NATIONAL REPORTING SYSTEM for Adult Education

Technical Assistance Guide

for Performance Accountability under the Workforce Innovation and Opportunity Act

DECEMBER 2017
Division of Adult Education and Literacy
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NRS
History and Overview

THE NATIONAL REPORTING SYSTEM (NRS) is the accountability system for the federally funded, State-administered adult education program. It embodies the accountability requirements of the Workforce Innovation and Opportunity Act (WIOA, the Act) for the adult education and literacy program (Title II) and reporting under WIOA.

This document presents (1) WIOA performance indicators and other NRS measures; (2) methodologies for collecting the measures; (3) training and technical assistance to States in collecting and reporting the measures; and (4) reporting tables, including the WIOA joint information collection request (ICR) instructions and forms.

History Of The NRS

The NRS was born in the 1990s, a decade known for its emphasis on accountability of Federal programs, when all publicly funded programs and agencies faced increasing pressures to demonstrate that they had met their legislative goals and had an impact on their client populations. The requirement to demonstrate program impact was mandated in 1993 through the Government Performance and Results Act (GPRA). GPRA required all Federal agencies to develop strategic plans to ensure that services were delivered efficiently and in a manner that best suited client needs and to develop indicators of performance to demonstrate their agency's impact.

In 1995, the U.S. Congress considered integrating the adult education program into a general system of workforce development with a State block grant. Strong and convincing data on the impact of adult education at the State and Federal levels were demanded to demonstrate its importance as a separate education program. In response to these demands, the State directors of adult education asked the Division of Adult Education and Literacy (DAEL) within the U.S. Department of Education (ED) to develop a national system for collecting information on adult education participant outcomes.

To address these demands, DAEL devoted its March 1996 national meeting of State directors of adult education to developing a framework for program accountability. This framework specified the purposes of the adult education program and the essential characteristics of an accountability system, and identified seven categories of outcome measures. At the March 1997 DAEL national meeting, a broad group of adult education stakeholders validated the framework, identified outcome measures for a new national reporting system, and discussed possible methodologies for the system. Based on these decisions, a project to design and develop the reporting system began in October 1997. The proposed voluntary nature of the NRS changed in August 1998 with the passage of the Workforce Investment Act (WIA), which required an accountability system for adult education. The NRS mandate was then expanded to establish the measures and methods to conform to WIA requirements. The enactment of WIOA in 2014 created new requirements for accountability and performance, as specified in Section 116 of the Act, which have been incorporated into the NRS.

The enactment of WIOA in 2014 created new requirements for accountability and performance

NRS Development Phases

The goals of the NRS project were to develop a national accountability system for adult education programs by identifying measures for national reporting and their definitions, establishing methodologies for data collection, developing standards for reporting to the ED, and creating training materials and activities on NRS requirements and procedures. The development of the NRS proceeded in three phases.

The first phase, standardization, involved the development of standard measure definitions for State and local programs, standard data collection methodologies, and software standards for automated data reporting. In the summer of 1998, interim software standards were established, methodologies were identified for pilot testing, and draft definitions for use in the pilot test were distributed to adult education stakeholders. (Tables D1 through D3 in Appendix D show the full results.)

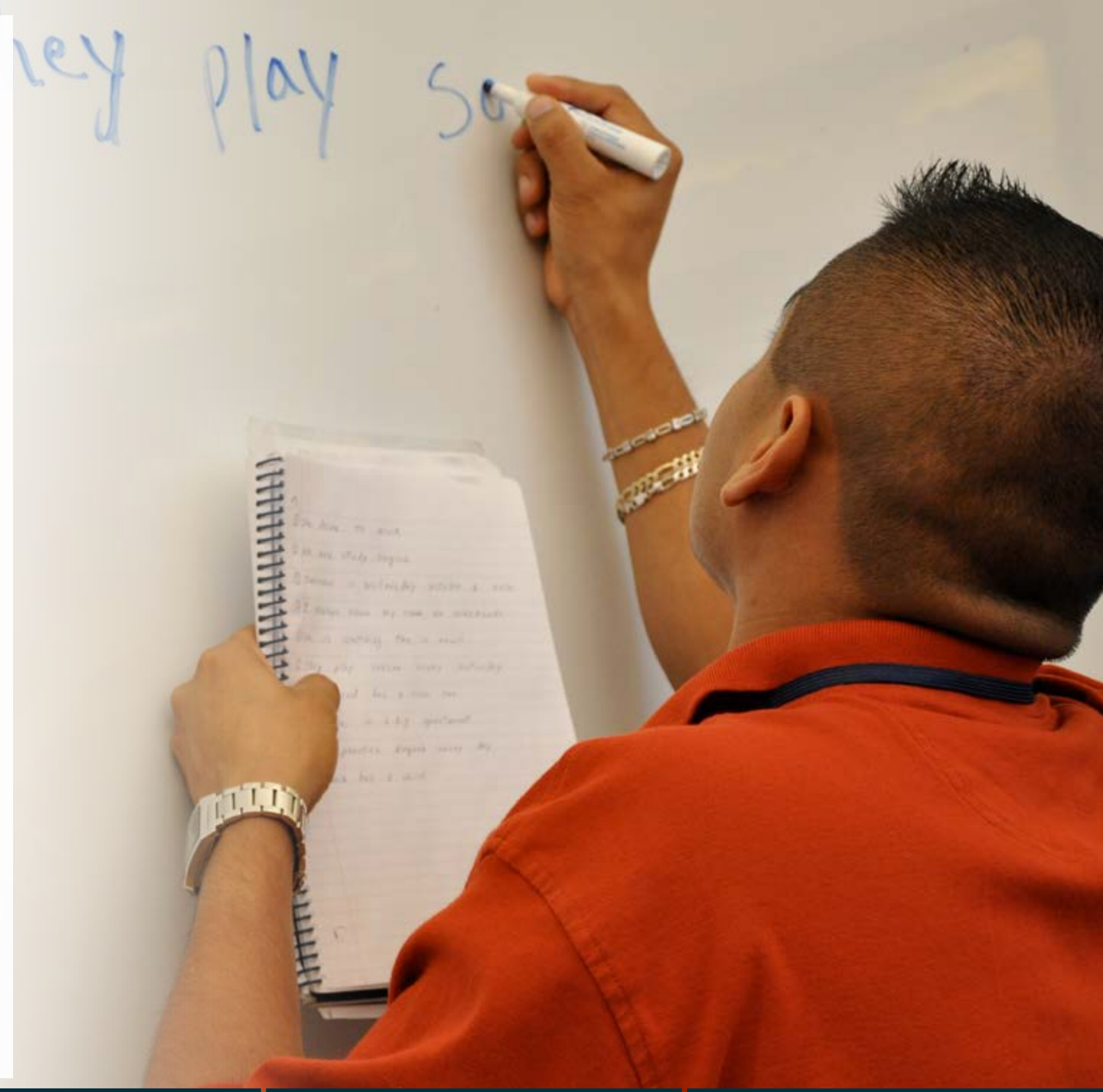
The pilot test was the second phase of development and was designed to have a small number of volunteer States and local programs test the draft measure definitions and proposed methodologies under realistic conditions. The pilot test assessed whether the draft measure definitions worked or needed to be refined. It also assessed costs, burden, and other difficulties in collecting the data using the proposed methodologies. The pilot test was completed in January 1999. Measures and methodologies were revised based on the pilot test.

A technical working group (TWG)—consisting of State directors of adult education, representatives from volunteer provider agencies, directors of local adult education programs, and experts on accountability systems—guided the project and met three times between December 1997 and March 1999. The TWG made significant substantive contributions to the measure definitions and methodologies. Participants in the pilot test also provided feedback on measures and methods.

DAEL released a draft of the *NRS Implementation Guidelines* in mid-1999 and another draft in June 2000, reflecting changes from State comments and early State experiences in implementing the requirements. The NRS formally went into effect on July 1, 2000, and DAEL issued a final Guidelines document in March 2001. Thereafter, there have been periodic updates to the *Guidelines* to clarify methodologies, provide further technical assistance on data collection, and make revisions to measures in response to ED requirements.

The third phase of NRS development, training and technical assistance, which began in the summer of 2003, supported State and local program implementation of the NRS. The different types of assistance included instructional training packets for States to use in a "train the trainer" environment, technology-based materials for State and local staff that explained NRS measures and methods, and individual technical assistance to States that supported their implementation efforts.

In 2015, in response to the joint accountability requirements of Section 116 of WIOA, the NRS was significantly revised to include the new indicators specified in WIOA and the resulting new timelines for participant follow-up and data reporting. Section 116 establishes primary indicators of performance and reporting requirements to assess the effectiveness of States and local areas in achieving positive outcomes for individuals served by the workforce development system's six core programs. These six core programs are the Adult, Dislocated Worker, and Youth programs, authorized under WIOA title I and administered by DOL; the Adult Education and Family Literacy Act (AEFLA) program, authorized under WIOA title II and administered by ED; the Employment Service program authorized under the Wagner-Peyser Act, as amended by WIOA title III and administered by DOL; and the Vocational Rehabilitation (VR) program authorized under title I of the Rehabilitation Act of 1973, as amended by WIOA title IV and administered by ED. WIOA provides an historic opportunity to align performance-related definitions, streamline performance indicators, integrate reporting, and ensure comparable data collection and reporting across all six of these core programs, while also implementing program-specific requirements related to data collection and reporting.



Overview of the NRS Measures and Methods

WIOA Primary Indicators of Performance and NRS Measures

The Technical Assistance Guide for Performance Accountability describes the following new indicators and changes to NRS reporting under WIOA.[1]

Employment indicators. New employment indicators of second- and fourth-quarter employment and median earnings have been added. Prior NRS measures of entered and retained employment have been eliminated.

Credential attainment indicator. The new credential attainment indicator consists of (1) postsecondary credential attainment for participants co-enrolled in adult and postsecondary education or (2) attainment of a recognized secondary school diploma, with employment or entry into a postsecondary education or training program within one year of exit, for participants enrolled at the secondary level who did not previously possess a secondary school diploma.

Measurable skill gains indicator. The measurable skill gains indicator is a new indicator under WIOA. It is used to measure a participant's interim progress through pathways that offer different services based on program purposes and participant needs. A measurable skill gain for an adult education participant is measured by achieving an educational functioning level gain or by the attainment of a secondary school diploma or its recognized equivalent.

The NRS also includes descriptive and participation measures. Descriptive measures include participant and teacher demographics and participant status. Participation measures include contact hours received and enrollment in instructional programs for special populations or topics, such as family literacy, integrated English literacy and civics education (IEL/CE), integrated education and training (IET), and correctional education. There also are additional optional measures for participants in family literacy and IEL/CE programs.

Exhibit 1.1 summarizes these indicators and measures, which apply to all adult education *participants*, defined as individuals who receive 12 or more hours of service.

EXHIBIT 1.1

SUMMARY OF NRS INDICATORS, MEASURES, AND DEFINITIONS

Performance Indicators | Descriptive & Participation Measures | Optional Measures | Key

TOPIC	MEASURES	CATEGORIES OR DEFINITIONS
PERFORMANCE INDICATOR **Measurable Skill Gains (MSG)**	Educational functioning level gain	Complete one or more educational functioning levels in reading, writing, speaking, and listening and functional areas, as measured by an NRS-approved assessment Earning enough Carnegie Units or credits to move from ABE level 5 to ABE level 6, according to state rule. Enrollment in a postsecondary educational or occupational skills program after exit and by the end of the program year
	Attainment of a Secondary School Diploma	Receipt of a secondary school diploma or recognized equivalent during enrollment or after exit and by the end of the program year
PERFORMANCE INDICATOR **Employment Measures**	Second-quarter employment	Employment in the second quarter after the exit quarter
	Fourth-quarter employment	Employment in the fourth quarter after the exit quarter
	Median earnings	Median earnings of participants employed in the second quarter after the exit quarter
PERFORMANCE INDICATOR **Credential Attainment**	Attainment of secondary school diploma or its recognized equivalent	Receipt of a secondary school diploma or its recognized equivalent and employed or entered into postsecondary education within 1 year of exit
	Attainment of postsecondary credential	Receipt of a postsecondary credential while enrolled or within 1 year of exit

EXHIBIT 1.1

SUMMARY OF NRS INDICATORS, MEASURES, AND DEFINITIONS

TOPIC	MEASURES	CATEGORIES OR DEFINITIONS
Demographics	Barriers to employment	Displaced homemaker; ELL, low-literacy or cultural barriers; exhausting TANF within two years; ex-offender; homeless or runaway youth; long-term unemployed; low income; migrant or seasonal farmworker; individual with disabilities; single parent; youth aged out of foster care system
	Race/ethnicity	American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Black or African American (non-Hispanic), Hispanic or Latino, White (non-Hispanic), more than one race
	Gender	Male, female
	Age	Years since date of birth
Status	Labor force status	Employed, not employed, not in labor force, employed but received notice of termination or pending military separation
	Highest degree or level of school completed	Highest grade level of school completed in U.S. or abroad, college, secondary school diploma, postsecondary degree
Student Participation	Contact hours	Number of hours of instructional activity
	Program enrollment type	ABE, ASE, ESL, family literacy, IET, IEL/civics education, correctional education, community corrections programs, other institutional programs, distance education
Teacher Descriptive	Years of experience in adult education	Total number of years of experience teaching in adult education
	Teacher certification	Certification in K–12, special education, adult education, TESOL

EXHIBIT 1.1

SUMMARY OF NRS INDICATORS, MEASURES, AND DEFINITIONS

TOPIC	MEASURES	CATEGORIES OR DEFINITIONS
Family Literacy	Involvement in children's education	Participant increases help given for children's school work, contact with teachers to discuss education, and involvement in children's school
	Involvement in children's literacy-related activities	Participant increases the amount read to children, visits libraries, or purchases books or magazines for children
ELL Civics	Achieved citizenship skills	Achieve the skills needed to pass the citizenship exam
	Voting registration	Participant registers to vote or votes for the first time
	General involvement in community activities	Participant increases involvement in community activities

EXHIBIT 1.1

SUMMARY OF NRS INDICATORS, MEASURES, AND DEFINITIONS

Performance Indicators | Descriptive & Participation Measures | Optional Measures | Key

ELL	English language learner
TANF	Temporary Assistance for Needy Families
ABE	Adult Basic Education
ASE	Adult Secondary Education
ESL	English as a Second Language
IET	Integrated Education and Training
IEL	Integrated English Literacy
TESOL	Teachers of English to Speakers of Other Languages

Performance Indicators: Measurable Skill Gains

Measurable Skill Gain (MSG) is a key indicator in the NRS and provides a measure of a participant's interim progress towards a credential or employment. The joint ICR identifies five types of gain that may be used to determine whether a participant has completed an MSG. Adult education participants may complete an MSG using two of the five types of gain described below[2]. Educational Functioning Level (EFL) gain and attainment of a secondary school diploma.

EFL Gain. There are three ways to assess EFL gain: through pre- and posttesting, attainment of credits or Carnegie Units, and entry into postsecondary education or training after exit.

1. **Pre- and posttesting.** Local programs assess participants at intake to determine their *educational functioning level (EFL)*. There are four levels for adult basic education (ABE), two for adult secondary education (ASE), and six levels for English as a second language (ESL). Each level is comprised of a set of skills and competencies that participants at that level can do in the areas of reading, writing, numeracy, speaking, listening, and functional and workplace areas. Using these descriptors as guidelines, programs determine the appropriate initial level at which to place participants using a standardized assessment approved in the state assessment policy for use in National Reporting System (NRS). The program decides the skill areas in which to assess the participant based on the participant's instructional needs and program requirements.

   After a predetermined amount of instruction determined by assessment requirements, the program conducts follow-up assessments of participants to determine whether they have advanced one or more EFL levels or are progressing within the same EFL level. Gain in any subject area on the posttest compared to pretest is permitted. The State has discretion to establish the standardized assessment method used within the State and procedures for progress assessment, and must develop a written statewide assessment policy describing assessments and procedures. All assessments and procedures must conform to standard psychometric criteria for validity and reliability.

2. **Awarding of Carnegie Units.** States that offer adult high school credit programs (including adult high schools) may measure and report EFL gain through the awarding of credits or Carnegie Units. Participants earning credits or Carnegie Units in high school-level courses can complete ABE Level 5 by earning enough credits to move to 11th- or 12th-grade status (ABE Level 6) as determined by State rule or policy.

3. **Entry into a postsecondary education or training program.** EFL Gain is also counted for participants who enter into a postsecondary education or training program after program exit. Entry must occur by the end of the program year.

Attainment of a secondary school diploma or its recognized equivalent. Participants may complete an MSG by attaining a secondary school diploma while enrolled or after exit. The participant must obtain the diploma by the end of the program year.

Post-exit Performance Indicators

The remaining performance indicators are *follow-up* indicators that are collected after participants exit. These measures are (1) employment in the second quarter after exit, (2) employment in the fourth quarter after exit, (3) median earnings of participants who are employed in the second quarter after exit, and (4) the credential indicator. The credential indicator includes two credentials: attainment of a secondary school diploma and attainment of a recognized postsecondary credential. However, the secondary school diploma only counts if the participant is either (a) employed within 1 year of exit or (b) enters into postsecondary education or training program within 1 year of exit. The secondary diploma component of the credential indicator applies only to participants without a secondary diploma or equivalent who enter at or advance into a secondary program of study (i.e., the ninth-grade equivalent level or higher). The recognized postsecondary attainment credential component of the credential indicator applies only to participants who are also enrolled in a postsecondary education or training program, including those who are enrolled in an integrated education and training (IET) program, as defined under WIOA. Attainment of the postsecondary credential must be achieved while the participant is enrolled or within 1 year of exit.

Participants in a section 225 program for corrections education and other institutionalized individuals, who remain incarcerated at exit, are excluded from all indicators except MSG. See the *Exclusions* section in Chapter II for additional permissible exclusions.

Descriptive and Participation Measures

The NRS *descriptive* measures are participant demographics and status. These measures allow for a description and an understanding of the characteristics of those who attend adult education programs. The measures also allow for analyses of the performance of subgroups of participants attending adult education programs. Demographic measures include ethnicity, age, gender, and 11 WIOA-defined barriers to employment. Status measures include employment status, highest degree achieved or level of schooling, and whether the participant has a disability or is on public assistance. Teacher status measures include total years of experience in adult education and certifications.

Two *participation* measures—contact hours and program enrollment type—are collected for both descriptive and analytic purposes. These measures record the amount of instruction that participants receive and the number of participants attending in areas such as family literacy, IET and IEL/CE programs.

Optional Measures

There are additional *optional* measures that apply to participants in family literacy and Integrated English Literacy and Civics Education (IELCE) programs under section 243. The optional family literacy measures include increased involvement in children's literacy activities and children's education. For IELCE participants, the optional IELCE measures are achievement of citizenship skills, registering to vote, and increased involvement in community activities.

NRS Methodologies

The NRS has three main methodologies for collecting data: direct program reporting, data matching, and supplemental methods for performance reporting purposes (described in OCTAE Program Memorandum 17-6).

With the **direct program reporting** methodology, local programs collect the information directly from the participant while the participant is enrolled and receiving instruction. The information is normally obtained as part of the intake process (such as through assessment) and on an ongoing basis during the course of instruction. Data collected with this methodology are demographic, student status, program participation, and assessment results.

Data matching refers to the procedures whereby agencies serving common clients pool their data, or have linked or unified data systems, to identify achievement of outcomes. Matching is achieved using Social Security numbers or other unique identifiers, and is typically done at the State level. For example, to determine whether participants obtained employment after leaving the program, the State agency responsible for adult education instruction matches the Social Security numbers and dates of attendance of participants who had obtained employment in the State Unemployment Insurance (UI) database for the appropriate calendar quarter.

The **supplemental method** for performance reporting employs a survey of participants who left the program during the program year. The local program, State, or third-party contractor may conduct the survey. To conduct this survey, programs must include all of the participants in the program to whom the measure applies. The procedures for conducting the survey are to be determined by the State but must follow accepted scientific practice for producing valid and reliable results. The State should establish a policy that clearly describes the procedures to be followed and conforms to the time periods in OCTAE Program memorandum 17-6.

These methods are further described in Chapter 2.

The NRS has three main methodologies for collecting data: direct program reporting, data matching, and supplemental methods for performance reporting purposes.

NRS and WIOA Reporting

States report NRS data by completing NRS reporting tables and the WIOA Statewide Performance Report using OCTAE's website dedicated to this purpose. States also must submit a narrative and financial report. The reporting period is a program year which covers July 1 through June 30. Annual reports are due to OCTAE on October 1. Reporting tables, including the Statewide Performance Report are in Appendix E. The appendix also includes new reporting tables that will be required beginning Program Year 2018-19, for reporting in October 2019.

Additional NRS Guidebooks and Tools

Since the NRS was implemented, OCTAE has offered annual training, guidebooks, and tools to clarify NRS requirements and to assist States in the collection and use of quality data for program management and improvement efforts. NRS project staff at the American Institutes for Research (AIR) prepared technical assistance guides and tools beginning in 2001. The most relevant of these for WIOA are the following:

- **The Guide for Improving NRS Data Quality** describes ways to standardize and improve data collection procedures for the NRS.
- **Using NRS Data for Program Management and Improvement** offers a data use and program change model and suggests ways to use NRS data.

- **NRS Data Monitoring for Program Improvement** explains the use of performance standards in program monitoring and suggests ways for States to monitor local program performance effectively.
- **Developing an NRS Data System** offers help to State and local adult education staff in making informed decisions on the design and development of a data system for the NRS. It outlines a process for identifying requirements that reflect the range of needs from functional and operational perspectives.
- **Demonstrating Results: Developing State and Local Report Cards for Adult Education** explains the components of report cards for demonstrating State and program performance, how they are used for program improvement, and how to develop them.
- **Desk Monitoring: Improving Program Performance** focuses on developing a desk monitoring system, including a tool to supplement on-site monitoring visits and a rubric to evaluate program performance.
- **Learning to be an NRS Data Detective: The Five Sides of the NRS** addresses several aspects of the NRS, including data collection procedures and requirements, improving data quality, and using data for the NRS.
- **Building and Sustaining Quality in NRS Data: A Guide to Program Improvement** deals with using NRS data to improve program quality through a four-step continuous improvement process for building and sustaining change.
- **The Local Connection: Building a Data Use Learning Community** focuses on the characteristics and essential elements of data use learning communities at the State and local levels.
- **NRS Guide to State Longitudinal Data Systems** describes models for the development and operation of State longitudinal data systems and how adult education programs can contribute to and use data from these systems.
- **NRS Myth Busters** presents a methodology and tips for conducting research on adult education programs using NRS data.
- **Linking Data Quality With Action: Evaluating and Improving Local Program Performance** reviews ways in which States can identify errors in NRS data reports and presents strategies for improving data collection and data quality.
- **The Power of Data Visualization: Advanced Presentations of NRS Data** reviews enhanced and complex ways to display data, including data dashboards and infographics.
- **Defining Adult Education Under WIOA: Messaging With Infographics** discusses effective messaging and communication strategies, and explains how to develop and use infographics to convey messages with NRS data.
- **Learn, Explore, Assess, and Plan (LEAP) Into WIOA, Part 1: Planning for Change** is an online guide with training and other technical assistance resources focusing on preparing States for changes related to WIOA. Topics include planning for data system changes, staff development, leadership strategies, and approaches for communication with State staff, local programs, and WIOA partners regarding adjustments in State reporting and data collection.
- **LEAP Into WIOA, Part 2: NRS Measures and Reporting** provides a detailed look at the new NRS reporting requirements and revised tables under WIOA. It describes changes in data requirements and modifications needed to State data collection and reporting systems, ways to implement changes, and methods of disseminating information to their local programs and State WIOA stakeholders.

The guidebooks and tools have accompanying training materials, and State staff were trained in the use of the guides and materials at regional trainings shortly after the release of each guidebook.

The NRS support project website, *NRSWeb,* includes comprehensive information about the NRS, links to NRS and WIOA documents and other resources, and online courses about NRS requirements, data quality, and data use for State and local adult education program staff. AIR has developed all of these NRS documents, training courses, and the website under contract to ED.

Overview of this Document

The remainder of this document presents the WIOA primary indicators of performance and other NRS measures, methods, NRS data collection policies, and reporting requirements in greater detail. Chapter II presents definitions of indicators and measures and the methodologies for collecting them. Chapter III presents an overview of the NRS data collection framework, describes how information flows from the classroom and program to the State and Federal levels, and discusses the responsibilities of Federal, State, and local agencies in the data collection and reporting processes. Chapter IV discusses quality control procedures and recommendations for local student record systems to enable NRS reporting. Chapter V presents the WIOA joint ICR instructions and forms used for WIOA reporting. There are six appendices. Appendix A is OCTAE Program Memorandum 17-2, which has definitions of the WIOA indicators and how they are calculated and reported. Appendix B presents the new EFL descriptors for ABE and ESL, Appendix C illustrates the time lag in reporting of employment measures, and Appendix D provides a sample survey and methodology for collecting data for the post-exit follow-up indicators. Appendix E includes the NRS reporting tables, joint ICR reporting template, and a copy of the data quality standards checklist.

