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ABSTRACT

This report presents findings from an evaluation of 84 educational projects funded by the Appalachian Regional Commission (ARC) during the 1990's. Data were collected via document reviews, interviews, a mail survey completed by 78 projects, and eight site visits. Most projects provided services to rural areas or community segments most in need. Projects primarily served elementary and secondary students and adults. The majority of projects aimed at developing educational resources, providing training to students and other community residents, or installing telecommunications applications. The most common services offered were adult literacy, secondary education, basic skills, and math and science education. Almost three-quarters of survey respondents reported that their level of accomplishment met or exceeded their original expectations. Many projects were able to sustain themselves beyond their ARC grant, but not many had expanded significantly beyond their original mission. Recommendations were made to enable the ARC to further enhance its capacity to assist its educational projects. Performance goals should be clarified and expanded. The ARC should continue to enhance its application workbook and guidelines. Final report requirements should be standardized. The practice of conducting validation visits to a sample of ARC projects should be continued. Workshops in effective data collection and analysis strategies should be provided. The ARC database should be enhanced and its information dissemination practices reinforced. Seven extensive appendices present examples and analyses of outcomes, survey data, notes, methodology, project descriptions, and the survey questionnaire. (Contains 21 tables, 15 figures, and 24 exhibits.) (TD)

Evaluation of The Appalachian Regional Commission's Educational Projects: *Final Report*

Study Conducted by Westat
For the Appalachian Regional Commission

March 2001

Evaluation of The Appalachian Regional Commission's Educational Projects: *Final Report*

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NOTE: The views, findings, conclusions, and recommendations expressed in this report are those of the authors and do not necessarily represent the official views, opinions, or policy of the Appalachian Regional Commission.

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EXECUTIVE SUMMARY

This report summarizes findings from an evaluation of the implementation and impact of 84 education projects funded by the Appalachian Regional Commission (ARC) during the 1990s. The study—conducted by Westat, a Rockville, Maryland, research firm—was designed to examine the range of activities that projects used to enhance learning opportunities, the extent to which these activities were implemented, the accomplishments associated with these activities, and the strategies that projects used to sustain themselves beyond the ARC grant period. Of particular interest was the extent to which projects achieved the outcomes set forth in their original proposals to ARC—and whether the activities and benefits associated with the ARC grants have been sustained over time.

Overview of Educational Attainment in Appalachia and the ARC

The Appalachian Regional Commission (ARC) was created in 1965 to promote economic and social development in the states and counties that made up the Appalachian Region.[1] The Commission represents a federal-state alliance designed to "advocate for and partner with the people of Appalachia to create opportunities for self-sustaining economic development and improved quality of life."[2] In 1994, the ARC began a broad-based strategic planning process, ultimately yielding a strategic plan for 1997-2002. The strategic plan clarifies the Commission's role in promoting progress in the 406 counties of the Appalachian Region and highlights five main goals:

- Appalachian residents will have the skills and knowledge necessary to compete in the world economy of the 21st century.
- Appalachian communities will have the physical infrastructure necessary for self-sustaining economic development and improved quality of life.
- The people and organizations of Appalachia will have the vision and capacity to mobilize and work together for sustained economic progress and improvement of their communities.

[1] The Appalachian Regional Development Act, as amended in 1998, identifies the 406 counties of the Appalachian Region. These counties include all of West Virginia and parts of Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia.

[2] Setting a Regional Agenda, ARC Strategic Plan: 1997-2002.

- Appalachian residents will have access to financial and technical resources to help build dynamic and self-sustaining local economies.
- Appalachian residents will have access to affordable, quality health care.

The first strategic goal is the focus of this study. There are two specific objectives for this goal (with the second being the focus of this study):

- The percentage of workers receiving basic education and skills training, skills upgrading, and customized training will increase, leading to development of a workforce that is competitive in the 21st century world economy.
- The percentage of students participating in school readiness, dropout prevention, school-to-work transition, and GED programs will increase, thereby raising the college-going rate and preparing students for the world of work in the 21st century.

Study Overview

In summer 1999, Westat initiated an evaluation of a sample of educational projects that received ARC funding during the 1990s.[3] A primary purpose was to assess the extent to which projects were able to achieve the outcomes they delineated in their original proposals to ARC. Also of interest was whether project-level gains had been sustained beyond the period of the ARC grant. The following evaluation questions guided the overall conduct of the study:

- What are the characteristics of communities and individuals that benefited from the projects?
- What problems were projects designed to address?
- What approaches did the projects use to ameliorate these problems?
- What specific outcomes were the projects designed to achieve?
- To what extent have projects accomplished their objectives?
- To what extent were project-related gains sustained beyond the period covered by the ARC grant?
- What factors influenced the projects' ability to implement their approaches and achieve their objectives?

[3] This report only examines a subset of the types of education projects funded by ARC. Vocational education and workforce training projects will be examined in a subsequent report.

The evaluation utilized the following data collection approaches to derive quantitative and qualitative assessments of the impact of ARC's investment in educational projects:

- A review of existing project and state documents and materials to inform the development of survey instruments and site visit interview protocols. The document review was also used to identify projects' anticipated goals and objectives.
- Interviews with ARC staff, including project coordinators and the program operations director, to gain a better understanding of the application process and project management.
- Telephone interviews with state-level and Local Development District (LDD) level ARC coordinators. The interviews were designed to enhance our understanding of the educational priorities of the 13 states that compose the Appalachian Region.
- A mail survey to 91 ARC education projects that received funding during the 1990s. (The 84 projects that responded to this mail survey eventually constituted the actual study sample.) This survey was designed to collect a common set of data regarding projects' characteristics, implementation practices, outcomes, and sustainability. A customized addendum to the survey collected narrative information on the extent to which a project's original outcomes were achieved.
- Site visits to eight projects that had successfully provided community residents with a new or enhanced educational service. The purpose was to obtain more detailed information about unique and sustainable practices that might be replicated elsewhere.

Characteristics of the Study Sample

According to its Strategic Plan, part of ARC's mandate is to "address economic underdevelopment that is deeply rooted in regionwide, historic patterns of isolation, exploitation, and outmigration." Study findings suggest that the projects in the study sample contributed to the Commission's goal of reaching those segments of Appalachia that are geographically isolated. Most projects provided services to rural areas—with almost half (48 percent) being situated in a region that was entirely nonmetropolitan. Equally significant, the community segments that were targeted generally reflected ARC's goal (as articulated in both its strategic plan and the provisions of its Distressed County Program) of serving those most in need—including persons in extreme poverty (82 percent), persons who are geographically isolated (77 percent), those who are unemployed or underemployed (70 percent), youth at risk of dropping out of school (60 percent), and persons with disabilities (59 percent). In addition, one-third (31 percent) of projects were serving areas that included distressed counties. Although

half of the projects in the study sample did not serve a distressed county,[4] their efforts were still focused on those community segments most in need of services. Many of the residents in these nondistressed areas faced similar educational and economic barriers as residents in distressed areas, and therefore required similar assistance from ARC.

Projects in the study sample primarily served elementary and secondary students (48 percent) and adults (33 percent). A small percentage of projects serve preschool students (7 percent) and communities as a whole (12 percent). Among projects serving elementary and secondary students, the vast majority were addressing the needs of all students (38 percent of all projects), rather than of a targeted group of students (10 percent of all projects).

A comparison of projects in the study sample to the universe of all ARC projects funded during the same period found that the sample and the universe were roughly similar in economic and metropolitan status, ARC grant amount, and total project cost. All ARC states except Maryland (only 2 percent of all education projects) were included in the study sample. Georgia and Kentucky were slightly overrepresented in the sample, while New York was slightly underrepresented. The mix of ARC project types in the sample varied only slightly from those of all education projects. Adult literacy, basic skills, and math/science education were overrepresented in the study sample, while distance learning was underrepresented in the sample. Child care and telecommunications were absent from the sample altogether. Finally, we were unable to match project types used for the study with those of all education projects due to the reclassification of the sample into adult, elementary/secondary (all students), elementary/secondary (targeted students), preschool, and communitywide.

Project Activities

The projects in the study sample reported conducting a total of 682 distinct activities—556 of which were partially or fully funded by ARC. The majority of projects conducted an ARC-funded activity aimed at developing educational resources (78 percent of projects), providing training to students and other community residents (71 percent), and/or installing/enhancing telecommunications applications (64 percent). The average educational initiative conducted activities in three different categories—suggesting that projects were fairly ambitious in the diversity of activities they chose to implement.

[4] The remainder of projects were statewide or multistate and were not assigned an economic designation.

Across all activity types, the most frequently cited ARC-funded undertakings were installing computers (51 percent of projects), providing academic skills training (46 percent), providing computer training (45 percent), providing teacher or tutor training (45 percent), and providing literacy training (37 percent).

Over four-fifths (85 percent) of respondents met or exceeded their implementation objectives. Only 15 percent indicated that their level of implementation on at least one task was less than planned—and no projects reported that they implemented all of their activities less than planned. Nearly all of the 556 ARC-funded activities were implemented as planned—in fact, 21 percent were implemented more than planned. Finally, the surveys and case studies provide little evidence that projects encountered any widespread barriers that affected the degree to which an activity was implemented. With the exception of underestimating the time/effort needed to conduct the project, no more than one-fifth of respondents cited any single barrier as having hindered their capacity to carry out the activities in their ARC grants.

Project Outcomes

Projects were successful in achieving the outcomes they set forth in their original requests for ARC support. Almost three-quarters of survey respondents reported that their level of accomplishment met or exceeded their original expectations. Just under half (47 percent) of the 203 outcomes that projects identified in their ARC proposals were ultimately achieved the same as planned, while 30 percent were achieved more than planned and 13 percent were achieved less than planned. Skeptics might discount some of these claims of success as being based on self-report. However, documentation from the mail surveys suggests that many of these claims were, in fact, based on either a study (e.g., pre- and post-intervention assessment of participants' basic skill levels) or external data source (e.g., students' scores on tests, school dropout rates, unemployment rates). Further, the case studies uncovered convincing evidence that the efforts of the projects in the study sample resulted in a broad range of educational, economic, and social gains.

Another important finding from our analysis of project outcomes was that over four-fifths (86 percent) of the projects in the study sample were, in fact, able to describe at least one anticipated outcome or community benefit in their proposal to ARC. (As stated above, the document review was used to extract and categorize the outcomes projects initially set out to achieve.) These outcomes, which we categorized into three general categories (educational, economic, and family/individual well-being),

outlined a skill or circumstance that would be enhanced as a result of their ARC grant. However, only a few of the outcomes described in the application materials had a quantifiable benchmark against which project success could be measured. Most projects used more general—and less quantifiable—language to describe their desired community goals. In addition, a small number of projects outlined a lofty goal that was beyond the possibility of a single project to achieve. Nonetheless, the fact that most projects had identified an outcome—and half appeared to have access to tangible evidence to back up their claims of success—suggests that a framework exists for ARC to build upon as it seeks to enhance its program monitoring capacities.

Finally, survey respondents were asked to hypothesize what would have happened if their project had not received federal funding through ARC. Two-thirds (67 percent) indicated that their projects would never have been implemented without their ARC award. The remaining 27 respondents indicated that their projects probably would have been implemented using alternative funding sources. However, the majority of these 27 projects indicated that without ARC funding their projects would have offered dramatically fewer services (67 percent), reached significantly fewer people (56 percent), and suffered substantial delays in implementation (52 percent).

Project Sustainability and Expansion

Findings from both the survey and case studies suggest that many of the projects in the study sample were able to sustain themselves beyond their ARC grant. At the time the mail survey was administered, two-thirds of projects were still in full operation and/or had grown or expanded—and almost all projects reported that at least some of their ARC-funded activities or equipment were still in use.

While projects appeared to have sustained themselves, it did not appear that many had expanded significantly *beyond* their original mission. Thirty projects were serving more beneficiaries than originally intended, although the characteristics of these beneficiaries had basically remained the same. Additionally, 38 projects had generated spinoff activities, but most of these actually constituted an expansion in the number of persons served.

Several factors appeared to be responsible for the high proportion of projects that remained operational or had expanded over time. In most cases, the general demand and need for the services were

still present or had grown—i.e., projects had expanded because there were simply more people who needed their services. Many projects also reported that they had enough financial and community support to allow them to continue or expand. Quality services, dedicated staff, strong leadership, and technological advances were also considered facilitators of expansion. While most of these projects were sustained, in many cases that result seemed serendipitous and was achieved without a high degree of planning. This finding suggests that project coordinators might encourage prospective projects to think ahead about steps they will take to sustain their efforts beyond the ARC grant period.

Recommendations

The lack of any prominent implementation barriers suggests that grant recipients were generally satisfied with the level of the financial and technical support they received from ARC. Similarly, case study participants praised the role that ARC played in making their projects possible. The mail survey, case studies, and telephone interviews with state and LDD staff were not explicitly designed to assess whether ARC staff were successful in promoting project-level success. Nonetheless, the absence of criticism among some of the Commission's key stakeholders represents an important and encouraging study finding.

The ultimate aim is for ARC to identify exemplary models of education improvement—and to develop strategies for duplicating these models throughout the Appalachian Region. In order for this to occur, ARC needs timely access to information about what is happening in the field. It also needs valid and reliable data on the types of educational interventions that are most likely to produce tangible results. The Commission now requires that its grant recipients provide detailed information about their anticipated and actual outcomes. (These requirements predate most of the projects in the study sample.) The following represent steps ARC might take to further enhance its capacity to monitor and assist its educational projects and to document the extent to which projects are meeting their own objectives and furthering the Commission's strategic goals:

- **Clarify and expand upon the performance goals for Goal 1.** The lone performance goal for Goal 1 focuses on a broad output ("Provide access to education and training services to 45,000 students/trainees as a step to ensuring an educated, resourceful, and skilled population"), as opposed to a benefit that could be expected to occur if an education intervention is successful. We therefore recommend that ARC develop additional performance goals that might be incorporated into future versions of the ARC Strategic Plan. These additional goals could build upon the educational,

economic, and family/individual well-being outcomes that were reported on the mail survey.

- **Continue to enhance the ARC's application guidelines.** In 1998, the Commission published an application workbook and application guidelines designed to improve the quality and consistency of the proposals submitted to ARC.[5] While this generic framework is sufficient, we would recommend that the Commission provide additional guidance and more explicit examples as to what constitutes an acceptable request for ARC assistance. The purpose would be to compel applicants (and ARC project coordinators) to think ahead about measuring project success and maximizing the likelihood of long-term sustainability. A secondary purpose would be to devise a framework for collecting standardized information from all applicants that could be entered into ARC's database.

- **Standardize ARC's final report requirements.** The most recent ARC Grant Administration Manual contains general guidelines and an example of topics that projects *might* address in their final report. However, few of the projects in the study sample provided the level of detail suggested by this model. We therefore recommend that ARC require that all projects use these guidelines when completing their closeout report. We also recommend that ARC provide customized examples of outputs and outcomes for each of the Commission's five strategic goals. Finally, projects should be encouraged to describe the methodologies that were used to document project success in the project outcome section.

- **Continue conducting validation visits to a sample of ARC projects.** The Commission recently began conducting validation visits to projects that are no longer receiving ARC support. The purpose of these visits is to assess whether projects ultimately attained their longer term outcomes. In addition to helping uncover tangible evidence of project success, these visits have provided project coordinators additional justification for requiring that applicants identify outcomes that can be expected to occur several years after the end of their ARC grant period. We believe that these visits serve an important function—especially if they compel projects to consider how their efforts will be assessed in future years—and should therefore be continued.

- **Provide workshops in effective data collection and analysis strategies.** Findings from both the survey and case studies suggest that projects had difficulty conceptualizing and operationalizing even the most basic data collection activities. This lack of evaluation data ultimately hinders ARC's ability to assess the effectiveness and impact of its education projects. Equally important, in an age of educational accountability, a project that lacks credible evaluation data may be at a disadvantage as its seeks funding from other sources. We recommend that ARC consider holding evaluation workshops with its LDDs and other interested stakeholders on a periodic basis—with particular emphasis on techniques for

[5] Most of the projects in the study sample were funded before ARC had revised its application guidelines or published the ARC Project Application Workbook. However, our preliminary review of grant proposals submitted under these new guidelines (for an upcoming study of ARC's vocational education and workforce training projects) suggests that they have had the intended effect of increasing the amount of pertinent information provided in applications and improving the quality of anticipated outcomes.

collecting baseline and follow-up data on project participants' educational and economic status.

- **Enhance the ARC database.** The ARC database contains a wealth of information about the projects that have received Commission funding over time. However, our experience in using this resource suggests that some of the data that ARC collects from its grant recipients are either incomplete or inaccessible. This has resulted in an underutilization of an important resource tool for systematically monitoring projects' activities and outcomes. We therefore recommend that ARC (1) add a field in the ARC database that links Commission-funded projects with successor state-funded projects, (2) enter information on the economic designation and metropolitan status of *all* counties that a project is serving, and (3) divide project type into two separate codes—one for the population that is to be served, and one for the overall approach or type of service that is to be provided.

- **Reinforce ARC's dissemination practices.** The Commission's Strategic Plan specifies that ARC's national staff are to serve as information brokers within the Region by disseminating information to stakeholders through studies, public forums, and workshops. ARC is already using several mechanisms to disseminate information about successful projects, including articles about specific projects in *Appalachia Magazine*, annual "best practices" conferences, and technical assistance with individual projects. While these approaches are all valuable, there are additional steps that ARC might take to enhance the level of information (e.g., effective implementation strategies, cost-effective approaches for collecting and analyzing outcome data) that can be made available to current and future grant recipients. One approach would be to develop an on-line clearinghouse for LDDs and communities looking for ideas about how best to address an educational barrier.

1. INTRODUCTION

Although educational attainment in Appalachia has increased in the last 30 years, stubborn problems associated with illiteracy, lack of access to resources (both educational and technological), lack of appropriate child development programs, and lack of services for at-risk youth persist. While the region is growing stronger overall, there are pockets where considerable progress is still needed. According to the Request for Proposal:

> Considerable educational deficits...remain in portions of the Region, particularly throughout much of central Appalachia, where the average high school completion rate for youth 18 to 24 years old is only 68 percent. Adult high school completion rates are at the national average for metropolitan counties of northern Appalachia, but are still only 60 percent for rural southern Appalachia and only 52 percent for rural central Appalachia.

Moreover, as stated in the Appalachian Regional Commission's strategic plan:[1]

- More than 4 million adult Appalachians do not have a high school diploma or GED; 2 million have less than a ninth-grade education. These Appalachians are not equipped to take advantage of technical or skills training.
- Many areas of the Region—particularly in central Appalachia—have dropout rates of more than 40 percent. Regionwide, 61 counties have rates that exceed 50 percent. The ripple effect of high dropout rates is a greater demand on social services and an increase in the number of working poor.
- Most of the 50 percent of Appalachian students that are not college bound do not have the critical thinking and computer skills required by today's technology-oriented employers.
- Rural counties in Appalachia are twice as likely to be considered "severely distressed" as rural counties elsewhere in the nation.
- The geographic and cultural isolation that led the Region to fall behind in the nation in economic development is also an impediment to its participation in the globalization of the nation's economy.

This report summarizes findings from an evaluation of the implementation and impact of 84 education projects funded by the Appalachian Regional Commission (ARC) during the 1990s. The study—conducted by Westat, a Rockville, Maryland, research firm—was designed to examine the range

[1] Setting a Regional Agenda, ARC Strategic Plan: 1997-2002.

of activities that projects used to enhance learning opportunities, the extent to which these activities were implemented, the accomplishments associated with these activities, and the strategies that projects used to sustain themselves beyond the ARC grant period. Of particular interest was the extent to which projects achieved the outcomes set forth in their original proposals to ARC—and whether the activities and benefits associated with ARC grants have been sustained over time.

This chapter provides an overview of ARC, the steps it has taken in recent years to enhance educational attainment throughout the Region, and the process by which the Commission determines which initiatives should receive grant funding. It also provides an overview of the purpose and conduct of the evaluation study.

1.1 Overview of the Appalachian Regional Commission

The Appalachian Regional Commission was created in 1965 to promote economic and social development in the states and counties that compose the Appalachian Region.[2] The Commission represents a federal-state alliance designed to "advocate for and partner with the people of Appalachia to create opportunities for self-sustaining economic development and improved quality of life."[3] The strategic plan clarifies the Commission's role in promoting progress in the 406 counties of the Region:

> ARC's role is to work collaboratively in effectively targeting resources to achieve the vision. The Commission's intention is to equip the people and communities of Appalachia with the entrepreneurial skills and enterprise development resources they need to create self-sustaining local economies...ARC's mandate is to address economic underdevelopment that is deeply rooted in regionwide, historic patterns of isolation, exploitation, and outmigration. ARC is specifically charged with creating regional solutions to pervasive economic problems that reach broadly across state lines.

The Appalachia Regional Development Act (ARDA) established the Appalachian Regional Commission as a partnership between the governors of the 13 states in the Region and a presidential appointee representing the federal government. The federal appointee and one of the governors act as co-chairs of the Commission. Within each state, local development districts (LDDs) provide for

[2] The Appalachian Regional Development Act, as amended in 1998, identifies the 406 counties of the Appalachian Region. These counties include all of West Virginia and parts of Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia.

[3] Setting a Regional Agenda, ARC Strategic Plan: 1997-2002.

grassroots-level participation, so that ARC activities originate from and ultimately benefit the communities. The ARDA focuses on ameliorating the widespread poverty in Appalachia by making investments in the education and job skills of community residents. The Act specifically directs ARC to:

- Promote federal-state cooperation in devising a regional approach to development;
- Provide the major portion of funding for a regional highway system to alleviate the Region's isolation;
- Work with existing federal and state agencies to build the broad array of community and human development programs needed to correct the enormous shortfalls in education, health care, and other services that were the legacy of decades of neglect;
- Help develop the local leadership that is essential to the success of the federal-state partnership at the community level; and
- Serve as an advocate and broker for the Region with public and private organizations to ensure coordination of all available resources to support Appalachia's development.

1.2 ARC Strategic Goals

In 1994, ARC began a broad-based strategic planning process, ultimately yielding a strategic plan for 1997-2002. This plan includes five strategic goals directed at improving the local and regional economy through education, infrastructure (physical and organizational), and access to resources and health care (Exhibit 1-1). The first strategic goal of ARC—and the focus of this study—is that the people of Appalachia will develop the "skills and knowledge necessary to compete in the world economy of the 21st century." There are two specific objectives for this goal:[4]

- The percentage of workers receiving basic education and skills training, skills upgrading, and customized training will increase, leading to development of a workforce that is competitive in the 21st century world economy.
- The percentage of students participating in school readiness, dropout prevention, school-to-work transition, and GED programs will increase, thereby raising the college-going rate and preparing students for the world of work in the 21st century.

[4] This evaluation did not examine the vocational education or workforce training projects that fall under these objectives.

