The success of efforts to improve the quality of programs that provide adult education has a direct impact on adult students’ abilities to meet their educational goals. Since 1991, policymakers in the United States have taken two approaches to improving program quality: focusing on the elements of a quality program that lead to anticipated student outcomes or focusing on student outcomes as the measure of a program’s quality.

Taking the first approach, the National Literacy Act of 1991 mandated the development of program quality indicators (PQI); the majority of which focused on program processes as a way to evaluate the effectiveness of adult education programs. PQI defined the processes that should be in place at the program level. For example, Indicator 7 states, “Program successfully recruits the population in the community identified in the Adult Education Act as needing literacy services” (Office of Vocational and Adult Education, 1992, p. 14). PQI did not provide a systematic and consistent way to either measure the process or the result of the indicators.
at the state or national level, making it impossible to track improvement across states. The Workforce Investment Act of 1998, on the other hand, mandated a systematic way of measuring results through a comprehensive performance accountability system. The National Reporting System (NRS) requires states to set performance levels and collect information on particular student outcomes, but does not suggest a specific approach to improve the quality of educational services that lead to these outcomes. These two approaches are not mutually exclusive, and most states and adult education programs apply elements of both without necessarily establishing a link between the two.

For either approach to be successful in improving program quality, positive change must occur at the program level. To bring about change, states and programs, including teachers and students, must engage in a process of examination of their data—about student outcomes, program processes, or both—and then identify and implement plans for change based on these data. This change process may happen haphazardly when individual teachers or directors make changes as they see fit. For example, a teacher might notice that a particular instructional approach does not seem to be working and therefore abandon it, or a program director might experiment with giving fast-food coupons in an effort to improve attendance. At the other end of a continuum, program improvement may be carried out systematically in an effort that includes (a) explicit statement of goals, (b) systematic data collection that shows whether these goals are being achieved, (c) identification and implementation of changes needed to better meet goals (including professional development and other necessary supports for change), and (d) evaluation of results of the changes. Although program improvement occurs at the local program level, state adult education agencies often guide these systematic efforts when multiple programs are involved. In this chapter, we examine efforts of adult education agencies to work with local programs statewide to systematically improve program quality.

The emphasis on program quality and accountability mandated by the 1991 and 1998 legislation for adult education programs is part of a larger focus on quality and accountability in the private sector and government. In this chapter, we begin by situating adult education programs in this larger arena and reviewing the national efforts to improve program quality in adult education. We then review approaches that states are taking to systematically improve program quality and performance and examine more closely case studies of three states. Finally, we draw conclusions
from state approaches and consider implications for practice, policy, and research.

**QUALITY AND ACCOUNTABILITY EFFORTS**

Interest in adult education program improvement parallels the private-sector quality movement. Quality emerged as a foundational concept in the 1980s when the superiority of Japan’s products threatened U.S. markets. Since then, *quality* has become the “term generally used to encompass the multiple outcomes, effects, and processes that organizations must pursue in order to achieve success” (Winn & Cameron, 1998, p. 492). W. Edwards Deming contributed perspectives that increased the scope of quality from a focus on manufacturing processes to the present-day focus on the management of an organization as a complex system (Walton, 1986). Quality management emphasizes continuous improvement through organization-wide participation, customer satisfaction, management based on fact (or measurement), continuous improvement, and learning.

**Private Sector**

Quality as an overall management strategy proliferated in the United States as manufacturers addressed increasing competition from Japan and the need to produce higher quality products more efficiently. Improving the quality of U.S. products drew national attention in 1987 with the passage of the Malcolm Baldrige National Quality Improvement Act and the establishment of a national quality award for companies in the private sector. The Act, administered by the U.S. Department of Commerce, mandated the development of a common framework on which to base judgments about quality processes and outcomes. According to Winn and Cameron (1998), the framework, referred to as the Baldrige Framework for Excellence, integrated the majority of philosophies and techniques espoused by quality theorists in North America and Asia. They point out that quality, in the scholarly literature on organizations, is the term used most often to encompass the multiple outcomes, effects, and processes that organizations pursue to achieve their goals. With the inception of the Baldrige Award program in the private sector, quality concepts had gained momentum in government.
Government

In government, rising costs, decreased quality of services, and entrenched bureaucracies created fertile ground for the need to adopt quality concepts. Building on the work of Deming, Osborne and Gaebler (1992) presented what they termed “a new paradigm” for reinventing government. They argued that U.S. bureaucracy, appropriate in the industrial era, was no longer effective for the postindustrial information age. By focusing on compliance with regulations, government had lost sight of the results, which made management of public monies difficult. The authors proposed that government must become entrepreneurial to meet citizen demands to increase quality, lower costs, and improve efficiency. Osborne and Gaebler’s book appeared at the same time the Clinton administration began the National Performance Review (1993) (later named National Partnership for Reinventing Government) spearheaded by Vice President Albert Gore. The Clinton administration initiative convened an interagency task force of federal employees to focus on ways to make the government “work better and cost less” (Peckenpaugh, 2001).

The following year, Congress passed the Government Performance and Results Act of 1993 (GPRA) to reduce waste and inefficiency in federal programs. Quality concepts are embedded in the legislation’s language; for example, Section 2, “Findings and Purposes,” lists the following three purposes (we have added explanatory comments in brackets):

- Promote a new focus on results, service quality, and customer satisfaction [this gave rise to the use of the word customer instead of client in many social-service agencies].
- Help federal managers improve service delivery by . . . providing them with information about program results and service quality [this describes the feedback loop proposed by Deming].
- Improve Congressional decision making by providing more objective information [an example of management by fact or measurement].

The GPRA legislation also called for strategic planning, performance targets, and measurement of performance over time. “Management by fact” introduced objectivity into decision making and led to a plethora of measurement initiatives to help agencies define which results should be measured and develop ways to measure them (GPRA, 1993). The language of quality—particularly the focus on meeting the needs of the
customer, use of data and measurement for decision making, and continuous improvement—then spilled into education at all levels.

**Education**

Over the last decade, educational agencies have faced increasing criticism for the failure of U.S. schools. The purpose of the Goals 2000: Educate America Act, which became law in 1994, was to “improve the quality of education for all students by improving student learning through a long-term, broad-based effort to promote coherent and coordinated improvements in the system of education throughout the Nation at the State and local levels” (Goals 2000: Educate America Act, 1994). Arif and Smiley (2003) examined the history of accountability in education and the steps that ultimately led to the demand to improve quality. They reviewed a series of federal reports from the early 1980s that were sharply critical of education, beginning with the maelstrom generated by *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983), which proclaimed that falling educational achievement was endangering the strength of the United States in commerce, technology, and science. Other reports, such as *Academic Preparation for College: What Students Need to Know and Be Able to Do* (The College Board, 1983) and *America’s Competitive Challenge: The Need for a National Response* (American Council on Education, Business-Higher Education Forum, 1983) emphasized the need for improving the quality of education. Arif and Smiley (2003) traced the link between public policy, the application of total quality management in education beginning in the 1980s, and its expansion over the years into the Baldrige Award. In 1998, President Clinton signed legislation allowing the educational sector to apply for the Baldrige Award, previously available only for business and industry.

The literature from the past 20 years is replete with anecdotal evidence describing the implementation of quality initiatives at individual K–12 schools (Bonstingl, 1992; Borsum & Francke, 1998; Wiedmer & Harris, 1997) or in higher education sites (Boyle & Bowden, 1997; Messner & Ruhl, 1998; Satterlee, 1996). Many academic programs refer to *continuous quality improvement* (CQI) in reference to their application of quality concepts. Depending on the individual site, the emphasis might vary from a focus on performance accountability to a focus on system improvements. According to Winn and Cameron (1998), “The most notable
characteristic of the scholarly literature on quality is the dearth of empirical investigations” (p. 492). This lack of research has not diminished the interest in or demand for quality education. The focus on quality in industry, K–12 education, and higher education preceded the growth of quality and accountability in adult education.

**LEGISLATION TO IMPROVE QUALITY IN ADULT EDUCATION**

As in business, government agencies, and K–12 and higher formal education, legislation for adult education sought new ways to assure ever-increasing productivity. In the past 15 years, the field has shifted its focus from serving adults to counting the outcomes adults achieved.

**National Literacy Act of 1991**

As noted in the introduction, the National Literacy Act of 1991 emphasized quality as a value for adult education programs to “ensure that educational services supported with federal funds are quality services” (Office of Vocational and Adult Education [OVAE], 1992, p. 4). To ensure quality services, the National Literacy Act authorized the development and implementation of PQI for use in evaluating whether programs funded under the Act were effective in recruiting, retaining, and improving literacy skills of individuals they served. The OVAE, in a participatory process (with subject-matter experts and practitioners in the field), developed eight PQI and measures as models for states to use as a guide in developing state-specific quality indicators.