2

Primary Indicators of Performance, Measures, and Data Collection

THE NATIONAL REPORTING SYSTEM (NRS) includes primary indicators of performance defined by Section 116(b)(2)(A) of the Workforce Innovation and Opportunity Act (WIOA) of 2014. The required data for adult education program reporting within the NRS include these indicators, along with descriptive and participation measures. States must report performance for the required indicators and measures on *all participants*, who are defined as individuals who receive 12 hours or more of service[3]. The U.S. Department of Education (ED) will use the WIOA indicators to evaluate State performance and negotiate expected levels of performance.

This chapter presents an overview of the WIOA performance indicators, which apply to all core programs under WIOA, and includes requirements specific to the adult education program (Title II in WIOA) reporting. In addition, the chapter includes the definitions and reporting requirements for all other required measures for NRS reporting. This chapter also provides a discussion of the data collection policies and procedures that States and local programs should have in place to collect data for the indicators and measures.

Primary Indicators of Performance

The primary indicators of performance within the NRS are the primary indicators of performance required by WIOA Section 116(b)(2)(A). These indicators are measurable skill gains, employment rate in the second quarter after exit, employment rate in the fourth quarter after exit, median earnings in the second quarter after exit, credential attainment, and effectiveness in serving employers. The U.S. Departments of Labor and Education have developed joint guidance for collecting and reporting these measures. This guidance includes definitions, methodology, calculations, and operational parameters. *OCTAE Program Memorandum 17-2* provides this guidance for adult education programs and also includes definitions of key terms related to accountability under WIOA. The next section of this chapter presents a summary of the six indicators and additional details, as appropriate, for collecting them. States should refer to this memorandum, which is included in Appendix A, for more specific information and definitions.

Measurable Skill Gains

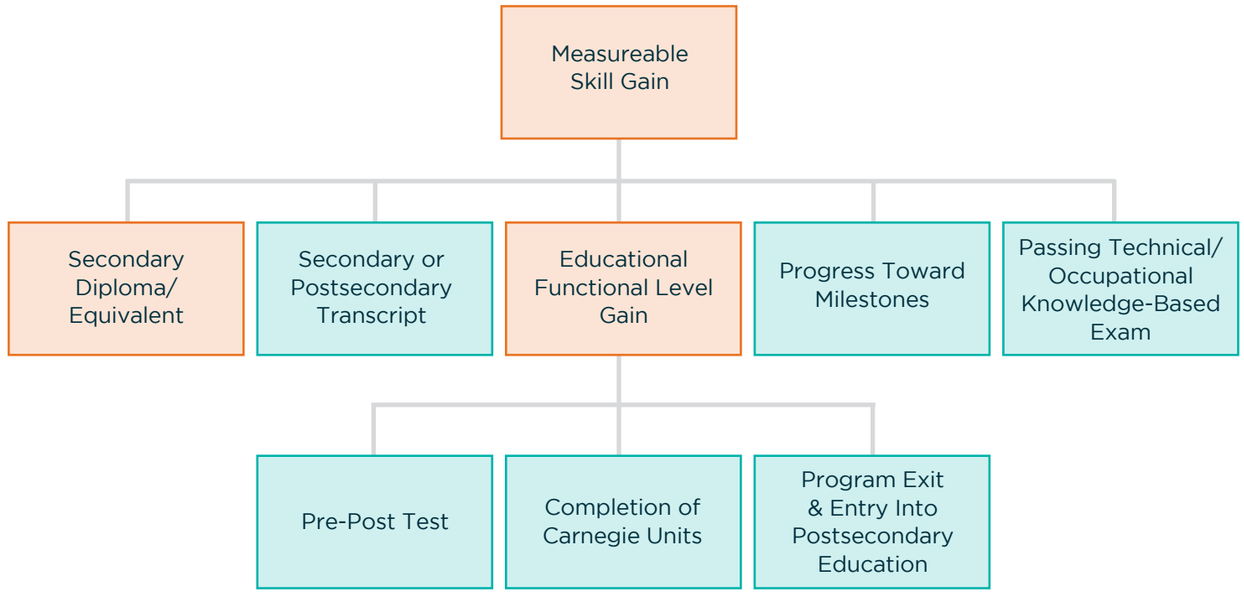
Measurable skill gains (MSG) is used to demonstrate participants' progress toward achieving a credential or employment. For adult education programs, participants can demonstrate MSG in two ways: educational functioning level (EFL) gain and receipt of a secondary school diploma (see Exhibit 2-1).

1. EFL gain can be demonstrated in one of three ways:
    - Comparing a participant's pretest with the participant's posttest, using a test approved for use in the NRS
    - Awarding Carnegie Units or credits in an adult high school program (enough to move to 11th- or 12th-grade status according to State rule)
    - Enrollment in postsecondary education or training after exit
2. Receipt of a secondary school diploma, can be demonstrated by achieving passing scores on State-approved high school equivalency tests or obtaining a secondary diploma or State-recognized equivalent[4].

EXHIBIT 2.1

FIVE TYPES OF MEASURABLE SKILL GAINS UNDER WIOA

Note: For adult education (WIOA Title II) participants, secondary or postsecondary transcripts, progress toward milestones, and passing technical/occupational knowledge-based exams cannot be used to document MSG.



Note: For adult education (WIOA Title II) participants, secondary or postsecondary transcripts, progress toward milestones, and passing technical/occupational knowledge-based exams cannot be used to document MSG.

Participants in other WIOA partner programs can demonstrate MSG by exhibiting progress on a secondary or postsecondary transcript, showing progress toward milestones, or passing a technical/occupational knowledge–based exam (shown in Exhibit 2.1). However, these measures cannot be used to report MSG in adult education programs. States report MSG for all participants for each period of participation, except for participants excluded due to the exclusions listed in OCTAE Program Memorandum 17-2 (explained in the *Exclusions* section).

Participants in other WIOA partner programs can demonstrate MSG by exhibiting progress on a secondary or postsecondary transcript, showing progress toward milestones, or passing a technical/occupational knowledge–based exam.

Employment-Related Indicators

There are three WIOA indicators related to employment:

- **Employment Rate—**Second Quarter After Exit: The percentage of participants who are in unsubsidized employment during the second quarter after exit from the program.
- **Employment Rate—**Fourth Quarter After Exit: The percentage of participants who are in unsubsidized employment during the fourth quarter after exit from the program.
- **Median Earnings—**Second Quarter After Exit: The median earnings of participants who are in unsubsidized employment during the second quarter after exit from the program.

Participants in correctional education programs (WIOA Section 225), who remain incarcerated at program exit, are excluded from the employment-related indicators, as are participants excluded due to the circumstances listed in the *Exclusions* section.

Credential Indicator

The credential indicator measures two types of credentials:

1. Receipt of a secondary school diploma or recognized equivalent during participation or within 1 year after exit from the program. The receipt of a secondary diploma is only counted if the participant also enters postsecondary education or training, or employment within 1 year after exit.
2. Receipt of a recognized postsecondary credential during participation or within 1 year after exit from the program.

The secondary diploma component of the indicator applies only to participants enrolled in a secondary education program at or above the ninth-grade level who exited the program and who did not have a secondary school diploma or its equivalent at program entry. The postsecondary education credential component of the indicator applies only to participants who were also enrolled in a postsecondary education or training program and exited the postsecondary education or training program. Participants in correctional education programs (WIOA Section 225), who remain incarcerated at program exit, are excluded from the indicator, as are participants excluded due to the circumstances listed in the *Exclusions* section.

Effectiveness in Serving Employers

WIOA requires the U.S. Departments of Education and Labor to establish a primary indicator of performance for effectiveness in serving employers. The Departments are piloting three approaches designed to address critical workforce needs of the business community.

- **Approach 1:** Retention – This approach captures the percentage of participants who exit and are employed with the same employer in the second and fourth quarters after exit. States must use wage records to identify whether a participant's employer wage record indicates a match of the same establishment identifier (such as a Federal Employer Identification Number (FEIN) or State tax id) in the second and fourth quarters. This approach addresses program efforts to provide employers with skilled workers.
- **Approach 2:** Repeat Business Customers – This approach tracks the percentage of employers who use core program services more than once. It addresses program efforts to provide quality engagement and services to employers and sectors, and establish productive relationships with employers and sectors over extended periods of time.

- **Approach 3:** Employer Penetration Rate – This approach tracks the percentage of employers who are using the core program services out of all employers represented in an area or State served by the public workforce system (i.e., employers served). American Job Centers will keep track of the number of establishments served within a program year and States will compare the data to the aggregate number of employers in a given State and/or county. This approach addresses program efforts to provide quality engagement and services to all employers and sectors within a State and local economy.

Because this indicator is a new approach for measuring performance under WIOA's core programs, the Departments have implemented a pilot program during which States must select two of the three approaches. They also may develop an additional State-specific approach. The Departments will evaluate State experiences with the various approaches and plan to identify a standardized indicator that will be implemented.

The Title II adult education program may not have access to the data required for approaches 2 and 3 to measure Effectiveness in Serving Employers. However, the State adult education program has an important role in collecting and reporting data under the first approach (retention with the same employer). That is, if the State selects the first approach, the State adult education program would be expected to provide Title II performance data to the State agency responsible for reporting the State's performance for the indicator. If the State adult education program cannot determine retention with the same employer through a data match, the State adult education program would be expected to provide data for those Title II participants who were employed in the second and fourth quarters to the State Agency responsible for reporting on the indicator, for the purpose of determining whether they were employed with the same employer in both quarters. Only performance data obtained through a direct data match is used for the "Retention with the Same Employer" approach.

Depending upon the nature of any additional State-specific approaches for measuring effectiveness, the State adult education program may have data collection and reporting responsibilities for those State-specific approaches as well. The role of the State adult education program in collecting and reporting data for such State-specific measures would depend on the State adult education program's access to such data.

Exclusions

Participants in correctional education programs (WIOA Section 225), who remain incarcerated at program exit, are excluded from all performance indicators except the Measurable Skill Gains indicator. Participants who exit the program due to the following circumstances may be excluded from the WIOA primary indicators of performance:

- The participant exits the program because he or she has become incarcerated in a correctional institution or has become a resident of an institution or facility providing 24-hour support such as a hospital or treatment center during the course of receiving services as a participant.
- The participant exits the program because of medical treatment and that treatment is expected to last longer than 90 days and precludes entry into unsubsidized employment or continued participation in the program.
- The participant exits the program because the participant is a member of the National Guard or other reserve military unit of the armed forces and is called to active duty for at least 90 days.
- The participant is deceased. Attachment 2 of OCTAE's Program Memorandum OCTAE 17-2 (found in Appendix A) provides further information about exclusions.

Collecting EFL Gain Data for MSG

OCTAE's Program Memorandum 17-2 provides guidance on collecting, reporting, and calculating each element of MSG. This section provides some additional discussion on measuring two elements of EFL for MSG: pre- and posttest gains and completion of Carnegie Units.

EFL Gain Through Pre- and Posttesting

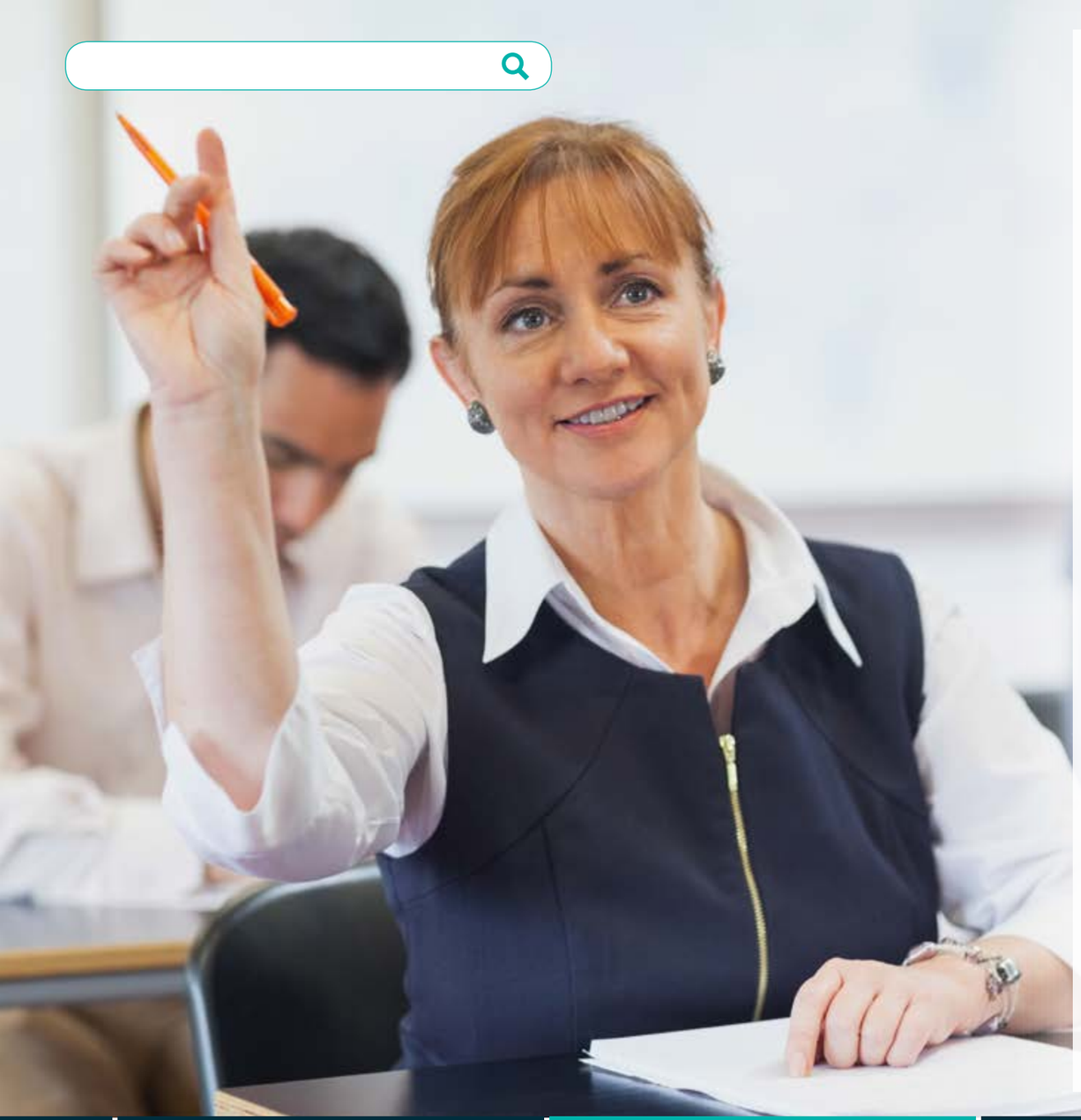
Measuring EFL gain through pre- and posttesting is defined through a set of EFLs in which participants are initially placed based on their abilities to perform literacy-related tasks in specific content areas, as measured by an NRS-approved standardized test. After a number of instructional hours, set according to the requirements of the assessment used and policy established by the State, participants are again assessed to determine their skill levels. If their skills have improved sufficiently to be placed in one or more levels higher according to the assessment, an EFL gain is recorded for that participant. States that offer adult high school credit programs, (including adult high schools) may measure and report educational gain through the awarding of credits or Carnegie Units, as explained further in this chapter.

Exhibit 2.2 describes the EFLs. Appendix B presents revised EFL descriptors for adult basic education (ABE), which were implemented when ED published a Federal Register notice in September 2017 (82 FR 42339) announcing tests suitable for use in the NRS. Appendix B also includes the revised EFL descriptors for English as a Second Language (ESL), which will be implemented when the Secretary of Education has determined that there is at least one assessment that is aligned with these descriptors and suitable for use in the NRS. Programs may continue to use the descriptors in Exhibit 2.2 until the tests aligned to those descriptors and currently approved for an extended period through February 2, 2019, are no longer approved for use in the NRS.

EFLs

The NRS divides educational functioning into six levels each for ABE and English as a second language (ESL). Each ABE level has a description of basic reading, writing, numeracy, and functional and workplace skills that can be expected from a person functioning at that level. The ESL levels describe speaking and listening skills and basic reading, writing, and functional workplace skills that can be expected from a person functioning at that level.

The functional and workplace skills for ABE and ESL differ by having a stronger second- language focus for ESL. Speaking and listening skills are only described for ESL, and numeracy is only described for ABE. Programs, however, may apply the numeracy descriptors to ESL participants and the speaking and listening descriptors to ABE participants if participants' needs and the program's instruction warrant this approach.



- The descriptors are entry-level descriptors and are illustrative of what a typical participant functioning at that level should be able to do. They are not a full description of skills for a particular level. When a participant has skills at one or more levels above the placement level, he or she has completed that level and can advance to the next level.
- Participants do not need to be assessed in all of the areas described in the level descriptors. The local program must decide, in accordance with State guidelines, the skill areas most relevant to each participant's needs or the program's curriculum, and assess participants in those areas. At a minimum, participants must be assessed in basic reading, writing, or math.
- If multiple skill areas are assessed and the participant has different abilities in different subject areas, the program may select the most appropriate level and place the participant in that level. The program must then use this level as the basis for determining the participant's initial educational functioning level. However, a posttest gain in any subject area that was pretested, regardless of whether it was used for initial placement, can be the basis for determining EFL gain.

State Responsibilities in Assessment for Measuring Educational Gain

To measure educational gain within the NRS through pre- and posttesting, States are required to have a written assessment policy for their local programs. The assessment policy must identify (1) the tests to be used to measure educational gain for both ABE/adult secondary education (ASE) and ESL participants, (2) when pre- and posttests are to be administered, and (3) how test scores are to be tied to the NRS EFLs for initial placement and reporting participant advancement across levels. The assessments allowed by the State must be approved through OCTAE's assessment approval process.

For the EFLs to be meaningful, assessments need to be administered in a standardized and consistent way by all programs in each State. When these procedures are not followed correctly or consistently, the determination of EFL is invalid and not comparable across programs or possibly even within programs, making data validity questionable. Program staff must be trained in test administration and scoring to ensure that the measures are valid and reliable across programs and participants.

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ADULT BASIC EDUCATION (ABE) LEVEL 1 **Test Benchmark:** **TABE (9–10) scale scores (grade level 0–1.9)** • Reading: 367 and below • Total Math: 313 and below • Language: 389 and below **CASAS scale scores** • Reading: 200 and below • Math: 200 and below **Wonderlic GAIN scale scores** • English: 200–406 • Math: 200–314	Individual has no or minimal reading and writing skills. May have little or no comprehension of how print corresponds to spoken language and may have difficulty using a writing instrument. At the upper range of this level, individual can recognize, read, and write letters and numbers but has a limited understanding of connected prose and may need frequent re-reading. Can write a limited number of basic sight words and familiar words and phrases; may also be able to write simple sentences or phrases, including very simple messages. Can write basic personal information. Narrative writing is disorganized and unclear, inconsistently uses simple punctuation (e.g., periods, commas, question marks), and contains frequent errors in spelling.	Individual has little or no recognition of numbers or simple counting skills or may have only minimal skills, such as the ability to add or subtract single digit numbers.	Individual has little or no ability to read basic signs or maps and can provide limited personal information on simple forms. The individual can handle routine entry- level jobs that require little or no basic written communication or computational skills and no knowledge of computers or other technology.
ADULT BASIC EDUCATION (ABE) LEVEL 2			
ADULT BASIC EDUCATION (ABE) LEVEL 3			
ADULT BASIC EDUCATION (ABE) LEVEL 4			

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ADULT BASIC EDUCATION (ABE) LEVEL 1			
ADULT BASIC EDUCATION (ABE) LEVEL 2 **Test Benchmark:** **TABE (9–10) scale scores (grade level 2–3.9)** • Reading: 368–460 • Total Math: 314–441 • Language: 390–490 **CASAS scale scores** • Reading: 201–210 • Math: 201–210 **Wonderlic GAIN scale scores** • English: 407–525 • Math: 315–522 **MAPT scale scores** • All tests: 200–299	Individual can read simple material on familiar subjects and comprehend simple and compound sentences in single or linked paragraphs containing a familiar vocabulary; can write simple notes and messages on familiar situations but lacks clarity and focus. Sentence structure lacks variety, but individual shows some control of basic grammar (e.g., present and past tense) and consistent use of punctuation (e.g., periods, capitalization).	Individual can count, add, and subtract three-digit numbers; can perform multiplication through 12; can identify simple fractions; and can perform other simple arithmetic operations.	Individual is able to read simple directions, signs, and maps; fill out simple forms requiring basic personal information; write phone messages; and make simple changes. There is minimal knowledge of and experience with using computers and related technology. The individual can handle basic entry-level jobs that require minimal literacy skills; can recognize very short, explicit, pictorial texts (e.g., understands logos related to worker safety before using a piece of machinery); and can read want ads and complete simple job applications.
ADULT BASIC EDUCATION (ABE) LEVEL 3			
ADULT BASIC EDUCATION (ABE) LEVEL 4			

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ADULT BASIC EDUCATION (ABE) LEVEL 1			
ADULT BASIC EDUCATION (ABE) LEVEL 2			
ADULT BASIC EDUCATION (ABE) LEVEL 3 **Test Benchmark:** **TABE (9–10) scale scores (grade level 4–5.9)** • Reading: 461–517 • Total Math: 442–505 • Language: 491–523 **CASAS scale scores** • Reading: 211–220 • Math: 211–220 **Wonderlic GAIN scale scores** • English: 526–661 • Math: 523–669 **MAPT scale scores** • All tests: 300–399	Individual can read text on familiar subjects that have a simple and clear underlying structure (e.g., clear main idea, chronological order); can use context to determine meaning; can interpret actions required in specific written directions; can write simple paragraphs with a main idea and supporting details on familiar topics (e.g., daily activities, personal issues) by recombining learned vocabulary and structures; and can self- and peer edit for spelling and punctuation errors.	Individual can perform with high accuracy all four basic math operations using whole numbers up to three digits and can identify and use all basic mathematical symbols.	Individual is able to handle basic reading, writing, and computational tasks related to life roles, such as completing medical forms, order forms, or job applications; and can read simple charts, graphs, labels, payroll stubs, and simple authentic material if familiar with the topic. The individual can use simple computer programs and perform a sequence of routine tasks given direction using technology (e.g., fax machine, computer operation). The individual can qualify for entry-level jobs that require following basic written instructions and diagrams with assistance, such as oral clarification; can write a short report or message to fellow workers; and can read simple dials and scales and take routine measurements.
ADULT BASIC EDUCATION (ABE) LEVEL 4			

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ADULT BASIC EDUCATION (ABE) LEVEL 1			
ADULT BASIC EDUCATION (ABE) LEVEL 2			
ADULT BASIC EDUCATION (ABE) LEVEL 3			
ADULT BASIC EDUCATION (ABE) LEVEL 4 **Test Benchmark:** **TABE (9–10) scale scores (grade level 6–8.9)** • Reading: 518–566 • Total Math: 506–565 • Language: 524–559 **CASAS scale scores** • Reading: 221–235 • Math: 221–235 **Wonderlic GAIN scale scores** • English: 662–746 • Math: 670–775 **MAPT scale scores** • All tests: 400–499	Individual is able to read simple descriptions and narratives on familiar subjects or from which new vocabulary can be determined by context, and can make some minimal inferences about familiar texts and compare and contrast information from such texts but not consistently. The individual can write simple narrative descriptions and short essays on familiar topics and has consistent use of basic punctuation but makes grammatical errors with complex structures.	Individual can perform all four basic math operations with whole numbers and fractions; can determine correct math operations for solving narrative math problems; can convert fractions to decimals and decimals to fractions; and can perform basic operations on fractions.	Individual is able to handle basic life skills tasks, such as understanding graphs, charts, and labels; can follow multistep diagrams; can read authentic materials on familiar topics, such as simple employee handbooks and payroll stubs; can complete forms, such as a job application; and can reconcile a bank statement. The individual can handle jobs that involve following simple written instructions and diagrams; can read procedural texts, where the information is supported by diagrams, to remedy a problem, such as locating a problem with a machine or carrying out repairs using a repair manual. The individual can learn or work with most basic computer software, such as using a word processor to produce own texts, and can follow simple instructions for using technology.