Exhibit 1-1. ARC strategic goals, 1997-2002

1. Appalachian residents will have the skills and knowledge necessary to compete in the world economy of the 21st century.
2. Appalachian communities will have the physical infrastructure necessary for self-sustaining economic development and improved quality of life.
3. The people and organizations of Appalachia will have the vision and capacity to mobilize and work together for sustained economic progress and improvement of their communities.
4. Appalachian residents will have access to financial and technical resources to help build dynamic and self-sustaining local economies.
5. Appalachian residents will have access to affordable, quality health care.

In the years since most of the study sample projects were funded, ARC has taken steps to further define these objectives in an application workbook provided to State Program Managers. New guidelines delineate output and outcome measurements for each objective. Whenever possible, ARC is requiring the use of these measurements in its grant applications. In addition, project coordinators provide periodic training to LDDs in the use of this workbook.

For the first objective (workers), the output measure is the number of workers who participate in a skill activity, and outcome measures are the number of workers who obtain employment or retain employment. ARC's progress with respect to these outputs and outcomes is examined in a subsequent evaluation report that focuses on the Commission's vocational education and workforce training projects.

The second objective (students) pertains to the projects in the study sample. The output measure is the number of students participating in the educational activity. Outcome measures include the number of students who:

- Obtained a GED within 1 year;
- Graduated from high school (at-risk dropouts);
- Completed a school readiness activity and tested on grade level entering kindergarten; or

- Entered the workforce after participating in a school-to-work program within 1 year (high school/college students).

The Strategic Plan delineates several broad strategies for developing the skills and knowledge needed to compete in the current economy. These approaches include (1) developing partnerships with other agencies, including the U.S. Department of Energy (e.g., Oak Ridge National Laboratory), the National Science Foundation (e.g., Appalachian Rural Systemic Initiative), and the Southern Regional Education Board (e.g., "High Schools that Work" program), (2) forging partnerships with states aimed at identifying areas of need and developing targeted interventions, (3) developing private-public national and regional collaborations, (4) using advanced telecommunications to enhance teacher training and worker preparation initiatives, and (5) identifying exemplary models of education improvement and strategies to duplicate them throughout the region. In addition, the Plan identifies one performance measure for Goal 1: "Provide access to education and training services to 45,000 students/trainees as a step to ensuring an educated, resourceful, and skilled population."

1.3 Process by Which ARC Grants Are Awarded

To accomplish its five strategic goals, ARC provides financial and technical support to local, regional, and multistate projects through its Area Development Programs. The process for awarding these grants reflects the underlying partnership between the Commission and participating states, as well as the need to give local communities a voice in determining how ARC funds are to be allocated. As such, most of the projects included in the study sample originated at the local or state level. Many were forwarded to the attention of ARC after a local or statewide competitive process.

Each year, the 13 states of Appalachia prepare individual annual strategy statements and spending plans. These documents contain state-level goals (which are aligned with ARC's five strategic goals) and corresponding proposals for each of the specific initiatives that are being recommended for funding. In some states, these initiatives are developed—in consultation with the LDDs—to reflect state and/or local priorities. In others, applicants submit proposals to their LDD or directly to the state and subsequently participate in a competitive review process. Our interviews with LDD and state-level staff revealed that no two states use the same method for determining which projects should be proposed for funding, and each LDD works under varying degrees of autonomy and provides vastly different amounts of technical assistance both before and after an ARC grant is awarded.

Once approved by the governor, a state's recommendations for project funding are submitted to ARC. Each proposed project is then reviewed by ARC project coordinators and, in most cases, approved by the federal co-chair. Project coordinators can negotiate changes to the proposed project with State Program Managers. In most cases, adjustments are made to timetables and budgets. More recently, negotiations have surrounded the substance and specificity of outputs and outcomes. A limited number of projects originate and are funded each year directly through the Commission and ARC set-asides. These projects are subject to the same policies and procedures as those funded through individual states.

1.4 Program Changes

Over the past several years, the ARC has made some changes to its application, proposal review, and program monitoring processes. First, as described previously, program staff developed a workbook for state program managers and applicants with the intent of collecting more complete application packages.[5] By providing examples of outputs and outcomes, they hoped to encourage prospective projects to be mindful of these concepts when designing their implementation plans and to identify specific outputs and outcomes in their grant proposals. Second, staff provided a Grant Administration Manual that describes what should be included in quarterly progress reports and a project's final report. The manual includes sample formats and examples of how output and outcome measures can fit into the narratives. Program staff are also taking a greater role in negotiating with states and projects to improve the quality of the projects by requiring that outcomes be more specific. Most recently, ARC staff have begun making site visits to a sample of projects 2 years after the end of their grant period. These validation visits are designed to assess whether projects eventually achieve their longer-term outcomes.[6]

Early work for a subsequent study on ARC's vocational education and workforce training projects has shown that these changes have, in fact, made a difference. A comparison of documentation from projects funded in the early 1990s to projects funded more recently shows a much greater emphasis on outcomes in grant applications. Because findings and recommendations drawn from this evaluation are

[5] The ARC Project Application Workbook contains a number of useful items to help state staff develop their own application packages and ensure complete documentation, including grantee checklists, internal checklists, and required federal forms.

[6] As is discussed in Study Methodology (Section 1.6), these requirements were put in place after most of the projects in the study sample had been awarded.

reflective of a program that has changed, we do not attempt to contextualize these findings to the current system.

1.5 Study Overview

In summer 1999, Westat initiated an evaluation of a sample of educational projects that received ARC funding during the 1990s. A primary purpose was to assess the extent to which projects were able to achieve the outcomes they delineated in their original proposals to ARC. Also of interest was whether projects' gains had been sustained beyond the period of the ARC grant. The following evaluation questions guided the overall conduct of the study:

- What are the characteristics of communities and individuals that benefited from the projects?
- What problems were projects designed to address?
- What approaches did the projects use to ameliorate these problems?
- What specific outcomes were the projects designed to achieve?
- To what extent have projects accomplished their objectives?
- To what extent were project-related gains sustained beyond the period covered by the ARC grant?
- What factors influenced projects' ability to implement their approaches and achieve their objectives?

The evaluation utilized a number of data collection approaches to derive quantitative and qualitative assessments of the impact of ARC's investment in educational projects. These approaches were applied to a sample of the projects that began receiving ARC funding between 1990 and 1998.[7] The following data collection strategies were used to address these evaluation questions:

- A review of existing project and state documents and materials to inform the development of survey instruments and site visit interview protocols. Findings from the document review were also used to generate a customized addendum to the survey that contained each project's anticipated outcomes. (Respondents were then asked to provide information about the extent of achievement for each anticipated outcome

[7] Projects initiated between 1990 and 1998 were eligible for inclusion in the evaluation because, at the time the mail survey was administered (January 2000), enough time had passed to assess these projects' accomplishments and longer term sustainability.

identified in the document review.) Finally, findings from the document review were used to augment our analysis of survey data.

- Interviews with ARC staff, including project coordinators and the program operations director, to gain a better understanding of the application and management procedures at ARC and within individual states.

- Telephone interviews with state-level and LDD-level ARC coordinators. The interviews were designed to enhance our understanding of the educational priorities of the 13 states of Appalachia. Other topics covered during these telephone interviews included the state-level process by which ARC grants are awarded and the monitoring practices that states use to determine whether a given project achieved its objectives. Finally, the interviews were used to obtain recommendations for potential case study sites and to identify additional study issues of interest to state and local staff.

- A mail survey to 91 ARC education projects that received funding during the 1990s. (The 84 projects that responded to this mail survey constitute the actual study sample.) This survey was designed to collect a common set of data regarding projects' characteristics, implementation practices, outcomes, and sustainability. It also obtained extensive narrative information on the extent to which a project's original outcomes were achieved.

- Site visits to eight projects that had successfully provided community residents with a new or enhanced educational service. The purpose was to obtain more detailed information about unique and sustainable practices that might be replicated elsewhere. Site visit findings were summarized in case studies and, where appropriate, used in the final report.

Appendix D provides a more detailed overview of these activities, as well as a discussion of the procedures used to select and refine the study sample. Appendix E provides information on the process used to select the eight case study sites.

1.6 Study Methodology

This report summarizes findings from the various study activities, with particular emphasis on the mail survey and document review. Several caveats regarding the study are worth noting. First, as is discussed in Appendix D, the process used to select the study sample systematically excluded initiatives that lacked a complete project file at ARC headquarters (in some cases, project files were in the closure process or under internal review and were not available for the evaluation) and/or a knowledgeable

individual who could respond to the mail survey.[8] These exclusions, while necessary, increased the likelihood that we would primarily survey projects that successfully implemented their ARC grant—and potentially limited our opportunity to examine factors that can hamper the efforts of ineffectual projects. In addition, projects that received less than $10,000 were excluded from the sample. Any findings regarding the success and sustainability of ARC-funded educational projects are therefore limited to the 84 initiatives that responded to the mail survey.

Second, it is worth emphasizing that any references in this report to site visit findings reflect a purposefully selected segment of the study sample—i.e., those projects that appeared to have been able to sustain an innovative or unique practice over time. As such, any conclusions drawn from the site visits may not pertain to the overall study sample.

Third, the RFP called for an analysis by project type. However, the project types assigned by ARC pertain both to the population being served and to the type of services being provided: adult literacy, basic skills, distance learning, dropout prevention, elementary education, preschool, educational partnerships, math/science education, and secondary education. As such, these designations were not particularly useful for the purpose of comparing projects. In an effort to develop alternative designations that would allow for more meaningful comparisons, we used the document review to assign projects to one of five categories designed to reflect the population receiving services—i.e., preschoolers, all elementary/secondary students, targeted elementary/secondary students, adults, and communitywide.

Fourth, as discussed in Section 1.4, ARC has made some recent improvements to its application and reporting guidelines to enhance the collection of outcome information. A brief review of FY 2000 project documentation for a subsequent report on vocational education and workforce training projects indicates that the more recent projects have benefited from these changes. Nevertheless, the changes were not in effect for the study sample and, therefore, are not discussed with the study findings.

Finally, the RFP called for an assessment of impacts after controlling for differences among project characteristics (e.g., metropolitan designation or economic status of participating communities). However, given the small number of projects that responded to the mail survey, we were somewhat

[8] The decision to exclude initiatives that appeared unlikely or unable to respond to the mail survey reflected a concern that we would not obtain sufficient information from a significant proportion of respondents if the study sample comprised randomly selected projects. This concern was exacerbated by three factors—i.e., the considerable length of time that had elapsed since some of the projects had received ARC funding, the lack of sufficient documentation for some projects at ARC's headquarters, and the small number of projects (91) included in the original study sample.

limited in our ability to disaggregate specific findings (e.g., degree to which specific objectives were achieved) across multiple project characteristics. The problems associated with the small sample size were exacerbated by the low cell counts that occurred when the survey responses were divided according to a variety of project characteristics. Typical statistical standards require at least five cases in each cell of a multivariate procedure, although ten or more cases in each cell results in more powerful analyses. For example, six projects in the study sample were identified as preschool projects. Conducting any analyses of these six projects resulted in cells sizes of less than five. Additionally, because many of these project characteristics were themselves intercorrelated, the data were not appropriate for high-level, complex regression analyses.

This issue was handled in two ways. First, although we were hesitant to rely extensively on multivariate analyses given the small sample size, univariate analyses still yielded important information about differences between projects on single, oftentimes critical, dimensions. Thus, in the text of this report, we provide information about projects based upon several descriptive characteristics (see below), and conduct appropriate univariate or bivariate analyses to test for differences.[9] All comparative statements based upon these tests are significant at the 0.10 level or better. While use of a critical p value of 0.10 represents a more liberal criterion than the generally employed level of 0.05, we believe that given the study's small sample size (84), such an adjustment allows for the identification of statistically significant differences that are large, but would otherwise be missed. Throughout the report, only noteworthy differences that are statistically significant are called out in the text. In addition, because comparisons within tables were often made both vertically and horizontally, indications of whether differences across rows or columns were statistically significant would have been extremely dense and potentially misleading. We have therefore not indicated any statistical differences in the tables.

Second, Appendix C contains tables for a series of additional analyses that are *not* discussed extensively in body of the report because small, and often uneven, cell sizes greatly limit the power of the analyses. However, illustrative findings from these analyses are reported in the main text, especially where trends are apparent. These tables may be helpful to stakeholders interested in examining key findings by one of the following project characteristics:

- **Project type**—i.e., preschool age, elementary/secondary (all students), elementary/secondary (targeted students), adults, and communitywide. The indication of project type is important for individuals with specific interests in different levels of

[9] All comparative statements were tested using appropriate statistical analyses, typically t-tests, ANOVAs, or Chi square with appropriate post hoc tests.

intervention (e.g., school or communitywide) or different targets of intervention (e.g., all students or selected students). This characteristic identifies who was targeted by project activities with some indication of the context for those activities.

- **Project scope**—i.e., project served a single town or county, project served two or more adjacent counties, and project served two or more nonadjacent counties. This characteristic provides an indication of whether a project represented a localized effort (e.g., a single school) or was intended to benefit individuals in a far larger community (e.g., statewide or extending beyond state boundaries). This characteristic may be of special interest to policymakers in judging the potential reach of a project, as well as individuals proposing to implement activities. For example, data on project scope might provide some insight into what types of activities and approaches "work" on different scales.

- **Economic status**—i.e., project served at least one distressed county, project served no distressed counties, and project served all ARC counties within a state (or served multiple counties in two or more states). All counties in the Commission's domain are assigned an economic classification. Counties identified as "distressed" show the most dire economic circumstances. This characteristic is therefore of direct policy relevance to ARC, but also to potential grantees who may question how a project's impact is influenced by the local economy.

- **Metropolitan status**—i.e., project only situated in nonmetropolitan counties, project only situated in metropolitan counties, project situated in a combination of nonmetropolitan and metropolitan counties, and project served all ARC counties within a state (or served multiple counties in two or more states). Although Appalachia may be perceived as being largely rural, there are a number of metropolitan areas within the region. While rural and metropolitan regions of Appalachia have common problems, different approaches may be more or less successful in these areas.

- **ARC grant size and total project cost**. These variables are considered proxies for the size of a project. For project directors and grantees, project costs are one metric by which to determine whether or not a given project is feasible for the host organization and/or community.

- **Years of ARC funding.** Although all of the projects included here were funded during the 1990s, some projects received multiple years of funding. In some cases these may have been longer duration projects with the expected benefits to occur only after a period of capacity-building or development, while other multi-year projects may have been successful in their first year and received subsequent funding for continuation. The duration of a project is an important indicator of how long it takes to implement approaches, and how long it may take to realize participant outcomes.

1.7 Structure of the Report

The remainder of this report provides the substantive findings from the evaluation. These results are organized as follows:

- Chapter 2 – Characteristics of the Study Sample
- Chapter 3 – Project Activities
- Chapter 4 – ARC Outcomes
- Chapter 5 – Project Sustainability and Expansion
- Chapter 6 – Summary and Recommendations
- Appendix A – Examples of Project's ARC-funded Outcomes
- Appendix B – Analysis of Outcomes Associated with the Overall Project
- Appendix C – Survey Data Disaggregated by Project Characteristics
- Appendix D – Notes on the Technical Approach
- Appendix E – Case Study Methodology, Findings, and Abstracts
- Appendix F – Project Descriptions
- Appendix G – Mail Survey

2. CHARACTERISTICS OF THE STUDY SAMPLE

This chapter describes the characteristics of the 84 projects in the study sample. It begins with a portrayal of the communities that received educational support through the ARC, continues with a description of specific project characteristics, and provides an overview of the grant recipients and partner organizations that assumed responsibility for managing and implementing the ARC grants. Wherever possible, the characteristics of the study sample are compared with the full portfolio of education projects[1] that received ARC funding during the 1990s.[2]

2.1 Community Characteristics

ARC, in close collaboration with the 13 states of Appalachia, works to fund projects that will increase the knowledge and skill levels throughout the Region. In this section, we describe the communities that received educational services through an ARC education grant. Special emphasis is placed on the diversity of these communities and the types of economic and educational barriers that projects were designed to overcome.

2.1.1 Project Scope

The projects in the study sample were asked to indicate the geographic distribution of the individuals who were expected to benefit from their ARC grant. The majority of projects indicated that they were designed to serve residents in two or more counties (Figure 2-1). Specifically:

- One-third of the projects in the study sample were designed to reach individuals within a single county (30 percent) or a single city or town (4 percent).
- More than half were designed to provide services to multiple counties within a single state—i.e., in two or more adjacent counties (37 percent), in two or more nonadjacent counties (16 percent), or in all ARC counties in the state (2 percent).
- Just under one-tenth were designed to serve residents in two or more adjacent (8 percent) or nonadjacent (1 percent) states.

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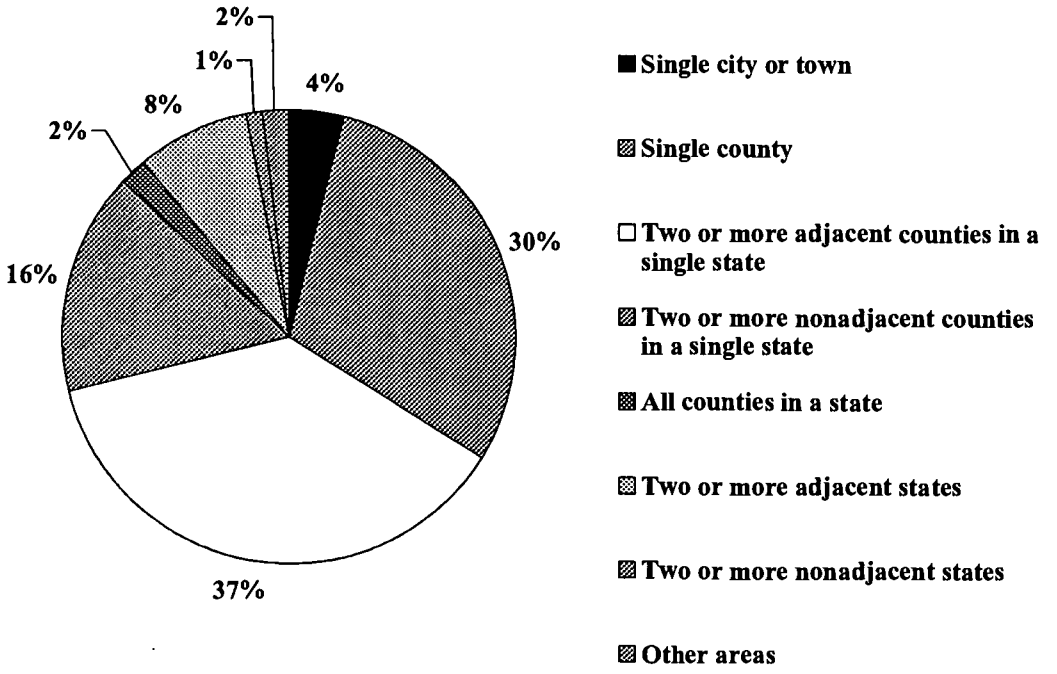
[1] This excludes vocational education and workforce training projects, which will be examined in a subsequent evaluation.

[2] We are only able to make comparisons for project characteristics that are contained in the ARC database. We are not able to make comparisons for project characteristics that were derived from the mail survey. In addition, because the study sample and the full portfolio of education projects that received ARC funding were not independent of one another, we did not test whether similarities and differences between these two groups were statistically significant.

Figure 2-1. Geographic distribution of expected beneficiaries of ARC education projects (n=84)



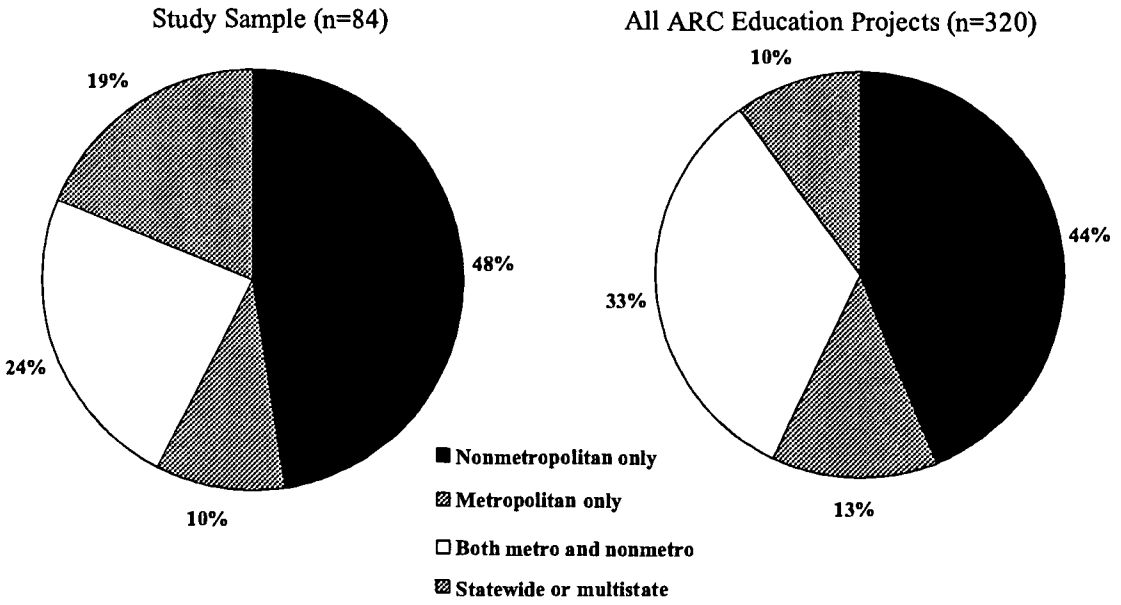
NOTE: No projects reported a major metropolitan region as the geographic location of their project.
SOURCE: 2000 mail survey of ARC grantees.

2.1.2 Metropolitan and Economic Status

Metropolitan Status. Almost half (48 percent) of the projects in the study sample were located in a nonmetropolitan area, compared to 44 percent of all ARC education projects (Figure 2-2). According to the descriptions that projects provided in their applications to ARC, these nonmetropolitan projects were often designed to serve residents who were living in severely isolated communities. For example:

- The target population will consist of individuals unable to access existing programs and employment due to isolation and lack of transportation. Allegheny County is sparsely populated with 51,742 people scattered across 1,047 square miles. *(Linking Individuals to Fundamental Training)*

Figure 2-2. Percent of projects by metropolitan status



NOTE: Percents may not sum to 100 due to rounding.
SOURCE: ARC database.

- Macon County is a small, rural county located in northern Middle Tennessee with a population of approximately 14,000 residents. The primary employment in the county is factory work and agriculture, with a per capita income of $10,632. *(Diversified Technology Program)*

Almost one-quarter (24 percent) provided services to a combination of nonmetropolitan and metropolitan communities, compared to 33 percent of all ARC education projects. Finally, 10 percent of the study's projects were situated in metropolitan communities, and 19 percent provided services to all ARC counties within a state (or to multiple counties in two or more ARC states). Among all ARC education projects, 13 percent were serving metropolitan areas, and 10 percent were statewide or multistate. For these multicounty projects, the ARC database did not provide any indication of whether the educational services provided through the ARC grant were evenly distributed between the nonmetropolitan and metropolitan communities. Nor did it provide information as to whether the statewide/multistate projects targeted their efforts to metropolitan or nonmetropolitan areas.