The resulting guide, *Model Indicators of Program Quality for Adult Education Programs* (OVAE, 1992), placed more emphasis on the quality of program process and content than on outcomes. Six indicators addressed program components, such as program planning, curriculum and instruction, staff development, support services, recruitment, and retention. Only two indicators addressed student outcomes: progress in attaining basic skills and advancement and completion of educational credential.

Although the OVAE guide outlined each quality indicator, measures for both process and outcome indicators were state-specific. For example, the first PQI (an outcome indicator) was, “Learners demonstrate progress toward attainment of basic skills and competencies that support
their educational needs.” The guide only suggested ways to measure this indicator, such as standardized test score gains, teacher reports of gains, or portfolio assessments. Individual states created measures they deemed relevant for their programs. Because one state might have used a standardized test to measure progress and another might have used portfolio assessment, it was difficult to make comparisons at the state or system level. Although the process of developing and using PQI led to numerous positive benefits for program improvement at the state and local level, the process failed to provide the basis for evaluating adult education because it was voluntary and focused on improving program processes without an accompanying framework for performance accountability.

**WIA, NRS, and Related Mandates (1998)**

The Workforce Investment Act of 1998 (WIA) replaced the National Literacy Act of 1991 and changed the emphasis to performance accountability, rather than program processes. Section 212 of the WIA established a performance accountability system to assess the effectiveness of adult education programs in achieving continuous improvement of adult basic skills and family literacy to optimize the return on the investment of federal funds. Core indicators of academic performance included (a) measurable improvements in basic skill levels in reading, writing, speaking the English language, and basic math; (b) receipt of a secondary school credential; (c) placement in postsecondary education; and (d) employment. As part of their education plans, states established levels of performance for each core indicator.

To fulfill the requirements of the WIA, OVAE—as the administrator of the adult education portion of the Act—established the NRS for Adult Education. The NRS defined six functional literacy levels, performance targets, and reporting procedures for individual states. In addition to the four indicators of performance already described, states could set optional measures, such as community or family measures, to evaluate the performance of local programs (U.S. Department of Education, 2001). The NRS focused on outcomes rather than on program processes, and only addressed program quality indirectly. Although continuous improvement is an expectation of the WIA legislation, a systematic approach to achieve it is not one of the Act’s mandates. The NRS provides training materials for using NRS data for continuous improvement (Condelli, Seufert, & Coleman, 2004) but does not recommended a particular approach. These decisions have been left to the states and the efforts of other national initiatives.
NATIONAL EFFORTS TO IMPROVE PROGRAM QUALITY IN ADULT EDUCATION

Various national adult education organizations, such as the Association for Community-Based Education (ACBE) and the National Institute for Literacy (NIFL), made efforts to develop approaches that would support states in the implementation of quality processes. Some of these efforts continue today and we examine these more closely in the state case studies. Others are important as precursors of current efforts.

Association for Community-Based Education Framework for Assessing Program Quality

The ACBE developed a program quality framework in response to the 1991 legislation’s requirements that states provide direct and equitable access to federal adult education funds for nonprofits based on their past effectiveness in providing services. The purpose of the framework was to assist nonprofit providers of adult basic education (ABE) to define and measure program quality (Stein, 1993). There were three sections to the framework:

2. Demonstrated Improvements in Learner Achievements, Program Quality and Community Development.
3. Process and Structures for Program and Learner Development. (p. 10)

For each section, the framework suggested indicators and measures.

The introduction of the ACBE Framework made explicit the influence of total quality management on adult education program management, and identified three Baldrige Award values as its “philosophic underpinning” (Stein, 1993 p. 7) with an emphasis on customer satisfaction, continuous improvement, and full participation. Rather than focusing on outcomes, the framework emphasized systematic data collection about performance and change.

Members of the ACBE used the framework for program improvement. A former program director who had been active in ACBE said that it was very useful for some programs because it was comprehensive; however, smaller programs that had scarce resources did not have the capacity to implement it (P. McGuire, personal communication, October 14, 2004).
National Institute for Literacy—Performance Measurement Reporting and Improvement System

In 1995, the NIFL developed the Performance Measurement Reporting and Improvement System (PMRIS), a framework to establish statewide accountability systems for adult literacy that would lead to a national accountability system. The purpose of PMRIS was to move adult literacy forward from a “patchwork quilt of services” to a “quality system” (Condelli & Kutner, 1997) by focusing on results from a systemic perspective. “An effective statewide accountability system must be customer-focused, results-oriented, and quality-driven” (Swadley & Ziolkowski, 1996, p. 12). PMRIS advocated the establishment of an interagency accountability system for adult literacy programs that had four key goals. The first was to form interagency groups that would focus on the national adult literacy goal outlined in the Goals 2000: Educate America Act (1994) that by the year 2000, every adult American would be literate and possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship. Second, states would measure progress in achieving the goal by measuring results, not process. Third, states that participated in PMRIS would establish an interagency working group to plan and implement an information management system that would provide a consistent reporting framework for local programs and enable state agencies to streamline reporting, share information, and eliminate duplicate record keeping. The final goal was to ensure continuous improvement because participating agencies would have data from the system that would enable them to identify strengths and weaknesses at the program level.

The NIFL awarded five states—Alabama, Hawaii, Kentucky, New York, and Tennessee—grants to establish interagency accountability systems for adult literacy in their states. Participating agencies were different in each state but generally included representation from state employment agencies, human services, and state libraries that had a stake in increasing adult literacy. A key contribution of PMRIS was viewing adult literacy from a “system” perspective. This perspective shifted from defining success as “inputs,” such as increasing the number of individuals enrolled in a program, to defining success as “outputs,” such as the number of individuals who increased their literacy skills, and ultimately to “outcomes,” which it described as the goals adults achieved as a result of increasing their skills, such as enrollment in postsecondary education or advancement to a better job. The PMRIS change to a systemic view of adult literacy shifted the responsibility for:
achieving outcomes from individual programs to a shared responsibility of the system as a whole. For example, by taking an interagency perspective, adults would receive not only educational services, but support and transitional services if these were needed. Outcomes achieved by students translated to a program’s performance, implied by the name of the system itself. In the 2-year time period of the grant, states achieved mixed results. Although an evaluation of PMRIS showed that states were not able to complete a functional, interagency statewide performance measurement system before their grants ended, states made progress in developing a more collaborative and strategic approach to adult literacy and recognizing the link between data requirements and outcomes (Swadley & Ziolkowski, 1996). Condelli and Kutner (1997) recommended that the lessons learned by the states during the PMRIS project be considered during the development of a national outcome reporting system.

Professional Development Network Competencies

In 2000, the U.S. Department of Education, Division of Adult Education and Literacy, sponsored the Professional Development Network (Pro-Net). Pro-Net developed three sets of competencies for instructors, program managers, and professional development specialists in adult education. The purpose of developing the competencies was to improve program quality by identifying the skills and knowledge that individuals would need to be effective in their roles (Sherman, Tibbetts, Dobbins, & Weidler, 2001). Each competency had a set of corresponding performance indicators that illustrated how the competency could be demonstrated. For example, a leadership competency for managers stated, “demonstrates effective interpersonal and communication skills.” One of the four indicators was “seeks input from all levels of staff, listens attentively, demonstrates fairness and consistency, and conveys information fully and clearly.” Pro-Net suggested various ways that states could use the competencies, such as developing credentialing systems for managers or for evaluation of local programs (Sherman et al., 2001). Materials, such as a self-assessment instrument, were provided to help practitioners and state staff use the competencies (see Pro-Net at http://www.pro-net2000.org/). Local programs could use the competencies for professional development. Pro-Net competencies, although informative about effective practice, focus on discrete skills and do not tie these skills back to a systematic program improvement effort that includes the state, program, staff, learner goals, or expected outcomes.
These national efforts to provide frameworks for improving accountability and program quality—ACBE framework, the PMRIS focus on performance measures, and the Pro-Net competencies—increased the information that was available to state administrators and local programs, but none of these efforts was implemented nationally. In the next section, we examine models that are currently being used in our case studies of the states where they are being applied.

STATE EFFORTS TO IMPROVE PROGRAM QUALITY

Under the WIA, the states make decisions about what particular program improvement approach to use. For this chapter, we wanted to identify the states that had systematic approaches to improving program quality and the model, if any, they used. The following section describes the methods we used to identify state approaches.

