.g., Is the program effective? Were the learning needs of all students served by the program?).

The U.S. Department of Education (ED) uses Part D pre-posttest data for summative purposes, along with other key academic indicators.³ Similar to the Federal Government, States and subgrantees can use test data to help evaluate their programs. In facilities, pre-posttests can be used to measure a student's general or incremental growth in skill development and to show gains over a period of time when compared to the student's initial score.

Pre-posttests have a limited scope in that a single assessment cannot serve all of a program's or student's assessment needs. Pre-posttests are not diagnostic tools and do not offer enough information to provide substantive guidance for teachers. They are not comprehensive measures of student knowledge and skill in a given academic domain; they are intended to be summative measures, not formative.

¹ This tip sheet can be used as a companion tool to NDTAC's "A Brief Guide to Selecting and Using Pre-Post Assessments" (http://www.neglected-delinquent.org/sites/default/files/docs/guide_prepost.pdf). This document provides more information about ideal characteristics of pre-posttests, more detail about the considerations of test selection, and a summary of factors impacting pre-posttest results.

² This requirement is for long-term students who have been enrolled in a facility or program for 90 or more consecutive days.

³ These performance indicators are reported in the Federal Annual Performance Plans and Reports (<http://www.ed.gov/about/reports/annual/index.html?src=ln>), as mandated by the Government Performance and Results Modernization Act of 2010 (<http://www.whitehouse.gov/omb/performance/gprm-act>).

Tips for Selecting an Appropriate Pre-Posttest

1. Form a Selection Committee of Key Stakeholders

As you select a new pre-posttest or evaluate the current assessment in use, it is important to consult a variety of stakeholders who are invested in the pre-posttest process; each will have a unique perspective and different priorities. Including a variety of stakeholders allows these differing perspectives to be taken into account. Stakeholders may include the State Part D coordinator, facility administration or instructional staff, and possibly administration or instructional staff at local education agencies, to which students regularly return upon exiting facilities. The committee will vary depending on whether the test is for a single facility, multiple facilities across a district, or multiple facilities across the State.

2. Convene a Selection Committee

When you convene the selection committee, the questions in table 1 will help members think through the different aspects of test selection. The steps in the table can help members determine priorities; they are not intended to be approached sequentially. These considerations highlight features to take into account when reviewing and deciding on specific pre-posttests and should be discussed by the committee as they relate to one's State or facility. After reviewing the steps, discussing the considerations, and answering the questions (as well as others that may arise), the selection committee should determine its priorities for identifying academic pre-posttests that best meet students' needs and provide the necessary educational information.

3. Research Pre-Posttest Options

After convening the selection committee, the priorities and information gathered should be used as selection criteria for researching pre-posttest options and ultimately selecting a pre-posttest that best suits the needs of all key stakeholders. The following organizations⁴ may serve as useful resources in the process of researching pre-posttest options:

- **National Reporting System (NRS) Assessment Database:**

http://www.nrsweb.org/NRSwork/database/assessment_table.asp

This resource was developed by NRS for States. It includes general information about assessments that may be appropriate for adult education and English literacy students. Juvenile justice facilities have used this tool as a resource for identifying appropriate tests.

- **National Literacy Project's Resource Guide for Adolescent Literacy:**

<https://education.ucf.edu/mirc/Research/Resource%20Guide%20for%20Adolescent%20Literacy.pdf>

This guide, developed with funding from the Bill & Melinda Gates Foundation, includes a review of reading assessments designed for both individual and group administration.

- **National Center on Response to Intervention (RTI) Screening Tools Chart:**

<http://www.rti4success.org/resources/tools-charts/screening-tools-chart>

This center developed a chart that summarizes its review of both math and reading assessments that are brief, valid, reliable, and evidence-based. These screening tools are conducted with all students or targeted groups of students to identify students at risk of academic failure and, therefore, likely to need additional or alternative forms of instruction to supplement the conventional general education approach.

⁴ The National Reporting System and the RTI are currently or were previously funded by ED and housed at American Institutes for Research.