Economic Status. The Distressed Counties Program is designed to provide a mechanism for setting aside funds to the Region's most impoverished communities. Begun in 1983, this program

provides a framework by which ARC can target a portion of its limited resources to those counties most in need of assistance. In addition, the program serves as a means by which the ARC can monitor the socioeconomic status of individual counties. Every year, the 406 counties of Appalachia are assigned to one of four economic categories: distressed, transitional, competitive, and attainment. Distressed counties are eligible for additional funding and lower matching requirements (20 percent). The match requirements are higher for transitional (50 percent) and competitive (80 percent) counties. Attainment counties are not eligible to receive funding from the ARC.

To be classified as "distressed," a county must have (1) a poverty rate that is at least 150 percent higher than the national average, (2) a 3-year unemployment rate that is at least 150 percent higher than the national average, and (3) a per capita market income (i.e., per capita income less transfer payments) that is two-thirds or less than the national average. Counties with lesser degrees of distress are designated as transitional, and as counties become more prosperous, they move to competitive and then attainment status. At the time of the mail survey (FY 2000), 111 (27 percent) of Appalachia's 406 counties were classified as distressed, 65 percent as transitional, 5 percent as competitive, and 3 percent as attainment.[3]

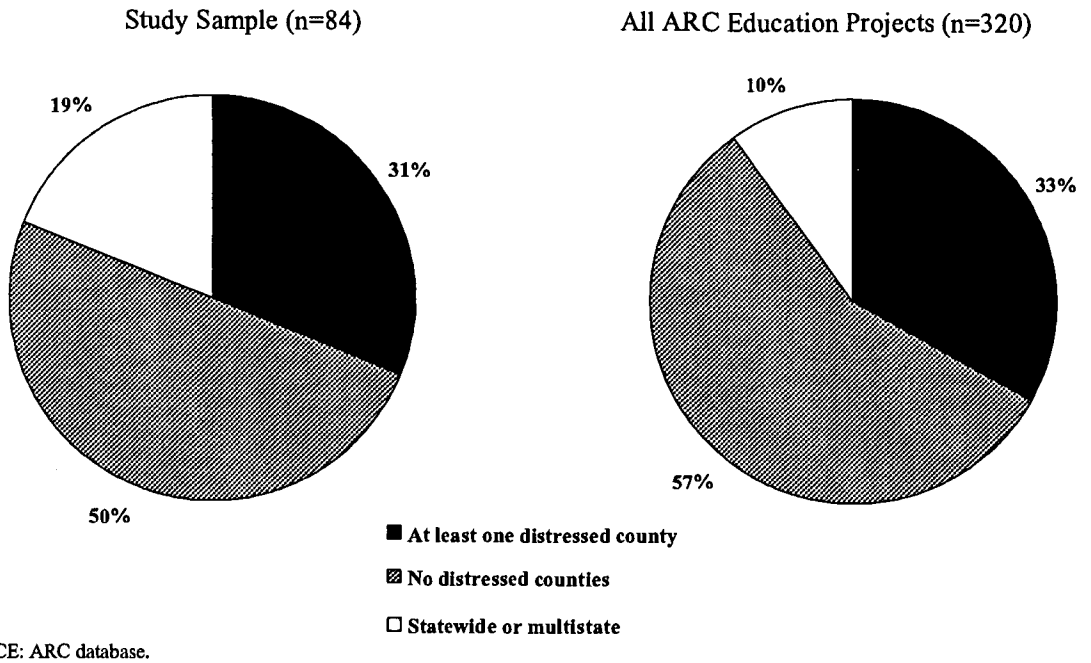
In an effort to assess the extent to which the projects in the study sample were situated in the Region's poorest communities, we calculated the proportion of initiatives that indicated they would be serving at least one distressed county in their application to the ARC.[4] Approximately, one-third (31 percent) of the projects in the study sample were serving at least one distressed county, while 50 percent served no distressed counties, and 19 percent were statewide or multistate (Figure 2-3).[5] This finding

[3] In FY 2001, the designations changed slightly, resulting in 114 distressed, 261 transitional, 22 competitive, and 9 attainment counties.

[4] As discussed earlier in this chapter, many of the projects in the study sample served more than one county. We therefore decided to focus on whether projects were identified as serving at least one distressed county in the ARC database. We were not, however, able to distinguish projects that were only providing services to distressed counties. In conducting this analysis, we used the county designation that was in place at the time the ARC grant was awarded—regardless of whether a given county's economic designation had changed over time. Finally, there was no information in the ARC database as to whether some of the statewide or multistate projects targeted their efforts to distressed counties.

[5] A better way to examine these projects would be to assign a weighted average economic designation for statewide and multicounty projects.

Figure 2-3. Percent of projects by economic status



SOURCE: ARC database.

suggests that the proportion of study sites serving at least one distressed county was slightly higher than the proportion of Appalachian counties designated as distressed in 2000, but similar to the proportion of all ARC education projects serving distressed counties. (We were not able to ascertain the number of projects in the study sample that were providing services in transitional counties. However, as is discussed in the next section, even projects situated in nondistressed counties tended to serve those community segments most in need of economic and educational support.)

We also reviewed projects' original requests for ARC support to gain a better understanding of the economic conditions they were designed to ameliorate. The following statements, pulled from these application materials, provide examples of the communities in which projects were situated:

- McCreary County has historically been one of the most disadvantaged counties in Kentucky. Designated as a "distressed county" by ARC, McCreary County faced a 1990 poverty rate of 46 percent. *(McCreary County Learning Center Expansion Project)*

- Breathitt County has a total population of 14,905 with 4,209 of its residents being children under the age of 18. Forty-six percent of

children live below the poverty level. *(Montessori Preschool Relocation and Expansion Project)*

- The economic and education blight of Columbiana County is reflected in the following statistics: (1) nine of the eleven districts ranked in the bottom 30 percent in annual income and the bottom 15 percent in property valuation per pupil, and (2) nine of the eleven districts ranked in the bottom 200 districts in the State in terms of overall wealth. *(Columbiana County Business/Education Partnership for Interactive TV Technology Labs)*

2.1.3 Extent to Which Projects Served Disadvantaged or Underserved Community Segments

Our analysis of the economic designations of counties in the study sample provides a useful indicator of whether study sites were focusing on the Region's most distressed communities. It does not, however, address whether projects in nondistressed counties are focusing their efforts on those community segments most in need of economic and educational assistance. To address this issue, survey respondents were asked if their projects were designed to serve members of their communities who were traditionally disadvantaged or underserved. Almost all (81 of the 82 projects that responded to this survey item) indicated that their project was designed to address at least one disadvantaged/underserved community segment—and the average project was designed to address five disadvantaged/underserved community segments. The most commonly targeted community segments were individuals who were impoverished (82 percent) and/or geographically isolated (77 percent). In addition, well over half of projects were designed to target those who were unemployed or underemployed (70 percent), school dropouts (60 percent), disabled (59 percent), or illiterate (57 percent) (Table 2-1).

Table 2-1. Number and percent of ARC projects that indicated they intended to use project-related services or resources to otherwise benefit various disadvantaged or underserved community segments (n=82)

Characteristic of underserved group	Number of projects	Percent of projects
Extreme poverty	67	82
Geographically isolated	63	77
Unemployed/underemployed	57	70
School dropouts	49	60
Disabled	48	59
Illiterate	47	57
Limited English speaking	29	35
Migrant workers/students	29	35
Other groups	16	20

NOTE: Two projects did not provide any information on the intended community segments to be served.
SOURCE: 2000 mail survey of ARC grantees.

Problems or Barriers Projects Were Designed to Address. The document review and site visits provided additional evidence that the projects in the study sample were targeting community segments most in need of educational support. These reviews also suggest that projects often attempted to ameliorate multiple barriers. For example, many of the adult learner projects designed to reduce intergenerational illiteracy also sought to address other issues—e.g., the lack of a high school diploma or unemployment/underemployment. Similarly, projects serving elementary/secondary students commonly addressed a combination of issues—e.g., a lack of educational technology or lab equipment, undertrained teachers, rising high school dropout rates. The following examples, pulled from applications to the ARC and case study reports, illustrate the types of barriers faced by projects' intended beneficiaries:

- Eastern and southern Kentucky is a rural, isolated region that has been economically dependent of the coal mining industry for years. Little education was needed to be a coal miner, and during the boom years the pay was very good, sometimes as high as $30,000 for entry-level positions. Hundreds of young men saw no need to obtain an education when they could go into the mines and earn that salary. Indeed, their fathers and grandfathers had done it before them. *(Local Affiliate Expansion Project application)*

- Families live in neighborhoods where education is not seen as a high priority or as something realistically attainable. Educational nurturing is not an accepted value for parents who have not completed high school, who may be illiterate themselves, and who live under the stressful conditions of low wage employment...Feelings of inferiority, cultural differences, perceived unfriendliness of teachers, hostility toward school for perceived wrongs, and limited communication and problem-solving

skills are the norm...For severely dysfunctional families, there may be problems with drugs and alcohol abuse, absence of parental supervision and protection of children, nonacceptance of traditional standards for hygiene and sanitation, impoverished living conditions, family violence, and adult illiteracy. Communication between the parent and child is usually poor and there is little or no parental encouragement and support. *(School Outreach Project application)*

- Teenage pregnancy (often compounded over several generations) as well as the increasing disintegration of extended families and communities has resulted in the diminishing of parenting knowledge passed from generation to generation among many of eastern Tennessee's poor. A host of parenting deficiencies has resulted from this state of affairs, such as poor hygiene (unclean bottles, head lice among children), child abuse, and a lack of understanding of child development. In addition, because of the fragmentation of communities, many parents do not have knowledge of or access to resources available to them. Many parents in eastern Tennessee are forced to raise their children under extremely difficult circumstances with few external supports. Further, these children fall behind in their development to such an extent that they may never fully recover. Many enter school lacking the fundamental cognitive, linguistic, social, and physical skills necessary for success. *(Partnering with Parents case study)*

Another common condition that projects described in their applications was an economic or geographic barrier that needed to be overcome. These barriers typically worked together in synergistic ways, creating a difficult cycle to break. For example, geographic barriers such as isolation create problems in their own right, but feed into other problems as well, such as the provision of adequate services and the ability to attract business and industry that would support the local economy. (See Exhibit 2-1 for examples of economic and geographic barriers that projects faced.)[6]

Finally, many of the projects described how their efforts would address a community's lack of access to a critical service (e.g., transportation, affordable day care) or educational opportunity (e.g., museum, computer lab, science and technology equipment for students). In some of the most economically or geographically isolated communities, providing even basic services (let alone developing models of advanced service delivery) sometimes proves difficult. Exhibit 2-2 illustrates the types of access barriers that two case study sites were designed to overcome.

[6] The exhibits on the following pages and throughout the report provide specific examples drawn from documents to provide a richer picture of issues as appropriate.

Exhibit 2-1. Examples of economic or geographic problems barriers that projects were designed to address

- **The David School: Success Bound.** Public education in this region has been distressed primarily due to an unstable economy and an inadequate tax base. These factors have caused overcrowding and a lack of funding to develop appropriate programming to the special needs of a large portion of mountain youth. The dropout rate in the immediate three-county area has reached epidemic proportions. Between 45 and 55 percent of students entering 9th grade do not complete 12th grade, as reported by the Kentucky Department of Education "Holding Power Report."

- **Infrastructure Development for the 21st Century.** Nowhere in Virginia are the effects of disparity of educational opportunity more keenly felt than in the counties of far southwest Virginia, where school divisions are forced to eliminate course offerings, freeze hiring of instructional staff or reduce the number of teachers, and even close schools. Elsewhere, wealthier school divisions continue to spend up to 2 ½ times more per pupil than less wealthy school divisions located chiefly in the rural areas of the state. The result is that poorer areas have fewer curricular offerings, less state-of-the-art technology, more poorly equipped labs, and higher student-to-teacher ratios than schools divisions in wealthier areas.

- **Thanks A Million.** In West Virginia, 570,857 (or 44 percent) of the adults over the age of 18 have not completed high school. Although grade level completion is not an entirely accurate account of functional literacy, this high percentage does indicate that the chances of a major basic skills problem could certainly be a significant one. With escalating workplace requirements, the economic impact of functional illiteracy carries a high price. Despite the valiant efforts of organizations such as public education, libraries, and volunteer literacy programs, less than 5 percent of the target population is being served. Limited funding for adult literacy programs has put strain on providing services adequate to reach and teach the large target population. In some counties, adults in need of services are put on waiting lists because classes are overcrowded or no volunteer tutors are available. Limited budgets often force programs to cut back on the number of class sites within the county. As a result, adult learners are left with the option of driving to a class on the opposite side of the county, often over winding, mountainous roads, or simply forgetting about pursuing their education.

SOURCE: Document review of ARC education projects.

Exhibit 2-2. Examples of access barriers that case study projects were designed to address

- **Science Center of West Virginia.** Since its inception, the Science Center of West Virginia has been the only facility in this area of the state that offered hands-on science education opportunities. Sunrise Science Hall, located in Charleston, also began offering some informal science education opportunities along with its original art program about that time, but that facility is located some 2 hours north of Bluefield—and largely out of reach of many of the area's schools in terms of both travel time and expense. Sunrise is also a more static viewing environment, with few interactive opportunities for visitors. Another problem facing the region was a lack of resources and equipment in all schools to adequately provide students with the 50 percent level of hands-on instructional time required by the state's 1993 science standards. At the time the ARC grant proposal was submitted, Mercer County and its neighboring counties had limited science resources available. The elementary education coordinator for the county indicated that this continues to be an issue, but the situation had improved somewhat at the middle and high school levels. Mercer County had begun to consolidate its schools over the past few years due to enrollment decreases. This consolidation has allowed for an increase in laboratory facilities and equipment at the remaining secondary schools. The elementary schools, however, have not experienced any real change in this regard. For example, with school funding being allocated on a per-student basis, some of the smaller schools, which have as few as 90 students, do not have excess funds to spend on science equipment. Recognizing the dual necessities of increasing students' accessibility to informal science education and increasing science resource availability to schools in the region, the founder/president of the Science Center, who then was also president of the Alliance, began raising money to create hands-on exhibits and an active outreach program.

- **Science and Math To Go! (SMTG!).** The hands-on, discovery-oriented experiences supported by SMTG! were often not available for a variety of reasons: (1) lack of time by teachers to seek and purchase supplies, (2) general lack of space and equipment to prepare hands-on laboratory experiences, (3) general lack of equipment for student use, (4) lack of availability to store and maintain equipment, and (5) lack of funds to purchase supplies and equipment. Additionally, project staff noted that many elementary teachers have little preparation in science content knowledge and pedagogy. These teachers are frequently uncomfortable with any science beyond a textbook or simply do not know what to do. Moreover, the schools and districts face an inequitable distribution of quality teaching materials—i.e., not all students have equal access to quality science content.

SOURCE: Document review of ARC education projects.

2.2 Project Characteristics

This section provides information on the projects themselves. It discusses project types, funding sources, amount of ARC funding and total project costs, relationship of the ARC grants to other project activities, and duration of the projects.

2.2.1 Project Type

Over three-quarters of the projects in the study sample fell into four of nine categories that the ARC uses to classify its education grants, including adult literacy (27 percent), secondary education (24 percent), basic skills (14 percent), and math/science education (11 percent) (Table 2-2). The remainder were distance learning, dropout prevention, preschool, elementary education, and educational partnership projects.

Table 2-2. Percent of projects by ARC education category

ARC education category	Percent of projects in the study sample (n=84)	Percent of all ARC education projects (n=320)
Adult literacy	27	17
Secondary education	24	21
Basic skills	14	7
Math/science education	11	4
Distance learning	6	13
Dropout prevention	6	5
Preschool	5	4
Educational partnership	4	3
Elementary education	4	3
Childcare	0	9
Telecommunications	0	6
Technical assistance	0	4
Teacher training	0	2
Libraries	0	1

NOTE: Percents may not sum to 100 due to rounding.
SOURCE: ARC database.

The distribution of study sample categories is roughly similar to the distribution for all ARC education projects, with the exception of adult literacy (27 percent of study sample projects, but only 17 percent of all projects), basic skills (14 and 7 percent, respectively), math/science education (11 and 4

percent, respectively), and distance learning (6 and 13 percent, respectively). In addition, several categories represented among the full portfolio of ARC education projects were not included in the study sample, including childcare (9 percent of all projects) and telecommunications (6 percent).

In conducting the document review, we determined that there was considerable overlap in these categories—with many initiatives providing services or addressing barriers in two or more ARC education categories. For example, a project designed to provide a dropout prevention program to secondary education students could be classified as "dropout prevention" or "secondary education." Therefore, for the purposes of the study, projects were reclassified according to the types of individuals who received services or otherwise benefited through the ARC grant. As shown in Table 2-3, these five project types include:

- **Preschool age.** This category, accounting for 7 percent of projects in the study sample, includes the six initiatives that provided services to preschoolers (or parents of preschoolers).

- **Elementary/secondary (all students).** This category, accounting for 38 percent of projects, comprises initiatives designed to benefit all students—i.e., no effort was made to withhold or target services to a subset of students. Thus, projects designed to provide enhanced curriculum, math/science education, or enhanced technology access to all students were included in this category.

- **Elementary/secondary (targeted students).** This category, accounting for 10 percent of projects, includes the eight initiatives that targeted their services to a specific subset of youth—e.g., students at risk of dropping out of public school, students who have already dropped out, students with severe learning disabilities.

- **Adults.** This category, accounting for 33 percent of projects, includes initiatives that primarily provided services to adults—e.g., literacy training, basic skills, parenting skills, GED preparation.

- **Communitywide.** The final category, accounting for 12 percent of projects, includes the 10 projects that provided services to entire communities—e.g., distance learning centers, support and technical assistance to community-based organizations, career development centers.

Table 2-3. Number and percent of projects, by intended beneficiary of the project (n=84)

Project type	Percent of projects
Preschool age	7
Elementary/secondary, all students	38
Elementary/secondary, targeted students	10
Adults	33
Communitywide	12

SOURCE: Document review of ARC grantees.

It should be noted that while care was taken to assure that projects were assigned to an appropriate category, there was still considerable opportunity for overlap. For example, a number of projects that were primarily designed to benefit youth were also providing limited services to adults, or a school-based project might have been actively encouraging parents to enroll in a GED course. In such cases, a project's primary intended beneficiary was used to make an assignment to one of the five categories. (A comparison to all ARC education projects cannot be made.)

2.2.2 Funding Source

The projects in the study sample received ARC funding in one of two ways—through their individual state or through the Commission.[7] Seventeen (20 percent) of the study sites were funded through the Commission, with the remaining 67 projects being funded through their respective states.

Two states—Georgia and Kentucky—each had 17 state-funded projects (20 percent of the study sample). Other states had relatively fewer projects in the sample. For example, New York had eight projects, Ohio had five, and Mississippi and Tennessee each had four. As shown in Table 2-4, Georgia and Kentucky were overrepresented in the study sample, while New York was underrepresented.

[7] Commission-funded projects are designated as such because the funding for the project comes from the ARC set-asides, as opposed to an individual state's allocation of money. Commission projects may operate in a single state or in multiple states.

Table 2-4. Percent of projects by the project's source of funding

Source of funding	Percent of projects in the study sample (n=84)	Percent of all ARC education projects (n=320)
Alabama	1	6
Georgia	20	12
Kentucky	20	9
Maryland	0	2
Mississippi	5	3
North Carolina	4	3
New York	10	17
Ohio	6	8
Pennsylvania	2	4
South Carolina	2	1
Tennessee	5	3
Virginia	1	3
West Virginia	4	5
Commission	20	23

NOTE: Percents may not sum to 100 due to rounding.
SOURCE: ARC Database.

2.2.3 Funding Amount and Total Project Cost

By design, ARC grants are often awarded in conjunction with funds from other sources—e.g., local businesses, other federal or state agencies, donations from private foundations or other sources. The ARC requires that projects provide a match of between 20 percent and 80 percent, and this amount varies by the economic designation of the community within which the project is located. Projects in distressed counties are expected to match only 20 percent of the ARC grant (compared to projects in competitive counties where their match is 80 percent of the grant amount). In the case where a project is located in counties with various designations, the project is assigned a weighted average score in order to determine the required match amount. Indeed, many projects had funding from other agencies over and above their ARC-required match.

ARC Grant Amount. The size of the ARC grant varied tremendously across the study sample—from a low of $14,000[8] to a high of $3 million. Half of the projects received less than $100,000 in ARC funding—with 21 percent receiving $50,000 or less and 30 percent receiving from $50,001 to

[8] Projects receiving less than $10,000 were excluded from the study sample and the universe of all ARC education projects.

$100,000 (not shown in tables).[9] Almost one-third (32 percent) of projects received between $100,001 and $200,000—with the remaining 17 percent receiving over $200,000. The distribution among all ARC education projects was roughly similar. Specifically, 34 percent received $50,000 or less, 27 percent received from $50,001 to $100,000, 25 percent received between $100,001 and $200,000, and 14 percent received over $200,000.

Total Project Cost. Projects also varied in terms of the total financial resources that they had at their disposal—from a low of $30,000 to a high of $4,960,000. While 25 percent of the projects had total expenditures of $100,000 or less, 10 percent had expenditures of over $900,000. The remaining projects reported expenditures between $100,001 and $200,000 (33 percent) or between $200,001 and $900,000 (32 percent). As expected, there was a direct relationship between the size of the ARC grant and total project cost (not shown in tables). Total costs among all ARC education projects matched that of the study sample with slight differences in the lowest category (34 percent) and the highest category (5 percent).

2.2.4 Project Duration

The average project in the study sample received 1 to 2 years of ARC funding, with 26 percent receiving ARC funding for a single year, 41 percent receiving ARC funding for 2 years, and 33 percent receiving funding for 3 or more years (not shown in tables).

As discussed previously, the study sample comprised projects that received an ARC educational grant during the 1990s.[10] However, as shown in Figure 2-4, there was some variation with respect to the specific years in which projects reported receiving financial support. Projects were most likely to indicate that they received financial support from ARC in the mid-1990s—e.g., 33 percent indicated 1995 as a year in which they were funded by ARC.