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ADULT BASIC EDUCATION (ABE) LEVEL 5 **Test Benchmark:** **TABE (9–10): scale scores (grade level 9–10.9)** • Reading: 567–595 • Total Math: 566–594 • Language: 560–585 **CASAS scale scores** • Reading: 236–245 • Math: 236–245 **Wonderlic GAIN scale scores** • English: 747–870 • Math: 776–854 **MAPT scale scores** • All tests: 500–599	Individual can comprehend expository writing and identify spelling, punctuation, and grammatical errors; can comprehend a variety of materials, such as periodicals and nontechnical journals on common topics; can comprehend library reference materials and compose multiparagraph essays; can listen to oral instructions and write an accurate synthesis of them; and can identify the main idea in reading selections and use a variety of context issues to determine meaning. The individual can write in an organized and cohesive manner with few mechanical errors; can write using a complex sentence structure; and can write personal notes and letters that accurately reflect thoughts.	Individual can perform all basic math functions with whole numbers, decimals, and fractions; can interpret and solve simple algebraic equations, tables, and graphs and can develop own tables and graphs; and can use math in business transactions.	Individual is able or can learn to follow simple multistep directions and read common legal forms and manuals; can integrate information from texts, charts, and graphs; can create and use tables and graphs; can complete forms and applications and complete resumes; can perform jobs that require interpreting information from various sources and writing or explaining tasks to other workers; is proficient using computers and can use most common computer applications; can understand the impact of using different technologies; and can interpret the appropriate use of new software and technology.
ADULT BASIC EDUCATION (ABE) LEVEL 6			

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ADULT BASIC EDUCATION (ABE) LEVEL 5			
ADULT BASIC EDUCATION (ABE) LEVEL 6 **Test Benchmark:** **TABE (9–10): scale scores (grade level 11–12)** • Reading: 596 and above • Total Math: 595 and above • Language: 586 and above **CASAS scale scores** • Reading: 246 and above • Math: 246 and above **Wonderlic GAIN scale scores** • English: 871–1000 • Math: 855–1000 **MAPT scale scores** • All tests: 600–700	Individual can comprehend, explain, and analyze information from a variety of literacy works, including primary source materials and professional journals, and can use context cues and higher order processes to interpret the meaning of written material. Writing is cohesive with clearly expressed ideas supported by relevant detail, and individual can use varied and complex sentence structures with few mechanical errors.	Individual can make mathematical estimates of time and space; can apply principles of geometry to measure angles, lines, and surfaces; and can apply trigonometric functions.	Individual is able to read technical information and complex manuals; can comprehend some college-level books and apprenticeship manuals; can function in most job situations involving higher order thinking; can read text and explain a procedure about a complex and unfamiliar work procedure, such as operating a complex piece of machinery; can evaluate new work situations and processes; and can work productively and collaboratively in groups and serve as a facilitator and reporter of group work. The individual is able to use common software and learn new software applications; can define the purpose of new technology and software and select appropriate technology; can adapt use of software or technology to new situations; and can instruct others, in written or oral form, on software and technology use.

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ESL LEVEL 1 **Test Benchmark:** **CASAS scale scores** • Reading: 180 and below • Life &Work (L&W) Listening: 162–180 and below **BEST Plus 2.0:** 88–361 (Student Performance Level (SPL 0–1) **BEST Literacy:** 0–20 (SPL 0–2) **TABE CLAS-E scale scores*** • Total Reading and Writing: 225–394 • Total Listening and Speaking: 230-407	Individual cannot speak or understand English, or understands only isolated words or phrases.	Individual has no or minimal reading or writing skills in any language. May have little or no comprehension of how print corresponds to spoken language and may have difficulty using a writing instrument.	Individual functions minimally or not at all in English and can communicate only through gestures or a few isolated words, such as name and other personal information; may recognize only common signs or symbols (e.g., stop sign, product logos); and can handle only very routine entry-level jobs that do not require oral or written communication in English. There is no knowledge or use of computers or technology.
ESL LEVEL 2			
ESL LEVEL 3			
ESL LEVEL 4			
ESL LEVEL 5			
ESL LEVEL 6			

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ESL LEVEL 1			
ESL LEVEL 2	Individual can understand basic greetings, simple phrases, and commands. Can understand simple questions related to personal information, spoken slowly and with repetition. Understands a limited number of words related to immediate needs and can respond with simple learned phrases to some common questions related to routine survival situations. Speaks slowly and with difficulty. Demonstrates little or no control over grammar.	Individual can read numbers and letters and some common sight words. May be able to sound out simple words. Can read and write some familiar words and phrases, but has a limited understanding of connected prose in English. Can write basic personal information (e.g., name, address, telephone number) and can complete simple forms that elicit this information.	Individual functions with difficulty in social situations and in situations related to immediate needs. Can provide limited personal information on simple forms, and can read very simple common forms of print found in the home and environment, such as product names. Can handle routine entry-level jobs that require very simple written or oral English communication and in which job tasks can be demonstrated. May have limited knowledge and experience with computers.
ESL LEVEL 3			
ESL LEVEL 4			
ESL LEVEL 5			
ESL LEVEL 6			

Test Benchmark:

CASAS scale scores

- Reading: 181–190
- L&W Listening: 181–189

BEST Plus 2.0: 362–427 (SPL 2)

BEST Literacy: 21–52 (SPL 2–3)

TABE CLAS-E scale scores*

- Total Reading and Writing: 395–441
- Total Listening and Speaking: 408–449

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ESL LEVEL 1			
ESL LEVEL 2			
ESL LEVEL 3 **Test Benchmark:** **CASAS scale scores** • Reading: 191–200 • L&W Listening: 190–199 **BEST Plus:** 2.0: 428–452 (SPL 3) **BEST Literacy:** 53–63 (SPL 3–4) **TABE CLAS-E scale scores:*** • Total Reading and Writing: 442–482 • Total Listening and Speaking: 450–485	Individual can understand common words, simple phrases, and sentences containing familiar vocabulary, spoken slowly with some repetition. Individual can respond to simple questions about personal everyday activities, and can express immediate needs, using simple learned phrases or short sentences. Shows limited control of grammar.	Individual can read most sight words and many other common words. Can read familiar phrases and simple sentences but has a limited understanding of connected prose and may need frequent rereading. Individual can write some simple sentences with limited vocabulary. Meaning may be unclear. Writing shows very little control of basic grammar, capitalization, and punctuation and has many spelling errors.	Individual can function in some situations related to immediate needs and in familiar social situations. Can provide basic personal information on simple forms and recognizes simple common forms of print found in the home, workplace, and community. Can handle routine entry-level jobs requiring basic written or oral English communication and in which job tasks can be demonstrated. May have limited knowledge or experience using computers.
ESL LEVEL 4			
ESL LEVEL 5			
ESL LEVEL 6			

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ESL LEVEL 1			
ESL LEVEL 2			
ESL LEVEL 3			
ESL LEVEL 4 **Test Benchmark:** **CASAS scale scores:** • Reading: 201–210 • L&W Listening: 200–209 **BEST Plus 2.0:** 453–484 (SPL 4) **BEST Literacy:** 64–67 (SPL 4–5) **TABE CLAS-E scale scores:*** • Total Reading and Writing: 483–514 • Total Listening and Speaking: 486–525	Individual can understand simple learned phrases and limited new phrases containing familiar vocabulary, spoken slowly with frequent repetition; can ask and respond to questions using such phrases; can express basic survival needs and participate in some routine social conversations, although with some difficulty; and has some control of basic grammar.	Individual can read simple material on familiar subjects and comprehend simple and compound sentences in single or linked paragraphs containing a familiar vocabulary; can write simple notes and messages on familiar situations but lacks clarity and focus. Sentence structure lacks variety but shows some control of basic grammar (e.g., present and past tense) and consistent use of punctuation (e.g., periods, capitalization).	Individual can interpret simple directions and schedules, signs, and maps; can fill out simple forms but needs support on some documents that are not simplified; and can handle routine entry-level jobs that involve some written or oral English communication but in which job tasks can be demonstrated. Individual can use simple computer programs and can perform a sequence of routine tasks given directions using technology (e.g., fax machine, computer).
ESL LEVEL 5			
ESL LEVEL 6			

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

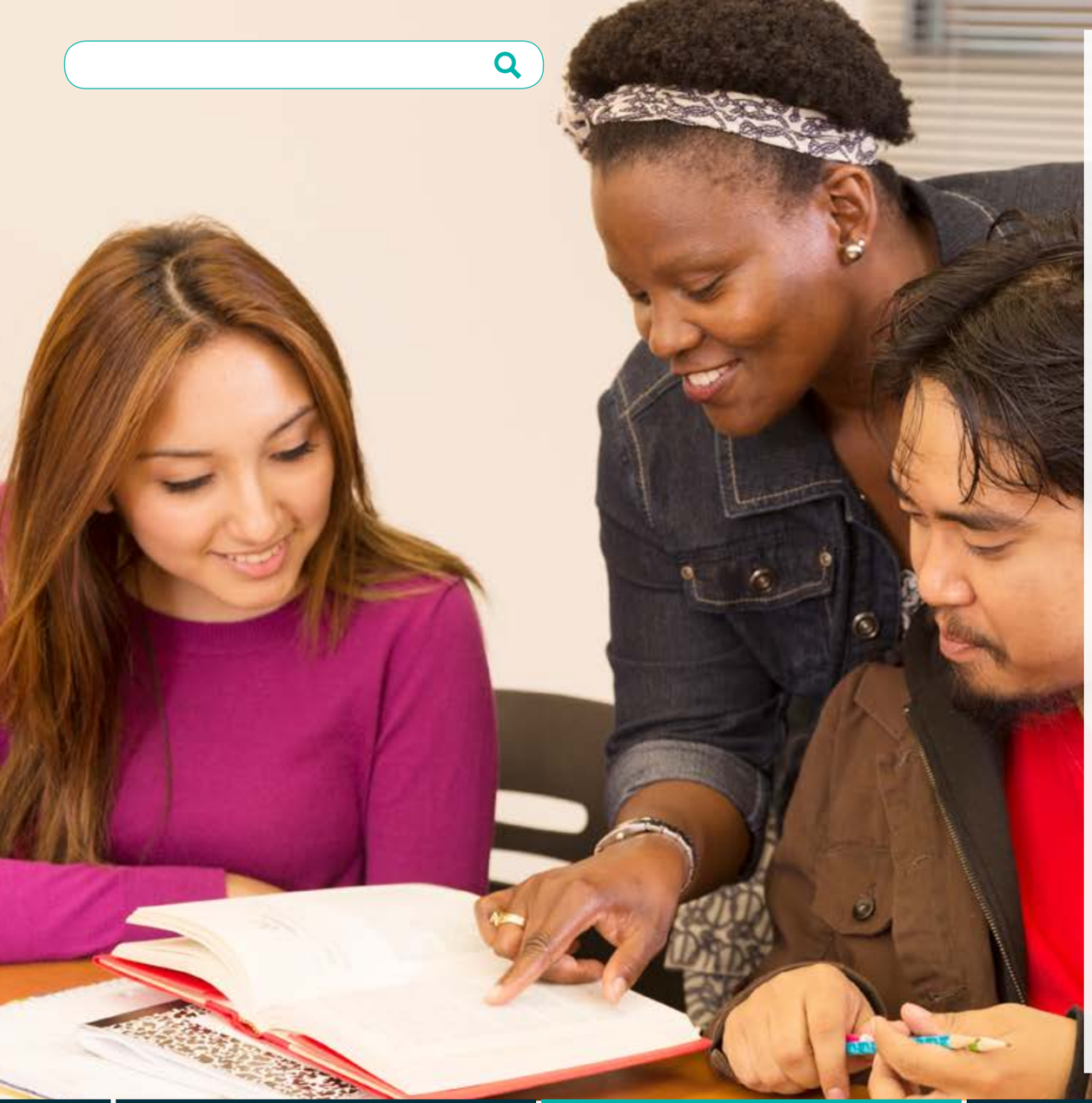
LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ESL LEVEL 1			
ESL LEVEL 2			
ESL LEVEL 3			
ESL LEVEL 4			
ESL LEVEL 5 **Test Benchmark:** **CASAS scale scores:** • Reading: 211–220 • L&W Listening: 210–218 **BEST Plus 2.0:** 485–524 (SPL 5) **BEST Literacy:** 68–75 (SPL 5–7) **TABE CLAS-E scale scores:*** • Total Reading and Writing: 515–556 • Total Listening and Speaking:526–558	Individual can understand learned phrases and short new phrases containing familiar vocabulary, spoken slowly and with some repetition; can communicate basic survival needs with some help; can participate in conversation in limited social situations and use new phrases with hesitation; and relies on description and concrete terms. There is inconsistent control of more complex grammar.	Individual can read text on familiar subjects that have a simple and clear underlying structure (e.g., clear main idea, chronological order); can use context to determine meaning; can interpret actions required in specific written directions; can write simple paragraphs with a main idea and supporting details on familiar topics (e.g., daily activities, personal issues) by recombining learned vocabulary and structures; and can self- and peer edit for spelling and punctuation errors.	Individual can meet basic survival and social needs, can follow some simple oral and written instruction, and has some ability to communicate on the telephone on familiar subjects; can write messages and notes related to basic needs; can complete basic medical forms and job applications; and can handle jobs that involve basic oral instructions and written communication in tasks that can be clarified orally. Individual can work with or learn basic computer software, such as word processing, and can follow simple instructions for using technology.
ESL LEVEL 6			

EXHIBIT 2.2

FUNCTIONING LEVEL TABLE

ADULT BASIC EDUCATION | ADULT SECONDARY EDUCATION | ENGLISH AS A SECOND LANGUAGE

LITERACY LEVEL	BASIC READING AND WRITING	NUMERACY SKILLS	FUNCTIONAL AND WORKPLACE SKILLS
ESL LEVEL 1			
ESL LEVEL 2			
ESL LEVEL 3			
ESL LEVEL 4			
ESL LEVEL 5			
ESL LEVEL 5 **Test Benchmark:** **CASAS scale scores:** • Reading: 221–235 • L&W Listening: 219–227 **BEST Plus 2.0:** 525–564 (SPL 6) **BEST Literacy:** 76–78 (SPL 7–8) ** **TABE CLAS-E scale scores:*** • Total Reading and Writing: 557–600 • Total Listening and Speaking: 559–600	Individual can understand and communicate in a variety of contexts related to daily life and work. Can understand and participate in conversation on a variety of everyday subjects, including some unfamiliar vocabulary, but may need repetition or rewording. Can clarify own or others' meaning by rewording. Can understand the main points of simple discussions and informational communication in familiar contexts. Shows some ability to go beyond learned patterns and construct new sentences. Shows control of basic grammar but has difficulty using more complex structures. Has some basic fluency of speech.	Individual can read moderately complex text related to life roles and descriptions and narratives from authentic materials on familiar subjects. Uses context and word analysis skills to understand vocabulary, and uses multiple strategies to understand unfamiliar texts. Can make inferences and predictions, and compare and contrast information in familiar texts. Individual can write multiparagraph text (e.g., organizes and develops ideas with clear introduction, body, and conclusion), using some complex grammar and a variety of sentence structures. Makes some grammar and spelling errors. Uses a range of vocabulary.	Individual can function independently to meet most survival needs and to use English in routine social and work situations. Can communicate on the telephone on familiar subjects. Understands radio and television on familiar topics. Can interpret routine charts, tables, and graphs and can complete forms and handle work demands that require nontechnical oral and written instructions and routine interaction with the public. Individual can use common software, learn new basic applications, and select the correct basic technology in familiar situations.



Assessment Procedures for Participants in Distance Education

If posttesting is to be used to measure MSG for participants in distance education, States should posttest these participants after the same amount of instructional time as other participants, according to the State's approved NRS assessment policy. States that choose to develop proxy contact hours using one of the approved models listed in the *Optional Reporting of Proxy Contact Hours* section will use the proxy contact hours to measure the posttest time for distance education participants. For example, if the State's assessment policy requires posttesting after 80 contact hours, programs must posttest distance education participants after 80 proxy contact hours, as determined by the State model.

States that choose not to collect and report proxy contact hours must develop procedures for determining the appropriate time for posttesting participants in distance education, as long as the posttesting time is after the same amount of instructional time as other participants. The State will describe the methodology it employed for determining posttest time and procedures for posttesting distance education participants in its State assessment policy.

Programs must administer all pre- and posttests used to measure educational gain of distance education participants for NRS reporting in person, at a proctored program site within the State that meets NRS assessment policy. Assessments not conducted through face-to-face interaction with a trained test administrator in a secure setting are not allowed for NRS reporting.

Standardized Assessment

To ensure comparability of the meaning of the EFLs across all programs in the State, all programs must use *standardized assessment procedures* that conform to the State's assessment policy when determining participants' EFLs. The assessment procedures must include a standardized test or a standardized performance-based assessment with a standardized scoring rubric that has been approved by OCTAE for measuring educational gain within the NRS framework. OCTAE conducts the review process annually using panels of independent experts in assessment, who evaluate assessments according to the process outlined in 34 CFR Part 462 (see *Federal Register*, Vol. 73, No. 9, January, 14, 2008). A list of tests determined suitable for use in the NRS is published annually in the *Federal Register*. The following sections summarize the criteria used to evaluate assessments for measuring educational gain for the NRS.

Intended Purpose of the Instrument

Generally speaking, tests or other assessment instruments are not inherently valid or invalid; rather, their validity hinges on how they are used. Assessments that measure educational functioning level gain should be designed to measure the development of basic English literacy and language skills through pre- and posttesting. This is not to say that tests developed and validated for one purpose can never be used for different purposes, only that the converse should not be taken for granted either. Moreover, it is usually true that the greater the difference between the intended purpose underlying the development of a given instrument and that associated with the needs of the NRS, the less likely that the instrument will be suitable for the NRS, regardless of its validity with respect to its original purpose.

Assessments that measure educational functioning level gain should be designed to measure the development of basic English literacy and language skills through pre- and posttesting.

Procedures Used to Develop/Maintain the Instrument

Relevant information associated with the test development process includes such details as the nature of the sample to which the assessment was administered for the pilot or field testing (e.g., How many examinees were administered each item? Were any measures taken to ensure the motivation of the examinees? From what population were the samples drawn?), and what steps were taken to ensure the quality of the items (e.g., How were items screened for fairness and sensitivity? How were they screened for psychometric quality?). With respect to the former, it is of particular relevance to ascertain the similarity of the samples used to develop the instrument with that of the adult education population. The greater the similarity between the samples used in developing the instrument and the population of interest to the NRS, the greater the likelihood that the results associated with those samples will generalize to that population.

Other information associated with the processes used to maintain the assessment that States should consider include the rate at which new forms are developed, the steps taken to ensure their comparability with existing forms, and the extent to which security is maintained. It is essential that multiple forms of each instrument be available, that scores associated with these forms be equivalent in meaning, and that the security of the forms be maintained at all times.

Matching Instrument Content to NRS EFL Descriptors

Validity is concerned with the accuracy of measurement; in other words, the extent to which the instrument measures what it is intended to measure. *Content validity* of an assessment is the extent to which the items and tasks of the instrument cover the domain of interest. For the NRS, the domain of interest is comprised of the skills used to describe the EFLs for ABE and ESL. To establish the content validity with respect to the requirements of the NRS, there must be evidence that the items and tasks of that instrument measure the skills associated with the EFLs (and, by the same token, do not measure skills not associated with the levels).

Typically, content validity is established by the judgments of subject matter experts (SMEs). For instance, a panel of such experts might be asked to judge the extent to which the items and tasks of a given instrument require the types and levels of skills described for a particular EFL. In general, the greater the judged overlap between the content of the instrument and the skills associated with a given level descriptor, the greater the content validity of the instrument with respect to its use as a measure of educational attainment at that level. It is important to point out that

the content validity of a given instrument may vary with respect to different EFLs; that is, it may provide adequate coverage of the skills associated with some levels but less than adequate coverage of the skills associated with other levels. Finally, it should be noted that the usefulness of content validity evidence is directly proportional to the quality of the judgments provided. Consequently, the test publisher should establish the credentials of the SMEs whose judgments were obtained, including their familiarity with adult education and the NRS levels, along with information regarding the number of experts used and the degree of agreement among them, both by skill and level.

Matching Scores on the Instrument to NRS EFLs

The assessment must provide a way to translate scores on the assessment to the NRS EFLs and the method used to establish this translation. States also should review the adequacy of the procedures used to establish the translations and the degree of uncertainty (or error) associated with them. The process used to identify the level of performance on a given instrument that is associated with a given level of achievement in some domain is generally referred to as standard setting. Although there are many different approaches to standard setting, most rely heavily on the judgments of SMEs. It is important for the test publisher to report the credentials of the experts making the standard-setting judgments, the number of experts used, and their degree of agreement. The latter information is directly related to the degree of error associated with the final translations and indicates the extent to which the cut scores to the NRS might be expected to differ if they had been established by a different (though similar) panel of experts. The greater the degree of agreement is among experts, the greater the amount of faith that can be placed in the resulting translations.

Reliability/Classification Consistency

Reliability refers to the degree of consistency in performance on an assessment; that is, the extent to which an examinee would be expected to perform similarly across multiple administrations of the instrument or under different conditions. An important condition that can differ across administrations of a particular instrument to be used for the NRS is the form of the instrument administered. More specifically, because educational gain is determined as a function of the difference between an examinee's pre- and posttest performance *as measured on different forms of the instrument*, it is essential to review the test publisher's information regarding the expected similarity of performance across forms in the absence of instruction or other external interventions. The greater the similarity in performance across forms, the greater the *alternate forms reliability* of the instrument and the stronger the inference that improvements in performance between pre- and posttesting is attributable to something other than measurement error associated with differences across forms.

Note that alternate forms reliability information should be provided for both the raw (or number correct) scores associated with the assessment being reviewed and the translated NRS EFL classifications. It is the consistency with which examinees are classified into the EFLs that is the most important consideration for determining the appropriateness of the instrument for use in the NRS because it is movement across the classifications that forms the basis for evaluating educational gain. Also, because the consistency of performance measurement may vary with respect to EFLs, information regarding classification consistency should be reported for each level that the instrument is being considered for use in measuring educational gain. Last, it is important for the test publisher to provide information regarding the nature of the sample used to estimate the reliability of the instrument because the greater the differences between the sample and the target population (e.g., ABE participants), the less generalizable the reliability estimates will be.

Construct Validity

Other types of validity information that are important in determining the appropriateness of a given instrument for measuring educational gain for the NRS fall under the global heading of construct validity. This includes *convergent validity*.

Convergent validity concerns the extent to which the scores on the instrument are related to scores on other instruments designed to measure the same or very similar constructs. States should review information provided by test publishers regarding the degree of relationship between examinee performance on their instrument and performance on one or more other measures currently approved for measuring educational gain in the NRS. This information should be provided with respect to the raw scores associated with the assessment and with the corresponding NRS EFL classifications. Likewise, information should be provided regarding the nature of the sample from which the data were collected to determine the extent to which the results are likely to generalize to the population of interest.

Other types of information that States should consider to evaluate the construct validity of an assessment include evidence regarding the extent to which scores on that instrument are free from sources of variance not relevant to the skills the assessment measures, such as practice effects or cultural-based knowledge, and the extent to which performance on the assessment is related to other variables that it should be related to, such as hours of instruction or other important outcome measures (e.g., attainment/retention of employment and acquisition of academic credentials).

The foregoing is not meant to be an exhaustive list of the types of information that might be provided by a test publisher in support of the validity of a given instrument, nor is it meant as a list of information that must be provided. Rather, this discussion is intended to suggest to States the kinds of information that would be considered relevant in determining whether a particular instrument is appropriate, valid, and reliable for measuring educational gain as a result of participation in an adult education program. Exhibit 2.3 summarizes the considerations for evaluating assessments.

Placing Participants in EFLs

To assist in placement decisions, test benchmarks are provided for the levels. Approved tests for ABE are Comprehensive Adult Student Assessment System (CASAS), Test of Adult Basic Education (TABE; forms 9–10 and 11–12), Wonderlic General Assessment of Instructional Needs (GAIN), and Massachusetts Adult Proficiency Test (MAPT); for beginning basic education and above). For ESL, the test benchmarks include CASAS and scores on BEST Literacy, BEST Plus, and TABE Complete Language Assessment System—English (CLAS-E). Student performance levels (SPLs) tied to the BEST and BEST Plus also are included with the benchmarks. These benchmarks are provided as examples of how participants functioning at each level would perform on the tests. The tests should not be considered equivalent, however, and do not necessarily measure the same skills. Please see the Federal Register notice (82 FR 42339 and 81 FR 89920) for a complete list of tests and test forms determined to be suitable for use in the NRS.

The NRS requires that local programs assess and place all participants into an EFL at intake. Programs should administer the initial assessment at intake or as soon as possible thereafter, and administer follow-up or posttest assessments according to State policy. The follow-up assessment should occur after a set instruction time, either in hours (e.g., after 50 hours of instruction) or months but must conform to the test publisher's guidelines for the amount of time needed for a participant to show a meaningful gain.

Use of Different Assessment Forms

Assessments designed for multiple administrations on the same participants, such as for pre- and posttesting, have different but equivalent versions or forms. Local programs must pre- and posttesting using different forms, unless testing conditions specify otherwise according to the test publishers' guidelines. In addition, some tests, such as TABE, have different forms for proficiency levels, designated as "easy" and "hard," for example. When using such a test, programs must follow the test publisher's guidelines in selecting the correct test form for each participant.