Review of Web Sites

We began to identify states that had systematic approaches for improving program quality by reviewing the Web sites (in spring 2003) of publicly funded state ABE programs. Most states mentioned quality and program improvement in their state plans and related it to the language in the NRS. Only a limited number of states described a specific program improvement process on their Web sites. These included the Equipped for the Future (EFF) initiative in Delaware, Hawaii, Maine, Virginia, and Washington; Pennsylvania’s Project Educational Quality in Adult Literacy (Project EQuAL); Tennessee Quality Award using Baldrige Criteria for Performance Excellence; and the Horizon Project in Maine. We were not able to determine if the information on the state Web sites was current, or if all of the states that had systematic program improvement processes in place described them on state-related Web sites.

Survey of State Directors

To augment the information we found on the Web sites, we conducted a brief survey of state ABE directors (see Appendix). In September 2004, the National Adult Education Professional Development Consortium (NAEPDC) distributed the survey and a letter of explanation in its monthly
As a reminder, we sent the survey in an e-mail message to state directors and received 10 additional responses, for a total response of 22 states (see Table 3.1 for results).

Approximately 14 states had statewide initiatives that involved close to 100% of the programs. Nine of these were based on one of four national models: Analyze, Identify, Design, Document, and Evaluate (AIDDE); Baldrige; EFF; and NAEPDC’s Going to Scale. Only four began the

TABLE 3.1
National Adult Education Professional Development Consortium (NAEPDC) Electronic Survey Responses

<table>
<thead>
<tr>
<th>State</th>
<th>Include Use of NRS Data?</th>
<th>Based on a National Model?</th>
<th>If So, Which One?</th>
<th>What % of Programs?</th>
<th>When It Began?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>—</td>
<td>100% 2004</td>
</tr>
<tr>
<td>B</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>AIDDE</td>
<td>100% 2000</td>
</tr>
<tr>
<td>C</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>NAEPDC Going to Scale</td>
<td>— 2004</td>
</tr>
<tr>
<td>D</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>—</td>
<td>100% 1996</td>
</tr>
<tr>
<td>E</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>—</td>
<td>100% 2000</td>
</tr>
<tr>
<td>F</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Baldrige</td>
<td>20 per year 2001</td>
</tr>
<tr>
<td>G</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>EFF, NAEPDC Going to Scale</td>
<td>13% 1986</td>
</tr>
<tr>
<td>H</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>—</td>
<td>100% 2004</td>
</tr>
<tr>
<td>I</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>J</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>K</td>
<td>No</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>L</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>—</td>
<td>5% 2004</td>
</tr>
<tr>
<td>M</td>
<td>No</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>N</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Baldrige</td>
<td>100% 2003</td>
</tr>
<tr>
<td>O</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>AIDDE</td>
<td>100% 2002</td>
</tr>
<tr>
<td>P</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Baldrige</td>
<td>100% 1998</td>
</tr>
<tr>
<td>Q</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>—</td>
<td>100% 2004</td>
</tr>
<tr>
<td>R</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>S</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>EFF</td>
<td>100% 2003</td>
</tr>
<tr>
<td>T</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Some</td>
<td>100% 2002</td>
</tr>
<tr>
<td>U</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>—</td>
<td>100% 1998</td>
</tr>
<tr>
<td>V</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>—</td>
<td>100% 2004</td>
</tr>
</tbody>
</table>


newsletter to state directors of adult education; 14 states responded. As a reminder, we sent the survey in an e-mail message to state directors and received 10 additional responses, for a total response of 22 states (see Table 3.1 for results).
initiative before 2000. We used the results of this survey to guide our selection of states to use for case studies of program improvement. The following criteria were used to select states for case studies:

- Type of systematic approach being used—we wanted to represent a variety of approaches.
- Extent to which local programs are involved in the approach—we wanted approaches that were in use across the state, not in just a few programs.
- Duration of the approach—we wanted approaches that have been in use long enough for states to have some sense about their success.
- Geographic region of the state—we hoped to examine cases across the country.
- State director’s willingness to have a case study written about his or her state.

Based on the results of the survey and on these criteria, we developed case studies about program improvement efforts in Oregon, Tennessee, and Vermont.

**CASE STUDIES OF PROGRAM IMPROVEMENT EFFORTS**

The state agencies that agreed to participate in the case study differ in their department affiliation. Adult education in Oregon is affiliated with the Oregon Community College system. In Tennessee, adult education is part of the Department of Labor and Workforce Development. Vermont’s adult education program is part of the Department of Education.

Data for the case studies were collected through telephone interviews with either the state director, or an individual assigned by the state director who had worked directly with the program improvement model. One of the authors conducted an initial interview with either the state director or individuals recommended by the state director and then wrote notes from the interviews and e-mailed the notes back to the respondents. To clarify the notes, we conducted additional interviews or exchanged e-mail messages until the respondent or respondents agreed that the data described the way the state applied the model.

The models of program quality improvement used by the states vary, but their overall purpose is to improve program quality, including
processes and results. However, states define processes and results differently. The following section describes the model used in each state, the state’s story (including how the initiative began), related professional development activities, results achieved, and lessons learned.

**Oregon and the AIDDE Model**

In Oregon, ABE is part of the Oregon Community College system. Instructors are referred to as faculty, and program managers are referred to as program directors. Oregon began its statewide program improvement strategy in 2001 when it volunteered to be part of the Northwest Quality Initiative (NQI). The NQI is a research and demonstration project to create, pilot test, and refine a process for developing leadership and carrying out program improvement in adult education at the state and local levels (Alamprese, 2003). Abt Associates, Inc., a large for-profit government and research consulting firm, established the NQI with funding from the U.S. Department of Education. The model used was AIDDE, which stands for the initial letter in the steps of the improvement process: analyze, identify, develop, document, and evaluate.

Two underlying assumptions guided the project: (a) continuous program improvement is an integral component of adult education program operations, and (b) a systemic approach to program improvement involves state adult education staff, local program directors, and program instructors and other staff.

To develop the model, Abt Associates reviewed the research on program improvement, program reviews from a variety of settings, and PQI. In addition to these reviews, researchers conducted case studies in six northwestern U.S. states to identify common components of adult education. From a systems perspective, each of the components influences the other components. The 12 identified components of the system are:

- Community environment.
- Institutional capacity.
- Program management.
- Program improvement.
- Interagency collaboration.
- Program recruitment and intake.
- Assessment and instruction.
- Program exposure.
- Support services.
Each system component has accompanying illustrative criteria for program quality. For example, one component of the system is program recruitment and intake. Criteria for determining quality for student intake include using multiple instruments for assessment (one being a standardized assessment) and the use of a formal referral process to other services or programs. Another component is program management. A criterion for quality of this component is communication between the program director and the staff showing that the director communicates with staff regularly, meets with staff on substantive issues, and obtains feedback.

The Program Improvement Process: Analyze, Identify, Develop, Document, and Evaluate

The AIDDE model is a series of action steps for improving any aspect of the 12 components of the adult education system at the classroom, program, or state level. The model has its roots in problem-based learning (analyzing issues and identifying solutions) and the scientific method (collecting, analyzing, and interpreting data). The AIDDE model is based on the premise that all levels of the adult basic skills (ABS) system must participate in change initiatives to see sustainable program improvement.

The AIDDE pilot was conducted in six states (Alaska, Idaho, Montana, Oregon, Washington, and Wyoming) beginning in 2001. Partners in the pilot were the six state offices and local programs in each state. State office staff provided leadership, support, technical assistance, reporting, and feedback to local program directors. Local program directors implemented the improvement process, planning and resource identification, data collection, and support and feedback for staff. Instructors and other staff participated in planning and identifying instructional resources, data collection, and dissemination within and beyond programs.

In addition to developing the model, Abt Associates provided professional development for applying the model to practice in three phases. In the first phase, local program directors and instructors identified “instruction” and “intake” for improvement instruction and intake” at the local program level for improvement. Following this was training for program directors to learn to use the AIDDE model to analyze and improve program management and program operations. The final phase involved state staff in three states that wanted to use the model for statewide program improvement.
The AIDDE model has five main steps. Each initial letter of the acronym AIDDE describes an action—analyze, identify, develop, document, and evaluate—that is a step in the systemic change process, as outlined in Fig. 3.1.

Each of the arrows in Fig. 3.1 demonstrates how the individual components work together as a system. Evaluation influences each step of the process. Because the model is applicable at all levels of the system, individuals or groups might carry out the steps for improving instruction, programs, or the state system. In Oregon, for example, program directors focused on student orientation and intake. Once they identified the area for improvement, they followed the steps of the AIDDE process:

- **Analyze** data, current practices, and research to identify areas of instruction, program operations, or state operations requiring change; set priorities for improvement. This step includes identifying current activities in each program operation component, including relevant data, issues, or pressures that staff must address. Staff (instructors, program administrators, state staff, teachers, or all groups working together) prioritize expected outcomes that may lead to improvement.

- **Identify** new practices or procedures for improving current practice. In this step, staff develop new practices using resources, strategies, and techniques from multiple sources, including research.