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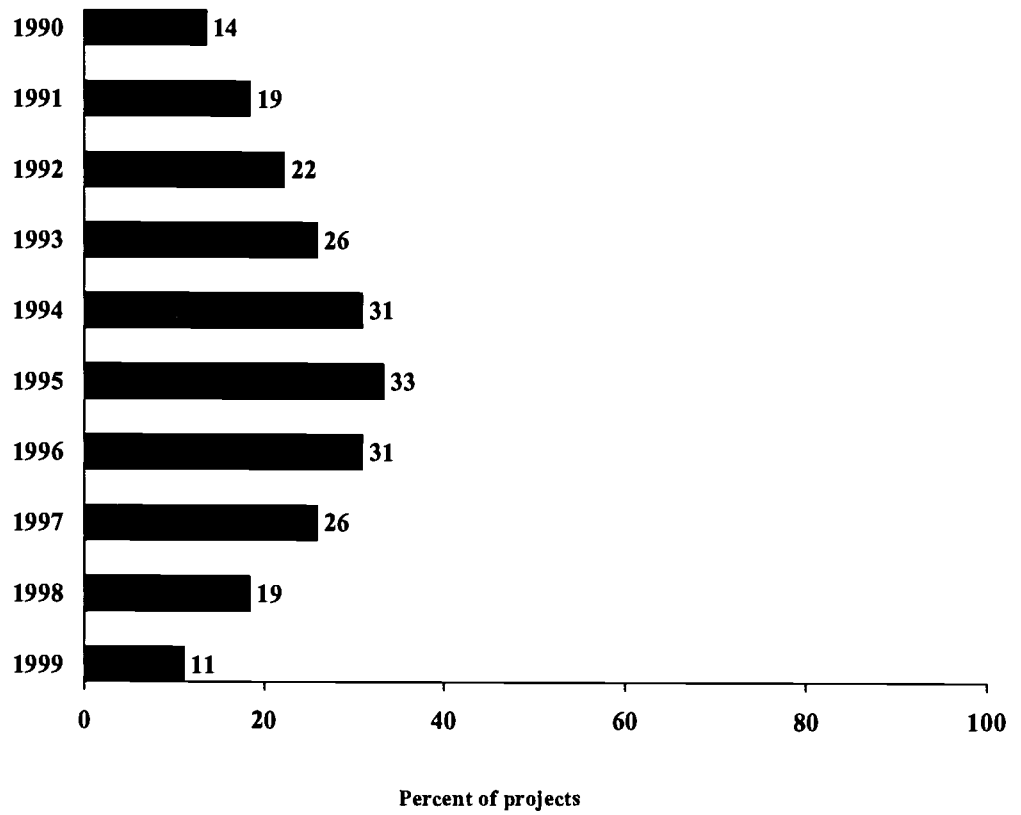
[9] Funding amounts were combined in cases where projects received multiple years of financial support through the ARC.

[10] We excluded from our sample projects that received initial funding in 1999. In addition, the survey and document review did not obtain information about activities that occurred prior to 1990, even if a project had received financial support through ARC in the 1980s.

Figure 2-4. Percent of projects that reported receiving ARC funding during the years 1990-99 (n=81)



NOTE: Three projects did not provide any information about the years of funding.
SOURCE: 2000 mail survey of ARC grantees.

It is likely that this trend reflects the way in which the study sample was selected. Specifically, projects funded in the early part of the decade were less likely to have a contact person who was knowledgeable about the project and therefore able to respond to the mail survey. (As discussed in Chapter 1, projects that appeared to lack a knowledgeable respondent for the mail survey were excluded from the study.) In addition, an effort was made to select those projects that had already completed their ARC grant. As such, only 14 percent of the projects in the study sample reported that they had been funded as far back as 1990, and only 11 percent had received funding in 1999.

2.3 Grant Recipient Characteristics

This section provides information about the organizations responsible for overseeing and implementing the ARC educational grants. It includes a description of the entities that served as grant recipients and project partners—with particular emphasis on the contributions of project partners to the overall effort.

2.3.1 Characteristics of Grant Recipients

Although all of the projects in the mail survey had education-related goals, not all originated from educational organizations. Indeed, projects were overseen by a wide range of organizations, including education entities (63 percent), other organizations (26 percent), and government agencies (11 percent) (Table 2-5).

Table 2-5. Number and percent of ARC education projects, by the type of organization of the grant recipient (n = 84)

Organization type	Number of projects	Percent of projects
Education organizations	**53**	**63**
Early childhood education organization	3	4
K-12 school or school system	17	20
Higher education institution or consortium	3	4
Adult education organization	9	11
Local education agency	6	7
Other education entity	15	18
Other organizations	**22**	**26**
Social service agency	0	0
Library	1	1
Museum or other entity	2	2
Community development organization	0	0
Professional organization/union	0	0
Public broadcasting station	0	0
Religious organization	0	0
Health care organization	0	0
Public safety organization	0	0
Nonprofit organization	18	21
Other community organization	1	1
Government organizations	**9**	**11**
State government agency	6	7
County government agency	1	1
City or municipal government agency	1	1
Tribal government	0	0
Other government entity	1	1

NOTE: Details may not sum to totals due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

The most common education organizations receiving an ARC grant were K-12 schools or school systems (17 grant recipients), adult education organizations (9 grant recipients), and local education agencies (6 grant recipients). Additionally, 15 other types of education organizations received grants, including a consortium of education organizations, a regional educational laboratory, and a joint vocational school. The following examples, culled from the document review and case studies, illustrate the range of educational organizations that served as grant recipients:

- Towns County Middle School was part of the Towns County Comprehensive School complex. This complex also housed a preschool, kindergarten, elementary, and high school classrooms. Prior to receiving the ARC grant, the school had already taken steps to begin providing access to learning technologies and was interested in expanding access to all students, families, and faculty. *(Mobile Technology Project)*

- The David School was a private, nondenominational nonprofit multifaceted educational service network. Its core curriculum, a full-time alternative secondary academic-vocational agenda, was established in response to the critical problem of students in the mountains of eastern Kentucky dropping out of school. *(The David School: Success Bound)*

- Science and Math To Go! was a curriculum and professional development program run out of the Anderson Oconee Pickens Hub at Clemson University. The hub was one of 13 across the state of South Carolina established in the planning for and receipt of a National Science Foundation grant for systemic education reform. Hubs served as math and science resource centers for the districts they encompass. *(Science and Math To Go!)*

Most of the government agencies that served as grant recipients were at the state level. Only one county and one city agency were so designated. In addition, one project was run through a national laboratory at the Department of Energy. Examples of government agencies that served as grant recipients follow:

- The Allegheny County Employment and Training Center was a composite of agencies whose purpose was to assist individuals in achieving employment goals and self-sufficiency. Eight agencies operated cooperatively in the center. *(Linking Individuals to Fundamental Training)*

- The Kentucky Literacy Commission was a specific agency designed to serve adult nonreaders with a general fund appropriation to "begin" program development. The Commission served adults age 16 and over who read below a sixth grade level through its network of local literacy programs in all of Kentucky's 120 counties. *(Operation Read)*

The remaining 22 grant recipients represented other agencies—i.e., nonprofit organizations (18 projects), museums (2 projects), library (1 project), and for-profit business (1 project). Examples of other entities that served as grant recipients are provided below:

- Thanks A Million Foundation (TAM) represented a cooperative effort of the public and private sectors to promote and support existing and new, innovative adult literacy efforts. *(Thanks A Million)*
- Forward in the Fifth was a nonprofit organization dedicated to improving the educational attainment of citizens in 39 counties of eastern and southern Kentucky. *(Forward in the Fifth Math and Science Project)*

2.3.2 Characteristics of Project Partners

While ARC grants are awarded to individual organizations, the implementation of most projects involved collaborations between the grant recipient and a number of partnering entities. Partnerships may be formed between the recipient and a wide range of organizations, including government agencies (local, state, or federal), education agencies, private foundations or companies, service providers, and other agencies.

Survey respondents were provided a list of nine different types of partners and asked to indicate how many partners of each type were involved with their projects. The 77 projects that responded to this item reported a total of 671 partners (Table 2-6). In addition:

- Sixty-one percent of projects reported that at least one of their partners was a local education agency.
- Forty percent reported that at least one of their partners was a private sector company.
- Thirty-nine percent of projects reported having a state education agency as a partner.

Table 2-6. Total number of partners involved and those that indicated having partnerships with each type of organization (n=77)

Type of organization	Total number of partners (n=671)	Percent of projects
Local education agency	187	61
Private sector company	182	40
Other organization	62	10
Local government (county/town) agency	60	25
Private foundation	52	30
Nonprofit organization	46	35
State education agency	39	39
Federal agency	27	33
State agency (excluding education)	16	17

NOTE: Seven projects did not provide any information about the type of partnerships for the ARC project. Percents do not sum to 100 because many projects had partnerships with more than one organization type.
SOURCE: 2000 mail survey of ARC grantees.

Partners' most prevalent contribution came in the form of financial support—with 75 percent of projects indicating that at least one of their partners provided monetary assistance (Table 2-7). Other contributions commonly provided by partners included space or facilities (cited by 68 percent of projects), in-kind support (67 percent), personnel (58 percent), and equipment or equipment discounts (41 percent). The following examples, taken from the case studies, illustrate how these partnerships contributed to project success:

- The Science Center developed a close relationship with the National Aeronautics and Space Administration (NASA), especially the Langley Research Center in Hampton, Virginia. For example, NASA personnel and exhibit materials make routine visits to the Science Center to provide professional development workshops to area teachers and informal science education opportunities to students and other area residents. These have included an exhibit of moon rocks, a $240 million lunar materials disk (soil and mineral samples), and a rocket that NASA transported to the center for display. *(Science Center of West Virginia)*

- Towns County Middle School achieved its match by soliciting funds from several local businesses to purchase individual laptop computers. According to the principal, this approach helped to create community awareness about the project. The need to increase community awareness of—and support for—the Mobile Technology Project was critical for two reasons. First, a number of the local businesses were owned or operated by parents whose children would be using the laptops at home. As such, this was viewed as another strategy for increasing parents' involvement in their children's schoolwork. Second, the project was viewed as an

opportunity to reinforce the relationship between the school and the local businesses that would likely employ many of the community's high school and college graduates. For example, a representative from a local bank that contributed funds for the project visited the school to demonstrate the electronic spreadsheets he routinely used at work. *(Mobile Technology Project)*

- Science and Math To Go! (SMTG!) nurtured a number of linkages with local and South Carolina-based corporations. The initial contribution these partnership was generally financial—e.g., Duke Power, Michelin, DuPont, and BMW all provided monetary support to SMTG! Over time, the name recognition associated with these entities has made it easier for SMTG! to obtain support from local school boards. *(Science and Math To Go!)*

Table 2-7. Total number of contributions and percent of projects that reported partner organizations provided contributions to the ARC project in the following ways (n=79)

Type of contribution	Total number of contributions (n=952)	Percent of projects
Provided cash	354	75
Provided space or facilities	158	68
Provided in-kind services	220	67
Provided personnel	120	58
Provided equipment or equipment discounts	66	41
Provided other contributions	34	6

NOTE: Five projects did not provide any information about the type of service or resource provided by partner organizations. Percents do not sum to 100 because partners often provided more than one contribution.
SOURCE: 2000 mail survey of ARC grantees.

2.4 Summary

According to its Strategic Plan, part of ARC's mandate is to "address economic underdevelopment that is deeply rooted in regionwide, historic patterns of isolation, exploitation, and outmigration." Study findings suggest that the project in the study sample contributed to the Commission's goal of reaching those segments of Appalachia that are rural and geographically isolated. Most projects provided services to rural areas—with almost half being situated in a region that was entirely nonmetropolitan. Equally significant, the community segments that were targeted generally reflected the ARC's goal (as articulated in both its Strategic Plan and the provisions of its Distressed

County Program) of serving those most in need—including persons in extreme poverty, persons who are geographically isolated, those who are unemployed or underemployed, youth at risk of dropping out of school, and persons with disabilities. In addition, one-third of projects were serving areas that included distressed counties. Although half of the projects in the study sample did not serve a distressed county,[11] their efforts were still focused on those community segments most in need of services. Also, it is likely that many residents in nondistressed areas faced barriers similar to those in distressed areas and therefore required similar assistance from ARC.

The projects in the study sample primarily focused on elementary and secondary students and adults, with small percentages serving preschool students and communities as a whole. Among projects serving elementary and secondary students, the vast majority were addressing the needs of all students, rather than of a targeted group of students.

A comparison of projects in the study sample to the universe of all ARC projects funded during the same period found that the sample and the universe were roughly similar in economic and metropolitan status, ARC grant amount, and total project cost. All ARC states except Maryland (only 2 percent of all education projects) were included in the study sample. Georgia and Kentucky were slightly overrepresented in the sample, while New York was slightly underrepresented. The mix of ARC project types in the sample varied only slightly from those of all education projects. Adult literacy, basic skills, and math/science education were overrepresented in the study sample, while distance learning was underrepresented. Child care and telecommunications were absent from the sample altogether. Finally, we were unable to match project types used for the study with those of all education projects due to the reclassification of the sample into adult, elementary/secondary (all students), elementary/secondary (targeted students), preschool, and communitywide.

[11] The remainder of projects were statewide or multistate and were not assigned an economic designation.

3. PROJECT ACTIVITIES

Residents of Appalachia commonly encounter a broad range of geographic, economic, and educational barriers. It is therefore not surprising that the projects in the study sample were primarily designed to address a prevalent condition (e.g., chronic unemployment, excessive school dropout rates, insufficient educational and technical skills) and/or a lack of access to educational resources or facilities. This chapter addresses the range of strategies that were used to overcome these barriers. Of particular interest is whether projects were able to conduct their activities as planned—and the factors that affected the degree to which these activities were successfully implemented.

3.1 Educational Activities Conducted by Projects in the Study Sample

The projects in the study sample employed a wide variety of approaches designed to overcome the Region's geographic, economic, and educational barriers. To determine which activities were used most prominently, the mail survey provided respondents with a list of 25 activities across the following six categories: improve physical plant, enhance telecommunications applications, develop educational resources, provide training to students and other community residents, provide support services, and provide community outreach.[1] Respondents were also provided an opportunity to describe "other" activities not included on the list of survey options.

Several important caveats should be considered when reviewing this discussion of project activities. First, as noted previously, many of the projects in the sample had received funds from ARC (including the grant match), as well as other local, state, and/or federal sources. In such cases, the project's implementation of activities relied on a combination of funding streams, with some activities funded solely by ARC, some funded solely by other sources, and some funded through a combination of sources. For example, a project may have used ARC funds to purchase computers, but funds from other sources to employ teachers and develop training materials for students. As a result of this combination of activities, students may have had increased access to test-preparation materials and scored higher on college entrance exams, resulting in greater acceptance rates to college. While it is possible for us to disaggregate activities funded by ARC from those funded by other sources (and, in fact, we have), it is

[1] Six projects that responded to the mail survey did not provide any data regarding the types of activities they conducted. These six projects were excluded from the analyses conducted for this section of the chapter.

not possible to link specific activities (funded by ARC or otherwise) with the outcomes discussed in the next chapter. Specifically, it is not possible to attribute a project's outcomes, which result from the totality of its activities, to any specific activity.

A second caveat is that the options on the survey ranged from discretely defined tasks (e.g., install science lab) to broader all encompassing ventures (e.g., establish partnerships). The activities also varied with respect to how expensive and/or difficult they were to implement—e.g., installing computers is potentially cheaper and easier than developing a distance education network. Thus, although the discussion throughout this chapter regards all undertakings as being equal, the implementation of each activity actually required a unique combination of skills, costs, staffing requirements, community partnerships, and level of effort.

3.1.1 Distribution of Activities

The 78 projects that responded to this survey item reported conducting a total of 682 distinct activities. Of this number, 556 (82 percent) were partially or fully funded by ARC.[2] The majority of projects reported an ARC-funded activity aimed at developing educational resources (78 percent of projects), providing training to students and other community residents (71 percent), and/or installing/enhancing telecommunications applications (64 percent) (Table 3-1). Less than one-third of projects reported providing support services (28 percent) or physical plant (27 percent) activity.

Across all activity types, the most frequently cited ARC-funded undertakings were installing computers (51 percent of projects), providing academic skills training (46 percent), providing computer training (45 percent), providing teacher or tutor training (45 percent), and providing literacy training (37 percent) (Table 3-2). The least frequently reported ARC-funded activities were renovating structures (7 percent of projects), building new structures (7 percent), providing emotional or psychological counseling (6 percent), and installing a science lab (5 percent).

[2] As noted in Chapter 2, ARC was the primary source of funding for some projects and a secondary source of funding for others. The mail survey was used to obtain information on all project-related activities regardless of their funding source. For each activity that a project conducted, the mail survey also obtained information on whether it was covered under the ARC grant. Therefore, in the discussion of project activities, a distinction is made between *all* activities reported by a project and those activities that were at least partially underwritten by ARC (i.e., ARC-funded activities).

Table 3-1. Percent of projects reporting at least one ARC-funded activity in a given category, by project characteristics

Project characteristic	Category of activity					
	Education resources	Training	Telecom-munica-tions	Commu-nity outreach	Support services	Physical plant
All projects (n=78)	78	71	64	42	28	27
Project type						
Preschool age (n=6)	83	67	17	67	67	0
Elementary/secondary, all students (n=31)	94	58	74	39	19	32
Elementary/secondary, targeted students (n=7)	86	86	14	57	71	14
Adults (n=25)	60	92	72	32	24	24
Communitywide (n=9)	67	44	78	56	11	44
Project scope						
Single town or county (n=25)	64	76	88	36	32	40
Adjacent counties (n=30)	77	67	70	43	20	23
Nonadjacent counties (n=23)	96	70	48	48	35	17
Economic status						
At least one distressed county (n=24)	79	75	50	38	29	21
No distressed counties (n=38)	71	74	84	42	29	40
Statewide or multistate (n=16)	94	56	38	50	25	6
Metropolitan status						
Nonmetropolitan only (n=38)	74	82	79	40	34	34
Metropolitan only (n=6)	50	83	83	67	17	33
Both metro and nonmetro (n=18)	83	56	50	33	22	28
Statewide or multistate (n=16)	94	56	38	50	25	6
ARC grant size						
Less than $50,000 (n=17)	77	71	53	18	12	0
$50,001 – $100,000 (n=22)	73	77	68	46	46	50
$100,001 – $200,000 (n=25)	80	72	68	52	28	20
More than $200,000 (n=14)	86	57	64	50	21	36
Total project cost						
Less than $100,000 (n=18)	78	72	50	33	28	17
$100,001 – $200,000 (n=27)	74	74	70	44	33	33
$200,001 – $900,000 (n=25)	84	68	68	48	28	24
More than $900,000 (n=8)	75	63	63	38	13	38
Years of ARC funding						
1 year (n=21)	91	67	71	38	24	29
2 years (n=33)	82	64	64	42	21	30
3 or more years (n=24)	63	83	58	46	42	21

NOTE: Six projects did not provide any information about the types of activities their projects were designed to conduct.
SOURCE: 2000 mail survey of ARC grantees.

Table 3-2. Percent of projects that reported various activities and percent of projects that reported various activities were fully or partially funded through ARC (n=78)

Type of activity	Percent of projects	Percent of projects with ARC-funded activities
Physical plant		
Install/replace mechanical equipment	20	17
Renovate structures	14	7
Build new structures	10	7
Other physical plant activity	4	4
Telecommunications		
Install computers	56	51
Install/develop network	32	26
Develop distance education system	19	16
Other telecommunications activity	6	5
Educational resources		
Install science lab	11	5
Install other special use classroom	26	24
Develop computer-based educational materials	32	25
Develop paper-based educational materials	33	26
Develop teacher training program/materials	44	32
Provide teacher/tutor training	63	45
Other educational resources activity	20	17
Training		
Provide literacy training	44	37
Provide computer training	56	45
Provide GED preparation training	36	30
Provide job skills training	47	35
Provide parenting skills training	29	23
Provide academic skills training	63	46
Provide peer tutoring	22	17
Other training activity	6	6
Support services		
Provide emotional or psychological counseling	14	6
Provide family support	17	10
Provide career/college counseling	36	19
Other support services activity	4	4
Community outreach		
Provide outreach activities	44	31
Establish partnerships	48	31
Distribute mini-grants	10	8
Other community outreach activity	8	5

NOTE: Six projects did not provide any information about the types of activities their projects were designed to conduct. ARC-funded activities represent those activities that respondents indicated were partially or fully funded by the ARC.
SOURCE: 2000 mail survey of ARC grantees.

The remainder of this section explores the types of ARC-support efforts associated with each of the six categories of activities. Special emphasis is placed on the extent to which the data on Table 3-2 reveal any noteworthy patterns by project characteristic.

Developing Educational Resources. Almost four-fifths (78 percent) of projects reported an ARC-funded activity aimed at developing educational resources (Table 3-1). Not surprisingly, projects designed to benefit all elementary/secondary students were more likely than any other project type to conduct an educational resources activity (94 percent of projects compared with 60 percent for projects serving adults). In addition, projects serving two or more nonadjacent counties (96 percent) were more likely to cite this type of activity than were those serving two or more adjacent counties (77 percent) or those serving a single town or county (64 percent). Finally, almost all (91 percent) projects with only a single year of ARC funding were developing an educational resource compared with 82 percent of projects with 2 years of ARC funding and 63 percent of projects with 3 or more years of ARC funding.

The two most widely conducted ARC-funded educational resource activities were providing teacher/tutor training (45 percent of projects) and developing teacher training programs/materials (32 percent) (Table 3-2). In addition, approximately one-quarter of projects used their ARC grant to develop paper-based educational materials (26 percent), develop computer-based educational materials (25 percent), and/or install other special use classrooms (24 percent). Only 5 percent reported using their ARC funds to install a science lab. Exhibit 3-1 provides examples of the educational resources that were developed with ARC support.

Providing Training to Students and Other Community Residents. The second most frequently used category of activities involved the provision of training to students and other community residents (71 percent of projects) (Table 3-1). Most projects serving adults (92 percent) and targeted elementary/secondary students (86 percent) used their ARC funding to conduct at least one training activity. This is not surprising, given that the training activities most frequently cited focused on the provision of a workplace (e.g., computer) or remedial (e.g., literacy, GED preparation) skill that would typically be provided to a specially targeted population.

Exhibit 3-1. Examples of educational resource activities

- **Michelin Learning Centers.** The Centers' curriculum for remediation involved an instructional module addressing each task on the Workplace Skills Inventory (WSI), so that individual results could be reviewed by instructors for areas needing improvement. In many cases, all that was required was a short coaching session on those tasks the WSI indicated needed improvement. Although the project team researched existing adult basic skills software systems, they determined that no one system would be able to adequately meet the needs of all learners. They therefore decided that the learning centers should include an array of customized resources, such as selected basic skills computer software, books, workbooks, cassettes, and videos. Efforts were made to integrate job-related materials into the curriculum. A "prescription sheet" was also developed for instructors that matched skill weaknesses with appropriate lessons and a variety of resources to assist in remediation.

- **Linking Individuals to Fundamental Training (LIFT).** LIFT used a team approach that combined remedial education in fundamental skills with extensive case management. Through ARC funding, they developed curricula geared toward the ability level and learning style of the individual.

- **Juniata Valley School District Curriculum Project.** The Juniata Valley School District developed a model aquaculture site for a secondary school district. ARC funding assisted in the collection, review, and development of aquaculture curricula, models, and application of technology. In addition, a conference on aquaculture was held to promote the interchange of ideas, and materials were distributed to other educational institutions.