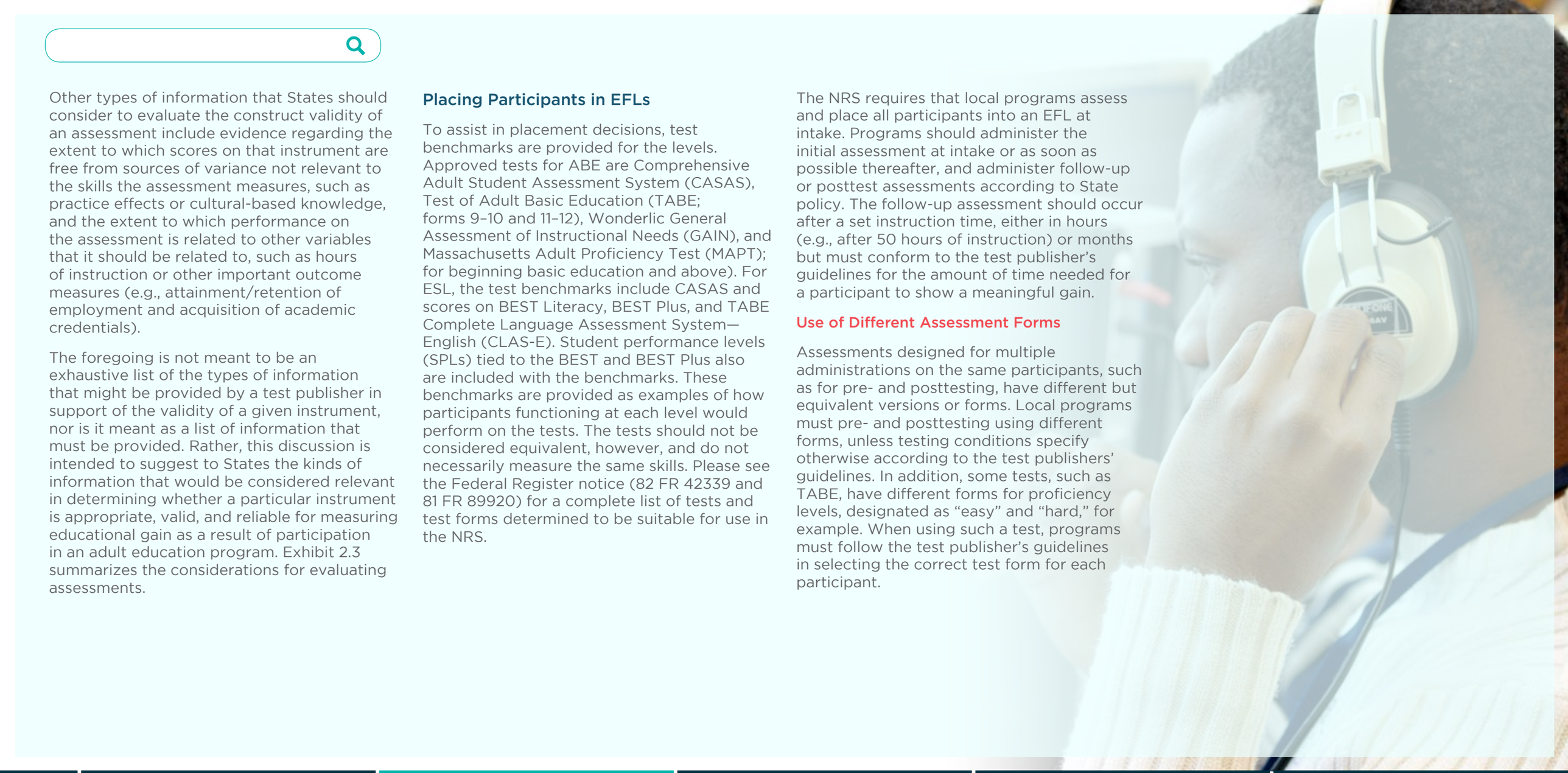


EXHIBIT 2.3

CONSIDERATIONS FOR EVALUATING ASSESSMENTS USED FOR MEASURING EDUCATIONAL GAIN

What is the intended purpose of the instrument?

a. **What does the instrument's technical manual say about the purpose of the instrument, and how does this match the requirements of the NRS?** (The NRS requires that instruments allow examinees to demonstrate their level of skills represented in the educational functioning level (EFL) descriptors. The NRS also requires instruments that include multiple parallel forms, so that gains in educational functioning can be demonstrated.)

What procedures were used to develop and maintain the instrument?

b. **How was the instrument developed?** (How similar was the sample[s] of examinees used to develop/evaluate the instrument for the population of interest to the NRS? What steps, if any, were taken to ensure their motivation while responding to the instrument? To what extent have items/tasks on the instrument been reviewed for fairness and sensitivity? To what extent have they been screened for adequacy of psychometric properties? Does the instrument have multiple forms?)

c. **How is the instrument maintained?** (How frequently, if ever, are new forms of the instrument developed? What steps are taken to ensure the comparability of scores across forms? What steps are taken to maintain the security of the instrument?)

Does the assessment match the content of the NRS EFL descriptors?

d. **How adequate are the items/tasks on the instrument at covering the skills used to describe the NRS EFLs? Are aspects of a given descriptor not covered by any of the items/tasks? Are there items/tasks not associated with any of the descriptors?** (Note: It is possible for an instrument to be appropriate for measuring proficiency at some levels but not at others.)

e. **What procedures were used to establish the content validity of the instrument? How many subject matter experts (SMEs) provided judgments linking the items/tasks to the EFL descriptors, and what were their qualifications? To what extent did their judgments agree?**

Can the scores on the assessment match the NRS EFLs?

f. **What standard-setting procedures were used to establish cut scores for transforming raw scores on the instrument to estimates of an examinee's NRS EFL? If judgment-based procedures were used, how many SMEs provided judgments, and what were their qualifications? To what extent did their judgments agree?**

g. **What is the standard error of each cut score, and how was it established?**

Is there evidence of reliability and classification consistency?

h. **What is the correlation between raw scores across alternate forms of the instrument? What is the consistency with which examinees are classified into the same NRS EFL across forms?**

i. **How adequate was the research design that led to these estimates?** (What was the size of the sample? How similar was the sample used in the data collection to that of the adult education population? What steps were taken to ensure the motivation of the examinees?)

Has construct validity of the assessment been demonstrated?

j. **To what extent do scores** (and/or educational functioning classifications) associated with the instrument correlate (or agree) **with scores or classifications associated with other instruments already approved by the U.S. Department of Education for assessing educational gain? To what extent are they related to other relevant variables, such as hours of instruction or other important process or outcome variables? How adequate were the research designs associated with these sources of evidence?**

k. **What other evidence is available to demonstrate that the instrument measures gains in educational functioning resulting from adult education and not some other construct-irrelevant variables, such as practice effects?**

Pretest Administration Time

The initial assessment is the basis for placing participants in an entering EFL according to NRS or State definitions. It is the baseline on which programs measure learning gains. Programs should administer the initial assessment to participants at a uniform time shortly after enrollment. This time should be set by State policy and apply to all participants to improve test comparability among participants. If available, programs should administer a locator test to determine the appropriate pretest to use.

Educational gain is determined by comparing the participant's initial EFL with the EFL measured by the posttest in any subject area in which the participant was pretested. EFL gain is not limited to the subject in which a participant's initial placement level is set.

Placement Policy Based on Initial Assessment

Using the results of the initial assessment, programs should place participants at the appropriate NRS EFL or the equivalent State level. States should provide to local programs the criteria for placing participants at each EFL, using test scores from the initial assessment. Not all of the skill areas described in the level descriptors need to be used to place participants, but the skill areas assessed should be in the areas most relevant to participants' needs and the program's curriculum. If multiple skill areas are assessed and the participant has differing abilities in each area, the participant need not be placed in the lowest area of functioning, but the program may determine the appropriate placement level based on the assessment, according to State policy. However, once determined, this placement level is locked in for the participant as the basis for reporting in the program year.

Established Time for Posttest

Just as programs should administer the initial assessment to participants at a uniform time, the State also should establish a time for posttesting in accordance with the test publisher's guidelines. This time is normally after a set number of instructional hours and should be long enough after the pretest to allow the test to measure gains. As noted earlier, local programs must conduct posttests with the parallel form of the same assessment used to place the participant, unless testing conditions specify otherwise according to the test publishers' guidelines.

Level Advancement Policy Based on Posttest

Educational gain is determined by comparing the participant's initial EFL with the EFL measured by the posttest in any subject area in which the participant was pretested. EFL gain is not limited to the subject in which a participant's initial placement level is set. Gains may occur in any subject in which an initial EFL was assigned and posttesting occurs. It is important to note that if a participant is not posttested, no advancement (via pre-/posttesting) can be determined for that participant. The participant must remain in the same level as initially placed for NRS reporting.

EXHIBIT 2.4

SUMMARY OF ASSESSMENT GUIDELINES FOR STATE POLICY IN MEASURING EDUCATIONAL GAIN

- Designate standardized assessments.
- Designate use of different forms or versions of the assessment at each administration when required.
- Establish a uniform time to administer the initial assessment.
- Develop procedures for participant placement based on the initial assessment.
- Establish a uniform time for the posttest based on the test publisher's guidelines.
- Develop a level advancement policy based on the posttest or follow-up assessment.
- Train staff in administrating the assessments.

Staff Training on Administration of Assessments

The State should ensure that all local program staff who administer assessments receive training on proper administration procedures. Such training should be provided on an ongoing basis to accommodate new staff and as a refresher to staff who had earlier training. These procedures should include the steps outlined above (i.e., use of the correct form of the assessment and administration at the proper time) and follow the publisher's procedures for giving directions to participants, timing the assessment, and not providing help to participants. Assessments should be administered under suitable conditions (e.g., in a well-lit, quiet room). Exhibit 2.4 summarizes assessment guidelines for measuring educational gain for the NRS.

The State should ensure that all local program staff who administer assessments receive training on proper administration procedures. Such training should be provided on an ongoing basis to accommodate new staff and as a refresher to staff who had earlier training.

Measuring MSG Through Carnegie Units

Another method for determining EFL gain for MSG is the completion of Carnegie Units awarded by an adult high school. An adult high school is a credit-bearing secondary education program sanctioned by State law, code, or regulation that leads to a secondary school diploma or equivalent. States that offer adult high school credit programs (including adult high schools) may measure and report EFL gain through the awarding of credits or Carnegie Units. Participants earning credits or Carnegie Units in high school-level courses can complete ABE Level 5 by earning enough credits to move to 11th- or 12th-grade status (ABE Level 6) as determined by State rule or policy. Participants who enter an adult high school program at an 11th/12th-grade level (as determined by State rules pertaining to credits held) are placed in ABE Level 6 regardless of NRS test score. Adult participants can complete ABE Level 6, and thus achieve an MSG, by earning enough credits to satisfy the requirements for high school graduation as determined by State rule or policy.

Periods of Participation

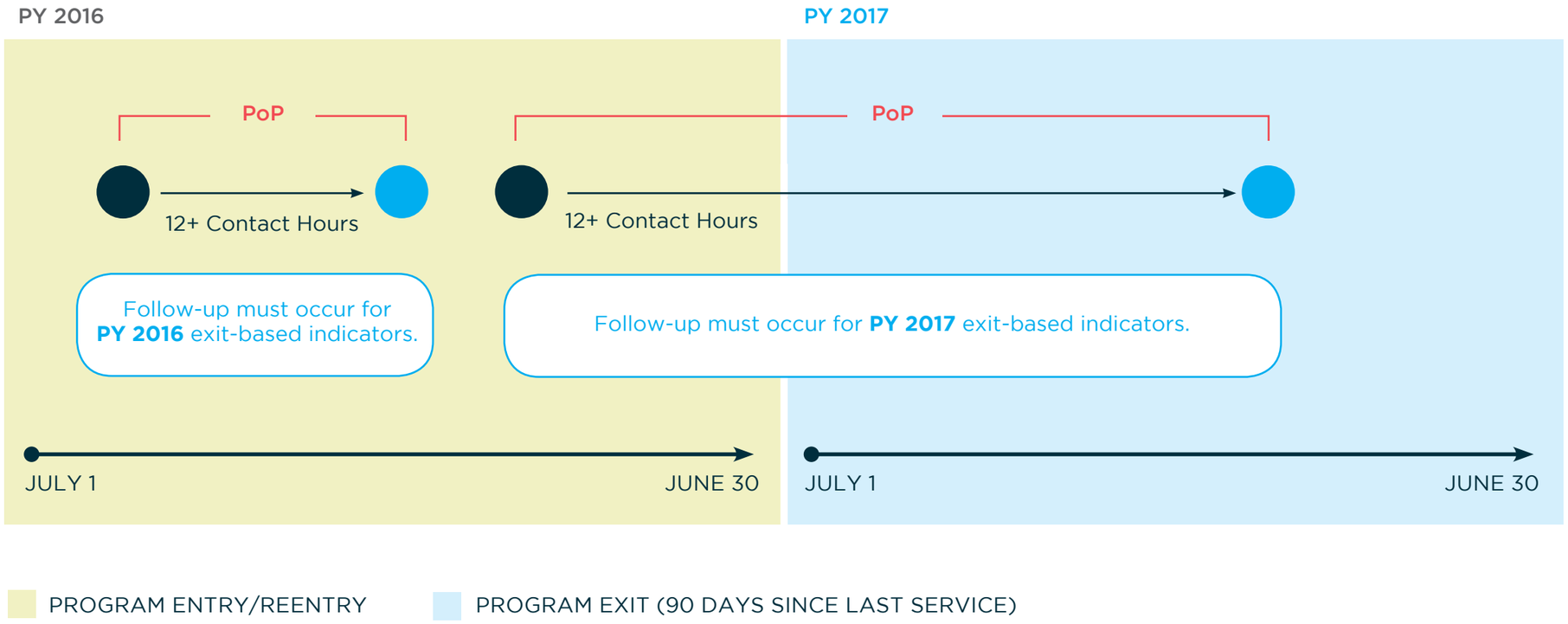
State performance on all core outcome measures under WIOA (except median earnings) is calculated as a percentage of the number of outcomes achieved by the number of periods of participation (PoPs) of each participant (see Appendix A for calculation formula). A PoP begins each time a participant (an individual with at least 12 contact hours) enrolls in adult education and then exits the program—even when multiple enrollments occur during the same program year. Subsequent enrollments and exits during a program year result in a new period of participation. Therefore, a participant may have more than one period of participation in a program year. If the participant does not exit, the PoP remains active. See *Entry and Exit* on the next page and Appendix A for a definition of exit.

For example, a participant who enters in September, exits in December, reenrolls in May, and exits in June has two PoPs. A participant who exits without reenrolling has one PoP, as does a participant who enrolls only once and remains enrolled at the end of the reporting period. Each PoP is counted separately and outcomes are counted for each period of participation. Therefore, a participant may be counted multiple times – once for each period of participation. Exhibits 2.5 illustrates PoP and its effect on the exit-based primary indicators of performance and Exhibit 2.6 illustrates PoP and its effect on MSG.

EXHIBIT 2.5

PERIODS OF PARTICIPATION (POPS):

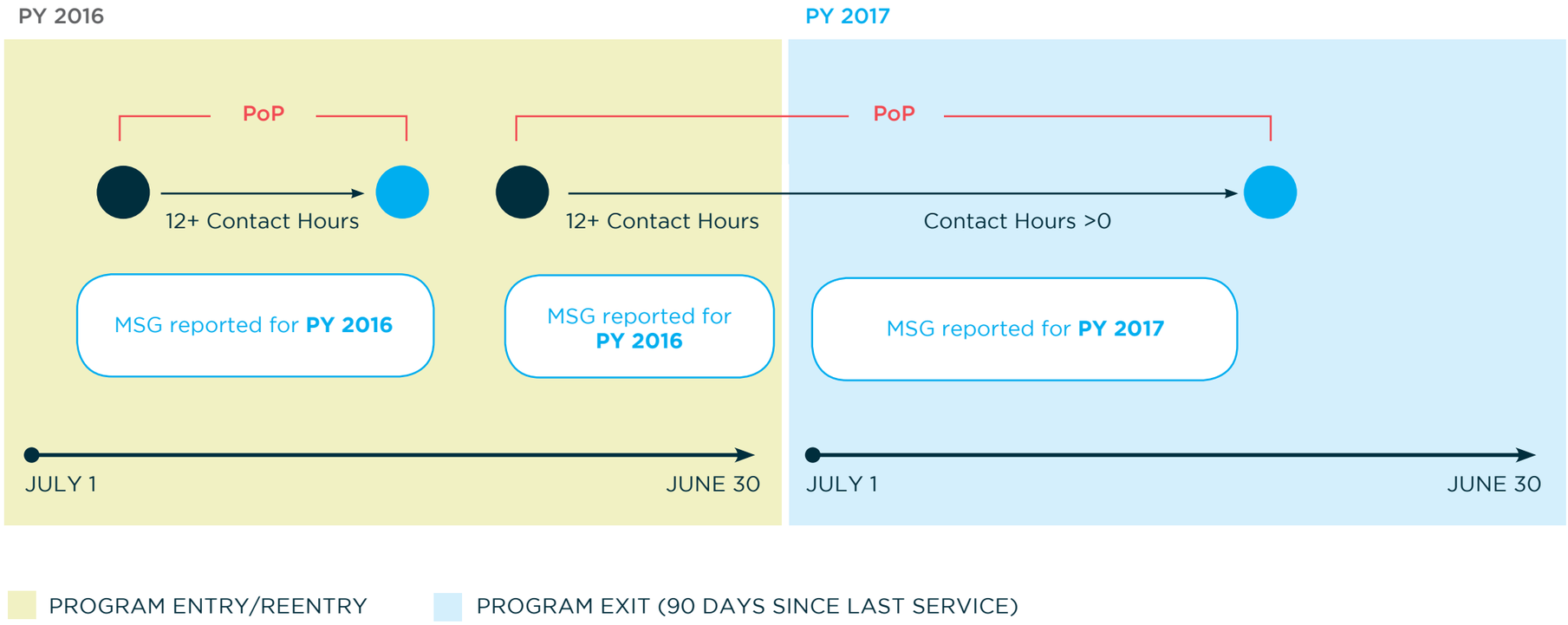
EXIT-BASED PRIMARY INDICATORS OF PERFORMANCE



The MSG indicator is not exit-based, so each participant's program entry, or the start of a new program year (assuming the participant has contact hours greater than zero to show he/she attended in the new program year), initiates a new reporting period for MSG. The reporting periods for MSG end with either a program exit or the end of a program year.

EXHIBIT 2.6

PERIODS OF PARTICIPATION (POPS): MSG INDICATOR



Entry and Exit

All participants have at least one period of participation, starting with their first enrollment in the program year and ending with their program exit. Subsequent periods are counted by reentry and exit. The exit date is the last day of service for participants, but this date cannot be determined until 90 days have elapsed since the person last received services and there are no future services planned. However, if there is no exit across a program year, the PoP continues into the next program year and MSG is reported for the new program year, as illustrated in Exhibit 2.6. See Appendix A for definitions of exit, entry, and other terms related to performance indicators.

PoPs and Pre- and Posttesting

At entry into each PoP, a participant must be placed in an NRS EFL on the basis of an assessment approved for use in the NRS. EFL placement in a new PoP can carry over from a prior period or a new placement test may be administered. However, it is important to note that policy and procedures for assessing participants should not change because of PoPs. Proper assessment practices should always be followed.

Policies and procedures regarding the assessment of individuals who return after an exit or an extended absence must be detailed in the State's assessment policy and those policies and procedures must follow test publishers' guidelines, when available. If the test publisher does not have retesting guidelines for returning participants, the State must establish a policy for retesting that local programs must follow. This policy will provide uniformity to testing practices within the State. After a participant is placed in an EFL in the new PoP, either by a new assessment or carryover from a prior assessment, a new posttest must be given in order to achieve an EFL gain (by pre-/posttesting) in the new PoP.

For example, a participant who enters in July and achieves an EFL gain, as measured by pre- and posttest, and exits in November would have one PoP and would be reported as a success for MSG once. If this same participant reenters in March[5], achieves an EFL gain as measured by pre- and posttest, and remains in the program through June 30, then another MSG would be reported, even though an exit did not occur. On NRS Table 4, the State would count two PoPs and two MSG achievements (one for the PoP from July–November and one for the MSG reporting time frame of March–June) for this participant[6].

Exit from PoP without posttesting. As discussed previously, MSG may be attained in multiple ways. However, if a participant is being assessed for an EFL gain using pre and posttest scores and exits the program without a posttest, that participant may later reenter the program in a new PoP in the same program year. In this instance the test administered at entry in the second PoP may be used to record a completion of an EFL in the previous PoP under the following conditions.

1. The participant **had** enough hours to posttest (according to state policy and test guidelines) and the participant had already qualified to posttest based on state policy and test guidelines. The test given upon reentry may be used as the pretest for PoP2 and as the posttest for PoP1. EFL gain may be counted for PoP1, if a gain is achieved.

2. The participant did **not** have enough hours to posttest in the first PoP (according to state policy and test guidelines) but receives enough instructional hours for posttesting in the second PoP by combining hours in the first and second PoPs and is then posttested. This test serves as the pretest for PoP2 *and* as the posttest for PoP1. An EFL gain, if achieved, is counted in PoP1. Assessing EFL gain in PoP2 requires another test after the participant receives sufficient instructional hours for a posttest.

Employment and Credential Indicators

Every PoP is treated as a separate event for a participant, and post exit performance indicators apply separately to each PoP. This means that for each PoP, the State must collect data on the appropriate post exit indicators. Each exit date from a PoP is used to determine the follow-up time. For example, if a participant exits in December, reenrolls in April, and exits again in June, the State would report on appropriate post exit indicators for both exits. The second-quarter employment outcome, for example, would be reported in the April through June quarter for the December exit and in the following October through December quarter for the June exit. States report in Table 5 both PoPs and all applicable indicators for both PoPs[7].

At entry into each PoP, a participant must be placed in an NRS EFL on the basis of an assessment approved for use in the NRS.

Collecting Post Exit Indicators: Data Matching

States collect data on the WIOA performance indicators, with the exception of MSG, after participants exit the program. The timeframe for collecting post exit indicators is specific to each indicator. For example, States would determine employment in the second and fourth quarters after exit for all participants who were not subject to the exclusions specified in Attachment 2, Tables A and C, of the joint performance accountability guidance (OCTAE Program Memorandum 17-2). Exhibit 2.7 summarizes the time period when the data must be collected and the participant population to which each indicator applies.

To collect these data, most States will match data from extant data sources, such as State unemployment insurance (UI) records, community college enrollment databases, and State education agency databases. For data not available through these sources, States can collect data through surveys, as explained later in this chapter. The joint guidance also permits other supplemental wage information data collection via a variety of methods for reporting participants' employment status and earnings (see OCTAE Program Memorandum 17-6).

Data Matching

Data matching refers to the procedure where two or more State agencies pool or share data on a common group of participants. The data consist of individual participant records collected by each of the agencies that can be linked through a common identifier, typically a Social Security number. Matching the data using the common identifier produces a new individual participant record or a data report containing data from one or more of the additional agencies. Each agency can use the new, pooled data records or reports to understand the impact of the program on participants and to obtain data to meet its reporting and accountability requirements.

Data-matching methods are particularly well suited for studying outcomes that occur after program participation ends. For example, UI systems can indicate the employment status of participants and their earnings after they exit.

EXHIBIT 2.7

PARTICIPANTS AND DATA COLLECTION PERIOD FOR PERFORMANCE INDICATORS

WIOA INDICATOR	PARTICIPANT POPULATION TO INCLUDE	DATA COLLECTION PERIOD
Employment in second quarter after exit	All participants, except those incarcerated at entry who remain incarcerated or those who exit due to extenuating circumstances listed in the Exclusions section, who exit during the program year	Second quarter after exit
Employment in fourth quarter after exit	All participants, except those incarcerated at entry who remain incarcerated or those who exit due to extenuating circumstances listed in the Exclusions section, who exit during the program year	Fourth quarter after exit
Median earnings, second quarter after exit	All participants who are employed in the second quarter after exit	Second quarter after exit
Credential indicator • Obtained a secondary school diploma during participation or within 1 year of exit; obtained employment or entered postsecondary education within 1 year of exit • Obtained a postsecondary credential during participation or within 1 year of exit	Participants who entered the program without a secondary school diploma or equivalent who were enrolled in, or advanced to, a secondary level program who exit during the program year, excluding those incarcerated at entry who remain incarcerated or those who exit due to extenuating circumstances listed in the Exclusions section	For obtained secondary school diploma: During participation or at any time within 1 year after exit For obtained employment or entering postsecondary education: Any time within 1 year of exit
	All participants coenrolled in adult education and a postsecondary education program who exit the postsecondary program during the program year, excluding those incarcerated at entry who remain incarcerated or those who exit due to extenuating circumstances listed in the Exclusions section.	During participation or at any time within 1 year of exit

Several reasons make data matching an attractive option for follow up. The first major advantage of data matching is that it is significantly less costly than other methodologies, such as conducting a survey. The costs of conducting a survey—drawing a sample, training interviewers, making phone calls—are replaced with the much-reduced cost of combining, cleaning, and analyzing the data. Furthermore, this cost can be divided among the participating agencies.

The second major advantage of data matching is reduced data collection burden. At the local program level, staff no longer need to conduct survey or other supplemental procedures. Local programs collect only the demographic, participation, and EFL information. Matching can then be done at the State level.

Third, matched data are likely to be more valid than those collected through surveys, other self-reported means, and some supplemental wage collection methods. For example, the UI database would reveal whether participants have actually received income from work. Finally, response rates for surveys are typically low, limiting the amount of information available on a substantial percentage of participants. With data matching, considerably fewer participants are missed, provided each agency has valid Social Security numbers. However, the need for Social Security numbers makes data matching problematic in some States because State policy does not allow them to be collected. In addition, some States have significant barriers to interagency sharing of Social Security numbers, and some participants are reluctant to give such information to government agencies. However, consent forms can alleviate confidentiality issues as do FERPA exceptions.