- **Design** a plan for new practices or procedures and implement the plan by using the new practice or procedure. The planning process
includes outlining the new practice or procedure, identifying the target population for the new procedure, and pilot testing.

- **Document** in two phases. First, describe current practices. Second, document new practices and procedures. These steps include making records of personnel, materials, and resources that currently exist and what resources are needed. After the procedure or practice has been implemented, staff identify its potentially successful aspects and barriers encountered.

- **Evaluate** outcomes from program or instructional improvement. The final step is for staff to evaluate the practices or procedures they used, what worked, what did not work, and the reasons for success or failure. Evaluation includes determining if the outcomes of the practice or procedure lead to program improvement.

Using the model effectively in any of the components of an ABE program requires professional development to learn how to apply the model in practice.

**Specific Objectives in Oregon**

Oregon has used the AIDDE process over 4 years with two primary goals: program improvement and leadership development. The first, program improvement, includes continuous improvement at the instructional, program, and state levels. The second goal, leadership development, focuses on instructional and program leadership. According to the state director, “We identified this as a strategic planning process the state could use to target system improvement, build a common language for the system, and develop existing and emerging leadership.” This was the first time AIDDE was systematically implemented at all levels in Oregon.

**Program Improvement.** There were four key program improvement activities over the course of 3 years, initiatives that focused on improving (a) instructional practices, (b) program operations, (c) program management, and (d) state system alignment. Oregon’s participants in the NQI during the first 2 years included six instructors and program directors from three local programs and a state representative. They focused on identifying and piloting new instructional practices. Instructors identified a key question or problem they wanted to address in their individual classes and followed the AIDDE process to: (a) analyze data, including their current practices and their assumptions about these practices;
identify and plan new practices; (c) document the use of the new practices; and (d) evaluate their activities for effectiveness. During Year 1, each instructor developed one question. In Year 2, all instructors focused on the same topic, factors that affect student success in transitioning to college. By working on the same topic across three programs, instructors had greater opportunities to collaborate and learn from one another. Programs were also able to see that many of the factors were common to all instructional programs. According to the state director, “Our instructors who took part in the project found it beneficial as a way of helping them become more deliberate about how they target instructional content, activities, and evaluate instruction.”

During the NQI’s second year, Abt Associates conducted a pilot training for two to three program directors from each state to apply the AIDDE process to improve the program operations of their ABE programs. Oregon’s second program improvement activity was for two of Oregon’s program directors to participate in this training and pilot process. Meanwhile, instructors from three of Oregon’s programs continued their AIDDE improvement activities (described previously).

A third key improvement activity based on the AIDDE model in Oregon has been the focus on program management. This initiative trained local program directors who make up the Oregon Council of Adult Basic Skills Development (OCABSD), an association of Oregon program administrators, to use the AIDDE process as a program management and operations improvement tool. State staff asked for volunteers from the OCABSD to attend the third phase of the AIDDE training on how to use the continuous improvement model in program management; every director of the OCABSD volunteered. Directors received an initial training and two follow-up training sessions over 2 years. During this time, directors implemented the AIDDE model focusing on one or two areas for improvement. The majority of directors focused on student orientation and intake. The other programs focused on improving partnerships through joint collaborations, such as developing vocational ESL programs. The involvement of all of the directors has been pivotal to the success of the AIDDE implementation throughout the state. The state director explained, “The local directors’ involvement is critical if we hope to see effective professional training and instructional improvement at the classroom level. We are striving to build a stronger link with directors that connects to instructors and state staff and that aligns state and local priorities with each other.”

The fourth program improvement activity focused on aligning priorities of the state system as a whole, and on methods of evaluation. An
interagency group of partners, including instructors, directors, council leadership, state staff, and external agency partners, followed the AIDDE process to conduct a thorough system evaluation; make recommendations on how to better connect the multiple policies, procedures, and activities of the system; and better align the system priorities with those of external partners. One of the results of the process was an annual joint planning session between the state office and the OCABSD that links priorities of key stakeholder groups.

**Leadership Development.** In addition to program improvement, the state also had a goal to develop leadership within local programs, the director’s council, and at the state level. The state focused on three primary leadership activities: (a) creating a council leadership scholarship, (b) ensuring that the Oregon Professional Development System (OPDS) participated in the national Leadership in Action project, and (c) supporting the state staff to continue to participate in the NQI.

The state expanded an established professional development scholarship for the outgoing OCABSD chair to include a second “leadership” scholarship for the vice-chair. The state director explained, “Last year the scholarship sent both the past-chair and the vice-chair to the national meeting of state directors to gain a broader field perspective that would contribute to stronger council leadership and integration of federal, state, and local priorities.” Additionally, in 2005, Oregon and Washington state directors explored ways for cross-state collaboration and leadership development by having state and council leaders participate in each other’s state spring council meetings.

The OPDS became a focus of the systemic improvement efforts in 2002–2003 when the state director participated in the Leadership in Action project that was funded by the U.S. Department of Education. The Leadership in Action Project included two training sessions on the use of the AIDDE model in designing and managing a professional development system. As a part of the training, Oregon’s project was a comprehensive needs assessment of directors and the OPDS.

Participation in this national initiative led the state to develop more purposeful and clear professional development expectations for all staff. For example, when faculty engage in the statewide instructional practices project, the state develops a participation agreement that details state and instructor responsibilities, and describes how the director will support the faculty in carrying out the project and integrating the knowledge and skills into the program. The state staff member, instructor, and local director
must agree to specific responsibilities to participate and receive the financial support from the state. This helps assure that projects are not undertaken with insufficient resources at the local level. The expectation is that what is learned by one group of instructors and directors will be documented and passed on to others. The outcome has been stronger commitment to priorities for system improvement on the part of all involved.

Currently, Oregon is one of four states continuing to participate in the NQI. In anticipation of reauthorization of the federal legislation, the states are using the AIDDE model for developing a new state plan and process for grant proposals. State staff are also continuing to apply what they have learned in their training as they explore ways to “go to scale” with the instructional practices project across their states, and investigate ways of providing further support to sustain local directors and state councils as they continue to work on leadership development and system improvement strategies.

**Results**

According to the state director, the AIDDE model has reinforced Oregon’s commitment to supporting program improvement and leadership development at many levels—with faculty, directors, partners, and state staff. She said that using the AIDDE process helped everyone understand the critical pieces for a continuous improvement model—analyzing data and information, identifying areas for improvement, developing and implementing new activities, and documenting and evaluating practices.

A critical step in the AIDDE model is analyzing data and information that reflect program practices because this process identifies areas for improvement. This step in the process is often overlooked because it is challenging to locate and compile the appropriate data and analyze it. In Oregon, this step was the foundation of a solid framework for improvement. OCABSD reviews state and local program data quarterly and identifies factors that affect program performance. Faculty participate in the data analysis and all other facets of the AIDDE process at the program level. They work as a team to set priorities, interpret data, and identify what is and is not working.

Using the AIDDE model also requires program managers at local and state levels to identify internal and external pressures from federal, state, community, and institutional levels to the program level. A common understanding and foundation make the system more manageable and increase participation from all stakeholders. Staff can see it as both sustaining and improving a system over time.
The AIDDE steps were integrated into the end-of-the-year program grant reporting requirements and applications for continued funding, requiring programs to clearly state program improvement priorities, proposed outcomes, and how they plan to achieve their goals. Oregon has also added a requirement that programs report statistics and analyze their data to assess past—and inform future—practices. The state office also revised Oregon Indicators of Program Quality and integrated the AIDDE model into the state program review process.

Results in Oregon include the alignment of the multiple components of the adult education system with the overarching principles of quality and continuous improvement, and implementation of a systematic process for evaluating data and information that then lead to a purposeful strategic planning process. The state director explained that Oregon is doing a better job at the following activities:

- Building a common foundation for the adult education system: “We’re not just thinking about today or this year, but where we want to be as a system, long-term, and how continuous improvement, planning, and evaluation help get us there.”
- Connecting processes, procedures, and activities at all levels: “No one wants to be given one more thing to do and everyone sincerely wants to understand how the work connects across programs and with the state system. Implementing the AIDDE model does not add work. Instead it supports the work by connecting the components of the system in a clear and manageable framework that requires continual evaluation and improvement of existing and new practices.”
- Creating a broader understanding of the system for local leaders.
- Aligning local, state, and national priorities: “Identifying pressures is an important part of building awareness of the complexity of the basic skills system. For a system to continually evolve and improve, we must be able to understand each partner’s expectations and investments in the system and assess the consequences of meeting or not meeting expected outcomes.”
- Connecting local, council, and state planning.
- Communicating more effectively with internal and external partners.
- Increasing credibility and investment both internally and externally.
- Using a systematic process for identifying and piloting new instructional practices: “We all try to understand and analyze our data so we can apply it to program evaluation and planning.”
• Expanding involvement of all staff in program operations and management.
• Developing leadership that will support the system in the long term.