- **Adult Skills and Academics Project (A.S.A.P.).** The A.S.A.P., a cooperative venture of the West Virginia Department of Education and the Thanks a Million Foundation, was designed to address the basic skill needs of adults preparing to enter the workforce or adults presently employed at work sites in West Virginia. Through ARC funds, they coordinated the training of teachers in the delivery of the curriculum and instructional delivery and developed curriculum at the work site.

- **Forward in the Fifth Math and Science Project.** Forward in the Fifth provided two different hands-on workshops to train elementary school teachers: (1) to teach math teachers by concept, rather than through rote memorization, and (2) to teach science teachers to focus on teaching science throughout activity centers.

- **Western Maryland Math-Science Teacher Training Project.** This project was designed with two components. The first component was a summer/fall training session designed to equip 48 teachers with skills to facilitate the integration of math and science at the elementary and middle school level. The second component of this project was to provide more indepth training for the teacher teams and access to consultants who would work with teachers within the counties to assist in the transition to an integrated curriculum in math and science.

SOURCE: Document review of ARC education projects.

The two most widely covered training topics were academic skills (46 percent) and computers (45 percent) (Table 3-2). Other training activities included literacy (37 percent), job skills (35 percent), GED preparation (30 percent), parenting skills (23 percent), and peer tutoring (17 percent). Exhibit 3-2 provides examples of the training activities that were conducted with ARC support.

Telecommunications Applications. Almost two-thirds (64 percent) of projects used their ARC funding to implement a telecommunications activity (Table 3-1). The use of ARC funds to conduct a telecommunications activity was most prominent among communitywide projects (78 percent), as well as those serving all elementary/secondary students (74 percent), and adults (72 percent). In contrast, only one (14 percent) of the seven projects serving targeted elementary/secondary students reported a telecommunications activity. In addition, projects serving a single town or county (88 percent) were more likely than those serving a wider geographic area to report using ARC funding for this purpose. Finally, projects serving at least one distressed county were less likely to report using their ARC grant for a telecommunications activity than were those serving no distressed counties (50 percent and 84 percent, respectively).

Just over half (51 percent) of all projects reported using their ARC grant to install computers, while 26 percent reported installing or developing a computer network (Table 3-2). Exhibit 3-3 provides examples of the telecommunications activities that were conducted with ARC support.

Community Outreach. Over two-fifths (42 percent) of projects used their ARC funding to conduct a community outreach activity—e.g., establishing a partnership (31 percent) or providing outreach activities (31 percent) (Tables 3-1 and 3-2). Community outreach typically included serving as a center of activity (e.g., an information or funding clearinghouse) or facilitating a community activity. For example, Forward in the Fifth served as an information clearinghouse on best practices by providing mailings, a newsletter, and public relations assistance for local affiliates and the schools. The use of community outreach was more prominent among projects serving preschoolers (67 percent), targeted elementary/secondary students (57 percent), and communitywide projects (56 percent)—and less prominent among projects serving all elementary/secondary students (39 percent) or adults (32 percent). Exhibit 3-4 provides examples of the community outreach activities that were conducted with ARC support.

Exhibit 3-2. Examples of training activities

- **Learn-By-Computer Literacy Program.** Learn-By-Computer was designed to provide adult learners an opportunity to use computer-based instruction in basic skills and GED studies. The grantee coordinated and conducted training for 41 instructors on how to help adult learners in the use of computers for basic skills and on employability skills training.

- **Basic Skills and Employability Development Project.** This project involved students attending the Computer Center for intervention services. It was designed to enhance their basic skills development and academic/applied skills correlated to their vocational program. Intervention services, which included remediation in math, reading, English, and communication skills, were performed by vocational and academic instructors and instructional aides. These were designed to empower students to achieve competencies for the mandated Ohio Proficiency Test, obtain a high school diploma, and enter the competitive workforce or postsecondary education program.

- **Technology Learning Center for Workforce Development.** The center prepared economically disadvantaged residents for entry-level manufacturing jobs. Specifically, they trained 125-175 participants over a 1-year period for such jobs including skills assessment, career counseling, introductory course work, training and practice, and pairing with a mentor company.

- **Presbyterian Child Welfare Agency (PCWA).** With financial assistance provided by ARC, PCWA proposed to open its second child care center in the Kentucky River Area Development District (KRADD) for infants and toddlers ranging from 2 weeks to 3 years of age. As part of the project, in-home and in-class instruction was provided to parents in order to improve parenting skills. Through the Northeast Mississippi Community Services, Inc., ARC funds were used as operational funds for the Mississippi Mobile Literacy Laboratory to provide basic skills and workplace literacy training to residents. Specifically, the laboratory provided a basic remediation computer course, a career match program, an Apple tutorial guide, and a career and social skills training program.

- **Hindman Settlement House.** Hindman provided a summer tutorial program for approximately 20 dyslexic students from eastern Kentucky. These students were housed and trained in an intensive 6-week program in reading, mathematics, auditory perception, and social values.

- **Smart Start.** As part of the Smart Start project, the Parent Mentor Team developed and implemented a parent empowerment training program to enable parents to become effective participants in designing and choosing services for their children.

- **Oak Ridge National Laboratory Summer Academy.** The Summer Academy for High School Students and Teachers was conducted in collaboration with the Department of Energy. A summer research experience allowed students and teachers to participate in a 2-week hands-on science and math training programs with scientists at the Oak Ridge National Laboratory (ORNL) and Continuous Electronic Beam Accelerator Facility (CEBAF). During the last 2 years of funding, a Teacher Leadership Institute and a Student/Teacher Math/Science Institute were held for selected participants. The focus was on hands-on laboratory research used in ongoing projects.

SOURCE: Document review of ARC education projects.

Exhibit 3-3. Examples of telecommunications applications

- **Cherokee Adult Literacy Project.** The Cherokee Adult Literacy Project was designed to expand the adult literacy services already provided. The ARC funding was used to purchase a computer that was used as an additional resource to the program by enabling students to work at the adult learning center at their convenience, rather than only when an instructor is available. The computers allowed for one-on-one instruction, which enabled the students to work at their own pace.

- **Workplace Learning Program.** The Workplace Learning Program for Dalton/Whitfield County installed 13 additional IBM computers as part of the learning demonstration lab to provide individualized instruction in reading, language, and math to increase the skill levels of employees.

- **Learn-By-Computer Adult Literacy Program.** Learn-By-Computer was designed to provide adult learners an opportunity to use computer-based instruction in basic skills and GED studies. Specifically, the project provided 15 computers at 15 different sites in the six-county area. In addition, printers and basic skills software were purchased to cover reading, math, English, and critical thinking skills.

- **Write to Read.** The Write to Read project worked in collaboration with IBM to establish programs in 10 counties. They coordinated and distributed hardware, software, and other equipment and materials purchased by IBM and supplied 10 printers for each site.

- **After School Tutoring Program (ASTP).** ASTP purchased computers, software, and additional equipment for the adult literacy lab and installed the center with a comprehensive computer software package for adult literacy. These centers were set up to test for literacy and scholarship programs, and support services were provided to attract individuals who would not normally be able to enter the program.

- **Distance Learning Network Linkage.** This network established new distance learning classrooms, which were expected to serve over 1,300 people during the first year of operation. The project connected 13 telecommunications classroom to the fiber optic backbone and linked the Erie I BOCES Project "CONNECT" interactive voice/video network.

- **Visions Five Plus Telecommunications.** Vision Five received ARC funding for the implementation and start-up of the Visions Five Plus interactive television network in public secondary schools in distressed counties. The overall purpose of the project was to establish a cooperative network of community learning centers.

- **Diversified Technology Program.** This program received ARC funding to purchase and install necessary equipment to establish a diversified technology lab for students to explore various uses of technology and jobs related to technology.

SOURCE: Document review of ARC education projects.

Exhibit 3-4. Examples of community outreach activities

- **Science Center of West Virginia.** Special activities were held at and sponsored through the Science Center of West Virginia, such as four membership nights per year, which ranged in attendance from 150-300, depending upon the focus of the event. The focal point of these events ranged from new exhibits at the Center to guest speakers. The most recent membership night focused on a new computer designed to accommodate quadriplegic visitors. The members were invited to learn and test the new computer. As a special event for National Engineers Week, the Center sponsored an "egg-dropping contest" in which competing students from surrounding counties packaged eggs in unique ways in hope of having them survive a three-story drop from the top floor of the Science Center.

- **Career Academy.** The Career Academy was designed to prevent students in grades 6-8 from dropping out of school. The Career Academy represented a partnership between teachers, parents, students, business/industry, and other community members. The academy provided 60 potential dropouts and/or college-bound students, not achieving at maximum potential, with opportunities to link school work to real work and still maintain academic rigor. In addition, community outreach activities included making presentations to potential students and parents.

- **North Carolina Rural Initiative-Outreach and Education Project.** As part of the project, ARC provided funding to small towns and rural communities through mini-grants. Other activities included holding a series of regional meetings to explain and educate rural leaders about the rural initiative.

- **Forward in the Fifth.** Forward in the Fifth worked to encourage effective community and parental involvement that would help schools better meet the needs of young people. In order to achieve this goal, Forward in the Fifth served as an information clearinghouse on best practices, including providing mailings, a newsletter, and public relations assistance for local affiliates and the schools.

- **Dropout Prevention/Career and Vocational Awareness Project.** One of the major foci of the project was to form a solid partnership with the local business community to address their work skill needs through a vocation program designed jointly by business leaders and educators.

- **Science and Math to Go! (SMTG!).** Community support was critical to the launching of SMTG! In addition, volunteers contributed heavily to the refurbishment of kits. University student organizations, mostly from Clemson University, and retirees come on a regular basis to assist with unpacking used kits, preparing new materials to go in kits, and packing kits for distribution. Some retirees also help with locating additional corporate and community partners. A small number of retirees, Clemson faculty, and parents volunteer in classrooms helping teachers monitor students' discovery activities.

SOURCE: Document review of ARC education projects.

Providing Support Services. Over one-quarter (28 percent) of projects used their ARC funding to provide support services (Table 3-1). These services typically included case management or helping families find and integrate necessary services. For example, the Presbyterian Child Welfare Agency (PCWA) provided parents of participating children with case-managed assistance in enrolling in job readiness, academic upgrade, and vocational skills courses in coordination with other existing programs. Not surprisingly, five (71 percent) of the seven projects serving targeted elementary/secondary were providing support services. In addition, the high proportion of preschool projects that provided support services suggests that these initiatives sought to ameliorate a range of family-related issues. The most prominent service offered was career/college counseling (19 percent) (Table 3-2). Exhibit 3-5 provides examples of the support services that were provided with ARC support.

Improving Physical Plant. Just over one-quarter (27 percent) of projects reported at least one ARC-funded physical plant activity (Table 3-1)—most commonly installing or replacing mechanical equipment (17 percent) (Table 3-2). Exhibit 3-6 provides examples of the physical plant improvements that were conducted with ARC support. Almost one-third (32 percent) of elementary/secondary projects serving all students cited this approach, suggesting that ARC funds were being used to make improvements to school facilities. Additionally, projects serving only nondistressed counties (40 percent) were more likely to make such improvements than were those serving at least one economically distressed county (21 percent) or all counties in a state (6 percent).

Exhibit 3-5. Examples of support service activities

- **School Outreach Project.** School Outreach provided families of at-risk kindergarten and first grade students the individualized support necessary to maximize the likelihood that children arrive at school healthy and ready to learn. Most often, outreach workers helped children with reading and mathematics and other enrichment activities and educated families about hygiene, stressing the importance of bathing and watching for head lice. They also provided access to multiple resources, including referrals to mental health providers, assistance obtaining Medicaid, transportation to eye doctors and dentists, and assistance in navigating the public assistance and child care systems.

- **Presbyterian Child Welfare Agency (PCWA).** PCWA provided parents of participating children with case-managed assistance in enrolling in job readiness, academic upgrade, and vocational skills courses in coordination with other existing programs.

- **The David School.** The Success Bound program at the David School was a comprehensive approach to better prepare students who had dropped out of school to join the labor market. Students in the Success Bound program were provided with career exploration and preparation for life after graduation. Periodic meetings for students with a staff counselor were offered to explain the various services available and ensure that students' needs are being met to the greatest extent possible.

- **Linking Individuals to Fundamental Training (LIFT).** LIFT delivered services on an in-home basis to 35 low-income adults who lacked the ability to engage in high school equivalency level training and were unable, due to transportation and/or other barriers, to access existing services or programs. Included were case management/psychological services.

- **Drop-out Prevention/Career and Vocation Awareness and Training Project.** This project worked to implement a worksite apprenticeship training program targeted toward at-risk high school youth who needed to increase their employment skills and work opportunities. The major focus of this project was to address the work skill needs of local business through a vocation program designed jointly by business leaders and educators. This project developed and implemented an apprenticeship and job-shadowing program for approximately 80 at-risk youth. In addition, it implemented a summer career exploration program to assist recent dropouts and at-risk students.

- **Adult Basic and Literacy Education.** This program of the Meigs County Schools included career awareness as part of their overall approach to educating adults. Specifically, learners were able to investigate career clusters, career skill information, and duties of workers, and to learn about resume and interviewing skills for jobs.

SOURCE: Document review of ARC education projects.

Exhibit 3-6. Examples of efforts to improve physical plant

- **Literacy Program to Provide Education Opportunities to Adults.** The Literacy Program was designed to renovate an existing literacy center. The grant permitted the existing center to expand operation to a larger number of individuals by providing handicap accommodations and upgrading electrical services.
- **Juniata Valley School District Curriculum Project.** This project was designed to develop a model aquaculture site. Part of the ARC grant was used to design an appropriate tank or pond system to accommodate the needs of the project.
- **Cullman County School District.** The district received funding to provide temporary classrooms for students at two schools that were destroyed by fire. Fifteen classroom trailers and one office trailer were leased for 1 year, and 400 desks and office equipment were purchased for the classrooms and offices.
- **McCreary County Learning Center Expansion Project.** This project entailed equipping the learning center with furnishings to meet the educational, training, and retraining requirements of area residents. Risers and seating were provided for the lecture hall and the community conference room. In addition, the parking areas were renovated and expanded to accommodate the increased number of participants at the facility. Outdoor seating was also to be added to the campus.
- **Itawamba County School District.** The district purchased equipment to furnish a physics/chemistry lab, biology lab, and a math computer lab, including furniture, and other necessary equipment in order to improve the math and science education in their school district.

SOURCE: Document review of ARC education projects.

3.1.2 Combination of Activities Conducted by Projects

Very few projects restricted their efforts to a single category of activities (10 percent) or attempted to implement an activity in all six categories (12 percent) (not shown in tables). In fact, the average educational initiative conducted activities in three different categories—suggesting that projects were fairly ambitious in the diversity of activities they chose to implement.

A series of correlation analyses revealed that the projects in the study sample tended to implement particular combinations of activities. For example, projects that reported at least one physical plant activity also tended to report at least one telecommunications activity. Likewise, projects that reported a support service activity also tended to report a community outreach activity. Finally, projects reporting a support service activity also tended to report at least one training activity. Taken together, these patterns suggest that projects' approaches tended to merge into a diversified, yet coherent strategy for achieving their goals. The following examples, taken from the case studies, illustrate this point:

- The Mobile Technology Project combined multiple activities, including the distribution of laptop computers, the installation and maintenance of a LAN using wireless infrared technology, the provision of training to teachers in how to use equipment and infuse technology into their daily lessons, the provision of instruction to students and their parents, and the establishment of community partnerships. *(Mobile Technology Project)*

- The Partnering with Parents for Successful Early Childhood Development project in eastern Tennessee developed written educational materials for parents ("Smart from the Start" sheets) and distributed them through local community agencies. It also provided classes in parenting skills and encouraged parents to complete their GED. *(Partnering with Parents for Successful Early Childhood Development Project)*

- The Science Center of West Virginia received a grant enabling the development of hands-on science exhibits. The center also developed science manipulative devices for classroom teachers to use, as well as a mobile, inflatable planetarium to use in classroom visits providing instruction in astronomy. *(The Science Center of West Virginia)*

3.2 Extent of Implementation

In an effort to assess the degree to which projects were able to implement their approaches, the mail survey obtained information on whether the level of achievement for each activity that a project

conducted was "less than planned," "same as planned," or "more than planned."[3] This section summarizes the extent of implementation across the 78 projects and 556 ARC-funded activities. All findings focus on those activities that were partially or fully funded by the ARC grant—i.e., no effort was made to analyze the extent of implementation for the activities that projects conducted *without* ARC support.

An important caveat about these finding is worth noting. Data presented in this section represent descriptive comparisons of the extent of implementation of activities by project characteristics. These comparisons were often made across vastly different types of projects. For example, if a small project installed computers "more than planned" and a large project developed a distance learning network "less than planned," we cannot infer that small projects were more successful than large projects. It is for this reason that we are hesitant to use these findings to make general policy recommendations about how the ARC might improve the management of its projects. (This issue is addressed in more detail in Chapter 6.)

Over four-fifths (85 percent) of projects reported that they were able to implement their ARC-funded activities as planned[4] (Table 3-3). Interestingly, the likelihood of projects realizing their implementation goals was not related to any project characteristics.[5]

Only 15 percent indicated that their level of implementation on at least one task was less than planned, and no projects reported that they implemented all of their activities less than planned. Projects serving preschoolers (33 percent), targeted elementary/secondary students (29 percent), and adults (20 percent) were more likely than other project types to report that at least one of their ARC-funded activities was not fully implemented. In addition, statewide or multistate projects were more likely

[3] Although this approach does not allow us to know specifically what degree of implementation was planned, it does allow us to use a common metric across a broad range of activity types. Obviously, if a project had low expectations, it was easier to claim that a given activity was implemented more than planned. Conversely, a project with high expectations might be more likely to report that its level of accomplishment was less than planned.

[4] For the purposes of this discussion, "as planned" represents a combination of projects reporting on the survey that their level of implementation was same as planned or more than planned.

[5] Note that differences that appear large in magnitude may not be statistically significant at the 0.10 level. All findings reported in the text are statistically significant to the 0.10 level.

Table 3-3. Extent to which projects implemented reported activities, by project characteristics

Project characteristic	At least one activity less than planned	All activities same as planned or more than planned
All projects (n=78)	15	85
Project type		
Preschool age (n=6)	33	67
Elementary/secondary, all students (n=31)	7	94
Elementary/secondary, targeted students (n=7)	29	71
Adults (n=25)	20	80
Communitywide (n=9)	11	90
Project scope		
Single town or county (n=25)	4	96
Adjacent counties (n=30)	20	80
Nonadjacent counties (n=23)	22	78
Economic status		
At least one distressed county (n=24)	13	88
No distressed counties (n=38)	13	87
Statewide or multistate (n=16)	25	75
Metropolitan status		
Nonmetropolitan only (n=38)	13	87
Metropolitan only (n=6)	17	83
Both metro and nonmetro (n=18)	11	90
Statewide or multistate (n=16)	25	75
ARC grant size		
Less than $50,000 (n=17)	12	88
$50,001 – $100,000 (n=22)	5	95
$100,001 – $200,000 (n=25)	20	80
More than $200,000 (n=14)	29	71
Total project cost		
Less than $100,000 (n=18)	6	94
$100,001 – $200,000 (n=27)	19	82
$200,001 – $900,000 (n=25)	16	84
More than $900,000 (n=8)	25	75
Years of ARC funding		
1 year (n=21)	14	86
2 years (n=33)	12	88
3 or more years (n=24)	21	79

NOTE: Six projects did not provide any information about the types of activities their projects were designed to conduct. No project reported that all of its activities were implemented less than planned. Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

than other initiatives in these two categories to report that at least one of their ARC-funded activities was implemented less than planned (25 percent). However, there did not appear to be any differences in the implementation experiences of projects serving distressed and nondistressed counties. Finally, projects funded for 3 or more years were more likely than projects funded for 1 or 2 years to have implemented at least one ARC-funded activity less than planned (21 percent).

These findings suggest that projects that were smaller in scope may have been better able to implement their approaches, while larger (and potentially more ambitious) projects were more likely to encounter at least some difficulty with at least one of their activities. While this is not a particularly surprising finding, it does ultimately suggest a set of criteria that ARC project coordinators might use in determining which types of projects are most likely to benefit from additional technical assistance and monitoring. It does not, however, provide a basis for suggesting a policy about which size of projects ARC should fund. As discussed previously, the study sample was too small to examine the influence of project size on a particular approach.

In addition to determining whether projects were able to implement their planned activities, we also explored the extent of implementation across all of the activities. The primary purpose was to determine whether projects' success was associated with the types of activities they tried to implement. Nearly all of the 556 ARC-funded activities were implemented as planned (Table 3-4). In fact, over one-fifth (21 percent) of activities were implemented more than planned. This pattern held across all categories of activities.

3.3 Implementation Barriers

Although the majority of ARC-funded activities were conducted as planned or more than planned, findings from both the mail survey and case studies suggest that projects did encounter some implementation barriers. In some cases, these obstacles were serious enough to prevent projects from fully implementing their ARC grant. In others, they merely hindered a project's overall effectiveness or altered its implementation strategy—e.g., introducing time delays, limiting the range of services or potential beneficiaries. This section describes the barriers and problems that hindered projects' efforts to conduct the activities that were partially or fully funded by the ARC.

Table 3-4. Extent to which projects implemented activities that were partially or fully funded by ARC, by the various activities that projects reported conducting

Type of activity	Extent of implementation		
	Less than planned	Same as planned	More than planned
Total (n=556)	5	74	21
Physical plant			
All physical plant activities (n=29)	0	79	21
Install/replace mechanical equipment (n=14)	0	79	21
Renovate structures (n=6)	0	67	33
Build new structures (n=6)	0	83	17
Other physical plant activity (n=3)	0	100	0
Telecommunications			
All telecommunications activities (n=82)	4	81	16
Install computers (n=43)	2	86	12
Install/develop network (n=22)	0	77	23
Develop distance education system (n=13)	8	69	23
Other telecommunications activity (n=4)	25	75	0
Educational resources			
All educational resources activities (n=150)	4	73	23
Install science lab (n=8)	0	88	13
Install other special use classroom (n=20)	0	95	5
Develop computer-based educational materials (n=21)	5	81	14
Develop paper-based educational materials (n=22)	0	77	23
Develop teacher training program/materials (n=27)	4	67	30
Provide teacher/tutor training (n=38)	8	63	29
Other educational resources activity (n=14)	7	57	36
Training			
All training activities (n=200)	5	75	21
Provide literacy training (n=31)	10	71	19
Provide computer training (n=38)	3	76	21
Provide GED preparation training (n=25)	0	76	24
Provide job skills training (n=27)	7	76	17
Provide parenting skills training (n=19)	11	68	21
Provide academic skills training (n=39)	0	77	23
Provide peer tutoring (n=14)	0	79	21
Other training activity (n=5)	20	60	20
Support services			
All support services activities (n=32)	6	78	16
Provide emotional or psychological counseling (n=5)	0	100	0
Provide family support (n=8)	0	75	25
Provide career/college counseling (n=16)	13	75	13
Other support services activity (n=3)	0	67	33
Community outreach			
All community outreach activities (n=63)	10	64	27
Provide outreach activities (n=26)	12	65	23
Establish partnerships (n=26)	8	65	27
Distribute mini-grants (n=7)	0	71	29
Other community outreach activity (n=4)	25	25	50

NOTE: Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

Survey respondents were provided a list of common implementation barriers and asked to indicate which ones pertained to their project efforts. One-third (34 percent) of projects reported that they had no implementation problems, while 21 percent reported only one barrier, 15 percent reported two barriers, 10 percent reported three barriers, and 14 percent reported four barriers (Figure 3-1). Five respondents (6 percent) reported five or more problems.