Data-Matching Models

With data matching, each participating agency collects a common set of demographic and descriptive information on its participants, dates of program participation, a common identification number (e.g., Social Security number), and the outcome measures specific to its program. All measures that are shared among the agencies need to have common definitions for the resulting analyses and reports to be meaningful for agencies.

There are several methods for conducting data matching. One is often referred to as a *data warehouse* model[8]. With this approach, each agency submits to a central source or "warehouse" its individual client records containing the data to be shared. Within the warehouse, data are combined into a single data pool, duplications are eliminated, and data are cleaned. This data pool is then available to the individual agencies, which can request specific tables and reports. The reports are usually in aggregate form at the State, program, and site levels, although individual data reports can be produced. Local program providers also can request reports through their agencies.

Under another decentralized approach is a linked data system, where each agency maintains its own data records and each separate agency requests data matches from the agency with the needed data. To match with an outside agency, the requesting agency sends to the other agency the records containing Social Security numbers and other data needed for the analysis, along with the format of the data tables needed. The other agency makes the matches and reports the data in the requested format.

For example, to obtain secondary school diploma test results of participants, the State adult education agency would send program information, social security numbers, and demographic information on those participants to the other State agency that conducts testing for the credential. The testing agency matches the records to produce a report on the number and characteristics of participants who have passed the tests. The State adult education agency could then use this information in its annual NRS reporting. Exhibit 2.8 illustrates data warehouse and linked data system models.

Other approaches include a federated system, where agencies share pooled data and an integrated data system of all partner agencies. With an integrated system, all providers under WIOA would use the same intake and data system, and a single interagency database is created. With this system, all data would be available in a single source.

For any type of data-matching approach, incorrect or missing Social Security numbers affect the availability of data. This problem can be substantial if participants refuse to provide their Social Security numbers or supply incorrect numbers. Legal barriers to collecting Social Security numbers also pose a significant barrier to this methodology. Another issue affecting data analyses with data matching is the time lag from the end of the reporting period to the point at which the data are available. It often takes two or more quarters for all of the data to be available. In States using data matching, the time lag ranges from one quarter to a year. For example, if a participant leaves the program in February, employment would need to be measured two quarters after exit (July–September). WIOA reporting requirements take this lag into account, as explained later in this chapter and in Appendix C. However, the time lag means that analyses linking the exit-based indicators to participants must be conducted many months after the participant has exited.

Implementing Data Matching

Data-matching arrangements can be difficult to establish and require considerable time to implement. With WIOA requirements for interagency partnering and joint accountability requirements, all partner agencies have an interest in developing data matching and data sharing agreements. An essential requirement is for each agency to have an individual participant record system. It is not necessary, however, that each

use the same record system or software, only that the software used by each agency produces information in a common format to allow data matching.

Beyond the basic planning and infrastructure needs, there are three conceptual problems that need to be surmounted to develop shared data arrangements:

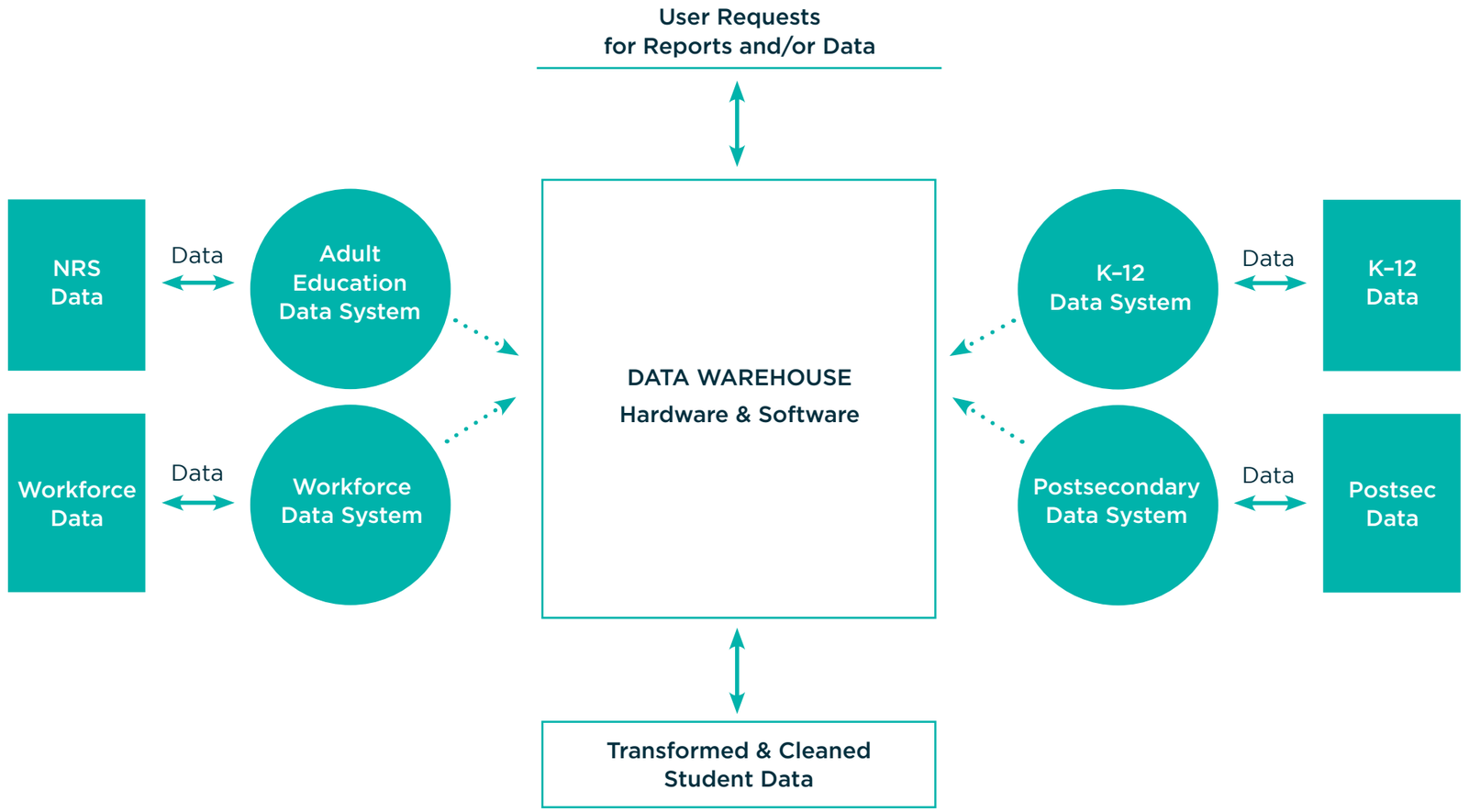
- Common data definitions
- Concerns about data confidentiality
- Training and technical assistance

The management information system (MIS) must have common definitions for measures that are shared. Under WIOA, partnering agencies have developed these common definitions for reporting. Care must be taken, however, to ensure that the definitions agreed upon maintain their fidelity during local data collection and reporting.

EXHIBIT 2.8

DATA WAREHOUSE AND LINKED DATA SYSTEM MODELS

Data Warehouse | Linked Data Systems



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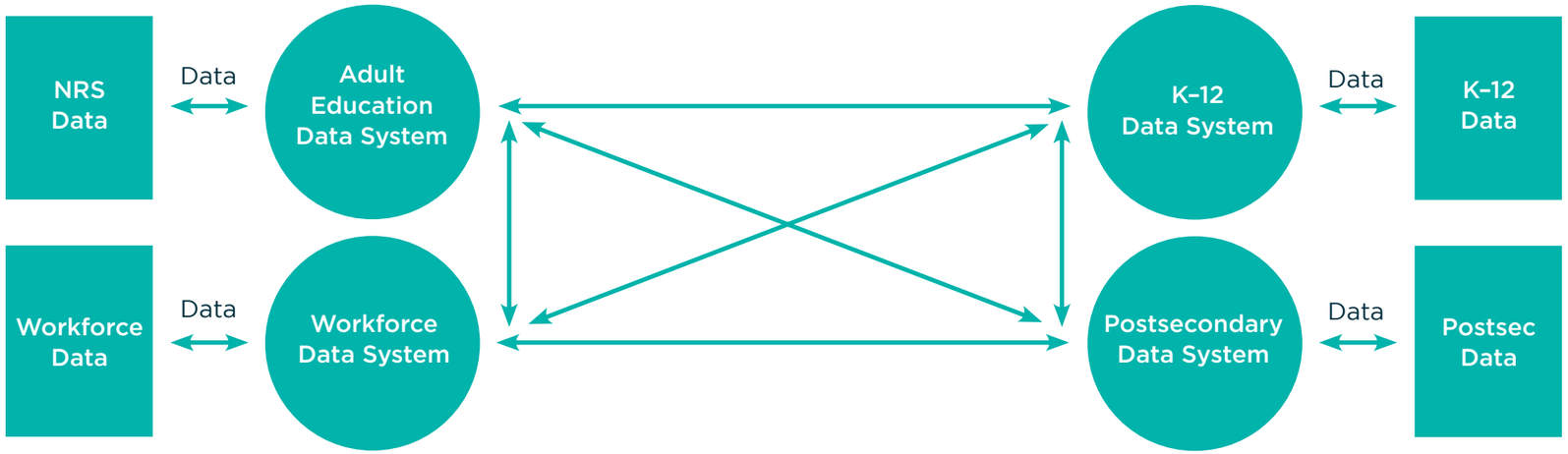


States using data matching must comply with the Code of Federal Regulations (CFR), Title 34, Part 99–Family Educational Rights and Privacy Act. The regulations in 34 CFR §99.31, which were published on December 2, 2011, articulate the specific conditions under which information may be disclosed or shared. States with privacy issues related to sharing Social Security numbers or other unique identifiers and against sharing educational records must resolve these issues before data matching can be used for NRS and WIOA reporting.

Finally, training and technical assistance at the local level is needed to develop a system that produces valid and reliable data. Training needs to be provided to State and local staff who handle the data on measure definitions, data collection and reporting, and data use. Training can also produce buy-in to the whole data collection and analysis process and can help elicit the cooperation of teachers, local staff, and other stakeholders who might be skeptical about the accountability system. The training also can supply local providers with an idea of how the data are used at the State level, and how providers can use them to improve their programs.

Technical Tips for Data Matching

Data matching is a technical process that requires the data system to produce specific data in a required format. To conduct this process, the State must have a database able to perform the functions described in this section.

Procedures to Collect and Validate Unique Identifiers

Data matching works by pairing records from different databases for the same participant using a common identifier—usually a Social Security number but it can be some other unique identifier (e.g., name, birthdate, and zip code). Consequently, a valid Social Security number or unique identifier must be obtained for all participants whose data is in the data matching pool. This number is usually collected at intake and, in some States and localities, participants need to be informed about the use of their numbers for this purpose. Some States may require written permission. It is critical to obtain Social Security numbers or unique identifiers because without them, data cannot be matched and outcomes cannot be reported. Similarly, there must be a process to verify the validity of Social Security numbers or unique identifiers for matching. The State or local program database must be able to produce a report to identify participants with missing, erroneous, or duplicate Social Security numbers or unique identifiers.

Common Format for Matching

There are several ways to perform data matching, and all techniques rely on software to link multiple databases and produce the number of matches for each outcome area. To perform these operations, the software requires State and local data to be in a specific format that includes the location, size, and name of each variable, as well as the technical format in which the local program database is to write the data. States must ensure that program databases can produce the data according to States' specifications and that local programs submit data in this format or in a way that they can be converted to this format. The U.S. Department of Labor, which uses an individual data record system for all providers, has established formats in its Participant Individual Record Layout (PIRL). However, adult education programs do not need to match the layout specified in the PIRL. Instead, local programs will use the format required by their State adult education agency.

Training and technical assistance at the local level is needed to develop a system that produces valid and reliable data.

Time Period for Data Matching

The State should have a standard time period for data submission, such as quarterly or monthly. Data submitted for matching should include the exit data for the correct exit quarters according to NRS definitions. Each period of participation must be included for each individual participant. There also should be checks to ensure that local data do not include participants who are still enrolled or those who exited in other time periods.

Data System Produces Individual Participant Records

Successful data matching requires individual participant records with three pieces of information: (1) a Social Security number or unique identifier, so that data can be linked across databases; (2) the outcome measure applicable to the participant (e.g., employment) or separate files for each participant with each outcome on which data will be matched, so that the participant can be matched with the correct database; and (3) the exit quarter for each period of participation. The database must be capable of producing records with at least this information and in the State's required format, as discussed previously.

Collecting the Follow-Up Measures: Survey Method

For States that cannot data match, or to supplement data not available through data matching or other sources, the NRS offers a second method for collecting the follow-up measures: a local program follow-up survey. States may use either method, or a combination of both, to collect measures. The recommended approach to collecting data for the exit-based primary indicators of performance, especially the employment indicators, is to conduct the survey quarterly (see Exhibit 2.9). When quarterly data collection is conducted, the survey should begin during the last month of the quarter and be completed within 3 months (one quarter). The time lag to contact participants after they exit the program, however, should be as short as possible. The longer the time lag is, the greater the likelihood of a lower response rate will be.

Most state and local staff consider conducting the follow-up survey the most difficult aspect of NRS data collection. It is difficult to conduct a survey in a way that produces valid and reliable results. The process includes determining which participants you must include in the survey, locating them and securing their cooperation, and administering the survey. Locating adult education participants is especially difficult, given the transient nature of many adult education participants. The procedures described below will assist States in conducting a valid survey.

EXHIBIT 2.9

QUARTERLY PERIODS FOR COLLECTING EMPLOYMENT AND EARNINGS INDICATORS

Exit Quarter	Collect Second-Quarter Employment and Earnings* by the End of:	Collect Fourth-Quarter Employment by the End of:
First Quarter (July 1–September 30)	Third Quarter	First Quarter, Next Program Year
Second Quarter (October 1–December 31)	Fourth Quarter	Second Quarter, Next Program Year
Third Quarter (January 1–March 31)	First Quarter, Next Program Year	Third Quarter, Next Program Year
Fourth Quarter (April 1–June 30)	Second Quarter, Next Program Year	Fourth Quarter, Next Program Year

*Earnings collected to calculate median only for participants employed in the second quarter after exit.

Method for Identifying Follow-up Participants

The local program's database must have the ability to identify participants who should be followed, including (1) all participants in the group applicable to each measure (see definitions), (2) participant identification number and contact information, (3) the follow-up outcome that applies to the participant, and (4) the date that the participant exited for each PoP. This information needs to be retrievable quarterly or according to the time when surveys are to be administered.

State Survey Instrument

In any survey, how the questions are asked may influence the responses. Therefore, it is important that the survey questions asked do not bias or affect responses. For comparability of data among programs in the State, it also is highly advisable that all programs in the State use the same or equivalent survey instruments. The State should provide all programs with a standard survey questionnaire that is short and simple. It is not necessary to have a long or complicated survey to collect NRS measures. For example, it is only necessary to ask if the person got a job or entered postsecondary education. In addition, the survey should be translated into the most common languages spoken by participants in local programs. Appendix D provides model surveys and procedures for conducting a follow-up survey. These models are offered for consideration by States and are not required.

Local Resources to Conduct Surveys

Conducting a survey is labor intensive. Besides administering the survey, participants must be located, the survey needs to be explained to them, and their cooperation must be obtained. This work requires frequent calls to participants and careful recordkeeping. States should ensure that local programs have sufficient staff and time to conduct the survey. Another approach is to have the survey conducted for all programs centrally at the State level, either by State staff or through a contract with a third party. This approach removes much of the burden from local programs.

Staff Trained on Surveying

Like any other data collection effort, staff must follow a uniform set of procedures to collect data in a valid and reliable manner. Staff conducting the survey must be trained in its administration, including what to say to participants to introduce the survey and obtain their cooperation, ways to avoid refusals, how to ask the survey questions, how to record responses, and how to answer participant questions about the survey. Staff should be thoroughly familiar with all questions and procedures before beginning.

Procedures to Improve Response Rate

The validity of a survey depends in part on the response rate—the proportion of people who respond to the survey out of the total number targeted for the survey. Getting a good response rate is probably the most difficult part of conducting a survey, and it may be especially hard for adult education participants because many are transient and may not have telephones or are otherwise difficult to locate.

To help improve the response rate, it is important that participants know they may be contacted later and asked about their outcomes. Programs should inform participants at program entry about the survey and collect extensive contact information about them, such as addresses and phone numbers of relatives or others who may know the participants' whereabouts over time. In addition, participants should be encouraged to provide new addresses and phone numbers when they move, and programs should implement procedures to update this information periodically while participants remain enrolled. These procedures can greatly assist in locating participants months later when the survey is conducted. States should provide local programs with additional technical assistance to improve response rates.

Database and Procedures for Survey Reporting

The State or local programs need a database to keep track of which participants are to be contacted for the survey, which participants have been reached, and whether participants achieved the outcomes. This information is needed to conduct the survey and track response rates. The State needs the information so it can aggregate the data among programs for NRS reporting. The State must report to ED the overall State percentage of participants who achieved each of the follow-up outcomes.

To compute the State's overall measures for each outcome, the State has to aggregate each of the measures from every local program to compute an average. Therefore, each local program that conducts a survey must report to the State to enable computation of the State average of the total number of participants in each indicator group who exited during the year and the number of participants who achieved each outcome.

Exhibit 2.10 summarizes the guidelines for conducting the follow-up survey.

EXHIBIT 2.10

SUMMARY OF FOLLOW-UP SURVEY GUIDELINES

- Develop a method for identifying participants to contact for follow-up.
- Conduct the survey at a proper time.
- Ensure that the State has a uniform survey instrument.
- Train staff to conduct the survey.
- Identify local resources available to conduct the survey.
- Implement procedures to improve response rates.
- Ensure that the State has a database and procedures for survey reporting.

Supplemental Wage Information

For states that do not have a participant's unique identification number, such as a Social Security Number, or do not conduct UI wage data matches, OCTAE Program Memorandum 17-6 (Appendix A) describes sources of supplemental wage information and wage data for reporting. Acceptable forms of supplemental wage information include, but are not limited to, the following:

Tax documents, payroll records, and employer records such as:

- Copies of quarterly tax payment forms to the Internal Revenue Service, such as a Form 941 (Employer's Quarterly Tax Return)
- Copies of pay stubs (minimum of two pay stubs) or
- Signed letter or other information from employer on company letterhead attesting to an individual's employment status and earnings

Other supplemental wage records such as:

- Follow-up survey (self-reported) from program participants;
- Income earned from commission in sales or other similar positions;
- Detailed case notes verified by employer and signed by the counselor, if appropriate to the program;
- Automated database systems or data matching with other partners with whom data sharing agreements exist;
- One-Stop operating systems' administrative records, such as current records of eligibility for programs with income-based eligibility (e.g., Temporary Assistance for Needy Families (TANF) or Supplemental Nutrition Assistance Program (SNAP)); or
- Self-employment worksheets signed and attested to by program participants.

Time Lag for Reporting of Post exit Indicators

The post exit indicators require up to one year for follow up, after the participant exits. For example, a participant who obtains a secondary school diploma has up to one year after exit to obtain employment or enter postsecondary education to be counted as achieving the outcome. Consequently, reporting of these indicators will lag behind the reporting of MSG and other data reported on other NRS tables. The time lag for employment indicators is prolonged further because of the delay in data availability in the UI database, which is the database that States use most often to determine employment through data matching. Therefore, although States report all other data on participants who attend during the program year, the post exit indicators will be reported on some participants who were reported in previous program years.

Due to this time lag, States will not report outcome data for post exit indicators for program year 2016-17 (reported in October 2017) and will report only partial data for the fourth-quarter employment rate and the credential indicators for program year 2017-18 (reported in October 2018). Full data for all post exit indicators will not be reported until program year 2018-19 (reported in October 2019). Appendix C has further information about the time lag in reporting.

Measures Of Barriers To Employment, Demographics, and Participation

In addition to the WIOA primary indicators of performance, States are required to collect demographic and participation measures on participants. These measures are required for disaggregated reporting by participant characteristics on the WIOA joint statewide performance report and other NRS tables. Participation measures will allow for description of enrollment in programs and additional disaggregated breakdowns of participants. There also are descriptive measures for teachers. In this section we describe these measures and their reporting on NRS tables.

The NRS descriptive measures include participant barriers to employment, ethnicity, age, gender, highest educational level or credential attained, and labor force status. The descriptive measures for teachers are years of experience teaching adult education and types of certification obtained.

There are two participation measures—contact hours and program enrollment type—collected for both descriptive and analytic purposes. These measures record the number of instruction-related contact hours that participants receive and the number of participants who attend in different program areas, such as family literacy, correctional education, IET, and IEL/CE. These measures are defined by the instructional focus of the programs.

Participant Demographic Measures

Program staff collect demographic information directly from participants, upon entry into the program. Participants self-report these measures or staff may determine demographic measures through observation, when participants decline to self-identify. All demographic measures required by WIOA use the identical definitions and reporting categories as other WIOA partner programs, as described in the PIRL in the joint information collection (OMB 1205-0526).

Program staff collect demographic information directly from participants, upon entry into the program.

Barriers to Employment

Definitions. WIOA requires each core program to report the performance indicators disaggregated by the following 11 barriers to employment. These barriers are presumed to affect placement of the participant in unsubsidized employment and are self-identified by the participant at entry into each PoP. Programs should report all categories to which the participant identifies.

- **Displaced homemaker—**The participant has been providing unpaid services to family members in the home and (a) has been dependent on the income of another family member but is no longer supported by that income; (b) is the dependent spouse of a member of the armed forces on active duty whose family income is significantly reduced because of (i) a deployment or a call or order to active duty pursuant to a provision of law, (ii) a permanent change of station, or (iii) the service-connected death or disability of the member; and (c) is unemployed or underemployed and is experiencing difficulty in obtaining or upgrading employment.
- **English language learner, low literacy level, cultural barriers—**The participant has either (a) limited ability in speaking, reading, writing, or understanding the English language; (b) an inability to compute and solve problems, or read, write, or speak English at a level necessary to function on the job in the participant's family or in society; or (c) a perception of him- or herself as possessing attitudes, beliefs, customs, or practices that influence a way of thinking, acting, or working that may serve as a hindrance to employment.
- **Exhausting Temporary Assistance for Needy Families (TANF) within 2 years—**The participant is within 2 years of exhausting lifetime eligibility under Part A of Title IV of the Social Security Act (42 U.S.C. 601 et seq.), regardless of whether he or she is receiving these benefits at program entry.
- **Ex-offender—**The participant is a person who either (a) has been subject to any stage of the criminal justice process for committing a status offense or delinquent act, or (b) requires assistance in overcoming barriers to employment resulting from a record of arrest or conviction.

- **Homeless or runaway youth—**The participant lacks a fixed, regular, and adequate nighttime residence; has a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings; is a migratory child who in the preceding 36 months was required to move from one school district to another due to changes in the parent's or parent's spouse's seasonal employment in agriculture, dairy, or fishing work; or is under 18 years of age and absents himself or herself from home or place of legal residence without the permission of his or her family (i.e., runaway youth). However, a participant who may be sleeping in a temporary accommodation while away from home should not, as a result of that fact alone, be recorded as homeless.
- **Long-term unemployed—**The participant has been unemployed for 27 or more consecutive weeks.
- **Low-income—**The participant (a) receives, or in the 6 months prior to application to the program has received, or is a member of a family that is receiving in the past 6 months assistance through the Supplemental Nutrition Assistance Program (SNAP), the TANF program, the Supplemental Security Income (SSI) program, or State or local income-based public assistance; (b) is in a family with total family income that does not exceed the higher of the poverty line or 70% of the lower living standard income level; (c) is a youth who receives, or is eligible to receive, a free or reduced-price lunch; (d) is a foster child on behalf of whom State or local government payments are made; (e) is a participant with a disability whose own income is the poverty line but who is a member of a family whose income does not meet this requirement; (f) is a homeless participant or homeless child or youth or runaway youth; or (g) is a youth living in a high-poverty area.
- **Migrant and seasonal farmworker—**The participant is a low-income individual who for 12 consecutive months out of the 24 months prior to application for the program involved has been primarily employed in agriculture or fish farming labor that is characterized by chronic unemployment or underemployment, and faces multiple barriers to economic self-sufficiency.
- **Individual with disabilities—**The participant indicates that he or she has any disability, defined as a physical or mental impairment that substantially limits one or more of the person's major life activities, as defined under the Americans with Disabilities Act of 1990.

- **Single parent—**The participant is a single, separated, divorced, or widowed individual who has primary responsibility for one or more dependent children under age 18 (including single pregnant women).
- **Youth in foster care or who has aged out of system—**The participant is a person who is currently in foster care or has aged out of the foster care system.
- **Federal Reporting.** The barriers to employment categories are used to disaggregate participants on the performance indicators in the joint ICR report.

Race/Ethnicity

Definition. Race or ethnicity is indicated by one or more of the following categories to which the participant self-identifies, appears to belong to, or is regarded in the community as belonging. Programs should report participants in only one of the following seven aggregate racial/ethnic categories at entry into each PoP.