The adult education programs in Oregon have always worked well together and as a group have built strong collaborative relationships with other state and local partner agencies. The AIDDE model helped make existing collaboration more systematic and intentional. This model has been an effective tool for helping the state staff work with partners within their agency, as well as in other agencies. It has provided a more systematic approach to evaluating and improving programs, which in turn has led to stronger partner support and program representation. Using the AIDDE model as a strategic planning process has enabled the state to “better align adult basic education with broader state initiatives such as workforce readiness and career pathways,” according to the state director. The most significant result of implementing the AIDDE model has been improvement in the way that adult education operates in the state.

Lessons Learned

• Positive sustainable change requires leadership and involvement. Staff at both the state and local level made an investment in the AIDDE process, established clear expectations, a system for accountability, and a vision for making this process a part of ongoing program management and operations.
• Implementing an improvement process takes time. Identifying specific areas for improvement and then following up on the steps of the process requires time for talking and thinking together, and time for practicing and documenting the process.
• Evaluation provides focus. Although implementing program improvement in a systematic way has its challenges, ongoing reflection and evaluation helped provide the clarity and focus necessary to ensure that implementing new processes would lead to continuous improvement.
• Focus on key areas to improve. Program directors selected orientation and intake as a common area of improvement and then stayed with it. Although getting sidetracked is common, staying with the initial questions about improvement is important.
• Stay the course. As different procedures and practices became part of the improvement process, state and program staff considered
how to go to scale within programs and across the state and how to maintain ongoing training and technical assistance in the reality of limited resources and staff turnover. Program improvement was not a one-time activity; rather, it became the way the state has decided to “do business.”

**Tennessee and the Baldrige Criteria for Performance Excellence**

Tennessee bases its systematic program improvement on the Baldrige Criteria for Performance Excellence developed as part of the National Quality Award. Any organization can use the criteria as a self-study process to develop business processes and improve organizational performance. In 1999, federal legislation extended the Baldrige Award to education and health care organizations, and the criteria were revised slightly to make the language more appropriate for these new contexts. The underlying assumptions, however, come from a business perspective, such as seeing the adult learner as a “customer.” Use of the Baldrige Criteria for Performance Excellence is growing in the education sector. By 2004, four educational organizations (three local school systems and one university) in the United States had received the Malcolm Baldrige National Quality Award after applying the criteria for performance excellence. Many states have established quality awards at the state level that use the same criteria for performance excellence as the national quality award. Tennessee, for example, offers a Tennessee Quality Award at four increasingly challenging levels—interest, commitment, achievement, and excellence—to encourage participation in the state’s quality program.

**The Program Improvement Process: Baldrige Education Criteria for Performance Excellence**

Baldrige National Quality Program’s (2005) *Education Criteria for Performance Excellence* are the basis of an organizational self-study guide to help educational organizations use an integrated approach to organizational performance management. The guide includes more than 200 questions in seven major categories of organizational performance. According to the guide, the purpose of the criteria is “to serve as a working tool for understanding and managing performance and for guiding organizational planning and opportunities for learning” (Baldrige National Quality Program, 2005, p. 1). Figure 3.2 describes the key categories of the Baldrige framework.
Each category of criteria is listed here:

- **Leadership** asks how senior leaders guide an organization, including the plan for governance (ethical, legal, and community responsibilities).
- **Strategic planning** asks how an organization develops and implements strategic objectives and action plans.
- **Student, stakeholder, and market knowledge** asks how the organization determines the requirements, expectations, and preferences of students and stakeholders and how it creates an overall climate for learning.
- **Measurement, analysis, and knowledge management** asks how an organization selects, gathers, analyzes, improves, and makes available its data to stakeholders.
- **Faculty and staff focus** asks how an organization’s work systems, faculty and staff learning, and motivation lead to high performance and how it builds a work environment and support climate conducive to performance excellence and personal and organizational growth.
- **Process management** asks about key organizational processes for educational programs and services that create value for students and other stakeholders.
- **Organizational performance results** asks about outcomes in key areas, including student learning and satisfaction, stakeholder satisfaction, budgetary and market performance, faculty and staff results, operational performance, leadership, and social responsibility.
More than 40 states have created public–private partnerships to encourage quality at the state level, using the Baldrige criteria and the self-study for evaluation and recognition. In Tennessee, for example, the Center for Performance Excellence annually presents qualifying organizations with awards at four incremental levels of achievement: interest, commitment, achievement, and excellence. According to the Web site of the Tennessee Center for Performance Excellence (2005), these four levels are not “a competition against another organization, but rather . . . a competition against increasingly difficult criteria . . . .” The process of applying for the award is similar to the Baldrige process at the national level. For example, if an ABE organization wants to apply for the award, the first step would be to develop an organizational profile that describes the program’s mission, goals, and challenges. The next step would be to conduct a self-study using the questions under each major category of Baldrige criteria. Finally, quality examiners (generally volunteers from business and industry) visit each candidate organization to evaluate whether the organization has adequately met the performance criteria for receiving an award and, after the evaluation, provide written feedback on ways the organization can improve.

In Tennessee, ABE is administered by the Tennessee Department of Labor and Workforce Development with local programs in more than 90 counties. Most managers are referred to as supervisors and work full time. The majority of teachers are part time. Programs are located in local school systems, community colleges, and local career centers.

Tennessee formally adopted the Baldrige criteria as its program improvement strategy in 2002. The state’s goal is for all 94 adult education programs in the state to receive the Tennessee Quality Award (TQA) at the commitment level by 2009. According to the assistant state director, “We wanted a systematic approach to continuous improvement that had a proven track record. We thought Baldrige was the best approach because it has been tested in education and business. In addition, we thought it would help us connect with business and industry in their language. And it has.”

Tennessee began using the Baldrige criteria for improving adult education programs in 1997, when a pioneering program manager learned about the Baldrige criteria from a new staff member who had taught the application of quality principles when he was a trainer in the military. “Our new staff member introduced us to the Malcolm Baldrige Education Criteria for Performance Excellence. These criteria take the total quality management principles originally used in the private sector and apply them to educational institutions” (Cody, Ford, & Hayward, 1998, p. 3).
Use of the Baldrige criteria spread to other programs in three ways. One way was through state conference presentations that program staff made about the way they applied the Baldrige criteria in their programs. A second way was ongoing professional development for program managers interested in applying quality principles in their programs. The Center for Literacy Studies at the University of Tennessee\textsuperscript{14} (CLS) provided professional development with the support of the Tennessee Director of the Division of Adult Education. Third, CLS invited local program staff to help facilitate a Leadership Institute for other program managers based on the knowledge they had gained at both the program and classroom level; eventually the local program staff member who initiated the process joined the CLS staff. As programs completed the self-study process and received the state’s quality award, their “effective practices” were integrated into the training and training materials for other supervisors.

Based on what was learned in the field about using the Baldrige criteria, the state office adopted the Baldrige process as the basis of the state’s performance improvement plan in 2002. From 1998 through 2004, of the 95 programs in Tennessee, 97\% had achieved the state quality award at some level. As of January 2005, 77\% (or 71 programs) had received the TQA at the interest level, 12\% (or 11 programs) had achieved the commitment level award, and 1\% (or 1 program) received the achievement level award.

\textit{Specific Objectives in Tennessee}

From the start, Tennessee’s approach has been to focus on program managers, with the understanding that once program managers undergo the self-study process, they will spread their efforts to teachers and other staff, and eventually to program participants. The Baldrige model requires that stakeholders (e.g., learners, teachers, and volunteers) must participate by the time the program reaches the commitment level. As a part of the state’s support of the Baldrige process, the state office conducted a self-study of its own operations and received the TQA at the commitment level in 2005. According to the state director, “We didn’t want to ask the programs to do anything that we weren’t willing to do ourselves.”

\textsuperscript{14}M. B. Bingman currently serves as Associate Director of the CLS and M. F. Ziegler is the former director.
With support from the state office, CLS has offered professional development on the Baldrige program model to both managers and teachers since 1999. The state director also appointed a staff member to provide support to programs that were applying the Baldrige criteria. In addition to an annual Leadership Institute, program supervisors participated in workshops that help sustain their interest and build their skills in areas such as interpreting data, making data accessible to stakeholders, and identifying the “vital few” program areas to improve. Sessions at the annual state conference focus on how teachers can use quality principles in the classroom. In addition to providing formal learning experiences, CLS offers one-on-one support at the program’s site as they are conducting the self-study process. An electronic discussion list enables managers who are going through the process to ask questions and provide support to each other. Programs that successfully complete the self-study process receive the TQA in a public ceremony.