As shown in Figure 3-2, no single obstacle was reported by more than one-third of the projects. The most frequently reported obstacle was underestimating the time or effort needed to implement the activities—with 34 percent of respondents indicating that their projects took more time or effort than originally anticipated. In addition, 19 percent of respondents indicated that participants had not maximized the use of their projects' services, 15 percent cited local administrative delays, 15 percent indicated they had underestimated the demand for services, and 14 percent cited difficulties developing program materials. Projects also identified barriers not included as response options—e.g., the inadequacy of their facilities, inclement weather, and local political complications.

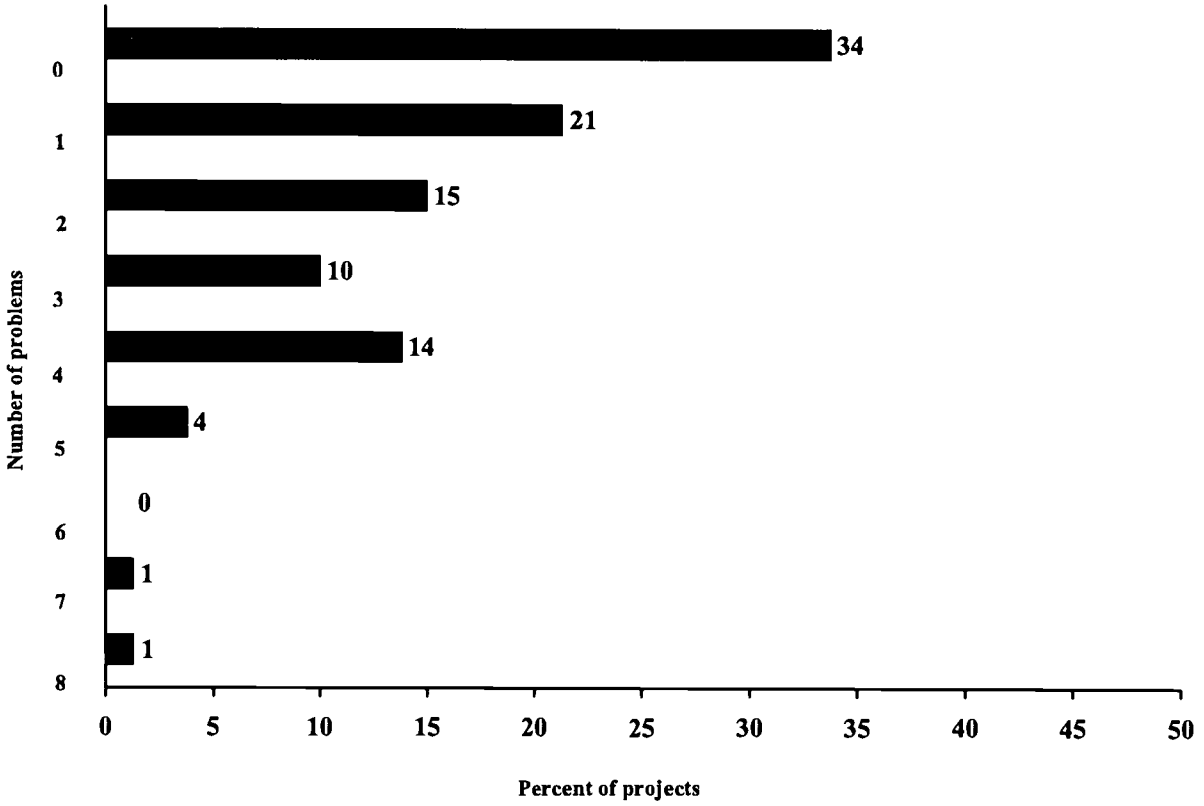
The site visits provided an opportunity to delve more deeply into the types of problems that projects encountered.[6] As might be expected, given the unique nature of the activities these projects attempted, we uncovered some additional problems that were not listed as response options on the survey. Seven of the eight case study sites indicated that they encountered some resistance to their proposed approach. For example:

- In the School Outreach Project, K-12 teachers expressed concerns that project workers were undermining their authority. The outreach workers found that while most teachers were supportive of the School Outreach Project, a few were less receptive. Some teachers and principals new to the schools felt that the outreach workers were telling them that they were not doing their jobs right and that the outreach workers were there to watch over their teaching. Project staff felt these were front-end issues that were easily dealt with at the initial orientation session.

- In Adair County Technology Center project, school administrators indicated that a technology center was not a necessity in their county. Although parents and local businesses and industry quickly recognized the significance of the technology center, it was harder to sell its merits to the education community (e.g., faculty, administrators). The project director noted that it was necessary to persuade the superintendent of the center's value, since his support trickled down to administrators and faculty and quieted their resistance.

[6] As discussed in Appendix E, these eight case study sites were not representative of the overall study sample—i.e., they were selected because they had implemented and sustained a unique approach that warranted further study.

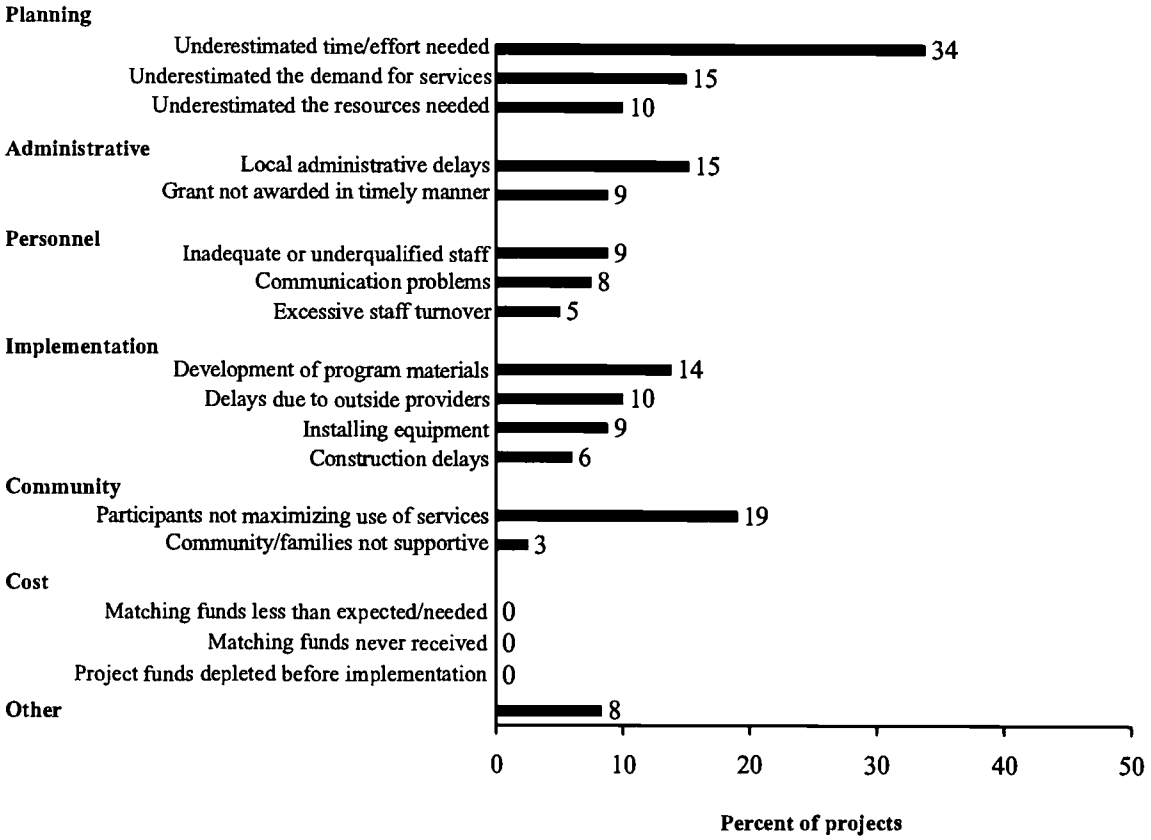
Figure 3-1. Number of problems or barriers to implementing ARC-funded activities (n=80)



SOURCE: 2000 mail survey of ARC grantees.

- The Michelin Learning Centers project experienced resistance on two fronts, one from the ranks of the production workers and one from management. After learning of the new company policy regarding basic skills testing, many of the production workers expressed concern and apprehension. Many feared for their jobs, and efforts were taken to reassure workers that although they would need to demonstrate sufficient basic skills in reading, math, and computer usage, they would be fully and patiently supported in the process. Some workers were reluctant to visit the learning centers, fearing the stigma and embarrassment attached to remediation. Further, many workers viewed voluntary continuing education as unnecessary and burdensome. Resistance to the learning centers also came from above, with some in management not buying in to the initiative. While the learning centers were fully implemented, two of the plants were not involved in project planning, and this exclusion hardened their resistance. According to the project's final report, local plants were not involved early on and their input was sought only to determine how to implement the plan. The effect was a low level of involvement by some plant management.

Figure 3-2. Percent of projects reporting implementation barriers for ARC activities (n=80)



NOTE: Four projects did not provide any information about the implementation barriers their projects faced.
SOURCE: 2000 mail survey of ARC grantees.

Half of the case study sites faced budget constraints and/or had limited resources to implement and maintain their projects. In several cases, the respect that projects had earned throughout the community did not translate into financial support, in large measure because key stakeholders lacked the necessary resources. In another case, a project's operational and maintenance costs were too high for a community that was in a period of economic decline (Exhibit 3-7).

Exhibit 3-7. Science Center of West Virginia

The Science Center continually struggled to obtain the amount of money necessary to operate an 11,500 square foot, high-maintenance facility that experiences a lot of traffic and heavy use of its exhibits by youth. Most of the surrounding area has experienced a population loss as a direct result of a serious, long-term decline in the economy. Some local industries have closed their doors, and others have been purchased by companies outside of the area. The founder/president of the Science Center commented, "The money we raised five and six years ago is no longer on the streets." A few examples highlight this fact: the type of mom-and-pop stores (e.g., drug stores, hardware stores and book stores), that would have typically supported an enterprise such as the Science Center—for both civic reasons and because their extended families are integral parts of the schools—have been replaced by large retail chains located in the mall outside of town; the local wood pulp business is now owned by a company in Germany; the telephone company is owned by a firm in New Jersey; the electric company is owned by a company in a neighboring state; the newspaper and television station are owned out of state; and the locally owned Pepsi Cola bottling and distribution plant, which could always be relied upon to provide beverages at special events, has been sold. This situation severely limits the amount of money that is being recirculated back into the community for many purposes and has impacted not only on the Science Center's larger fundraising efforts, but even the small donations it used to be able to obtain from local merchants in terms of services and supplies.

Finally, in several case study sites, demand outpaced supply. This appeared to happen in cases where projects underestimated the staff or materials needed for a project—or the project experienced such difficulties as high staff turnover or lack of space to store project materials (see Exhibit 3-8).

Exhibit 3-8. Science and Math To Go!

Science and Math To Go! (SMTG!) had far more demand for professional development than it could handle. Teachers wanted to be trained on new kits, and new teachers wanted the initial training. The need to address new state standards and assessments strained the program's training resources. Moreover, unlike science, there were no commercially available math kits for SMTG! to support. Staff and teachers had to create them and contract with a supplier for the materials. This was a long, slow process and drew time away from other activities, including providing professional development. One kit was created for each grade level, but demand for additional math kits continues. While everyone hoped that new kits would be developed in the coming year, researching and testing materials and then having kits assembled was a lengthy process. Storage space was also a problem. Teacher demand for kits overwhelmed the distribution capacity of the Materials Resource Center. While the center's space had improved dramatically over the early years, it still needed a more efficient shelving system and space for cutting and measuring materials and repacking the crates. This will become even more of an issue in future years as SMTG! begins distributing kits for middle school and adding more math and additional science kits to meet the standards.

Taken together, the findings from the survey and case studies suggest that inadequate planning—especially estimating the time needed to implement a given task—represented the only obstacle that projects encountered to a large extent (and even this barrier was cited by only one-third of projects). The relative absence of grant-related barriers (e.g., grant not awarded in timely manner, insufficient funding) suggests that respondents generally viewed the level of support provided by ARC as being both timely and sufficient to meet their needs.

3.4 Summary

The projects in the study sample reported conducting a total of 682 distinct activities—556 of which were partially or fully funded by ARC. The majority of projects conducted an ARC-funded activity aimed at developing educational resources, providing training to students and other community residents, and/or installing/enhancing telecommunications applications. The average educational initiative conducted activities in three different categories—suggesting that projects were fairly ambitious in the diversity of activities they chose to implement. Across all activity types, the most frequently cited ARC-funded undertakings were installing computers, providing academic skills training, providing computer training, providing teacher or tutor training, and providing literacy training.

Over four-fifths of respondents met or exceeded their implementation objectives. Only 15 percent indicated that their level of implementation on at least one task was less than planned—and no projects reported that they implemented all of their activities less than planned. Nearly all of the 556 ARC-funded activities were implemented as planned—in fact, 21 percent were implemented more than planned. Finally, the surveys and case studies provide little evidence that projects encountered any widespread barriers that affected the degree to which an activity was implemented. In fact, with the exception of underestimating the time/effort needed to conduct the project, no more than one-fifth of respondents cited any single barrier as having hindered their capacity to carry out the activities in their ARC grant.

4. ARC OUTCOMES

The ultimate test of the merit of ARC-supported projects is whether they achieve their intended educational outcomes. Even initiatives that successfully implement all of their proposed activities cannot be considered successful until they provide evidence that they benefited the communities they serve. Such evidence might include gains in student achievement (e.g., increased grades, improved scores on statewide tests), increased interest in educational attainment (e.g., higher graduation rates, lower dropout rates, increased enrollment in higher level mathematics and science courses, increased enrollment in college), gains in adult learning (e.g., increased literacy rates, increased GED attainment rates), and gains in economic well-being (e.g., increased wages, decreased unemployment rates).

This chapter assesses the extent to which the projects in the study sample achieved the educational objectives they delineated for themselves in their proposals to the ARC.[1] In reviewing these findings, it should be noted that many of the projects in the study sample were funded before the ARC revised its application procedures and began requiring that applicants delineate specific outputs and outcomes in their proposals. While some projects in the study sample identified a tangible outcome (e.g., *"retain more students in the school district"*), others described an abstract or impractical outcome (e.g., *"break the generational illiteracy cycle in the four county region"*). Few projects provided a numeric benchmark against which their progress could ultimately be measured. Had these projects been funded after 1998—the year in which the ARC began requiring that applicants specify measurable outcomes—it is likely that a higher proportion of the applications would have contained tangible and measurable outcomes.

It is also important to note that we were not able to substantiate projects' claims that they had achieved their ARC-supported outcomes. Although we asked projects to provide written evidence that a given outcome had been achieved, we were not in a position to assess whether these gains had, in fact, occurred. Nor were we able to ascertain whether the methodologies they used to document these gains were appropriate.

Finally, with most grantees receiving funding and support from multiple sources, we were not able to determine the extent to which a project's accomplishments were directly or indirectly

[1] See Appendix B for a discussion of projectwide accomplishments—i.e., accomplishments associated with the sum of activities conducted by projects (regardless of funding source).

attributable to the ARC grant. However, this chapter does discuss whether respondents believed they would have been able to achieve their outcomes if ARC funding had not been made available.

4.1 Methodology

In an effort to assess the extent to which grant recipients achieved the goals they had set for themselves, we reviewed each project's application materials to identify the specific objectives and outcomes they had delineated in their original proposals to the ARC. These outcome statements were entered into a database that was then used to generate an addendum to the mail survey. This addendum, customized for each project, provided respondents with an opportunity to (1) indicate the extent to which they met their own outcomes, (2) provide tangible evidence that a given outcome was achieved, and (3) describe factors that hindered their ability to achieve a desired goal.

To the extent possible, the phrasing for the outcomes provided in the addendum was taken from projects' original applications to the ARC. In a limited number of cases, however, the outcome statements either had to be imputed (e.g., from more general language in the proposal) or taken from other sources (e.g., the official contract between the ARC and the grant recipient). Once they received the survey, respondents could contact Westat if they believed that the outcomes listed in the addendum were not representative of what their ARC project was designed to achieve. (None did so.) Respondents could also provide information about any additional ARC-related outcomes that were not already listed in the addendum. (Nineteen projects described additional outcomes.)

Twelve (14 percent) of the 84 projects identified intended outputs (e.g., provide training to 20 teachers)—*but no intended outcomes*—in their ARC proposal. These 12 projects were excluded from the analysis of ARC-related outcomes. (We do, however, provide a separate discussion of the extent to which these 12 projects achieved their intended outputs in Section 4.3.) Some projects listed a combination of outcomes and outputs in their proposals. In such cases, we focused exclusively on outcomes and did not assess the extent to which projects' intended outputs were achieved.[2]

[2] The decision to exclude outputs in cases where outcomes were also listed was based on two factors. First, the primary focus of the Government Performance and Results Act (GPRA) is on results and outcomes—as opposed to activities and outputs. Second, Item 7 of the mail survey was designed to obtain information on whether projects achieved their anticipated ARC-supported activities. In an effort to alleviate response burden, we concluded that there was no compelling reason for using the addendum to collect similar data about outputs (except in cases where projects failed to identify any outcomes).

The primary intent of this exercise was to provide ARC with an assessment of the extent to which the education projects in the study sample produced tangible gains—e.g., an increase in student achievement, adult literacy, or wages and job retention. A secondary purpose was to assess whether projects had more or less difficulty achieving specific types of outcomes—e.g., were projects designed to increase student achievement more successful than those designed to boost household income. As is discussed in Chapter 6, a third purpose was to develop an inventory of outcomes that could serve as a framework for enhancing ARC's capacity to monitor and track its educational projects.

4.2 Outcomes Associated with ARC-Funded Activities

A major purpose of this evaluation was to evaluate projects "according to the performance standards set forth in the project description of objectives" (*Request for Proposals by the Appalachian Regional Commission for A Program Evaluation of ARC's Educational Projects*, May 28, 1999). Unlike the projectwide activities described in Chapter 3, this section focuses on the specific goals that projects described in their original requests for ARC support—with an emphasis on the outcomes that were directly associated with their ARC grant.

4.2.1 Types of ARC Outcomes That Projects Identified for Themselves

Across Projects. Over four-fifths (86 percent) of projects in the study sample described at least one anticipated outcome or community benefit in their proposal to the ARC. These outcome statements generally outlined a skill (e.g., *increase the reading and math skills of those participating in the program*) or circumstance (e.g., *retain more students in the school district*) that would be enhanced as a result of their ARC grant. However, only a few of the outcomes described in the application materials had a measurable benchmark against which project success could be measured (e.g., *reduce the dropout rate in Madison County by 50 percent in the next ten years, 20 percent or 7 individuals will upgrade their fundamental skill levels and social skill capabilities)*. Most projects used more general—and less quantifiable—language to describe their desired goals (e.g., *boost the number of GED graduates, improve job performance of adult learners)*. In addition, a small number of projects outlined a lofty goal that was beyond the possibility of a single project to achieve (e.g., *break the generational illiteracy cycle in the four county region, improve the overall quality of life for the citizens of SDA One)*.

Projects anticipated an average of 2.8 ARC-related outcomes—with projects serving preschoolers and targeted elementary/secondary students anticipating an average of 3.6 and 3.9 outcomes, respectively (Table 4-1). Not surprisingly, over four-fifths (83 percent) of projects described in their proposal an educational attainment objective that would occur as a result of the ARC grant (Table 4-2). In addition, 36 percent cited an economic benefit, and another 36 percent outlined a family/individual well-being outcome. An analysis of anticipated outcomes by project characteristics uncovered some interesting trends. Specifically:

- **Project type.** Most projects serving preschoolers and all projects serving targeted elementary/secondary students anticipated both educational and family/individual well-being outcomes—suggesting that these projects were seeking to ameliorate both educational and social barriers. In addition, the majority of projects serving adults anticipated educational gains (70 percent), and less than half anticipated economic (44 percent) or family/individual (26 percent) outcomes.

- **Project scope.** Nearly all projects situated in a single town or county (96 percent) anticipated an educational outcome, and approximately one-quarter (23 percent) described a family/individual well-being outcome. This suggests that local initiatives primarily focused on improving the educational status of a defined population (e.g., students in a single school or district), while regional initiatives were more likely to address economic concerns.

Across Outcomes. Of the 203 outcomes identified during the document review, 122 (60 percent) described an educational benefit, 42 (21 percent) described an economic benefit, and 39 (19 percent) described a family/individual well-being outcome (Table 4-3). Exhibit 4-1 provides examples of projects' anticipated educational, economic, and family/individual well-being outcomes. (Exhibits A-1 (educational), A-2 (economic), and A-3 (family/individual well-being) in Appendix A provide additional examples of the outcomes that projects described in their proposals to the ARC.) An analysis of these outcomes uncovered the following noteworthy and statistically significant trends (Table 4-3):

- **Project type.** Not surprisingly, projects serving youth tended to identify education-oriented objectives. In addition, half (50 percent) of the 74 outcomes identified by projects serving adults described an educational benefit, 24 (32 percent) described an economic benefit, and 13 (18 percent) described a family/individual well-being benefit.

- **Project scope.** Over three-quarters (58 projects—or 77 percent) of the 75 outcomes identified by projects serving a single town or county described an educational benefit, as did 34 projects (47 percent) serving two or more adjacent counties and 30 projects (55 percent) serving two or more nonadjacent counties.

Table 4-1. Average number of ARC outcomes reported by projects, by project characteristics

Project characteristic	Average number of ARC outcomes
All projects (n=72)	2.8
Project type	
Preschool age (n=5)	3.6
Elementary/secondary (all students) (n=25)	2.6
Elementary/secondary (targeted students) (n=8)	3.9
Adults (n=27)	2.7
Communitywide (n=7)	2.3
Project scope	
Single town or county (n=26)	2.9
Adjacent counties (n=25)	2.9
Nonadjacent counties (n=21)	2.6
Economic status	
At least one distressed county (n=24)	2.8
No distressed counties (n=37)	2.9
Statewide or multistate (n=11)	2.5
Metropolitan status	
Nonmetropolitan only (n=37)	3.0
Metropolitan only (n=7)	2.6
Both metro and nonmetro (n=17)	2.7
Statewide or multistate (n=11)	2.5
ARC grant size	
Less than $50,000 (n=15)	2.3
$50,001 – $100,000 (n=23)	2.9
$100,001 – $200,000 (n=24)	2.9
More than $200,000 (n=10)	3.2
Total project cost	
Less than $100,000 (n=18)	2.6
$100,001 – $200,000 (n=25)	2.8
$200,001 – $900,000 (n=23)	3.0
More than $900,000 (n=6)	2.7
Years of ARC funding	
1 year (n=18)	2.7
2 years (n=28)	3.0
3 or more years (n=26)	2.7

NOTE: Projects that only listed outputs are not included on this table.
SOURCE: 2000 mail survey of ARC grantees.