- **American Indian or Alaska Native—**A person having origins in any of the original peoples of North and South America (including Central America), and who maintains a tribal affiliation or community attachment
- **Asian—**A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam
- **Black or African American—**A person having origins in any of the Black racial groups of Africa
- **Hispanic/Latino of any race—**A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term "Spanish origin" can be used in addition to "Hispanic/Latino or Latino."
- **Native Hawaiian or Other Pacific Islander—**A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands
- **White—**A person having origins in any of the original peoples of Europe, the Middle East, or North Africa
- **More than one race—**A person having origins in two or more race categories and not Hispanic/Latino

Participants who identify themselves as Hispanic/Latino are reported only in that category.

Federal Reporting. The total number of participants by racial/ethnic group is reported in Table 1 by EFL, and by age and gender in Table 2. Race/ethnicity categories also are used to disaggregate participants on the performance indicators in the joint ICR report.

Gender

Definition. Designate whether the participant is male or female.

Federal Reporting. The total number of participants by gender is reported by EFL, age, and race/ethnicity in Table 1, and by age and ethnicity in Tables 2. Gender also is used to disaggregate participants on the performance indicators in the joint ICR report

Age

Definition. Years since participant's date of birth.

Federal Reporting. The total number of participants is reported using the following age categories: 16–18 years, 19–24 years, 25–44 years, 45–54 years, 55–59 years, and 60 years and older, broken down by gender and ethnicity in Tables 2 and by program type in Table 3. Age categories also are used to disaggregate participants on the performance indicators in the joint ICR report

Labor Force Status

Definition. Determine labor force status using the following categories. Report only one category.

- **Employed—**Participants who work as paid employees, work at their own business or farm, or work 15 hours or more per week as unpaid workers at a farm or business operated by a member of their family. Also included are participants who are not currently working but who have jobs or businesses from which they are temporarily absent.
- **Employed but received notice of termination of employment or military separation is pending—**Participant has received a notice of termination of employment or the employer has issued a Worker Adjustment and Retraining Notification (WARN) or other notice that the facility or enterprise will close, or participant is a transitioning service member (i.e., within 12 months of separation or 24 months of retirement)
- **Unemployed—**Participants who are not employed but are seeking employment, are making specific efforts to find a job, and are available for work
- **Not in the labor force—**Participants who are not employed and are not seeking employment

Federal Reporting. The total number of participants by category is reported in Table 6.

Highest Degree or Level of School Completed

Definition. The highest number of years of formal schooling the participant has completed or the highest credential or degree the participant has achieved. Schooling in the United States or abroad is included.

Federal Reporting. The total number of participants completing the highest grade level or credential is reported for schooling either in the United States or abroad in Table 6 in the following categories: no schooling, Grades 1–5, Grades 6–8, Grades 9–12 (no diploma), high school or alternate credential, secondary school equivalent, some postsecondary education (no degree), postsecondary or professional degree, or unknown.

Teacher Descriptive Measures

States must report the following descriptive measures about teachers, which are collected at the start of each program year.

Total Years of Adult Education Teaching Experience

Definition. The total number of years a teacher has taught in adult education.

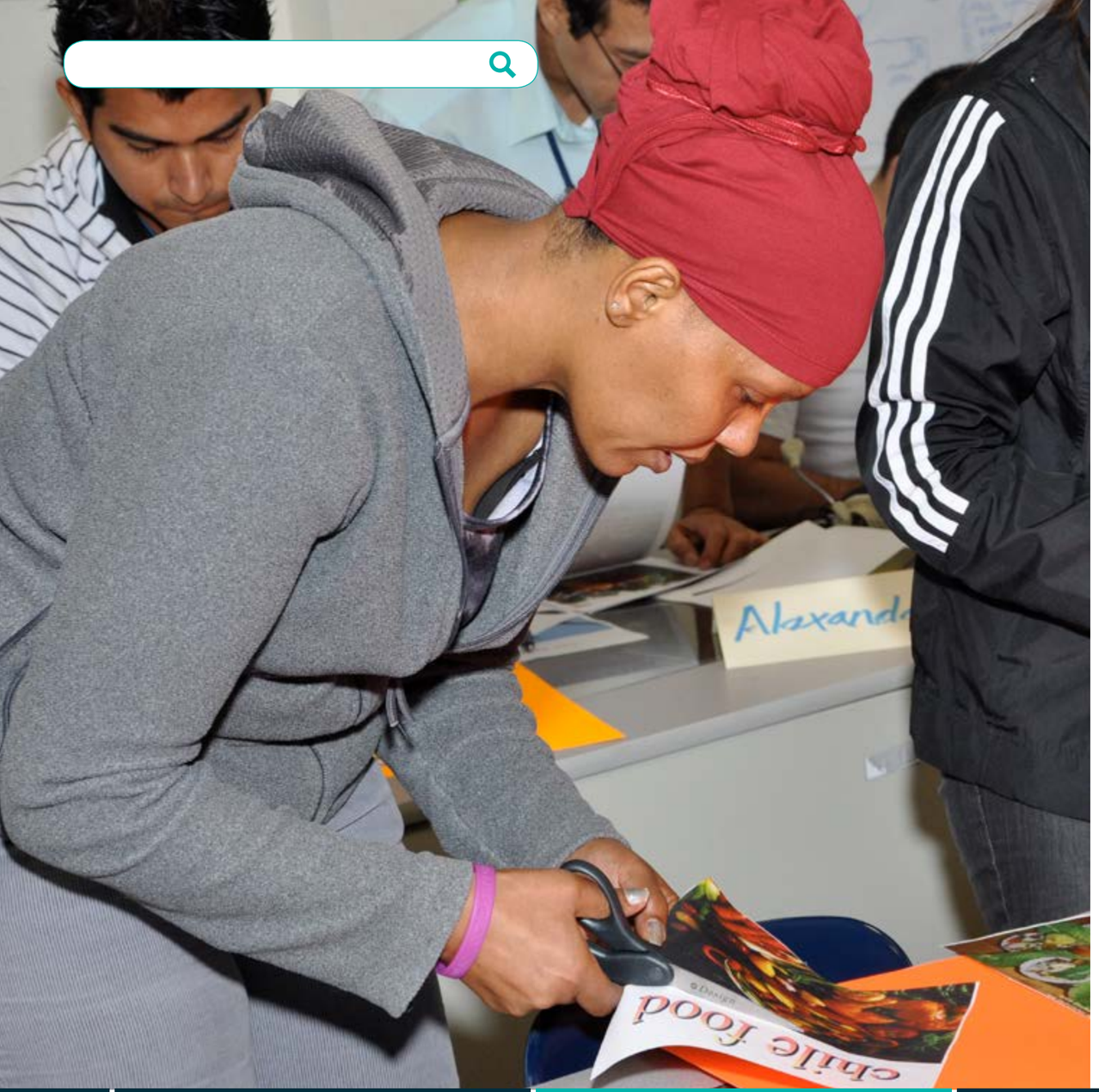
Federal Reporting. The total number of teachers by years of experience teaching adult education is reported in Table 7, separately for full- and part-time paid teachers, as less than 1 year, 1 to 3 years, or more than three years.

Teacher Certification

Definition. The credential achieved by a paid teacher, as defined in the following categories:

- **Adult Education Certification—**A credential recognized by the State that focuses on teaching adult education students
- **K–12 Certification—**A credential recognized by the State that focuses on teaching children
- **Special Education Certification—**A credential recognized by the State that focuses on teaching children or adults with disabilities or special needs
- **Teachers of English to Speakers of Other Languages (TESOL) Certification—**A credential recognized by the State that focuses on teaching English to speakers of other languages
- **No Certification—**Teacher has none of the above certifications

Federal Reporting. The total number of teachers by type of credential is reported separately for full- and part-time paid teachers.



Student Participation Measures

Contact Hours

Definition. Hours of instruction or instructional activity that the participant receives from the program. Instructional activity includes any program-sponsored activity designed to promote learning in the program curriculum, such as classroom instruction, assessment, tutoring, or participation in a learning lab. Time spent on assessment can be counted only if the assessment is designed to inform placement decisions, assess progress, or inform instruction. Time used simply to administer tests, such as the GED tests, cannot be counted as instructional activity.

Federal Reporting. The total number of hours is reported as attendance hours in Tables 4, 4B, and 4C.

Measuring Contact Hours for Participants in Distance Education

Participants in distance education (defined under Program Enrollment Type below) must have at least 12 hours of contact with the program before they can be counted for Federal reporting purposes. Contact hours for distance learners can be a combination of actual contact and contact through telephone, video, teleconference, or online communication, where participant and program staff can interact and through which participant identity is verifiable.

Optional Reporting of Proxy Contact Hours

States may, but are not required to, report proxy hours of time that participants spent on distance learning activities. States providing distance education that want to measure and report proxy contact hours for these participants must develop a State distance education policy that describes the following:

- The curricula that local programs can use to provide distance education;
- The model or models used to assign proxy contact hours for each type of curriculum. States must develop proxy contact hours using one of the following models[9]; and
  - Clock Time Model, which assigns contact hours based on the elapsed time that a participant is connected to, or engaged in, an online or stand-alone software program that tracks time
  - Teacher Verification Model, which assigns a fixed number of hours of credit for each assignment based on teacher determination of the extent to which a participant engaged in, or completed, the assignment

- Learner Mastery Model, which assigns a fixed number of hours of credit based on the participant passing a test on the content of each lesson. Participants work with the curriculum and materials and, when they feel they have mastered the material, take a test. A high percentage of correct answers (typically 70%–80%) earns the credit hours attached to the material.

- The proxy contact hours assigned for completing requirements for each type of curriculum used (Teacher Verification Model) or the proxy contact hours assigned for completion of units of material comprising the curriculum (Learner Mastery Model). The State must use the proxy contact hour model appropriate for the distance education curricula. The State may use the Clock Time Model that tracks the time participants spend interacting with instructional material and disconnects after a preset period of inactivity, and must describe the procedures used to develop proxy contact hours.

Program Enrollment Type

Definition. Participant is enrolled in the following programs or institutions:

- **Adult Basic Education Program—**A program of academic instruction and education services below the secondary level that increase an individual's ability to read, write, and speak in English and perform mathematics necessary to attain a secondary school diploma or its recognized equivalent, transition to postsecondary education or training, and obtain employment.

- **Adult Secondary Education Program—** A program of academic instruction and education services at the secondary level that increase an individual's ability to read, write, and perform mathematics necessary to attain a secondary school diploma or its recognized equivalent, transition to postsecondary education or training, and obtain employment.

- **ESL/English Language Acquisition Program—**A program of instruction designed to help eligible individuals who are English language learners (ELLs) to achieve competence in reading, writing, speaking, and comprehension of the English language, and that leads to attainment of a secondary school diploma or its recognized equivalent and transition to postsecondary education and training or employment.

- **Integrated Education and Training (IET)—**A service approach that provides adult education and literacy activities concurrently and contextually with workforce preparation activities and workforce training for a specific occupation or occupational cluster for the purpose of educational and career advancement.

- **Integrated English Literacy and Civics Education—**A program of instruction funded under WIOA, Section 243, which includes education services provided to English language learners who are adults, including professionals with degrees and credentials in their native countries, that enables such adults to achieve competency in the English language and acquire the basic and more advanced skills needed to function effectively as parents, workers, and citizens in the United States. It includes instruction in literacy and English language acquisition and instruction on the rights and responsibilities of citizenship and civic participation, and may include workforce training. In addition, the program must be provided in combination with IET.

- **Correctional Education Program—** A program of ABE, ASE, or ELL instruction for adult criminal offenders in correctional institutions.

- **Family Literacy Program—**A program with a literacy component for parents and children or other intergenerational literacy components.

- **Community Corrections Programs—** A community-based rehabilitation facility or halfway house.
- **Other Institutional Programs—**Any other medical or special institution.
- **Distance Education—**Formal learning activity where students and instructors are separated by geography, time, or both for the majority of the instructional period. Distance learning materials are delivered through a variety of media, including but not limited to, print, audio recording, videotape, broadcasts, computer software, Web-based programs, and other online technology. Teachers support distance learners through communication by mail, telephone, e-mail, or online technologies and software.

Note: For participants who receive both distance education and traditional classroom instruction during a program year (such as through a blended distance-classroom approach or concurrent enrollment in both types of instruction), the State must have a policy, consistent with the NRS definition, that defines how local programs are to classify the participant. For NRS reporting, States can count a participant only once, as either a distance education participant or a traditional classroom participant.

Federal Reporting. The total number of participants in each program or category is reported in Tables 1, 3, 4, 4B, 4C, 6, 8, 9, or 10, depending on the category. The number of participants in each program type is used to disaggregate the performance of these participants separately from the overall participant population.

Optional Outcome Measures for Family Literacy and Civics Education (CE) Programs

NRS Tables 8 and 9 include optional measures for participants in family literacy and ELL civics programs. These measures may be reported but are not required for these participants at State discretion.

For NRS reporting, States can count a participant only once, as either a distance education participant or a traditional classroom participant.

Optional Family Literacy Measure: Involvement in Children's Education

Definition. Participant increases involvement in the education of dependent children under his or her care, including:

- Helping children more frequently with their schoolwork.
- Increasing contact with children's teachers to discuss children's education.
- Having more involvement in children's school, such as attending school activities and parent meetings and volunteering to work on school projects.

Federal Reporting. The total number of participants who increase involvement in any area is reported in Table 8. A rate or percentage can be computed by dividing this total by the total relevant population (number of participants in programs that include a family literacy focus).

Optional Family Literacy Measure: Involvement in Children's Literacy-Related Activities

Definition. Participant increases involvement in the literacy-related activities of dependent children under his or her care, including:

- Reading to children.
- Visiting a library.
- Purchasing books or magazines for children.

Federal Reporting. The total number of participants who increase involvement in any area is reported in Table 8. A rate or percentage can be computed by dividing this total by the total relevant population (number of participants in programs that include a family literacy focus).

Optional CE Measure: Achieved Citizenship Skills

Definition. Participant attains the skills needed to pass the U.S. citizenship exam.

Federal Reporting. The total number of participants who obtain skills to pass the citizenship exam is reported in Table 9. A proportion or rate can be computed by dividing this total by the total relevant population (number of participants who enrolled in IEL/CE classes).

Additional Guidance on Achieved Citizenship Skills Measure

This measure is included to document learning gains of participants who are enrolled in IEL/CE classes designed to give them the literacy skills and substantive knowledge to pass the citizenship exam. To determine whether participants achieve these skills, program staff should administer a State-approved test that measures the relevant skill areas—such as a practice citizenship test, sample forms, and speaking tests—at the conclusion of the ELL civics class. It is the State's responsibility to ensure that programs use an appropriate test, establish the standards for passing this test, and train and monitor local staff in its use.

Optional CE Measure: Voter Registration

Definition. Participant registers to vote or votes for the first time anytime during the program year.

Federal Reporting. The total number of participants who register to vote or vote for the first time is reported in Table 9. A proportion or rate can be computed by dividing this total by the total relevant population (number of participants who enrolled in IEL/CE classes).

Optional CE Measure: Involvement in Community Activities

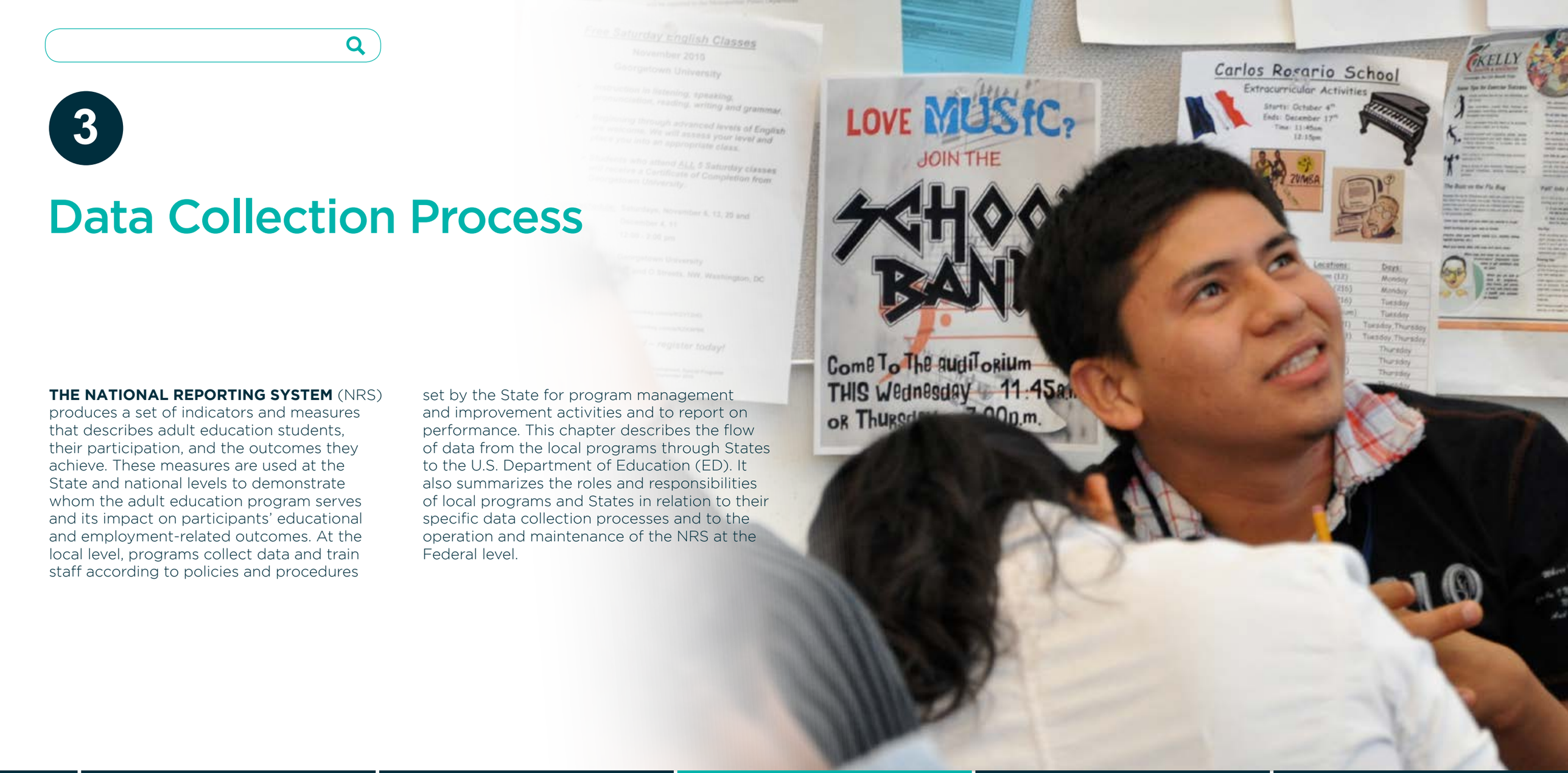
Definition. Participant increases involvement in the following community activities:

- Attending or organizing meetings of neighborhood, community, or political organizations.
- Volunteering to work for such organizations.
- Contributing to the support of such organizations.
- Volunteering to work on community improvement activities.

Federal Reporting. The total number of participants who increase community involvement in any activity is reported in Table 9. A proportion or rate can be computed by dividing this total by the total relevant population (number of participants who enrolled in IEL/CE classes).

3

Data Collection Process



THE NATIONAL REPORTING SYSTEM (NRS) produces a set of indicators and measures that describes adult education students, their participation, and the outcomes they achieve. These measures are used at the State and national levels to demonstrate whom the adult education program serves and its impact on participants' educational and employment-related outcomes. At the local level, programs collect data and train staff according to policies and procedures set by the State for program management and improvement activities and to report on performance. This chapter describes the flow of data from the local programs through States to the U.S. Department of Education (ED). It also summarizes the roles and responsibilities of local programs and States in relation to their specific data collection processes and to the operation and maintenance of the NRS at the Federal level.

The NRS Data Flow Framework

The development of a national database for adult education requires close collaboration among ED, Workforce Innovation and Opportunity Act (WIOA) partner agencies (e.g., State education and vocational rehabilitation agencies, community college boards, departments of labor), and local programs. Each entity has an essential role in the operation and maintenance of the system that helps ensure the collection of valid and reliable data from programs and States.

At the *Federal* level, ED supports a national database for adult education by developing the framework and measures for the NRS. The Federal role is to implement the WIOA accountability requirements and establish other NRS measures, methods, and reporting requirements; ensure valid and reliable data; approve assessments for use in the adult education program, provide assistance to States in understanding and implementing these requirements; negotiate performance levels with States; monitor the system to ensure that it is producing valid and reliable measures; report the data to Federal agencies; and maintain the national database of measures.

States are responsible for implementing NRS measures, methods, and requirements in a way that meets Federal guidelines and WIOA requirements; setting State performance standards; providing resources, training, and support for data collection to local programs; monitoring local programs using quality control procedures to ensure data validity; maintaining a database that includes data from all local programs; establishing a written policy for collecting follow-up measures; and implementing data-matching procedures and/or survey procedures when these methods are used as the follow-up methodology. In addition, States must have a written assessment policy to ensure that measures of educational gains are meaningful by establishing a standardized assessment system based on NRS-approved tests. States are to use NRS measures to promote continuous improvement based, in part, on their performance on NRS measures.

Local programs are responsible for allocating sufficient resources to collect NRS measures and reporting them according to State requirements. Local programs have primary responsibility for collecting these measures using valid, uniform procedures to ensure comparability among programs, and must maintain these data in an individual student record system. To ensure that educational gains are standardized, programs must have common methods for assessing students at intake and following instruction. In States using the survey follow-up methodology, programs also must conduct a follow-up survey on students.

Exhibit 3.1 shows the general data flow framework envisioned for the NRS by following the movement of data at each of these three levels (Federal, State, and local). At the program level, each of the program's instructional sites collects measures from students at three time periods, including intake, update, and follow-up. Upon a student's *intake* into the program, local staff collect descriptive measures—such as demographic information and student status measures—and conduct an assessment of the student's educational functioning level (EFL) for placement. Updates occur during the course of instruction. Program staff (typically teachers) provide at least two additional measures about the student: contact hours or attendance and progress assessments or a posttest. The posttest and other assessments are administered at a time according to State policy. Assessments may be administered at the end of the course of instruction, at the end of the program year, or after a set number of instructional hours, in accordance with the test publisher's guidelines.

In States using the survey methodology, local programs also are required to collect *follow-up* measures on students. These measures include employment-related measures, measures on placement in postsecondary education or training, and obtainment of a secondary or postsecondary credential. In States that use data matching, the collection of follow-up data becomes a State responsibility.

Local programs must combine all of the measures collected at each instructional site into an individual student record system. This type of system is essential to the NRS because it allows local programs to conduct analyses of outcomes for specific student groups for reporting and program management.

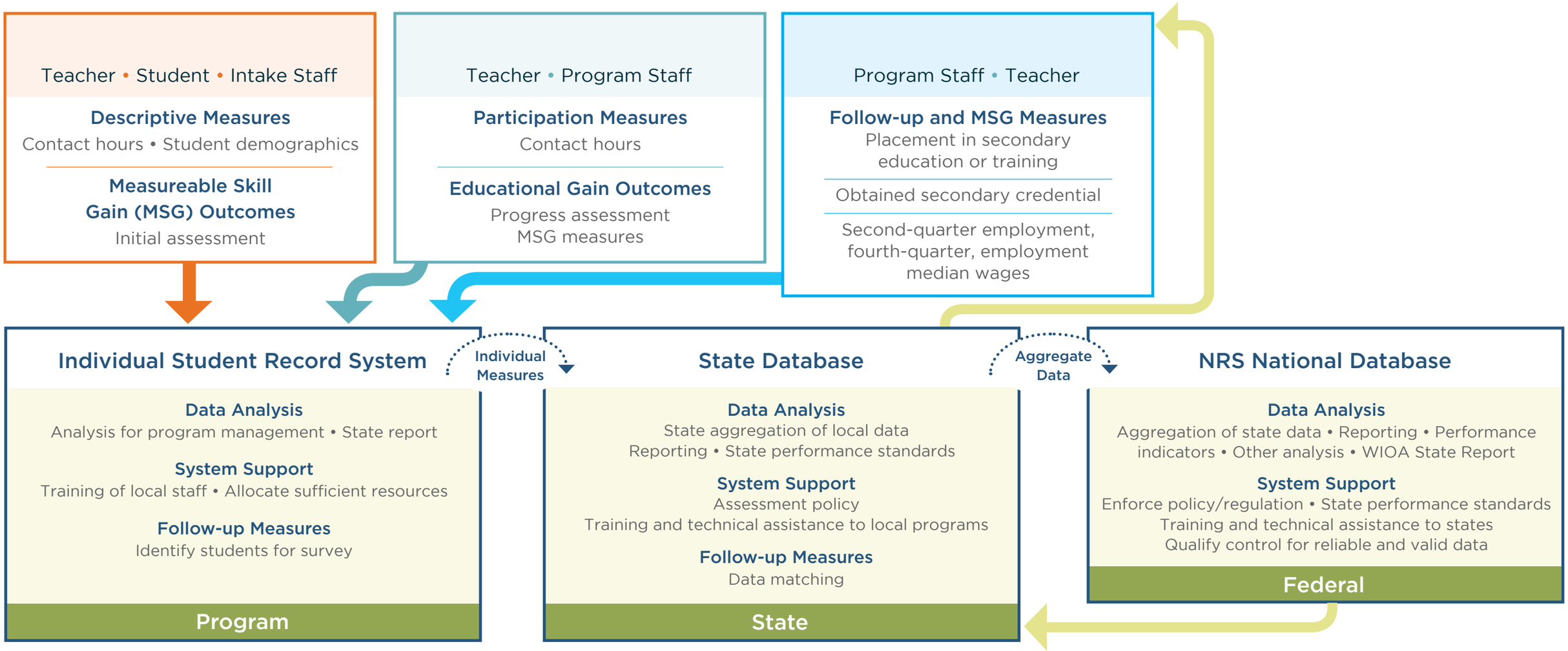
Exhibit 3.1 also shows the movement of NRS data from the local program to the State level. Each local program must submit its data to the State education agency to enable the State to develop a statewide adult education database. At the end of the program year, States must submit data in aggregated data tables to ED, which maintains a national database. This submission is required electronically, through a website developed for this purpose by ED.