Tests in the Field

ED does not endorse or promote any specific pre-posttest for Part D programs—States and facilities are encouraged to select the tests that best fit the populations they serve. Similarly, the National Evaluation and Technical Assistance Center for the Education of Children and Youth Who Are Neglected, Delinquent, or At-Risk (NDTAC) does not conduct reviews or evaluations of assessments and cannot provide recommendations to States. From work in the field, NDTAC has learned that the following are some of the tests used in juvenile justice facilities receiving Part D funding:

- Basic English Skills Test (BEST)
- Test of Adult Basic Education (TABE)
- Basic Achievement Skills Inventory (BASI)
- Diagnostic Assessment of Reading (DAR)
- Renaissance Learning STAR assessments⁵
- Wide Range Achievement Test (WRAT)

4. Revisit Test Selection and Processes

It is important to reconvene key stakeholders over time, particularly if the population tested changes, to ensure that the selected test continues to meet the needs of students who are N or D. A regular review of test selection and processes will guarantee that the test selected continues to be the best fit.

⁵ Grantees have indicated that they are using STAR assessments in short-term facilities or in facilities with younger students.

Table 1: Questions and Key Considerations To Take Into Account During Test Selection

Steps	Considerations	Questions To Ask
<p>Determine what data you need from your pre-posttests</p> <p>Evaluate the appropriateness of the tests for your students (e.g., developmentally, culturally, linguistically)</p>	<p>The Consolidated State Performance Report (CSPR) requires facilities to report academic gains in reading and mathematics for students residing 90 days or longer in facilities for youth who are N or D.</p> <p>If your facility provides services beyond reading and mathematics skills, it may be helpful to have pre-posttests that also capture the impact of those services (e.g., in English or science).</p> <p>Students entering juvenile justice and child welfare settings often test below grade level. Not all pre-posttests fully capture your students' range of ability.</p> <p>Culturally diverse students may have backgrounds that differ from the student sample to which the test was normed. These students may not understand the cultural references in reading passages, which prevents them from demonstrating understanding or proficiency.</p> <p>Students who are English learners (EL) may have the capacity to do mathematics, but if the mathematics pretest or posttest includes word problems written in English, the test may not accurately measure their skill in mathematics.</p> <p>Students with disabilities may need accommodations (e.g., extended time, extra breaks, preferential seating, reading, oral accommodations) to take pre-posttests.</p>	<p>What academic programs and services are supported by Part D funds in the facility?</p> <p>How will your programs be able to demonstrate academic progress in the data reported for the CSPR and for continuous quality improvement?</p> <p>What is the age range or grade level of students entering the facility? What age ranges or grade levels do the pre-posttests need to accommodate?</p> <p>Does your student population include students who are EL or students from diverse backgrounds? Has your pre-posttest been validated with culturally and linguistically diverse populations?</p> <p>Does your student population include youth with learning, physical, or other disabilities? What accommodations do students' individualized education programs require for test administration? Can your facility provide such accommodations?</p>

Steps	Considerations	Questions To Ask
<p>Determine the appropriateness of the tests for the purpose of evaluating your program</p>	<p>To capture the effect of your program, you'll want to ensure the test you select aligns with the type of programming you provide (e.g., if your program is intended to improve verbal skills, a reading comprehension test will not be appropriate for evaluating the program).</p> <p>It is ideal when a program's formative assessments and curriculum align with State curriculum in order to better prepare students for a successful transition upon reentry into their local district school and afford the youth in confinement a comparable curriculum to youth who are not involved in the justice system.</p>	<p>What types of programming are you offering? Does the test you administer align with that programming?</p> <p>What standards has your State adopted? Do your curriculum and formative assessment align with those standards? Does your State or local district school have benchmark assessments? Would those assessments be appropriate to use in your program?</p>
<p>Determine the frequency of testing that makes sense for your students, facilities, and reporting requirements</p>	<p>CSPR data collection requires students residing in a facility for 90 days or longer be pre-posttested in reading and mathematics.</p> <p>Facilities with average lengths of stays shorter or longer than 90 days may want a test they can administer at different intervals to capture the full extent of the progress their students make while there.</p> <p>The tests you choose should be designed to be taken more than once. Tests that were originally designed for administration on an annual basis are inappropriate because they may not be sensitive to small changes in students' skill levels.</p> <p>The test should have at least two different versions or forms available for administration, at least one for each of the pretest and posttest levels. Administrators should not posttest a student with the same questions used in the pretest. Doing so can produce invalid data because students' progress cannot necessarily be attributed to the skills they have developed if they are already familiar with the test questions.⁶</p>	<p>How long do students typically reside in the facility (i.e., What is the average length of stay in the facility)?</p> <p>How frequently does the test developer recommend administering the pre-posttest?</p> <p>Are there any State or local policy or procedural directives on testing frequency? Does your facility have the capacity to test as frequently as recommended or required?</p> <p>How many versions or forms of the test are available to use for pre-post testing?</p> <p>What do you plan to do with the outcomes or posttest data beyond meeting reporting requirements?</p>