Results

A key result of using the Baldrige model, according to the Tennessee state associate director, has been the integration of various adult education initiatives into a cohesive system. For example, the state is merging the Baldrige criteria with PQI and will use these new criteria for evaluation of local adult education programs. By using common criteria in conjunction with the Baldrige self-study process, local program staff members will be able to prioritize their goals, then decide on and use the strategies they believe will help achieve the goals, and evaluate their performance based on data they collect. All programs will be using the same criteria to identify the particular program components that need improvement. The common criteria will also enable the state to more easily measure progress consistently across programs and more effectively plan for professional development.

The purpose of engaging in the Baldrige process was to improve the overall system’s processes and results. The state is tracking results based on the broader definition of the Baldrige framework, which includes student learning, customer and stakeholder satisfaction, operational performance, and leadership. The state’s data show an increase in customer satisfaction, measured at all levels, which the associate director attributes to an increased emphasis on listening to students and other stakeholders. Because programs are adopting the Baldrige process in waves, the link between improving program quality and results is not yet consistent.
across the state. The program that has been using the Baldrige model for the longest period of time, and that has received the TQA at achievement level, reports an increase of student learning of more than 20%, based on advancement from one NRS level to another. In addition, the program reports that retention and GED attainment have increased, and instructional hours have decreased. Other programs are reporting increased retention, improved rates of pre- and posttesting, more effective intake and orientation processes, and “a much better sense of knowing what works.”

**Lessons Learned**

- **Listen to stakeholders and meet their needs.** Stakeholders in the Tennessee adult education system include adult learners, teachers, local program directors, state staff, and partners from other state agencies and business and industry. As customers, adult learners regularly evaluate the services they receive from local programs and local programs regularly evaluate state services. These multilevel evaluations become part of the continuous improvement process.

- **Use a recognized program-improvement model.** The TQA has been recognized by the governor, agency leaders, and leaders from business and industry. The increased visibility has amplified the adult education program’s credibility among its partners and led to broader support for the goal of adult education.

- **Integrate system components.** Tennessee has integrated the criteria from the Baldrige model with the Tennessee PQI. These coordinated criteria are used at both the state and program level for evaluation, setting goals, and developing a continuous improvement plan.

- **Present the real experiences of programs using the process and incorporate them into professional development for others.** State professional development staff documented effective practices used by local program staff and added them to professional development materials. As a part of professional development, program directors participate in an electronic discussion about their experiences with program improvement and with applying for the TQA.

**Vermont and Equipped for the Future**

Vermont has taken a standards-based approach to improving program quality, using the EFF standards to frame their adult education programs.
The basic assumption of standards-based improvement is that content standards with aligned assessments and accountability mechanisms will provide “clear expectations for learning” and “will lead to continually higher levels of learning and achievement” (EFF Assessment Consortium, 2004). The National Research Council (1999) model for standards-based educational improvement starts with content standards, assessment, and accountability requirements in alignment to provide clear expectations for what students should be learning. Figure 3.3 shows that for this model to be effective in building quality (defined here as higher levels of learning), information about expectations defined by standards and about how to teach to meet those expectations must be distributed throughout the system.

**The Program Improvement Model: Equipped for the Future**

EFF was developed as an initiative of the NIFL to improve the quality and results of the U.S. adult learning system. Through a process of collaborative research, EFF developed 16 content standards that define what adults need to know and be able to do to meet the National Adult Literacy and Lifelong Learning Goal that “Every adult American will be literate and possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship” (Goals 2000: Educate America Act, 1994). The 16 EFF standards define the skills adults use in their roles as workers, family members, and community members, and include communication skills, decision-making skills, interpersonal skills, and skills for lifelong learning. The standards are:
• Read with understanding.
• Convey ideas in writing.
• Speak so others can understand.
• Listen actively.
• Observe critically.
• Use math to solve problems and communicate.
• Solve problems and make decisions.
• Plan.
• Cooperate with others.
• Advocate and influence.
• Resolve conflict and negotiate.
• Guide others.
• Take responsibility for learning.
• Reflect and evaluate.
• Learn through research.
• Use information and communications technology.

The standards include, but go beyond, academic skills, to define integrated skills processes that describe what is involved in using skills for the purposes in adults’ lives. So, for example, the components of the standard Read With Understanding are:

• Determine the reading purpose.
• Select reading strategies appropriate to the purpose.
• Monitor comprehension and adjust reading strategies.
• Analyze the information and reflect on its underlying meaning.
• Integrate it with prior knowledge to address reading purpose (Stein, 2000).

The standard describes what an adult does when reading a text.

In 1994, NIFL began developing the standards through a process that included adult students; stakeholders from a wide variety of groups including employers, trade unions, civic organizations, governmental bodies, and parents’ groups; and experts on educational standards. NIFL identified adult students’ purposes for participating in adult education. Three “role maps” described the broad range of activities that adults perform in their roles as workers, family members, and citizens and community members. NIFL worked with field development partners from adult education programs in 13 states and an expert review panel to develop the EFF content standards describing the skills adults use in these three roles. Additional
field research and expert review has led to performance continua describing performance of the EFF standards with increasing levels of complexity.

The NRC standards-based model requires assessment aligned with standards. The EFF staff determined that performance-based assessments were best suited to evaluating the integrated skills defined by the standards, and they developed continua of performance and accompanying level descriptors for 11 of the standards. These continua describe performance on the standards in terms of knowledge base, fluency, independence, and range. For example, an adult performing at Level 1 on the read with understanding performance continuum can "read and comprehend words in short, simple texts slowly and with some effort but with few errors, to independently accomplish simple, well defined, and structured reading activities in a few comfortable and familiar settings" (EFF Center for Training and Technical Assistance, n.d.), for example, to read store or product names.

An EFF quality model describes research-based program practices that support use of EFF standards, including "A systematic approach to accountability and program improvement based on meeting student and national goals" (Bingman & Stein, 2001). However, although adult education programs should be able to use the EFF standards and aligned performance assessments in their efforts to be accountable for meeting student goals and particular local goals such as building student leadership, EFF standards and assessments have not been approved for purposes of reporting on national goals for the NRS.

Vermont was involved in the early field development of EFF and uses EFF as the model on which statewide program improvement is based. Their Web site states:

The Department of Education and the adult education and literacy providers have adopted Equipped for the Future as the primary framework for standards, student goal setting curriculum, instruction, and assessment. The EFF Framework aligns with Vermont’s collective philosophy and vision for how education can support adult learners to function in their roles as workers, citizens, and family members. (State of Vermont, Department of Education, n.d.)

Specific Objectives in Vermont

In 2001, when the Adult Education and Literacy Programs staff at the Vermont Department of Education decided to move to a standards-based system, they determined that EFF met their needs as a framework of adult standards. Although the decision to adopt standards was to some extent
driven by the need to be aligned with the standards-based K–12 system, the state staff had other reasons to use standards and, in particular, the EFF standards. They were interested in broadening the curriculum to include a wider range of skills, such as problem-solving and interpersonal skills. The state staff found that teachers involved students in “wonderful activities” but did not take advantage of these activities systematically as a way to build a range of skills. The purpose of the learning activities was not always clear. State staff wanted teachers to be more intentional about what was happening in their classes and with their students, and for students to be clear about what they were learning. The state staff was also interested in moving toward performance assessment as a way for students to demonstrate competency in skills. They expected EFF to support both state and student goals.

The state staff took into account the structure of adult education in Vermont when implementing the EFF framework and standards. The Vermont Department of Education, Adult Education and Literacy Programs, contracts with a single provider, Vermont Adult Learning, to offer adult education services across the state. These services, including instruction in literacy and essential skills, English language learning, preparation for the GED, and an adult diploma program (ADP), are provided through 10 full-service adult education learning centers across the state. Vermont Adult Learning (and its three subcontractors) hire the teachers, 85% of whom work full time, and a statewide professional development team plans and contracts to provide professional development.

Because Vermont’s program improvement efforts have focused primarily on teachers and teachers’ instructional practice, professional development has been the primary approach Vermont has used to implement the EFF standards. Professional development in support of EFF has included workshops, but has moved toward more on-site efforts such as teacher inquiry, curriculum development, and having staff developers coteach with local teachers. The professional development has focused on helping teachers move from teaching sets of discrete skills to using the EFF standards to integrate skills instruction into learning projects that address issues in adults’ lives. For example, a class might have concerns about how to make decisions as a consumer. The teacher plans a series of learning activities that address this concern: comparing advertisements to choose a product, identifying unsupported statements in advertising claims, or writing a consumer complaint letter. The EFF standards help the teacher focus on the elements of the skills that are used in these activities, such as observe critically, which
includes the component “analyze the accuracy, bias, and usefulness of the information” (Stein, 2000, p. 33). Students learn to read critically, to write clear paragraphs, and other “academic” skills as they use them.