Data Collection: The Federal Role

At the Federal level, ED's role is to establish the NRS procedures through an inclusive process that meets WIOA accountability requirements, responds to State and local concerns, and coordinates with Federal partner agencies. In addition, ED monitors the implementation of the NRS, conducts quality control of State procedures, and provides ongoing technical assistance and training to States. This training supports State efforts to train staff and implement the NRS to produce valid, uniform, and reliable data. Learning to use data more effectively for program improvement and accountability is another focus of training as a means to enhance the value of the NRS and to encourage adoption and support of the system. Technical assistance materials are provided to States on issues such as local program quality control, assessment procedures, and program monitoring.

EXHIBIT 3.1

NATIONAL REPORTING SYSTEM DATA FLOW FRAMEWORK



All States are required to submit their aggregate data to ED annually using NRS data tables. ED then creates a national report and submits this report to the U.S. Congress and other audiences. Prior to creating the national report, ED reviews each State's data tables for errors and inconsistencies and asks for corrected data tables from States, as needed. In turn, States may need to again review local program data to correct data problems and contact local program directors for corrections. Local staff then need to identify problems, correct errors, and resubmit data to the State, which provides the corrected tables to ED.

Data Collection: The State Role

WIOA and NRS requirements present a common framework that provides standards and consistency for national data collection. However, States have the responsibility for developing policies and implementing procedures that meet these requirements and work within each State's environment and delivery system to produce valid and reliable data.

Assessment Policy

One critical area where the Federal–State interface occurs is in the measurement of skill gains within the EFLs. To accommodate State variation in instructional emphasis, goals, and assessment polices, the NRS allows States to establish their own procedures for student placement and assessment to measure EFL gains through pre- and posttesting. Each State must have an assessment policy that describes the assessments that local programs may use and the time frame for pre- and posttesting students. States can use only assessments that have been approved by OCTAE for measuring EFL gain within the NRS framework. OCTAE conducts the approval process annually using panels of independent experts in assessment who evaluate assessments according to the process outlined in 34 CFR, Part 462 (see *Federal Register*, Vol. 73, No. 9, January, 14, 2008).

Nonvalidated rubrics and checklists and locally developed tests do not meet these criteria and are not acceptable. However, it is acceptable for a State to have more than one assessment, such as one test for English as a second language (ESL) students and a different test for adult basic education (ABE) students, as long as there are clear procedures for when to use each test. The State policy also should designate when programs should pretest students and the calendar time or instructional hours when programs should posttest students. These times must correspond to the test publisher's guidelines for testing. The policy also should clearly state that programs are to use a different form of the same assessment for pre- and posttesting, or the instances in which using the same assessment form are allowable based on test publisher guidelines. Chapter II of this document presents greater details of these requirements.

Follow-Up Methodology

The State must determine a methodology for collecting WIOA post exit follow-up measures related to employment, median earnings, attainment of secondary and postsecondary credentials, and entry into postsecondary education. States must use data matching, a follow-up survey, or a combination of these methods to collect these measures. The survey must include all local programs, although the State or a third party may conduct the survey. See Chapter II for more information on these requirements.

Data Reporting Timelines and Formats

The State must have requirements for local programs to report data according to a fixed, regular schedule. Programs should submit data to a central source, such as the State or district, according to this schedule. The reporting periods for local programs should be at least monthly or quarterly to minimize incomplete reports and potentially inaccurate data that result from longer time periods between report cycles. Another reason for frequent reporting is that errors or problems may be identified and corrected on an ongoing basis. If data are reported only once or twice a year, it is not possible to identify errors before it is too late to correct them. The State also should specify the technical format in which data are to be submitted so that it is consistent with State reporting software. States are encouraged to use a Web-based system that has immediate or daily updates.

A System of Quality Control

To verify the validity of data and ensure local program compliance with State data collection policies, the State should conduct frequent reviews of data immediately after local programs submit them. Error checking also should be built into data system software. In addition, monitoring procedures should include regular discussions with local data collection staff, either at State meetings or by telephone and e-mail, to discuss problems. To be most effective, monitoring should be proactive, nonpunitive, and presented as a form of technical assistance. With this approach, local staff are less likely to hide problems and cover up mistakes. Monitoring also should include at least occasional on-site auditing of data. Quality control is described in more detail in Chapter IV.

Software or Technical Standards for Local Data Collection and Reporting

To meet NRS reporting requirements, the State must have software that is capable of aggregating NRS data from all local programs and producing the required data tables for Federal reporting. To report data to the State, local programs must have an individual student record database in a relational format. Each State must establish a State database system for local programs or provide programs with uniform technical standards for database development to allow State reporting. All software should have the ability to produce "edit reports" and possess error-checking capabilities to identify missing and inconsistent data. These requirements for data collection are the minimum for NRS reporting—additional data and reporting from local programs may be required to meet the needs of the State.

Ongoing Training and Technical Assistance to Local Programs

Because local adult education program staff collect NRS data, they must fully understand policies and procedures if they are to produce quality data. Thus, it is critical to the success of the NRS that States provide training to teachers and other local staff involved in collecting and reporting data. This training should be ongoing so that it is available for new staff. Critical topics for training include definitions of measures, completing reporting forms, conducting assessments, and follow-up methods. Although training should cover the general procedures and methods of the NRS, additional training on the importance of data and how to use them is likely to increase data quality. When local staff can see how to use data for their own purposes, their data collection activities become more meaningful and they are likely to take more care in collecting data.

Exhibit 3.2 presents a summary of the policies and procedures that States must have in place for the NRS.

EXHIBIT 3.2

SUMMARY: STATE NRS POLICIES AND PROCEDURES

- Statewide assessment policy is established.
- Follow-up methodology is established.
- State can provide ongoing training and technical assistance to local programs on data collection, reporting, and use.
- Data reporting timelines and formats are established.
- A quality control system is in place to monitor and audit local data collection.
- State has software or technical standards for local data collection and State reporting.

Data Collection: The Local Role

Local programs are on the front lines of the data collection system and they must allocate sufficient resources, including both staff and funds, to collect information from students—the descriptive, participation, and outcome measures that comprise the database. For these data to be meaningful on a statewide and national basis, data collection procedures must be standardized among all programs in each State; that is, the data must be defined and collected in the same way by all programs to make them comparable. The role of local programs is central to data collection efforts. To achieve standardization of data collection, program staff need ongoing training and assistance in:

- Understanding the definitions of each measure and having clear guidelines on how to record these measures, including how to handle missing or incomplete data.
- Understanding of and compliance with the State-defined procedures for assessing students for placement into EFLs and evaluating progress.
- Following procedures for implementing the follow-up survey, if it is conducted by the program.
- Understanding how to correctly record and report data to the State.

It is the State's responsibility to provide training and technical assistance to local programs to achieve these competencies.

The local program data collection process must produce reliable and valid data in order to be useful to the programs and the State. Data are reliable to the extent that they are collected in the same way, by different people, and at different times. In other words, no matter who collects the data or when data are collected, the same data collection procedures are consistently implemented in the same way. Data are valid only to the extent that they represent what they are intended to represent. For example, if the program reports that 40% of students have gained a level according to test scores, those test scores (if they are valid) will accurately convey the score and interpretation intended by the test's publisher.

There are three components to collecting valid and reliable data: (1) a well-planned, effective process; (2) resources to implement the process; and (3) clearly defined procedures for collecting each measure. The data collection process must include these three components and a method for evaluating the process.

Model Data Collection Process

Like other system processes, data collection requires planning, constant attention, oversight, and fine-tuning through monitoring, error checking, and training. With a sound, well-planned process, sufficient resources, and oversight, the program can have a data collection system that produces valid and reliable data to assist program management and promote improvement.

The specifics of individual approaches to data collection vary among programs, but Exhibit 3.3 presents a model data collection process, starting with student intake and tracing the process to the end goal—submission of State and Federal reports. This model illustrates the key components of a valuable data collection system and staff roles at each step.

Intake

Upon entry into the program, staff collect NRS measures, including age, ethnicity, race, and gender. If the program uses a follow-up survey, staff should explain the survey to students and that they will be contacted after they leave class. Intake staff complete an intake form and send the form to clerical staff and/or teachers.

Teachers

Teachers have a large role in data collection in most programs because they often report student attendance or contact time, assess students, and report test scores. In addition, teachers who have direct contact with students are often asked to provide student information that was missing or incorrect at other stages of the data collection process. Teachers complete forms and, ideally, have a role in reviewing data and reports.

Clerical and Error-Checking Staff

The data collection process may result in a high volume of data—forms, test scores, attendance records, and surveys—that clerical staff receive and track. Clerical staff must develop an organized system for managing this data flow that includes receiving forms from other staff for checking and correcting. After error checkers correct forms, clerical staff then submit forms for data entry, if needed.

Reporting and Error Checking

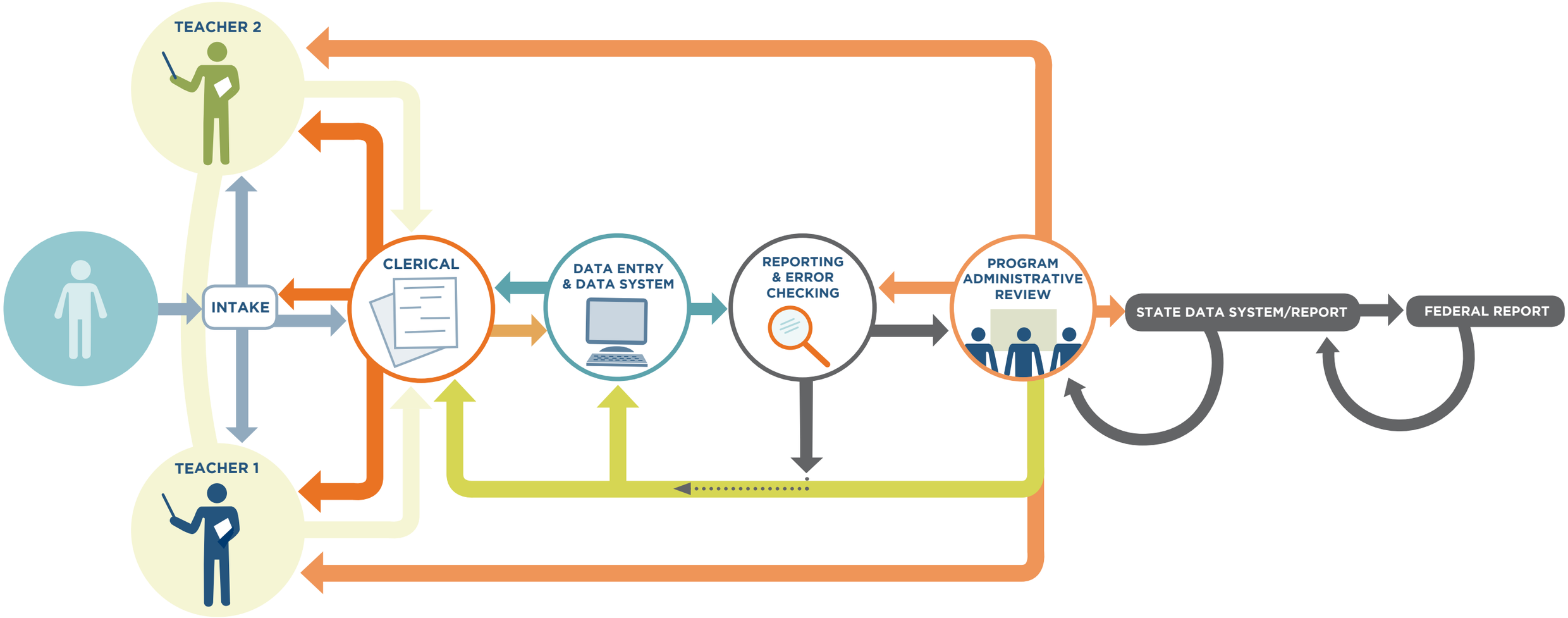
An essential feature of the data collection process is regular and frequent review of data entered into the data system. The data system should have preprogrammed error reports that allow for a review of inconsistent, out-of-range, and missing data. Data entry and clerical staff should regularly review these reports and should return them to teachers, intake workers, and clerical staff to clarify problems and obtain the missing data. Corrections should then be sent to data entry staff for entry into the database.

Program Administrative Review

The process should include a regular opportunity for the program director and other program leaders to review data reports. The director may often be the only person in the program who can see the big picture and thus brings a different perspective to the data review process. This review may raise further questions about data integrity, requiring another round of data checking and verification among the staff. The program director may share data reports with staff as a means to identify problems, track progress, and receive staff buy-in into the data collection process by demonstrating how data can be used for program management and improvement.

EXHIBIT 3.3

LOCAL DATA COLLECTION: A MODEL



Local Data Collection Policies and Procedures

In addition to following a clear model of data collection, local programs must establish policies and procedures for data collection that comply with State NRS requirements. This section presents the policies and procedures that local programs need to have in place.

Staff Roles and Responsibilities for Data Collection

Every staff member in an adult education program plays a role in the data collection process. Intake staff collect student demographic data, teachers report attendance and other outcomes and may administer tests, administrators review and make decisions based on data tables, and administrative staff may be involved in checking forms and data entry. The State must ensure that every local program has clear written descriptions of the data collection process and the role of each individual in that process. In fact, local program job descriptions should incorporate the data collection responsibilities of the job, and performance reviews should consider how well staff fulfill these functions.

Clear Definitions of Measures

Local program policies and procedures should include a written, precise definition for each data item that is compatible with the State definition. Some programs and States, for example, have a data dictionary that defines all measures and categories within measures. Although some measures may seem straightforward—ethnicity or sex, for example—others may require detailed explanation. Even seemingly simple definitions can sometimes require elaboration. For example, States should clarify the definition of how to classify the ethnicity of a student who self-identifies in more than one category. Potential ambiguities show how helpful it is to customize definitions to the particular circumstances of State programs and to include examples of how to resolve ambiguities.

Standard Forms for Collecting Data

Staff must record information on intake and other data forms. An administrative staff member or the student keys the information from these forms into the program database or the forms may already be programmed into it. Whatever the case, programs should use standard forms for data collection that include all the data elements and categories that are referenced in the database system. Staff should not be allowed to enter their own codes or variables because this will cause data-entry errors and hurt reliability and validity.

Error-Checking and Quality Control Systems

Data collection is a complex activity—mistakes and missing data are inevitable. For example, staff may fail to complete forms fully or enter data incorrectly because of their workload demands or simple oversight, or the required information may not be available when it is needed. The data collection system must have procedures for checking data for completeness and accuracy at several points during the process, and these error checks should be built into the database, where possible. Data checking should follow a regular, prescribed schedule with clear deadlines. More than one staff person should be assigned to perform these data-checking functions, and these functions should be made explicit in the staff job descriptions and throughout the program. Data checkers should review all data as soon as possible for completeness and accuracy and should receive error reports from the database to check immediately after data entry. To do their job, data checkers must have access to all staff—teachers, intake staff, counselors, and administrative staff—and the authority to obtain cooperation from them.

Ongoing Training on Data Collection

Staff must understand and follow data collection procedures to ensure valid and reliable data. To this end, training should be provided to staff to clarify their roles and responsibilities and to highlight the importance of data collection. The program should provide this training to all staff, and training should be offered several times during the year, if possible, to accommodate new staff and allow existing staff to take follow-up training. Regularly scheduled staff meetings or inservice training on data issues also provide staff with opportunities to discuss problems and issues that arise during data collection. Addressing these issues promptly helps the program avoid more serious data problems later. (A more detailed discussion on data collection training for staff is provided later in this chapter.)

Student-Level, Relational Database System

To use data for program improvement, staff must be able to look at outcomes and demographics for individual students according to such variables as the number of instructional hours received, length of time of enrollment, the teachers and classes enrolled, and the student's EFL. This type of analysis requires a database that stores information by individual students and links the different pieces of data for each student in reports or other output—a system known technically as a relational database.

Clear and Timely Data-Entry Procedures

The procedures for data entry should specify at least one person whose job it is to enter the information from data collection forms into the program's database. All staff members should know this person's role, and he or she should have the authority to request clarification and resolve errors. In addition, data entry should be scheduled at frequent, regular intervals, such as weekly or monthly. Without frequent data entry, the program may end up with a large backlog of data to enter and staff may not become aware of errors and missing data on forms until it is too late to correct them. Part of the data-entry procedures also should include a prompt, organized way to identify and resolve errors. For example, soon after data are entered, staff should be able to print out an error report for review. Staff should then use the error report to resolve missing data issues and correct errors as soon as possible after data entry.

Timely or Direct Access to Database

Local program staff members must have access to data for use in program improvement and management. The database system should have the capability for local program staff to access their data in useful ways. It is best if this access is direct, so that staff at the local level can query the database to print a report locally. Access through a third party or through the State is useful if staff can request and receive data in a timely fashion. The usefulness of the data is limited when there is a long time lag between the request and receipt of data.

Regular Data Reviews

The program's data collection procedures should include regular data reviews by staff soon after data entry. Regular data reviews allow staff to identify errors, missing data, and other data that do not make sense. Data reviews also are useful as a staff development opportunity to examine problems and issues in support of program improvement. Data can help staff understand issues such as the impact of instructional arrangements, learner retention, and learner progress. This will not only foster program improvement, but it also may improve data quality, as staff recognize the importance of data collection to produce accurate and valuable information for their own use.

Exhibit 3.4 summarizes local program policies and procedures.

EXHIBIT 3.4

SUMMARY: LOCAL PROGRAM DATA COLLECTION POLICIES AND PROCEDURES

- Staff have a clear description and understanding of their roles and responsibilities for data collection.
- Clear definitions for each measure are established.
- Program uses standard forms, tied to the program database, for collecting data.
- Program has an error-checking and quality control system for identifying missing and inaccurate data.
- Program has ongoing training on data collection.
- Program has a student-level, relational database system.
- Data-entry procedures are clear and timely.
- Staff have timely or direct access to information from the database.

Local Staff Training Policies and Procedures

Without training, staff will not know or understand the policies and procedures, resulting in incomplete or haphazard data collection that can impair data reliability and validity. To ensure that the data collected are of high quality, local programs should implement ongoing staff training on NRS procedures. Staff training in data collection policies and procedures should include content on effective professional development practices, as summarized below.

Training on WIOA and NRS Policy and Data Collection Procedures

All program staff should be trained and fully knowledgeable in WIOA and NRS policy, accountability policies specific to the State and locality, and the program's data collection process. Training on data collection should cover each individual's job in the process and include a review of others' roles and how these roles and activities are connected, including the flow of data. (See Exhibit 3.3 as a model for the flow of data collection at the local level.) The training must be specific and detailed, addressing such mundane topics as completing forms, data-entry procedures, error checking, the program's database system, and general accountability requirements. The program should establish a schedule to train new staff members and provide follow-up and ongoing training for existing staff.

Continuous Professional Development on Data Collection

One-shot training on any topic generally does not have lasting impact. Staff forget procedures, misunderstand some part of the training, or think some procedures do not work effectively and do not follow them. A continuous system of professional development helps resolve these problems. Given the often high turnover among adult education staff, a continuous training protocol also gives local programs an ongoing mechanism to train new staff. Regularly scheduled training throughout the year that employ different modalities to improve effectiveness and impact on data collection procedures are best. For example, the program might schedule general workshops, individual peer mentoring, shadowing, online courses, or learning activities throughout the school year. Online training built into the State system can support ongoing training efforts.

Regularly scheduled training throughout the year that employ different modalities to improve effectiveness and impact on data collection procedures are best.

Training Addresses Staff Needs

Although all staff should receive initial general training on data collection, State accountability, and NRS requirements, the training should be designed according to the needs of local program staff. Using a periodic formal or informal needs assessment, collaborative planning process, or review of procedures, such as those outlined in this guide, the program can identify areas where staff need or want further training. Using this input to design training will make it more relevant to staff, thereby increasing interest and the likelihood that the training will result in improved data collection procedures.

Use Effective Trainers and Methods

High quality trainers are almost as important as the content of the training. Trainers should be knowledgeable about the data collection process. They should also be articulate, well-organized, and encouraging of the contributions and input of participants in the training. In addition, the training is likely to be more effective if it employs interactive, hands-on activities, rather than just a lecture format. For example, an interactive training may involve asking staff to analyze actual data tables and then having them troubleshoot problems on their own.

Training Results in Learning and Improved Practice

The goal of professional development is to change staff behavior. For training on data collection, the desired outcome is that staff learn and then correctly follow all procedures. Although it is difficult to determine a cause–effect relationship between professional development, learning, and behavioral change, general patterns in data or observations of staff behavior at work may provide an indication of training effectiveness. For example, after training on assessment, staff may be observed as they administer tests or review student assessment records. Trainers may follow up by examining the assessment data produced by individual staff members for procedural differences. The professional development approach should include ways to verify staff learning and implementation of procedures that staff have learned.

Exhibit 3.5 summarizes the local program training policies and procedures.

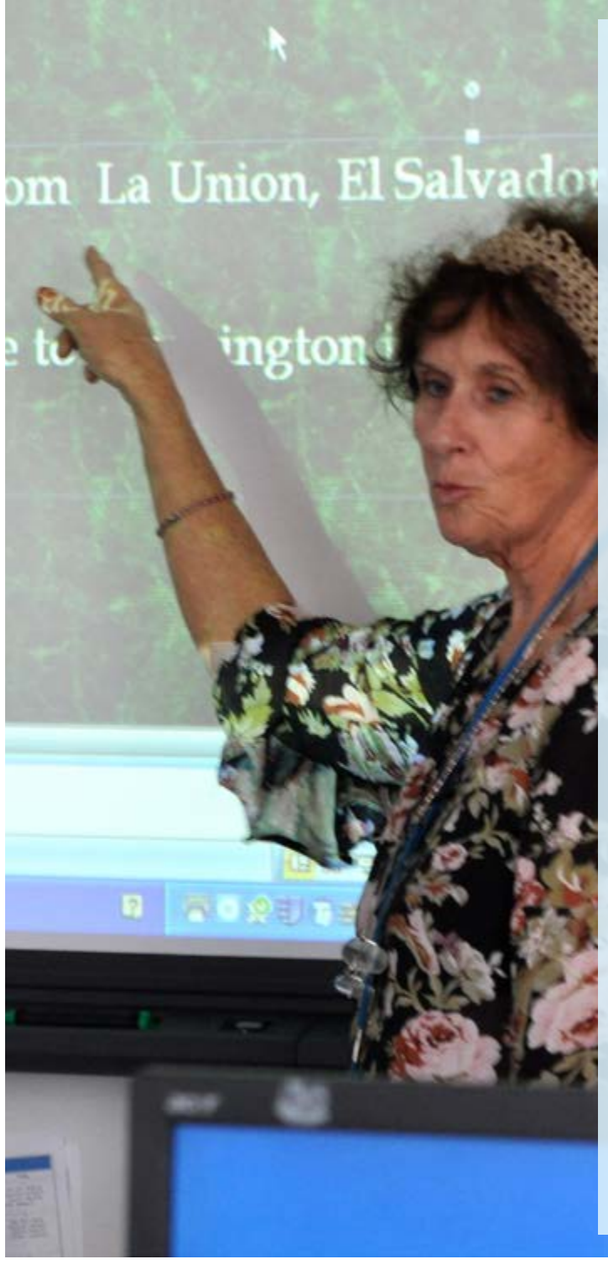


EXHIBIT 3.5

SUMMARY: LOCAL STAFF TRAINING POLICIES AND PROCEDURES

- Staff receive training on WIOA and NRS policy and data collection procedures.
- A system of continuous professional development on data collection is in place.
- Training addresses staff needs.
- Trainers effectively use interactive and hands-on activities to lead training.
- Training results in learning and improved practice.

4

Quality Control & Reporting

THE DATA USED FOR THE NRS are only useful if they are *valid* (i.e., measure what they are supposed to measure) and *reliable* (i.e., collected in the same way by different people at different locations). To obtain valid and reliable data, data collectors at the State and local levels must understand the measures and follow the proper procedures for collecting the measures at all times with all people. States are responsible for promoting data quality and implementing training and quality control procedures for NRS measures. This chapter provides a brief overview of quality control methods that can be implemented prior, during, and following data collection. The chapter also presents an overview of NRS reporting requirements, including student record software requirements.