Table 4-2. Percent of projects reporting at least one ARC outcome in each type of outcome, by project characteristics

Project characteristic	Increase educational attainment/preparation	Increase economic well-being	Increase family or individual well-being
All projects (n=72)	83	36	36
Project type			
Preschool age (n=5)	80	40	80
Elementary/secondary (all students) (n=25)	92	24	20
Elementary/secondary (targeted students) (n=8)	100	38	100
Adults (n=27)	70	44	26
Communitywide (n=7)	84	43	29
Project scope			
Single town or county (n=26)	96	27	23
Adjacent counties (n=25)	72	48	44
Nonadjacent counties (n=21)	81	33	43
Economic status			
At least one distressed county (n=24)	96	38	42
No distressed counties (n=37)	81	38	32
Statewide or multistate (n=11)	64	27	36
Metropolitan status			
Nonmetropolitan only (n=37)	92	41	35
Metropolitan only (n=7)	71	29	29
Both metro and nonmetro (n=17)	82	35	41
Statewide or multistate (n=11)	64	27	36
ARC grant size			
Less than $50,000 (n=15)	80	40	53
$50,001 – $100,000 (n=23)	87	22	26
$100,001 – $200,000 (n=24)	83	42	42
More than $200,000 (n=10)	80	50	20
Total project cost			
Less than $100,000 (n=18)	89	33	44
$100,001 – $200,000 (n=25)	80	24	40
$200,001 – $900,000 (n=23)	87	48	30
More than $900,000 (n=6)	67	50	17
Years of ARC funding			
1 year (n=18)	94	33	44
2 years (n=28)	79	43	29
3 or more years (n=26)	81	31	39

NOTE: Projects that only listed outputs are not included on this table.
SOURCE: 2000 mail survey of ARC grantees.

Table 4-3. Number of anticipated outcomes for each type of outcome, by project characteristics

Project characteristic	Increase educational attainment/ preparation	Increase economic well-being	Increase family or individual well-being	Total
Total	122	42	39	203
Project type				
Preschool age	10	3	5	18
Elementary/secondary (all students)	50	8	6	64
Elementary/secondary (targeted students)	15	3	13	31
Adults	37	24	13	74
Communitywide	10	4	2	16
Project scope				
Single town or county	58	9	8	75
Adjacent counties	34	21	18	73
Nonadjacent counties	30	12	13	55
Economic status				
At least one distressed county	44	12	12	68
No distressed counties	63	23	22	108
Statewide or multistate	15	7	5	27
Metropolitan status				
Nonmetropolitan only	76	19	18	113
Metropolitan only	11	2	5	18
Both metro and nonmetro	20	14	11	45
Statewide or multistate	15	7	5	27
ARC grant size				
Less than $50,000	16	7	12	35
$50,001 – $100,000	48	8	10	66
$100,001 – $200,000	39	17	14	70
More than $200,000	19	10	3	32
Total project cost				
Less than $100,000	30	7	10	47
$100,001 – $200,000	41	10	19	70
$200,001 – $900,000	44	18	8	70
More than $900,000	7	7	2	16
Years of ARC funding				
1 year	30	9	9	48
2 years	52	20	12	84
3 or more years	40	13	18	71

SOURCE: 2000 mail survey of ARC grantees.

Exhibit 4-1. Examples of outcomes that projects specified in their original proposal to the ARC

Educational Outcomes
Increase adult literacy rates within the State of West Virginia.
Break the generational illiteracy cycle in the four county region.
Reduce the number of at-risk students in the 10 counties in the Appalachian region of Tennessee.
Reduce the drop-out rate in the 10 counties in the Appalachian region of Tennessee.
Retain more students in the school district.
Increase the number of students who pursue studies in math and/or science.
Economic Outcomes
Attract new business and industry to the area.
Upgrade adults' re-employment skills.
Reduce the likelihood of plant closures and layoffs in the 6 participating counties.
5 students who participated in the Success Bound program will gain employment.
Reduce the unemployment rate in the 5 county region.
Create additional non-farm income.
Family/Individual Well-Being Outcomes
Enable adult learners to be less economically dependent on the social service system.
Improve worker self-esteem and job attitude.
Return men and women to the community as productive individuals.
Seventy-five percent or 26 individuals served will experience a significant increase in the quality of their lives, and a significant decrease in dejection and vulnerability to exploitation.
Create a positive home climate that enhances positive feeling, relationships and aspirations, and connect home to the school and mainstream community.

SOURCE: Document review of ARC education projects.

- **Economic status.** Of the 68 outcomes identified by projects serving at least one distressed county, 44 (65 percent) described an educational benefit, 12 (18 percent) an economic benefit, and 12 (18 percent) a family/individual well-being benefit.

- **Metropolitan status.** Of the 113 outcomes identified by nonmetropolitan projects, 76 (67 percent) described an educational benefit, 19 (17 percent) an economic benefit, and 18 (16 percent) a family/individual well-being benefit.

- **Total project cost.** Larger projects (i.e., those with total budgets of more than $200,000) were more likely than smaller projects to describe an economic benefit—suggesting that these projects had the resources to tackle issues related to the local economy.

- **Years of ARC funding.** Projects that received 3 or more years of ARC funding were more likely to describe a family/individual well-being outcome than those receiving only 1 to 2 years of ARC funding.

4.2.2 Extent to Which Projects Achieved Their ARC Outcomes

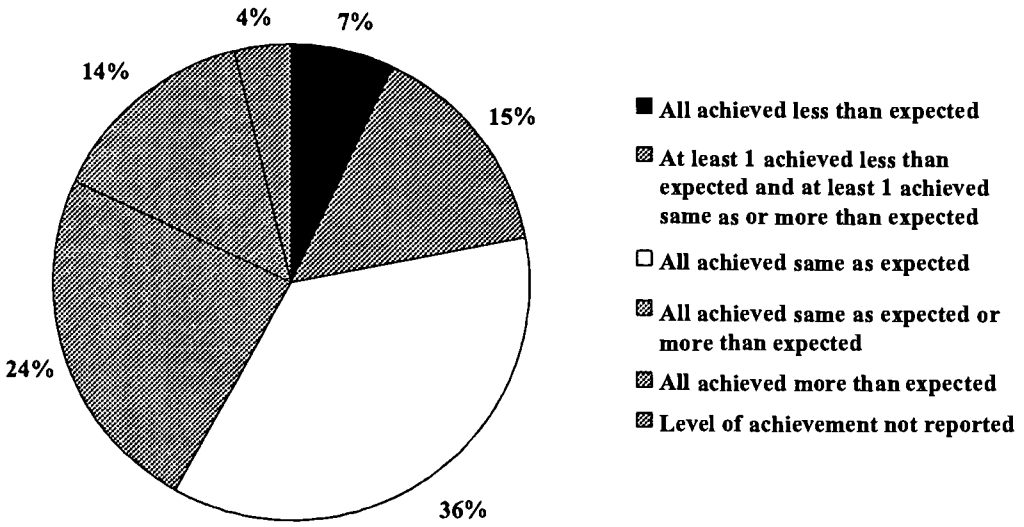
Almost three-quarters (74 percent) of respondents reported that they met or exceeded their anticipated level of achievement for all of their ARC outcomes—with 14 percent indicating that they had achieved *all* of their outcomes *more* than originally expected (Figure 4-1). Only 22 percent reported that their level of achievement on at least one outcome was less than expected—with only 7 percent indicating that their level of achievement was less than anticipated for *all* of their outcomes. In addition, projects' level of achievement across different outcome types was similar—although respondents were most likely to report having achieved all of their family/individual well-being outcomes. Specifically:

- **Educational attainment outcomes.** Of the 60 projects that described an educational outcome, 77 percent indicated that they met or exceeded all of their anticipated educational goals—with 20 percent reporting that they achieved *all* of their educational outcomes more than planned (Figure 4-2). Only one-fifth (19 percent) had at least one educational outcome that was achieved *less* than planned.

- **Economic well-being outcomes.** Of the 26 projects that described an economic outcome, 81 percent indicated that they met or exceeded their anticipated economic goals (Figure 4-3). In fact, 15 percent achieved *all* of their economic outcomes more than planned. However, 19 percent indicated that their level of achievement across *all* of their economic outcomes was *less* than planned.

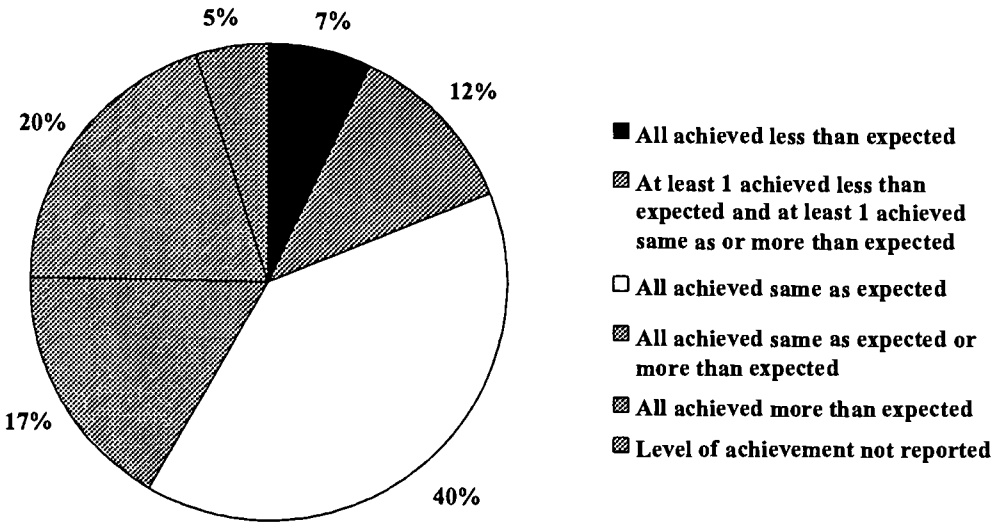
- **Family/individual well-being outcomes.** Of the 26 projects that described a family/individual well-being outcome, 78 percent indicated that their level of achievement was similar to or better then originally anticipated—and 31 percent achieved *all* of their family/individual well-being outcomes more than planned (Figure 4-4). Only 8 percent indicated that they achieved a family/individual well-being outcome *less* than planned.

Figure 4-1. Percent of projects' ARC outcomes, by the extent in which they were achieved (n=72)



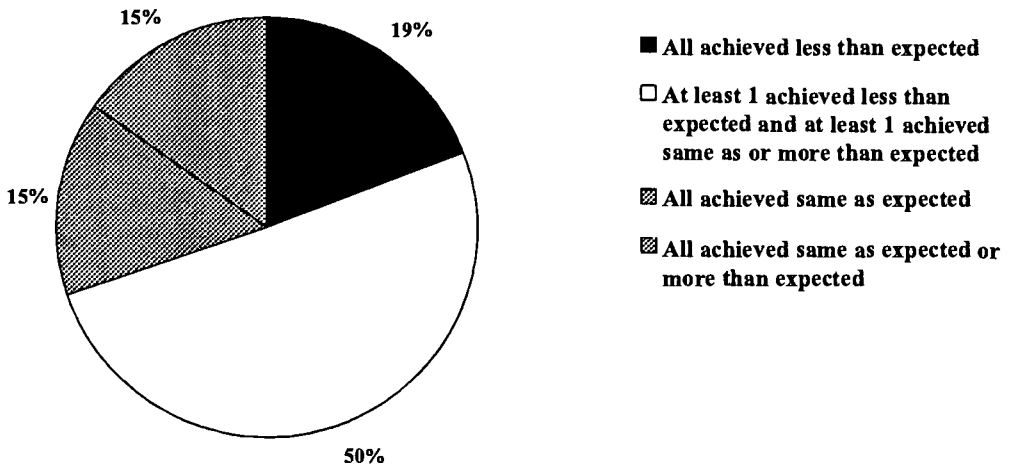
NOTE: Outcomes for which the extent of achievement was not reported are not included here. Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

Figure 4-2. Percent of projects that anticipated outcomes that were designed to increase educational attainment, by the extent to which they were achieved (n=60)



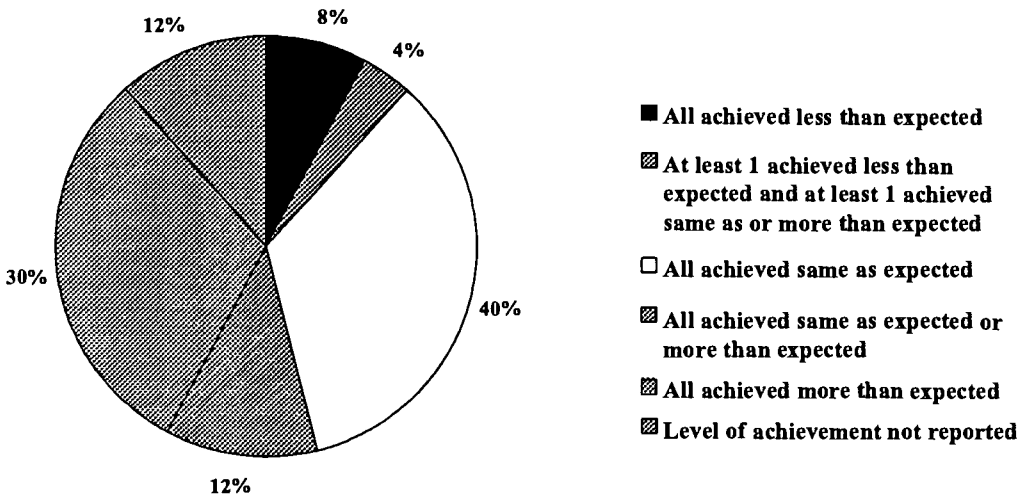
NOTE: Outcomes for which the extent of achievement was not reported are not included here. Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

Figure 4-3. Percent of projects that anticipated outcomes that were designed to increase economic well-being, by the extent to which they were achieved (n=26)



NOTE: Outcomes for which the extent of achievement was not reported are not included here. Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

Figure 4-4. Percent of projects that anticipated outcomes that were designed to increase family or individual well-being, by the extent to which they were achieved (n=26)



NOTE: Outcomes for which the extent of achievement was not reported are not included here. Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

4.2.3 Extent to Which Specific Types of Outcomes Were Achieved

In addition to assessing whether projects were able to achieve the sum of their anticipated outcomes, we also examined the extent of achievement across the three outcome types—i.e., educational, economic, and family/individual well-being. A primary purpose was to determine whether projects' self-reported levels of success were associated with the types of outcomes they were trying to achieve. A secondary purpose was to develop an inventory of the evidence, by outcome type, that projects compiled to assess their own level of achievement. (Respondents were asked to provide quantitative or qualitative evidence that the level of achievement for any given outcome matched or exceeded their expectations.) Of particular interest was whether projects employed valid and credible assessment methods—and whether those methods could be easily adapted by other sites. The remainder of this section discusses what was found, and Chapter 6 discusses the implications of these findings for future data collection activities.

Just under half (47 percent) of the 203 outcomes that projects identified in their ARC proposals were ultimately achieved as planned, while 30 percent were achieved more than planned and 13 percent were achieved less than planned (Table 4-4).[3] The level of achievement was generally highest for family/individual well-being outcomes and lowest for economic outcomes.

Table 4-4. Number and percent of ARC outcomes, by the extent to which they were achieved

Type of ARC outcome	Number of anticipated outcomes	Extent of achievement (percent)			
		Less then planned	Same as planned	More than planned	Not reported
Increase educational attainment	122	12	47	30	12
Increase economic well-being	42	24	52	24	0
Increase family/individual well-being	39	8	44	36	13
Total	203	13	47	30	9

NOTE: Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

There was considerable variety in the quality of the evidence provided in support of these outcomes—with no apparent correlation between levels of achievement and the credibility of the methods used to document projects' accomplishments. It should be noted that we were not in a position to assess whether any of the evidence that projects described was credible and reliable. Nor were we in a position

[3] Respondents were not able to assess their level of achievement for the remaining 9 percent of outcomes. In most instances, this occurred because a given respondent had not been with a project at the time the proposal was written and was therefore unwilling to comment on the extent to which the outcome had been accomplished as planned.

to assess whether a specific gain (i.e., improved test scores, decrease in unemployment) was actually a result of the activities that ARC supported. As such, our inclusion of a project's evidence should not be viewed as confirmation that the corresponding outcome was, in fact, achieved—or that the methodology was suitable and/or applied in an appropriate manner.

Overall, the documentation provided for 83 (53 percent) of the 157 successfully achieved outcomes was derived from a specific data source (e.g., scores on state or national tests, decrease in dropout rates, job placement for project participants) or study (e.g., parent/teacher survey, pre/post survey regarding job skills) (not shown in tables). Much of the remaining documentation merely described a new or expanded service (26 percent of successfully achieved outcomes) or represented anecdotal evidence (14 percent). Claims of success that are derived from a specific study generally carry more weight than those based on activities or anecdotes. For example, one project that anticipated enhancing students' computer skills provided the following as evidence: *"Number of students served—without this grant the services would have been unavailable."* While it is possible that students' computer skills were, in fact, enhanced, the evidence does not support this claim. A stronger form of evidence would have been a pre/post test of students' computer skills and frequency of use.

Educational Outcomes. Of the 122 educational outcomes that projects delineated in their proposals, 57 (47 percent) were achieved the same as planned—and 37 (30 percent) were achieved more than planned (not shown in tables). Only 14 (12 percent) of the 122 educational outcomes that projects delineated in their proposals were achieved *less* than planned.

The evidence provided for 46 (49 percent) of the 94 educational outcomes that were achieved was derived from a specific study or data source (not shown in tables). These included:

- Increases in students' scores on state or national tests—cited as the primary source of documentation for 21 percent of the 94 educational outcomes that were achieved as expected (Table 4-5). For example, one project with a goal of attaining *"higher test scores in various testing situations"* reported that *"For the first time in school history, ACT scores for Wayne County High School students matched the state average."*

- Increases in the number of adults attaining a GED (11 percent). While some projects provided imprecise evidence (e.g., *"The number of students that participated in this project and the number that received their GED was more than expected"*), others provided more explicit documentation (e.g., *"High school diploma—30; GED—272; this is what was expected"*).

Table 4-5. Forms of evidence that projects used to support their claims that they met or exceeded a given outcome, by level of achievement

Form of evidence provided in mail survey	Level of achievement (percent)		
	Same as expected	More than expected	Same/more than expected
Education Outcomes (n=94)			
Description of new or expanded service	21	38	28
Scores on state or national tests*	25	16	21
Anecdotal description (e.g., gain in student interest)	16	16	16
Increase in adults attaining a GED*	9	14	10
Decreased dropout rate/increased school attendance or enrollment*	11	5	9
Parent/teacher survey*	2	5	3
Other (e.g., census data, postsecondary plans)*	7	3	5
Unclear (i.e., could not discern from survey response)	11	3	7
Economic Outcomes (n=32)			
Description of new or expanded service	23	3	25
Job placement for project participants*	9	3	16
Jobs created/businesses located in region*	9	3	16
Increase in job skills*	18	0	13
Anecdotal description (e.g., discussions with employers)	14	1	13
Increase in employment rate/decrease in unemployment rate*	9	0	6
Increase in degree attainment (e.g., from vocational program)*	9	0	6
Increase in wages*	5	0	3
Increase in productivity*	5	0	3
Family/Individual Well-Being Outcomes (n=31)			
Pre/post survey/observations regarding skills/interests/status*	18	36	26
Description of new or expanded service	18	21	19
Decrease in reliance on government assistance*	18	7	13
Job placement*	18	7	13
Anecdotal description (e.g., discussions with teachers)	6	14	10
Increase in adults attaining a GED*	6	0	3
Other/none	18	14	16

NOTE: Because this table uses outcomes—as opposed to projects—as the unit of analysis, the number of observations exceeds 84. In addition, this table does not make any adjustments for projects that used the same form of evidence to demonstrate achievement for multiple outcomes. For example, evidence submitted twice by the same project (e.g., number of jobs created) in support of two distinct goals would be counted twice on the table. Finally, for the purpose of this analysis, forms of evidence that are followed by an (*) are considered to be "a specific study or data source."

SOURCE: 2000 mail survey of ARC grantees.

- Decreases in school dropout rates/increases in school attendance/enrollment (9 percent). For example, a project with a goal of making *"math and science a priority for Falkner High School Students"* reported *"More students are enrolling in advanced math and science courses."*

Fifteen (16 percent) of the 94 descriptions of project success were based on anecdotal accounts (e.g., teachers' assertions that students are more interested in their schoolwork), while 26 (28 percent) of the narratives merely recounted a new or enhanced service that was being made available to a given population (e.g., *"Number of students served—without this grant the services would have been unavailable"*).[4] Exhibit A-4 in Appendix A provides a sample of the narratives that projects provided in support of the educational outcomes that were successfully achieved.

Fourteen (11 percent) of the 122 educational outcomes that projects delineated in their proposals were achieved less than planned. As shown in Exhibit 4-2, no single barrier was responsible for these shortfalls. Rather, a variety of factors hindered projects' efforts to achieve their desired results, including serving fewer participants than originally anticipated, setting goals that ultimately exceeded the project's capacity, encountering factors beyond the control of the project (e.g., high unemployment rates), difficulty quantifying project results, and failing to fully implement the project.

Economic Outcomes. Of the 42 economic outcomes anticipated by projects, 52 percent were achieved the same as planned—and 24 percent were achieved more than planned. However, almost one-fourth (24 percent) of all economic outcomes were achieved *less* than planned—suggesting that projects described overly ambitious economic goals and/or the economic benefits that projects anticipated were beyond the control of their ARC grant.

The evidence provided for 20 (63 percent) of the 32 successfully achieved economic outcomes was derived from a specific study or data source. These included:

- Job placement for project participants (cited as the primary source of documentation for 16 percent of the 32 economic outcomes that were successfully achieved). For example, one project with a goal of making individual students more competitive in the job market reported, *"In the two years since the completion of the project, several students have obtained jobs in computer operation. This evidence is obtained in a post-school survey done by the school."*

[4] An analysis of evidence between outcomes achieved same as planned and those achieved more than planned uncovered no noteworthy patterns. In fact, a higher proportion of the outcomes achieved more than planned were linked to a description of a new/expanded service than were outcomes achieved the same as planned.