In addition to ongoing professional development on using the EFF standards to frame project-based instruction, the state has also developed performance-based assessments that are multistep activities or projects that allow students to demonstrate competence on a set of standards. For example, a student might be asked to research and summarize the positions of Vermont legislators in preparation for a conversation with the legislators on a particular issue of concern to the student. Their work is compiled in a student portfolio. The Vermont ADP has crosswalked, or identified the congruency of, the EFF standards with the state high school standards for this assessment development process. Assessors for the ADP examine portfolios of student work based on six performance-assessment activities as a “capstone assessment.” When their performance assessments are sufficiently reliable, the state hopes that all adult students will work toward the ADP based on EFF standards.

When the state introduced the performance assessments, teachers saw them as a useful way to structure teaching and asked to use them for instructional purposes. The state and Vermont Adult Learning are now working to involve teachers in developing assessment activities that can be used as an element of classroom instruction while they continue to develop performance assessments to be used as measures of achievement of the standards.

Although the state’s primary focus has been on the quality of instruction, in 2004, Vermont instigated a process of annual “quality visits” to each of the 10 learning centers. During the visits, a team of community members, teachers, and managers meet with program staff and students to examine how the center is meeting local goals, EFF standards, and NRS data collection. After the initial quality visit, the program develops an improvement plan, and the next year’s visit focuses on targets from these plans.

One major hurdle in the implementation of the EFF framework in Vermont has been the requirements of the federal accountability system and the NRS. Because programs cannot use performance on the EFF standards to report the learning gains required by the NRS, they continue to use standardized assessments for reporting purposes. It has not been possible for the programs or the state to align content standards, assessment, and accountability, the premise of the standards-based educational improvement approach.
Results

Professional development and the introduction of performance-based assessments encouraged some teachers to adopt EFF, but others were “a little reluctant to give up their traditional skills-based teaching methods and approaches.” When the ADP became standards-based, the state staff saw that “a pretty dramatic shift” had occurred as teachers became more willing “to shift their thinking and teaching strategies to support students in the ADP.” In 2005, the state staff estimates that as many as 75% of the 110 adult education teachers used the EFF standards in some way, but as few as 5% to 10% used the standards in a systematic way to design curriculum, plan instruction, and assess performance. They imagine that program managers are not using it to “a great extent,” so the program improvement is beginning at the classroom level and then may move to a programwide process.

Lessons Learned

EFF and a standards-based system are not yet fully implemented in Vermont, but the state staff has identified lessons they have learned to date. These are:

- **Assessment drives practice.** When assessment for the ADP was tied to the EFF standards, teacher interest in using EFF as the basis for instruction increased markedly. Having tangible performance tasks that led to something (the ADP) that teachers and students valued both lent credibility to EFF and helped teachers better understand how to use the EFF standards in instruction.
- **Manager support is critical.** Because the teachers have been the ones implementing the programs, managers may not understand EFF well enough to provide support to their teachers’ efforts. State staff are exploring ways to address this.
- **Provide teachers support over time.** The state has found that professional development that takes place with teachers in their classrooms working on projects over time has been more effective than single-session workshops in leading to change.
- **Performance assessment is difficult.** Developing assessments and training assessors to use them consistently has been more difficult than the state anticipated. Although they have been effective in “focusing teachers more on applied learning,” the assessments have been expensive to develop and the state is not yet satisfied with their validity and reliability.
All three of the states in the case studies are applying different models for systematic improvement to better serve the adults who participate in their adult education programs. Although each state adopted a model that suits its particular purpose, we found commonalities in practice across the models. For the sake of discussion, we write about these commonalities separately, but in fact, they are interrelated.

Improving Quality Within Different State Structures

Where adult education is located within a state structure may influence the type of improvement process the state adopts. Adult education in Oregon is a part of the Department of Community Colleges and Workforce Development system and has 26 programs. Program directors work full time and the majority of teachers work part time. In Tennessee, adult education is administered by the Department of Labor and Workforce Development, which aligns its goals with the needs of business and industry. The state has more than 90 programs; most have full-time directors and primarily part-time teachers. Vermont is structured very differently. Adult education is in the Department of Education and is aligned with the K–12 system. The state has one main program provider and offers services at 10 sites; each site has a local program director. Teachers and administrators are primarily full time.

The impetus for program improvement was different in each state. Oregon began its implementation of the AIDDE model as part of a pilot project to improve instruction. The pilot led to the realization that teachers need the support of program managers to make significant changes in instruction, and eventually led to the state’s adoption of the AIDDE model for comprehensive system improvement. In Tennessee, program supervisors took the lead in applying the Baldrige criteria to their programs. Use of the model began with one manager who wanted to improve her management skills so her program could be more effective. Her efforts spread to other managers and eventually their successes led to the state’s adoption of the Baldrige model for all adult education programs because not only had the model been tested in the field, but it was also valued by business and industry. Tennessee teachers have been involved only if they were part of local program-improvement teams. Vermont, on the other hand, focuses its efforts by using standards to guide instruction because the standards support the
state’s values and goals. Teachers have been participating since the development of the EFF standards and recently, program directors have become involved. The state structure may have influenced not only the choice of a particular model, but the way the model is applied to practice.

Developing a Common Language

Each program improvement model has a particular language that provides a way to think and talk about improvement in concrete terms. In Oregon, for example, the AIDDE model focuses on process, making it applicable to addressing a wide range of program components at local and state levels. Regardless of the action, those who are using it over time develop a shared understanding of what it means to “design an implementation plan” or “evaluate implementation.” In Tennessee, the language of the Baldrige criteria is widely accepted among state agencies, business, and industry. Adult education program staff who engaged in the self-study process have developed a shared understanding of the criteria as applied to adult education. Program staff know what types of improvement activities apply to “program leadership” or “faculty and staff focus.” Use of the EFF framework in Vermont has provided the same type of common language that reinforces the state’s focus on supporting adult learners in their roles as workers, citizens, and family members. Teachers who are applying the standards to instruction can use the EFF language to both think about their practice in new ways and develop a common understanding of standards as they apply them with learners and talk about them with other teachers. The common language makes the improvement process more accessible, enables those in roles at different levels of the system to share information, and provides a way to communicate more effectively with stakeholders outside the system.

Collaborating Across Boundaries

As in other types of organizations, adult education programs have numerous boundaries between different stakeholder groups. For example, professional development staff may design training based on national trends, whereas teachers want professional development based on local needs.

A boundary surrounds each of these groups and without intentional connections, professional development staff and teachers may each believe the other group is out of touch with what is needed. This can lead
A type of silo effect, in which staff members from one part of the program become disconnected from staff in other parts (Watkins & Marsick, 1993). These boundaries develop because the roles of learners, teachers, volunteers, local administrators, professional development staff, and state administrators are different. Crossing these boundaries as part of a program improvement process means that a member of a particular group participates in the activities of another group. As administrators, teachers, and learners cross boundaries, they gain a broader perspective of the system as a whole.

In Oregon, local program staff became more involved in state program operations and management. For example, state staff and program directors held a joint planning session. In Tennessee and Vermont, professional development staff invited staff from local programs to contribute to professional development because of their experience in practice. The Baldrige criteria require the involvement of all key stakeholders in the self-study and improvement process. This requirement leads naturally to teams that cross administrative and instructional boundaries. From an instructional perspective, the EFF model crosses the typical teacher–learner boundary as learners become involved in instruction based on their own goals. In the three states we studied, boundary crossing increased people’s awareness of the system as a whole and reduced the silo effect because individuals had a reason to move out of their particular area and engage with others.

Learning and Sharing Knowledge at Different Levels

Stakeholders at all levels have learned from these improvement processes. As local and state staff have gained more experience in applying the models, they have begun to develop a knowledge base about program improvement; sharing this knowledge base makes it available to the system as a whole.

Oregon focused improvement efforts on “going to scale”; in other words, as teachers or administrators engage in potential program improvement efforts, they explore ways to take what they have learned and apply it on a larger scale. In Tennessee, program managers who have conducted a successful self-study process share their knowledge with others by contributing materials to training or engaging in an online discussion about quality improvement. In Vermont, instructors are coteaching with professional development staff. Rather than adding new work, program improvement
models are intended to provide a clearer and more effective way of working. Although this may ultimately be the case, understanding a particular model and how to apply it takes considerable time and presents a steep learning curve for many. A key challenge for adult education program staff who engage in learning for ongoing continuous improvement is the limitation of resources (e.g., time for many part-time staff, and financial resources for many states).