Data Quality Checklist

To allow OCTAE to assess the quality of NRS data, States must complete annually the NRS data quality checklist, which defines OCTAE's standards for data quality. States are required to submit this checklist with their annual NRS data submission. The checklist describes State NRS policies and the data collection procedures that local programs within the State follow to collect NRS data. It provides a standardized way for OCTAE to understand and evaluate NRS data quality by defining data quality standards in four areas. Appendix E contains the checklist.

Data Foundation and Structure

This content area addresses whether the State has in place the foundation and structures for collecting quality data that meet NRS guidelines. Standards measure whether the State has policies for assessment and follow-up, whether local programs know these policies, and whether the State conducts validity studies to ensure processes are working to produce accurate and reliable data.

Data Collection and Verification

This area determines whether the State collects measures according to NRS guidelines using procedures that are likely to result in high reliability and validity. Standards also address whether data are collected in a timely manner and are systematically checked for errors, and whether the State also has processes for verifying the validity of the data.

Data Analysis and Reporting

The quality standards in this content area include whether the State has systems for analyzing and reporting data, including appropriate databases and software. The standards also address whether analyses and reports are produced regularly, are used to check for errors and missing data, meet NRS and State needs, and are useful to State and local staff for program management and improvement.

Staff Development

The standards under this area address whether the State has systems for NRS professional development for State and local staff, including whether the State provides training on data collection, measures, assessment, and follow-up procedures. Standards also focus on whether the training is ongoing and continuous, meets the needs of State and local staff, and is designed to improve data quality.

Levels of Data Quality and Quality Improvement

Within each area there are three levels of data quality that reflect whether the State has policies and procedures likely to improve the reliability and validity of data. Based on the checklist, OCTAE classifies States' NRS data procedures into one of these levels each year.

Acceptable Quality. State policies and procedures for implementing the NRS meet the essential requirements for NRS implementation as described in this guide and all related NRS guides on improving NRS data quality.

Superior Quality. State procedures go beyond the minimum to promote higher levels of data validity and reliability through more rigorous definitions, regular oversight of data collection methods, ongoing assistance to local programs on NRS data issues, and procedures for verifying the accuracy of data.

Exemplary Quality. The State has procedures and systems that promote the highest levels of data validity and reliability, including systems for verifying data accuracy from local programs, systems for monitoring data collection and analyses, and corrective systems to improve data on an ongoing basis. State procedures indicate a focus on continuous improvement of the quality and accuracy of data.

States have to meet all of the standards within a quality level to be considered at that level. In addition, the scoring is *cumulative*, so that to score at the superior level, a State has to meet all of the standards for that level *and* all standards for the acceptable quality level. To rank at the exemplary level, States have to meet all of the standards for all quality levels. Appendix E includes a copy of the checklist.

Improving Data Quality

The data quality checklist defines data quality in the NRS and provides a framework for States for improving data quality. This section summarizes how States can improve quality in three ways: training local staff, improving local data collection, and local monitoring and data audits.

Training

Within the NRS, the primary data collectors are local program staff. Therefore, it is critical to NRS's success that teachers and other local staff involved in collecting and reporting data receive both preservice and in-service training on the NRS. Critical topics for training include definitions of indicators and measures, completing reporting forms, conducting assessments, and follow-up methods.

Understanding and correctly using State assessment procedures are critically important to NRS data quality, given the central importance of the educational functioning level gain measure. Accurate reporting of this measure requires local staff to implement the State assessment methods for intake and progress assessment. For example, progress assessment must be administered at the appropriate time, as determined by the State and staff, and must follow standardized procedures. Failure to follow the correct procedure for administering a standardized test invalidates the test results.

Training should cover the general procedures and methods of the NRS, but additional training on the importance of data and how to use them is likely to increase data quality. When local staff can see how to use data for their own purposes, their data collection activities are more meaningful and they are likely to take more care in conducting them.

Quality of data also is enhanced when resources are available, including State or other local staff to consult when questions or difficulties arise. Through the NRS support project, OCTAE developed NRS online training courses available through the project website (http://www.nrsweb.org), to assist States in training local staff. Training materials also are available on this site.

Local Data Collection

During the data collection process, States and local programs can implement four mechanisms to help ensure data quality. First, data collection *procedures* need to be explicitly organized. Program staff should establish specific, concrete procedures for data collection and data reporting. These procedures should state what is to be collected, when it is collected, and who is responsible for collecting it. The time when the information should be collected and reported also should be determined. Incorporating these procedures formally into staff job responsibilities enhances the likelihood that staff perform them.

The second critical factor to collecting quality data is devoting sufficient *resources*—time, staff, and money—to data collection. Providing resources shows staff that data collection is a valued and important activity, not something that is done as an afterthought or when there is time. At least one staff member in a program should have explicit responsibility for ensuring that data are collected and reported.

Timely reporting of data according to a fixed, regular schedule is the third factor for promoting data quality. Data should be reported to a central agency, such as the State or district, frequently and at fixed time periods. At the local level, information should be entered into the program's data system as frequently as possible. For example, attendance should be reported daily or weekly. For reporting to the State, quarterly data submission is required to achieve data quality at the superior level. More frequent reporting or real-time data updates, such as through a Web-based system, are optimal.

A State or local staff member knowledgeable in reporting and data collection should provide regular, ongoing monitoring of data collection through scheduled contact with local staff.

If the time lag for reporting data is too long, then the data are not reported completely, as staff have a tendency to put off data reporting until the deadline. The result is a high degree of missing and possibly false data. Another reason for frequent reporting is that errors or problems can be identified and corrected on an ongoing basis. If data are reported infrequently, errors may go unnoticed before it is too late to correct them.

Finally, frequent contact with data collection staff and spot checking their data assists in ensuring quality data. A State or local staff member knowledgeable in reporting and data collection should provide regular, ongoing monitoring of data collection through scheduled contact with local staff. Samples of data collection forms should be examined periodically. To be most effective, monitoring should be proactive and nonpunitive and viewed as a form of technical assistance. With this approach, staff are less likely to try to hide problems or cover up mistakes.

Local Monitoring: Data Reviews and Data Auditing

One of the simplest ways to audit local programs is to review local data. A data review should examine disaggregated data from all local programs. Aggregated State data (i.e., summary data from all local programs combined) may mask important details and clues about what the data reflect. Types of data to examine include:

- The number and percentage of students who are pre- and posttested by type of student and date of posttesting.
- The percentage of students who advance by level.
- The number and percentage of students who achieve follow-up outcomes.
- Students' average attendance hours and number of hours it took students to advance and achieve follow-up outcomes.

Critical review of these data may identify patterns that raise questions or seem improbable with numbers that seem unrealistically high or low. Data reviews also can be used to study local adherence to State policies and differences by types of students and programs.

A more formal way to investigate local program adherence to State policies and to study data quality is to conduct a local program data audit. Like a financial audit, a data audit involves an on-site review of the actual data forms and files, as well as verification of the accuracy and validity of the information on the forms. States should perform at least occasional data auditing of a sample of programs because this type of review is the most accurate way to assess data validity at the local level. Findings from the audit can help identify technical assistance and training needs and prevent future problems.

The auditing process should include at least four steps. First, the auditor should interview program staff involved in data collection regarding the procedures they follow, particularly how staff deal with missing and incomplete information, data-entry procedures, and reporting times. The auditor also should review the program's assessment and follow-up procedures to ensure that they comply with State policy.

Second, the auditor should examine a random sample of student records for completeness and accuracy. The sample size must be large enough to make inferences about the program overall and to accommodate the expected high percentage of students whom the auditor is unable to reach. The auditor should compare the written records and information on selected students' forms with information that is in the program's management information system (MIS) to ensure correspondence between the sources. This review informs the auditor about whether staff complete forms fully and accurately and whether there are problems transferring information from the forms to the program's database.

Third, the auditor should contact the sample of students to obtain verification on key variables, such as:

- **Attendance—**Ask students to recall dates of active enrollment and approximate frequency of attendance.
- **Tests and assessments—**Ask students to recall whether and when they took tests and assessments, what goals they set, and why they attended classes.
- Outcomes for follow-up measures
- Satisfaction with services

To minimize interviewer bias, States should prepare a formal protocol and standard script for auditors to follow when making these calls.

As a fourth step in the auditing process, the auditor should verify attainment of follow-up measures with a secondary source, especially if the program uses a survey methodology. Compared with data matching, surveys are more likely to elicit socially desirable responses. For example, students may inaccurately claim to have obtained a job or passed secondary credentialing tests because they may believe that attaining these outcomes is expected of them. The auditor should (1) contact a sample of employers to verify that students are or were employed, (2) review secondary test reports to verify the claims of those students who reported passing the tests, and (3) check enrollment at community colleges to see whether students who claim to enter postsecondary programs are actually enrolled.

Data Systems and NRS Reporting

NRS data collection produces a rich source of information about adult education students and their outcomes. States and local programs can use these data for program accountability, to identify effective programs and instruction, and to foster program improvement. States also can use the data to assess the effectiveness of local programs and to promote continuous program improvement. States must report their performance levels on WIOA primary indicators of performance to OCTAE.

This section provides a general discussion on establishing a statewide student reporting system that allows States to meet NRS and WIOA requirements. The discussion includes a brief summary of software needs and requirements, a description of the information that must be entered into the student record system, and the types of outputs or reports that States and local programs should be able to produce.

To meet NRS requirements, each local program must use an automated, individual student record system to enter NRS data.

General Software and Architecture Requirements

To meet NRS requirements, each local program must use an automated, individual student record system to enter NRS data. The software for this system must have a relational database structure, whereby information on individual students can be related to other variables in the database, and data can be aggregated and analyzed for specific subgroups. The software also must be capable of aggregating data to produce the required Federal reporting tables or the data must be able to be imported into other software that produces the Federal tables.

OCTAE does *not* require any specific software product or system beyond these requirements. States should carefully consider not only NRS reporting requirements but also their reporting needs and the needs and capabilities of local programs when selecting software. Other factors to consider include training and technical support for software use and the overall cost of developing and maintaining the system.

States also should consider the system's architecture or general structure. Centralized approaches make changes and enhancements to the software easy to implement and eliminates local reporting because data are directly entered into a unified database. To promote easier integration and broader use of NRS data with other education and labor data systems, NRS data systems should be as interoperable as possible. At the same time,

they should provide for data security and protection of personal privacy. The system should also allow users access through a web-based browser. Exhibit 4.1 offers tips for selecting software.

Data Structure and Inputs

The software system should allow local programs to enter and retrieve their own data for individual students. To be most useful, the data should be organized by site and class. Exhibit 4.2 shows a basic data structure for NRS reporting and analysis. This structure allows programs to examine student outcomes by individual class, by single site, and for the program overall, and thus provides users the ability to examine the relationship between instruction and other program components and student outcomes.

Data elements used in the system and access methods should also support data linking and matching with other related agency and interagency systems. For example, taking the time and effort required to coordinate with other agencies and use standardized WIOA data definitions and common participant identifiers will simplify approaches to combine and analyze cross-system data. Developing standard procedures and tools for extracting and sharing data, individualized and aggregate—as appropriate—will streamline the process for data sharing.

To provide adequate protection both for data integrity and the privacy of students, the system should be built using contemporary practices to prevent unauthorized access, data theft, and other forms of hacking. For example, data-access methods should be encrypted, and software should be engineered to prevent tampering. Parameters, set by policy and enforced by technology, should be established concerning appropriate and allowable use of data within the organization and for others with whom the data are shared.

The State and local systems must include, at a minimum, the WIOA indicators, required NRS measures and their applicable coding categories, and basic system functions to allow the inputting and reporting of these data. Exhibit 4.3 summarizes the basic data elements and functions needed for the NRS. The NRS guides, *Developing an NRS Data System: Putting the Pieces Together* and training resources from *Twenty-first century Data Systems for NRS: WIOA and Beyond* (available at http://www.nrsweb.org), contains more information about developing a data system for the NRS. *NRSWeb* also includes other training materials related to data system development and information about desirable analytic and reporting features.

EXHIBIT 4.1

TIPS FOR SELECTING STUDENT RECORD SOFTWARE TO MEET NRS REQUIREMENTS

ISSUES IN CHOOSING SOFTWARE	SYSTEM DESIGN	USABILITY ISSUES	TRAINING AND SUPPORT	DATA INPUT	USING THE DATA

- The overall design of the software
- The training and support offered by the software's vendor
- The methods used to enter data into the software
- The various ways that the software allows the program to use data, including reporting, data analysis, and program planning functions

EXHIBIT 4.1

TIPS FOR SELECTING STUDENT RECORD SOFTWARE TO MEET NRS REQUIREMENTS

ISSUES IN CHOOSING SOFTWARE	SYSTEM DESIGN	USABILITY ISSUES	TRAINING AND SUPPORT	DATA INPUT	USING THE DATA

- What is the cost of the system?
- Does the system meet your agency's IT compatibility, security and privacy standards?
- Are your data definitions appropriate to facilitate data matches/sharing with partner agencies (consider coding conventions, granularity, etc.)?
- By what mechanism are data shared or integrated with other systems?

EXHIBIT 4.1

TIPS FOR SELECTING STUDENT RECORD SOFTWARE TO MEET NRS REQUIREMENTS

ISSUES IN CHOOSING SOFTWARE	SYSTEM DESIGN	USABILITY ISSUES	TRAINING AND SUPPORT	DATA INPUT	USING THE DATA

- Is the software intuitive and easy to use?
- Do potential users appreciate the appearance of the software?
- Can the software be customized to meet the program's needs?
- Does the software include the specific measures, coding categories, and data elements needed by the program?
- How does the system provide for data security and personal privacy?
- Will the system be used by instructors or students? On what kinds of devices (desktop, laptop, tablet, phone, other)?

EXHIBIT 4.1

TIPS FOR SELECTING STUDENT RECORD SOFTWARE TO MEET NRS REQUIREMENTS

- Does the vendor offer training and/or support? What mechanisms of training and support are available?
- What is the cost of training or support?
- Does the software have documentation, such as online help, or a user knowledgebase? Does it provide information about data validation and business rules?
- Are there planned upgrades for the software? Are software upgrades made available free of charge, and are users notified when they become available?

EXHIBIT 4.1

TIPS FOR SELECTING STUDENT RECORD SOFTWARE TO MEET NRS REQUIREMENTS

- Is data entry user friendly?
- Are data keyed in manually or can they be scanned into the system? What does the software use for a student ID number (e.g., Social Security numbers or program-defined numbers)? Can this number be changed if necessary?
- Does the software support multisite data entry at the individual program level? Can site-level data be aggregated to the program level?
- Can data be imported from other software packages (e.g., spreadsheets or other databases)? What formats are required by the software for imports?

EXHIBIT 4.1

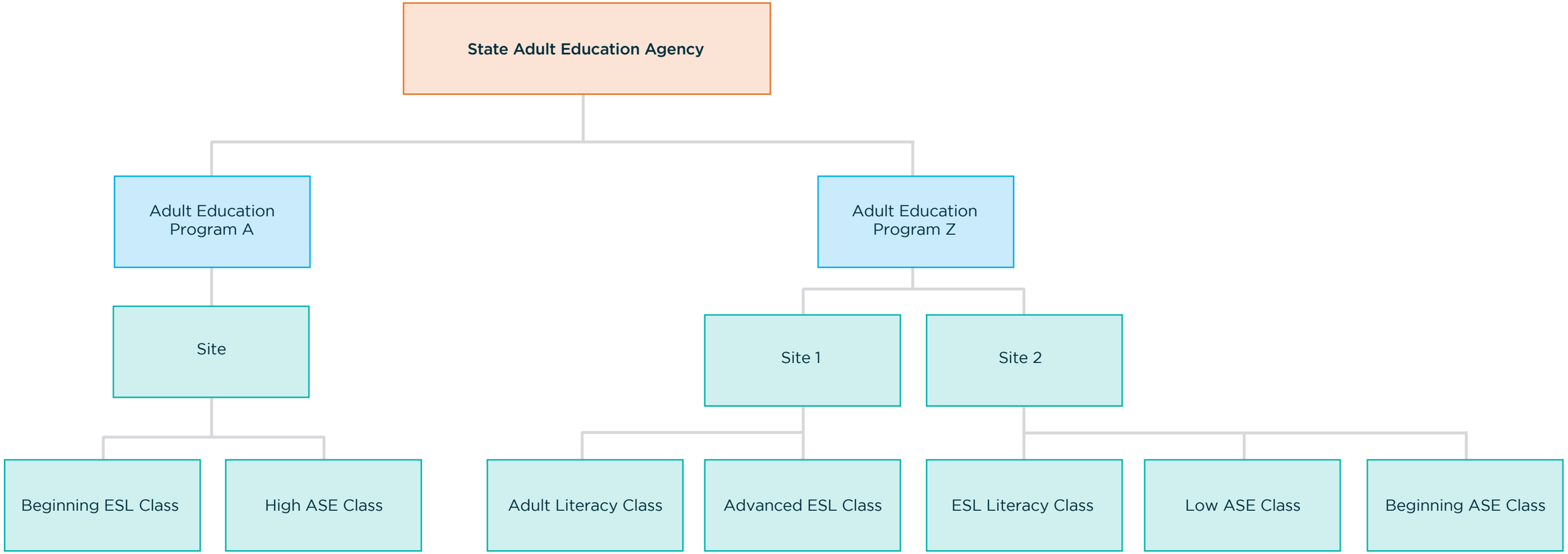
TIPS FOR SELECTING STUDENT RECORD SOFTWARE TO MEET NRS REQUIREMENTS

ISSUES IN CHOOSING SOFTWARE	SYSTEM DESIGN	USABILITY ISSUES	TRAINING AND SUPPORT	DATA INPUT	USING THE DATA

- How do you plan to use data (i.e., for accountability, program improvement, or program evaluation) and does the software addresses these needs?
- Does the software come with built-in reports appropriate for the program's uses?
- How difficult is it to create reports or modify existing reports as needs arise? Is additional software needed to create new reports?
- Does the software allow users to search the database for specific records or conduct queries to locate different classes of records?
- What are the analytic capabilities of the software?
- Does the software allow users to conduct analyses at the individual student level?
- Can data be exported to other software packages (e.g., spreadsheets or other databases)? What format does the software use for exports?

EXHIBIT 4.2

BASIC DATA STRUCTURE FOR NRS REPORTING AND ANALYSIS



ESL=English as a second language; ASE=adult secondary education

Reporting Capabilities

Equally important to the system's data structure and inputs is the system's capability to output or report information. For Federal reporting, the NRS requires that each State annually submit aggregated summary tables of descriptive and performance data. Each local program's software must have the capability to create these reports and submit an aggregated report to the State, or local programs must be able to submit their individual student data to the State for aggregation.

In addition to NRS tables, WIOA requires State-level reporting using the joint information collection request (ICR) template. This template includes extensive breakdowns by specific subpopulations, such as long-term unemployed participants and participants with disabilities. To obtain this information, the software system must have the capability to report separately the performance of participants with these barriers to employment.

Even more detailed reporting is needed to use NRS data to address program improvement needs. Among the most powerful uses of NRS data is the capability to understand the program and instructional factors related to successful student outcomes. To study these issues, States and local programs need the ability to examine data by site, class, and student characteristics and to relate outcomes to such variables as contact hours, teacher characteristics, and curriculum. Although most software systems commonly include these data elements, the reporting of this information in a form amenable to program performance evaluation can be problematic unless this capability is initially built into the system.

EXHIBIT 4.3

BASIC DATA ELEMENTS AND FUNCTIONS NEEDED FOR NRS REPORTING

Basic Data Elements | Functions

PARTICIPANT INFORMATION

- Name
- Address
- Phone
- E-mail
- Date of birth
- Gender
- Ethnicity
- Barriers to employment
- Program entry date
- Program exit date
- Highest degree or level of school completed
- Educational functioning level
- Employment status
- Disability information
- Test scores and dates (for computing EFL gain)
- Program type:
  - Adult basic education
  - Adult secondary education
  - Corrections education
  - English as a second language or English language acquisition
  - Family literacy
  - Integrated education and training
  - Integrated English literacy and civics education
- Contact hours/dates (weekly/monthly)

PARTICIPANT OUTCOMES

Primary indicators of performance:

- Second-quarter employment
- Fourth-quarter employment
- Second-quarter earnings

Credential attainment:

- Credential type achieved (secondary and postsecondary)
- Follow-up criteria for attainment of secondary school diploma or its recognized equivalent (employment or entry into postsecondary education or training during first year after exit)

Measurable skill gain:

- EFL gain type (via posttest, credits, entry into postsecondary education or training)
- Secondary school diploma or its recognized equivalent

Optional achievements:

- Achieved citizenship goals
- Increased involvement in child's education
- Increased involvement in child's literacy activities
- Registered to vote
- Increased involvement in community affairs

STAFF INFORMATION

Function:

- Teacher
- Counselor
- Paraprofessional
- Local administrator
- State-level administrator
- Status (Full-time, part-time, volunteer)

Teacher years of experience in adult education:

- Less than 1 year
- 1 to 3 years
- More than 3 years

Teacher certification:

- No certification
- Adult education certification
- K–12 certification
- Special education certification
- Teachers of English to Speakers of Other Languages (TESOL) certification

EXHIBIT 4.3

BASIC DATA ELEMENTS AND FUNCTIONS NEEDED FOR NRS REPORTING

PROGRAM/SITE FUNCTIONS	DESCRIPTION
Add program	Set up information for program
Add site	Set up information for site associated with program
Add class	Set up information for class associated with site
Move sites/classes	Ability to move one or more classes to a different site or sites to a different program (merge)
Class attendance	Enter attendance information for all students in class
STUDENT FUNCTIONS	
STAFF FUNCTIONS	
REPORTING FUNCTIONS	
SYSTEM MANAGEMENT FUNCTIONS	

EXHIBIT 4.3

BASIC DATA ELEMENTS AND FUNCTIONS NEEDED FOR NRS REPORTING

PROGRAM/SITE FUNCTIONS	
STUDENT FUNCTIONS	**DESCRIPTION**
Intake	Enter demographics, needs, goals, and so on at intake
Enrollment	Enroll/drop student in class
Attendance	Maintain attendance information for students
Assessment	Enter student test scores
Leveling	Student level based on test scores (automatic)
Separation	Enter separation information
STAFF FUNCTIONS	
REPORTING FUNCTIONS	
SYSTEM MANAGEMENT FUNCTIONS	

EXHIBIT 4.3

BASIC DATA ELEMENTS AND FUNCTIONS NEEDED FOR NRS REPORTING

STAFF FUNCTIONS	DESCRIPTION
PROGRAM/SITE FUNCTIONS	
STUDENT FUNCTIONS	
Staff profile	Maintain information about staff members
Contact hours	Enter actual contact hours by week or month
REPORTING FUNCTIONS	
SYSTEM MANAGEMENT FUNCTIONS	

EXHIBIT 4.3

BASIC DATA ELEMENTS AND FUNCTIONS NEEDED FOR NRS REPORTING

Basic Data Elements | Functions

PROGRAM/SITE FUNCTIONS	
STUDENT FUNCTIONS	
STAFF FUNCTIONS	
REPORTING FUNCTIONS	**DESCRIPTION**
NRS tables	Generate NRS tables
SYSTEM MANAGEMENT FUNCTIONS	

EXHIBIT 4.3

BASIC DATA ELEMENTS AND FUNCTIONS NEEDED FOR NRS REPORTING

PROGRAM/SITE FUNCTIONS	
STUDENT FUNCTIONS	
STAFF FUNCTIONS	
REPORTING FUNCTIONS	
SYSTEM MANAGEMENT FUNCTIONS	**DESCRIPTION**
Assessment/leveling information	Maintain information about test scores and levels
Identify group designations for follow-up measures	Maintain information about follow-up cohorts and outcomes
Track periods of participation	Maintain information about enrollments and exits

Federal Reporting Tables

NRS data are to be reported annually to OCTAE by each State in aggregate form. OCTAE has developed reporting tables for this purpose. These tables—included in Appendix E—have been revised by OCTAE for WIOA and reviewed and approved by the Federal Office of Management and Budget (OMB) under control number 1830-0027. Instructions on completing each table are included with each table. The joint Statewide Performance Report is also included in this guide and was approved by OMB under control number 1205-0526.

Several reporting tables allow for separate reporting on special populations for the primary indicators of performance. For example, tables for distance education and correctional education participants provide a picture of how these participants performed on performance measures. There also is a table to report outcomes of participants in integrated education and training (IET) and one optional table for separate reporting of participants in family literacy and integrated English literacy and civics education (IEL/CE) programs. States are encouraged to examine the performance of other target subpopulations separately and must submit separate reports to meet WIOA reporting requirements with additional breakdowns.

Employment measures follow a multiple-year reporting procedure. A time lag in the availability of employment data from the unemployment insurance (UI) database used for data matching requires reporting of students who attended in different program years for second- and fourth-quarter employment measures.

In addition to performance tables in the AEFLA information collection 1830-0027, the OCTAE requires States to submit a narrative report and financial reports detailing expenditures. Forms and instructions for the financial reports also are included in Appendix E.

States are required to submit the NRS tables, the Statewide Performance Report, and the Data Quality Checklist by October 1 of each year. The financial reports, narrative report, and assessment policy are due on December 31 of each year. States must submit all reporting components to OCTAE using the online NRS database.

List of Exhibits