⁶ See more on the importance of multiple forms on pages 6 and 9 of NDTAC's "A Brief Guide to Selecting and Using Pre-Post Assessments" (http://www.neglected-delinquent.org/sites/default/files/docs/guide_prepost.pdf).

Steps	Considerations	Questions To Ask
<p>Assess the technology needed to administer the test</p> <p>Establish testing procedures at intake, during residence, and at exit that can be repeated consistently to acquire comprehensive data</p>	<p>Different tests can be administered via paper and pencil or by computer. Computer-based tests may allow for quicker scoring.</p> <p>There may be an economic justification for purchasing computer technology to avoid using staff time to administer and score the tests.</p> <p>Computer-adaptive tests can adjust to students' comprehension level as they take the test. These computer-adaptive tests can capture a wider variety of grade levels and academic skill ranges.</p> <p>Many students are overwhelmed upon entry into a facility. If an assessment is given right away, the results may not capture their true ability. It may be useful to establish testing procedures that allow youth time to adjust before fully assessing their academic capacity while still prioritizing their speedy access to educational programming. This could be done by administering a quick screening test upon entry, for the purpose of initial placement, followed by a more detailed pretest once students have acclimated to the facility and school.</p> <p>Facilities should seek to administer the test at consistent frequencies across all students to obtain valid and reliable data.</p> <p>Some students are moved from facilities without much warning; assessment just before exit may not be feasible in such cases. It may be useful to establish a regular schedule for administering posttests to capture the data from students before exit.</p>	<p>Does the test you are considering require specific technology for test administration or scoring?</p> <p>What technological capacity does your facility have (e.g., computers, Internet access)?</p> <p>Does your facility have or can your facility obtain the technology for a computer-adaptive pre-posttest, if needed or desired?</p> <p>Although it is important to pretest students as soon as possible, is there flexibility to allow time for students to adjust to the facility?</p> <p>How often are long-term students moved or released from the facility with little to no notice?</p> <p>How much notice does your facility receive regarding students who are leaving, and how quickly can a posttest be administered appropriately before they leave?</p>

Steps	Considerations	Questions To Ask
<p>Ensure that you have the staff required to administer the pre-posttest, taking into account the time it takes to complete the pre-posttest and the time and training it takes to score the pre-posttest (as necessary)</p>	<p>Some exams are designed to be administered to larger groups and others administered individually. Always consider the situation in the facility school, the facility school's testing protocol, and the acceptable testing procedures per the publisher of the test before selecting a test.</p> <p>Some pre-posttests require training to score them and interpret the results. If this is the case, your facility will need to devote the time and resources necessary for staff training.</p>	<p>Can the pre-posttest be administered to a student individually or in a small or large group format?</p> <p>Does the publisher's recommended format fit your testing protocol?</p> <p>Does the pre-posttest take long to administer and score?</p> <p>Does the pre-posttest require specialized expertise or lengthy training to administer and/or score?</p> <p>Does the pre-posttest developer offer staff ready access to training and technical support?</p>

Disclaimer

With funding from the U.S. Department of Education (ED), the National Evaluation and Technical Assistance Center for the Education of Children and Youth who are Neglected, Delinquent, or At-Risk (NDTAC) serves as a national resource center to provide direct assistance to States, schools, communities, and parents seeking information on the education of children and youth who are considered neglected, delinquent, or at-risk.

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