Providing Professional Development

A model is only a guide. How to apply a model in a particular context, especially when the model suggests practices that are very different from those commonly used, is not self-evident. Most continuous-improvement models require translation from the language of the model to everyday practice in an ABE program (Ziegler, 2005).

In all three states, professional development was a key strategy for encouraging adoption of the model and its use in practice. Professional development in this instance was more than an occasional workshop. In Oregon, state staff received training from Abt Associates, and when the association of program directors was asked for volunteers to receive professional development, all members volunteered. In Tennessee and Vermont, programs received on-site support from professional development staff in their respective states. Although both time and cost intensive, on-site support provides more opportunities for inquiry and practice than single-session workshops. Each of the three states selected a model that had support from a larger federal organization. Staff who were knowledgeable about the model and had expertise in applying it were available to provide professional development. These states had the resources to obtain the education and training that they wanted.

Using Data Strategically

Each model stresses the importance of using data as either a strategic management tool or a strategic instructional tool. In the past, data in adult education traveled one way, from the local program to the state and on to the federal government. The purpose of collecting data was to report them, not use them (Merrifield, 1998). The emphasis on quality in the public sector changed the meaning of data from a reporting and monitoring mechanism to a program-improvement mechanism. At the federal level, programs are still reporting their data to the state and the states input the
data in the NRS system. However, Oregon and Tennessee are using data strategically at the administrative levels; the AIDDE and Baldrige models rely on data to identify program components that need improvement and to determine whether improvement has occurred. Oregon program directors, as a collective, set aside time for data analysis at meetings. Tennessee program directors receive specific training in interpreting data and making them meaningful and accessible. In Vermont, improvement of instruction also relies on data. By aligning the EFF standards with the ADP, the state has a quantitative measure that can be reported on the NRS and is aligned with their state standards represented by EFF.

**Aligning Program Processes**

All three states used the improvement models to align administrative processes, priorities at the state and local level, and instructional processes. States in the case studies saw a relationship between improving program processes and results; however, each state defined results more broadly than program outcomes, such as an increase in the number of participants advancing an NRS level. Results might have included greater involvement of staff in planning, increased customer satisfaction, or more teachers applying standards. In the case studies, state staff did not make a direct link between improving a particular program process and increasing a particular program outcome.

**Becoming More Deliberate and Systematic**

All three states became much more deliberate and systematic about program improvement, but in varying ways. The AIDDE model is process oriented. It does not suggest what program component to improve; rather, it provides a process (analyze, identify, develop, document, and evaluate) that can be applied to instruction or administration at local or state levels, and by any member of the system. The Baldrige framework defines categories for both processes and results but organizations must identify areas for improvement and address these in different ways. For example, the category of strategic planning must be addressed as part of the self-study process; however, each program might answer questions about strategic planning differently. Although measuring results is part of the model, programs might have varied results, including those collected by the NRS, depending on the outcome of their self-study processes. Use of the EFF framework for program improvement is based on a set of established standards.
By using a particular model, program staff consider not only the instructional areas they will address and how they will address them, but also what resources they will need, the data they will need before they start, how they will measure success, and how the learner will know that success has been achieved. By using a systematic process, program improvement becomes more proactive than reactive. Being proactive by engaging in inquiry and reflection leads to the type of planning and decision making that supports a long-term view of improvement.

**IMPLICATIONS FOR PRACTICE, RESEARCH, AND POLICY**

Although the systematic program improvement models described in the three case studies were different from one another, their commonalities suggest that a systematic approach has merit. Looking across these case studies, we can see implications for practice, research, and policy.

**Practice**

*Meaningful Data*

The program improvement models described in this chapter have the potential to strengthen widespread access to information and learning that results from sharing and interpreting information. Using a framework highlights the importance of making data more transparent and accessible and therefore open to scrutiny by broad stakeholder groups (Cervero & Wilson, 1994). A corresponding challenge is making data available for program improvement, particularly data that may not be captured by state systems designed to collect NRS data. Collecting these data requires resources that may be beyond the capacity of small states, or states that do not receive money from the state for adult education.

*Professional Development*

Each of the three states has used professional development to learn to apply the model, because improvement approaches are likely to require changes in practice. This requires aligning professional development activities to meet both program needs and instructional needs. Programs can also use a program-improvement model as an inquiry method for professional development. In this way, the model itself becomes integrated into practice.
All three states used their model to improve practice in both administration and instruction and stimulated learning and changes in practice.

**Research**

*Connecting Program Performance and Program Processes*

The relationship between systematic improvement of program processes and student performance as measured by NRS outcomes is unclear. Although standards-based models appear to have relevance for improving instruction, it is not clear whether these improvements lead to greater learning gains and if they do, how this happens. We do not really know which changes affect which outcomes because research has not focused on this relationship. What is the relationship between particular program components and student outcomes? Research that sheds light on this connection can help us understand whether one program component, such as intake, influences a particular performance indicator, such as learning gains.

*Program Improvement at the System and Instructional Levels*

In what ways does the use of a statewide program improvement model influence instruction? Although numerous anecdotes in the literature suggest that applying program improvement models leads to positive change, few studies have actually investigated this process. Those that have been conducted in K–12 and higher education focus mainly on administration and question how process-oriented models might influence instruction (Xue, 1998). Teachers traditionally enjoy professional autonomy in making decisions about the most effective ways to help individual students. Further systemization, which may be an asset to administrative functions, may limit teachers in their responses to student needs. Research is needed to better understand teacher change and what supports teacher change.

**Policy**

*Resources*

Ongoing, comprehensive program improvement takes resources, including time, funding for professional development, and collection of data not gathered by the federal performance accountability systems. States may have multiple funding sources for adult education—or only
one funding source—to dedicate to program improvement. States with limited resources may not have the capacity to engage in a systematic improvement process. If a policy for program improvement is established, the federal agency supporting adult education must consider these implications for state structure and budgets.

Program Quality Indicators

The PQI that were in place attempted to balance improving program results with improving program processes. Although the PQI measures were not nationally defined, and therefore not comparable across states, many states believed the PQI had merit, and in fact, they are still in use in two of the case study states. Rather than starting over, policymakers could build on what states learned as they implemented the PQI. These lessons could help align federal, state, and local goals so that neither states nor local programs get caught between competing stakeholder needs.

Measuring Outcomes—The Limitations of Standardized Assessments

The adult education system has a limited number of standardized assessment instruments that local programs can use. For example, Vermont used the EFF standards-based system for instruction and performance assessment but also uses standardized tests that are not aligned with their standards for the external accountability system. The NRS relies on standardized assessments to have comparable quantitative data across states and programs. However, the adult education system has a limited number of standardized assessment instruments that local programs can use. For example, Vermont used the EFF standards-based system for instruction and performance assessment but also used standardized tests that are not aligned with their standards for the external accountability system. However, not all of the assessments being used by states were designed to be used for instruction. Most instruments define learning gain narrowly, to make it more measurable. Although standardized assessment can be compared, one danger is that assessment instruments drive the whole system. Those who are at lower literacy levels or those who are native speakers of languages other than English may have goals that are not measured by the NRS and they may achieve gains that cannot be measured with current standardized tests. States that define assessment more
broadly may need a parallel system to use assessments not accepted by NRS. Policymakers must find ways to broaden the assessment instruments and options available to states.

**Achieving Adult Education Program Quality**

In their efforts to take a systematic approach to improving program quality, Oregon, Tennessee, and Vermont each took a different approach that helped state and local staff gain clarity about the meaning of program quality. Each state has in place a process that it believes will move it toward quality. However, as more states adopt improvement models, they face ongoing demands for increasing performance outcomes and the constant threat of fewer resources. A disjuncture may occur between their conceptions of quality and the implied federal definition of quality as ever-increasing performance on a narrow set of measures. Although current policies have addressed the need for adult education to have aggregate performance data that demonstrate their effectiveness, the system still needs to develop a national accountability system that can also serve to increase the quality of services for adult learners. All stakeholders, including agencies at the federal level, need to be involved in a meaningful, integrated process of program improvement.

**REFERENCES**


APPENDIX: E-MAIL SURVEY INSTRUMENT

1. Name of state
2. Does your state have a statewide initiative that focuses on program improvement, i.e., does your office involve programs in a systematic statewide process of program improvement?
3. If you answered “yes” to Question 2, please continue. If you answered “no,” thank you for your help!
4. Does the process include use of NRS data? Yes or No
5. Is the process based on a national model, e.g., EFF, NAEPDC Going to Scale, Baldrige?

If so, which one:

6. About what percent of programs are involved: a few, about half, most, all?
7. Approximately when did you begin this process?
8. Please provide contact information for a staff member who could give us more information by phone:

If you complete this survey, we appreciate your consent to participate in this study. Thank you!