Exhibit 4-2. Examples of factors that respondents indicated hindered their projects' ability to achieve desired educational outcomes

Anticipated outcome	Factor that hindered level of achievement
Increase computer literacy for adults in Meigs County	Fewer participants were involved compared to the anticipated number we had hoped to reach. Many dropped out of the program before results could be measured.
Increase basic skill levels in reading, math, and writing for adults in Meigs County	We documented the increased skill levels. However, we reached fewer participants than anticipated.
Increase the numbers of adult learned in the quad-county area	Information was made available, but results are impossible to quantify.
Break the generational illiteracy cycle in the four-county region	The scope was too broad for the project.
Prepare adults with the necessary basic skill remediation or GED preparation to gain entry level employment	The high unemployment rates at that time affected the ability of students to find local employment.
Enhance the educational level of the workforce in Madison County	Actually, I don't know! I'm not aware of how much was expected on any of these questions.
Increase the number of students participating in science fairs in the Tuscaloosa areas, as well as in surrounding counties	In 1992, science fairs and projects seemed to be the core of elementary science curricula. Over time, this has abated. The center has been used minimally for science fair projects.
Move unemployed and underemployed families with marketable skills into long-term job training	We served only 10 toddlers instead of the 20 reported in the grant—due to not having new building finished—so we were able to help less parents than anticipated.
Increase in high school graduation rates for children who participate in the program	We really cannot address this until these children reach high school age.
Decrease dropout rate by offering a wider variety of stimulating, hands-on learning courses and vocational Tech-ED courses	The dropout rate has increased slightly. This is partly attributed to the importance of school not being taught at home and partly associated with increased graduation requirements.
Improve the educational needs of the five distressed counties	The network was placed under the control of the schools. Teachers were afraid of the technology. Many feared loss of their jobs, unjustly, if the project took hold, so they sought to subvert the system and did so. The secondary schools resented overtures from community colleges to offer courses, fearing that would lead to effective use of the system. So postsecondary and vocational schools had the network removed for fear instructors would be displaced and the authority of the director undercut.

SOURCE: 2000 mail survey of ARC grantees.

- Jobs created/businesses located in the region (16 percent). For example, a project with a goal of attracting new businesses and industry to the region reported, *"From 1986 to 1993, our community experienced a growth of 12,000 jobs to our payrolls in a county of 8,000 total population."*[5]

- Increase in job skills (13 percent). For example, a project designed to upgrade employees' skills reported, *"Unemployed workers were able to find better jobs after computer training."*

Four (13 percent) of the 32 descriptions of project success were based on anecdotal accounts, while eight (25 percent) recounted a new or enhanced service that was being made available to a given population. Exhibit A-5 in Appendix A provides a sample of the narratives that projects provided in support of the economic outcomes that were achieved as planned.

Ten (24 percent) of the 42 economic outcomes that projects delineated in their proposals were achieved less than planned. As shown in Exhibit 4-3, the primary barriers were the community's poor economy, failure to fully implement the project, and overly ambitious project goals.

Family/Individual Well-Being Outcomes. Of the 39 family/individual well-being outcomes anticipated by projects, 44 percent were achieved the same as planned—and 36 percent were achieved more than planned. Only 8 percent were achieved less than planned, suggesting that projects were generally successful in setting—and meeting—realistic family/individual well-being outcomes.

The evidence provided for 17 (55 percent) of the 31 successfully achieved family/individual well-being outcomes was derived from a specific study or data source. The most prominent form of evidence was pre/post surveys or observations regarding skills, interests, or status—cited as the primary source of documentation for 26 percent of the 31 family/individual well-being outcomes that were successfully achieved. For example, one project with a goal of enabling adult learners to become more self-sufficient stated, *"Theoretically do pre- and post-TABE test. Some learners left before we were able to post-test. Those who were tested did improve their reading skills."* The second most frequently cited evidence was a decrease in reliance on government assistance (13 percent). Six (19 percent) descriptions recounted a new or enhanced service that was being made available to a given population. Exhibit A-6 in Appendix A provides a sample of the narratives that projects provided in support of the family/individual well-being outcomes that were achieved as planned.

[5] Again, the inclusion of such statements in this report is meant to illustrate the types of evidence that projects provided. This respondent did not provide any documentation that 12,000 new jobs had been added to the county's payroll—or that any of these new jobs were a direct or indirect result of the ARC grant.

Exhibit 4-3. Examples of factors that respondents indicated hindered their projects' ability to achieve desired economic outcomes

Anticipated outcome	Factor that hindered level of achievement
Increase employment opportunities for the most at-risk population in the region—the adult non-reader	Unemployment remains high in Eastern Kentucky and business and industry were not as welcoming as we had hoped.
Enable adult learners to become more employable	The trend seems to be that basic literacy skills are not enough in this high technology workplace.
Increase the stability and competitiveness of the manufacturing community in the 6 participating counties	Unable to implement the project and measure outcomes.
Reduce the likelihood of plant closures and layoffs in the 6 participating counties	Unable to implement the project and measure outcomes.
Attract unemployed but employable persons to jobs that are open but which currently are unfilled due to a lack of developmentally appropriate child care for 0-3 year old children	Due to serving less children than expected, we did not meet our goal. Considering we served 10 toddlers and helped 7 of those parents—that is a very good rating.
Impact the economic needs of the five distressed counties	Virtually nothing was done. The schools are closed after school hours. They would not open to permit use by community. During school hours, no community was permitted. So for all practical purposes, there was no community use of the system. It is a total failure in that regard. It is simply a matter of management.
Attract business employers into Highland County	Very rural community—no new companies came to the area.

SOURCE: 2000 mail survey of ARC grantees.

Only three (8 percent) of the 39 family/well-being outcomes that projects delineated in their proposals were achieved less than planned. One respondent indicated that their outcome, *"Improve the quality of life for the citizens of SDA One,"* was *"impossible to quantify."* A second project, designed to *"increase parental involvement among targeted at-risk youth,"* reported:

> *Perhaps our dreams were unrealistic. Many parents in this group are limited by unemployment, transportation, home duties, educational background, and self-confidence. We appreciate those who have participated and contributed, but the number is less than we hoped.*

4.3 Outputs Associated with ARC-Funded Activities[6]

Twelve (14 percent) of the 84 projects in the study sample used their ARC proposals to focus exclusively on the activities and outputs that would occur as a result of their ARC grants (see Exhibit 4-4 for examples of these outputs). On average, these 12 projects anticipated an average of three outputs—with 10 indicating that they successfully achieved all of their outputs (not shown in tables). Across the 37 outputs anticipated by these projects, 17 (46 percent) were achieved the same as planned and 18 (49 percent) were achieved more than planned. Only two (5 percent) outputs were achieved less than planned.

4.4 Qualitative Findings on ARC-Funded Outcomes

While the preceding analysis allows for a common measure of success across respondents, it fails to convey the underlying value of the achievements associated with the projects in the study sample. This section provides two additional perspectives on the accomplishments of ARC education projects—i.e., respondents' own perceptions of their most notable outcomes (as provided on the mail survey) and a more indepth description of outcomes in four of the case study sites.

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[6] Because Chapter 3 focuses on activities, we provide only minimal information about the outputs that were anticipated and achieved by these 12 projects.

Exhibit 4-4. Examples of outputs that projects specified in their original proposal to ARC

Improve opportunities for learners to find and keep a job in Whitfield County.

Expand adult literacy and basic education services by at least 10 percent in Cherokee County.

Increase the training opportunities available to literacy providers in West Virginia.

Create a more "user friendly" environment for education, in the quad county area.

Retain 70 percent of the enrolled participants in the Mississippi Mobile Adult Literacy program for a minimum of 50 hours of instruction.

Increase enrollment at the McCreary County Learning Center.

Encourage leadership programs for Appalachia youth.

Encourage postsecondary opportunities for the region's high school graduates and adult population.

At least 25 percent of the college's full-time faculty will be introduced to the use of microcomputer hardware and software for the development of instructional programs.

Increase access to more computerized learning for students in Towns County.

Increase students' access to an enhanced curriculum.

Build leadership, outreach, and decision-making capacity of communities.

Increase communication and networking capacity of North Carolina's Appalachian Counties.

Strengthen the organizational capacity of Local Affiliate organizations.

SOURCE: Document review of ARC education projects.

4.4.1 Respondents' Perceptions of the Most Important Outcome to Result from the ARC Grant

The survey provided projects the opportunity to describe, in their own words, the single most important outcome that resulted from their ARC grant. As might be expected, projects varied in terms of the types of achievements they chose to emphasize. While some provided information about a community benefit that occurred as a result of their ARC grant, the majority focused on activities that were implemented or expanded.[7] Specifically, of the 79 projects that responded to this item:

- Forty-five (57 percent) illustrated how the ARC grant had enabled them to provide or expand a specific service or activity—e.g., serve significantly more students, provide a more comprehensive academic and vocational training program, provide a higher level of education to students in the school district. Exhibit 4-5 provides examples of the activities that projects identified as being their most important accomplishments.

- Twenty-nine (37 percent) described a general outcome (e.g., increase the employability of students, increase in the reading and math scores of the students) or a specific accomplishment (e.g., over 90 percent of the students finished high school) that occurred as a result of their efforts. Exhibit 4-6 provides examples of the outcomes that projects identified as being their most important accomplishments.

- Five (6 percent) described how the activities resulting from the ARC grant served to increase stakeholders' understanding of the need for a specific service—e.g., increased awareness about the need for parents and community members to help schools, an awareness of the need for high-quality professional development for teachers.

4.4.2 Site Visit Findings Regarding Project Accomplishments

During the site visits, we had an opportunity to interview the staff responsible for administering and implementing these projects and, in some cases, the individuals who benefited (directly or indirectly) from the ARC grant. The process used to select the eight case study sites precludes us from using site visit findings to make generalizations about the range of accomplishments across the 84 projects in the study sample.[8] We can, however, use information from the case studies to provide a more

[7] While the implementation or expansion of an activity represents an important achievement, successful implementation is not the same as the attainment of an outcome.

[8] Case study sites were selected from those that were still in operation at the time of the study and had achieved at least one of their goals and, therefore, are not representative of the sample or universe. See Appendix E for a description of the site selection process.

Exhibit 4-5. Examples of respondents' perceptions of the most important *output/activity* to result from the ARC grant

Preschool Age *Every county in the region improved the quality of child care, improved the materials and support for providers, and established a broad-based community board to ensure improved ongoing educational and health opportunities for children [ages] 0-5.* *Serving a younger population of children was most important to the people in our area. We provide transportation to and from home so we also were able to serve geographically isolated toddlers who were very much in need of stimulation. We now do have a building that can accommodate 20 toddlers and 30 pre-schoolers.*
Elementary/Secondary (All Students) *To provide classroom space for students in the aftermath of fire (arson) destroying their high school (on September 2, 1996). The school system is grateful for your support.* *Enable the school to implement a program where students receive hands-on training in vocational-technical job skills that better prepare them for the market. The program is so successful that it has become a part of the curriculum for students in the vocational-technical path and they earn credit toward graduation.* *This lab allows students to explore technology applications to a degree/level not otherwise available.* *Astronomy outreach program (portable planetarium) use the van (bought with ARC money) to take the planetarium around to schools, summer camps, etc.* *Technology personnel and teachers in a seven county area received training in network maintenance/improvement that resulted in area schools having more efficient access to online resources and the Internet.*
Elementary/Secondary (Targeted Students) *The project is self-sufficient and students are being enrolled for the 2000-01 school year.* *Serve significantly more students and provide a more comprehensive academic and vocational training program.*
Adults *The most important instructional outcome was the incorporation of information technology into teaching and learning at Tompkins Cortland Community College. While such integration likely would have happened over time, the resources (hardware and software) and the institutional focus occasioned by this project significantly accelerated the process by which effective technology applications became infused into the curriculum at the college. It created an early environment for teaching and learning innovation that has subsequently kept Tompkins Cortland Community College at the forefront of community colleges within SUNY (State University of New York).*
Communitywide *The ARC grant assisted BOCES to leverage a large project with NTIA (National Telecommunication and Information Administration, U.S. Department of Commerce) funding.* *Provided computer training for staff. Provided literacy skills for middle school children.*

NOTE: This table provides examples of the activities and outputs that projects provided in their response to survey item 10: *What was the major or most important outcome (anticipated or not) to result from the ARC grant?*
SOURCE: 2000 mail survey of ARC grantees.

Exhibit 4-6. Examples of respondents' perceptions of the most important *outcome* to result from the ARC grant

Preschool Age
Being able to serve more children was the most important outcome. Relocating to the center of the county allowed more parents an opportunity to use our program. When we were 12 miles out of town, we were not accessible to those parents who worked in town. Low income working parents used our program because we offered a sliding fee scale.
Elementary/Secondary (All Students)
Our students are more academically competitive with students in our N.E. Mississippi area. Students have a stronger sense of pride in the school. Community support for other projects has increased. Students have a stronger sense of pride in the school. Community support for other projects has increased. Local funding for major renovations and additions has been more easily achieved. Other school systems have made significant efforts to modify their programs to match the innovations at Mantachie.
The ARC grant attracted new and renewed interest in the museum. "Never before" donors provided matching funds for the project. Two of those donors have remained financially supportive over the years. School children from throughout Alabama and neighboring Mississippi have benefited from the science and computer lab.
The self-confidence of the participants increased much more than anticipated. Many students increased basic skills enough so they successfully completed the state exam to earn a high school diploma.
Over 90 percent of the kids finished high school, went on to college, or got work in fields related to their teaching.
Increase in parent/community involvement including self-improvement. This was demonstrated by increased contacts with school and increased participation in adult education programs. Improved attendance and punctuality on the part of students was also noted.
Elementary/Secondary (Targeted Students)
The increase in the reading and math scores of the students.
The level of advances that students are making in this program, both academically and socially, have been significant. Children who once looked forward to the day they would be 16 so that they could drop out of school are now looking forward to high school—and possibly college.
The families willing to accept help from outsiders to assist with their children.
The students' responses to the job shadowing component has far exceeded (in many cases) what we expected. Students have consistently rated this component as helpful. We have seen remarkable attitude changes due to the community meetings at the job sites, increased self-esteem, positive goal setting, and an increase in academic achievement.
Adults
The number of folks who participated in the adult education program at all levels and the number who passed the GED test.
Of the 5,500 adults served, 2,010 participants improved their ability to help children in school, 2,125 improved their basic skills, 700 improved their parenting skills, and 1,100 increased their reading level by at least one grade level.
Improved production employees' basic skills and for some acted as a catalyst for life-long learning. Many received their GED as a result.
Improved self-esteem needed to achieve personal, educational, and career goals.
Communitywide
Increased student enrollment and positive job placement.

NOTE: This table provides examples of the outcomes that projects provided in their response to survey item 10: *What was the major or most important outcome (anticipated or not) to result from the ARC grant?*
SOURCE: 2000 mail survey of ARC grantees.

detailed description of the types of benefits that can be associated with successful ARC education grants. This section uses examples from four of the eight case studies to provide a richer portrayal of these project-related outcomes.

The **Michelin Learning Centers** are designed to improve the basic skills of employees within the Michelin Tire Corporation. As a result of these efforts, most of the employees who visit the learning centers have significantly improved their proficiency in reading, writing, basic math, and computers. At the time of the site visit, the purpose of the learning centers had been revised to reflect the reduced need for remediation across the three plants. (The number of workers lacking basic-skills was minimal—and new employees are required to have either a high school diploma or a general equivalency diploma *and* must take a 4-hour screening test.) As such, the current focus of the learning centers is on training employees in a wide range of job-related skills.

The **Adair County Technology Center** was initiated in 1993 to address the problem of graduating secondary students inadequately prepared for the technical workforce of the 1990s. The primary aim was to expose students to a variety of technology-oriented career paths to make way for their transition into technical fields either in the workforce or in postsecondary educational settings. At the time of the site visit, the center was continuing to serve approximately 150 students per year. According to both students and staff, the center has increased students' enthusiasm regarding careers in technology fields. In addition, 58 of the 99 students taking Tech I at the time of the site visit had already signed up to take Tech II during the 2000-01 school year. Course enrollment had increased significantly, another indication of the technology center's success. Although no numbers were available, the center appeared to be achieving the aim of encouraging at least some students to choose careers in technical fields. For example, the instructor discussed three previous students who were preparing to study engineering at the University of Kentucky. One student went on to the Somerset Technical College to study industrial maintenance. He later joined the Army Corps of Engineers to become an engineer. Finally, the principal noted that the technology center was partly responsible for an increase in students' interest in mathematics and science—as well as for an increase on mathematics and science scores on standardized tests.

The **School Outreach Project** provides families of at-risk kindergarten and first grade students the individualized support necessary to maximize the likelihood that children arrive at school healthy and ready to learn. For the children and families served by School Outreach, the project has met its short-term goal of improving school performance, self-confidence, social skills, and interest in

learning.[9] The project director estimated that the program was serving 125 children at the time of the site visit—of which 75 were in their first year of intensive services. It was clear from talking with outreach workers, school principals, and teachers that children and families had benefited from their participation in the project. One principal noted that they might not ever really see the difference they make, but they have to believe that they will. Similarly, one respondent noted that the results of the intercessions may not show until the children are in high school, but that they must still work with primary grade students in order for the results to appear later.

Another principal indicated that there were fewer discipline problems as a result of the project's work with academic and social/emotional issues. She commented that many of the children served by the project are angry at their families, at their economic circumstances, at the fact that they did not get a Christmas present, because they do not have a warm enough jacket, or because they do not have someone to count on. The anger results in discipline problems at school. But by having one person who consistently spends one-on-one time with the child, the student is able to dispel some of the anger and work on academics at the same time.

Principals, teachers, and outreach workers agreed that many students appeared more eager to come to school and learn than prior to their participation. Both of the principals interviewed during the site visit acknowledged that the outreach workers have been a key factor in increasing attendance. Aside from transporting students to school, the outreach workers have made students want to go to school (or let them know that they do not have a choice). Finally, school staff indicated that the project has resulted in better parent-teacher relations—e.g., parents seem more willing and less fearful of coming to teacher conferences. PTA meeting attendance was also up in at least one of the schools visited.

Science and Math To Go! (SMTG!) is an elementary curriculum, materials, and professional development system. Staff and teachers reported that this approach has helped to close the gap between high and low achievers. Students are more engaged in the activities and enthusiastic about science. Teachers associated high interest with more learning. When a group of 20 first graders were asked how many wanted to be scientists, almost all raised their hands. According to local staff, SMTG! has allowed teachers to emphasize a subject that was typically put on the back burner in elementary schools. Moreover, science is being taught in a systematic, connected way, rather than through fragmented lessons based on teachers' previous science background or available materials.

[9] The long-term goal of reducing dropouts cannot be examined until the children are in high school. The first cohort served under the ARC grant is just entering high school.

While there were no hard data on changes in student achievement, anecdotal evidence suggested that traditionally low achievers were performing better in science than before because the hands-on activities addressed the multiple learning styles of students. One teacher commented, *"The kits ask students to think harder than they do for other subjects, and they like it! They leave the children wanting to learn more."* Another said, *"Lower achieving students shine when given the opportunity to talk and use manipulatives."*

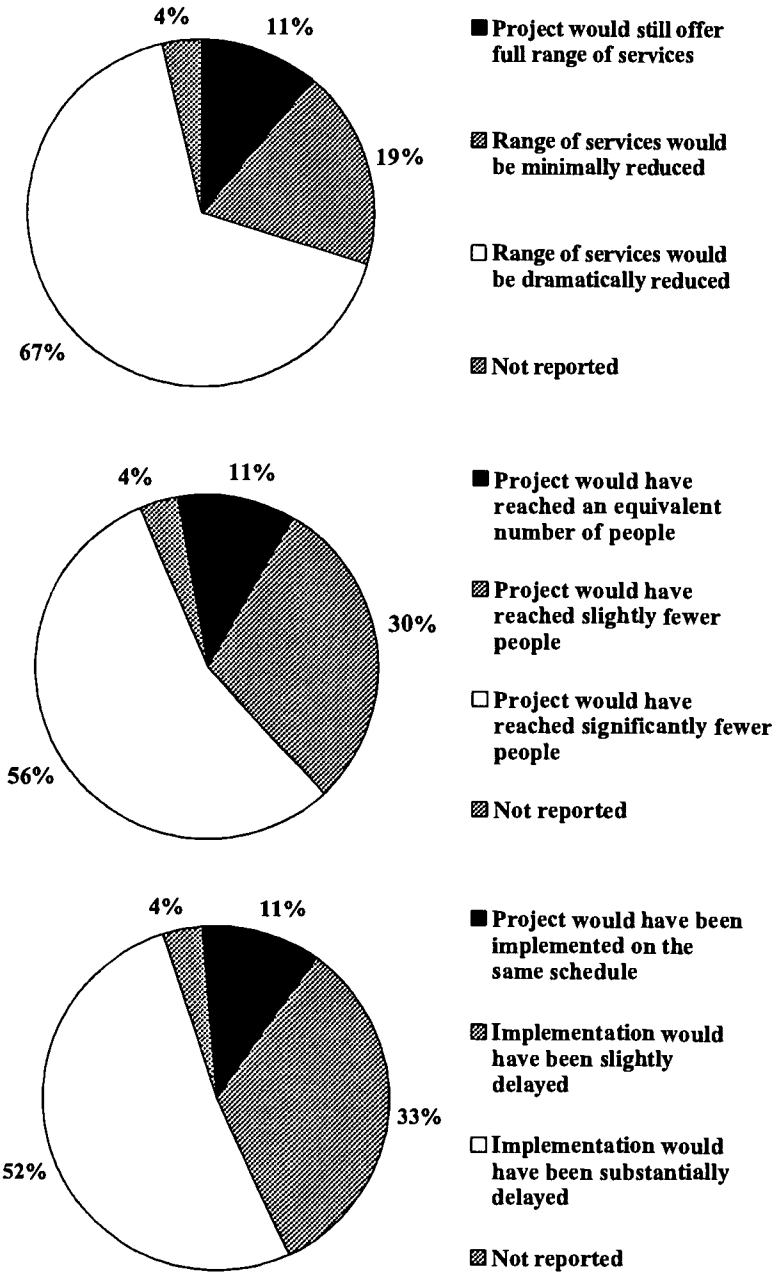
Several teachers reported that classroom management is easier, even with the vast amount of materials and student-driven tasks involved. While more monitoring of individual students must be done with all the materials around the classroom, students are now more engaged and attentive to the tasks. This has resulted in fewer discipline problems in many classrooms. One sixth grade teacher in a departmentalized school indicated that students with behavior problems were well-behaved, active participants in her science class. Several teachers reported that students have asked to stay in through recess to complete their experiments or have asked to take items home to share their findings with their families. Another teacher stated that her students were borrowing nonfiction science-related books from the library for required free reading, where third graders generally select simple storybooks.

4.5 Impact of the ARC Grant

Survey respondents were asked to hypothesize what would have happened if their project had not received federal funding through ARC. Two-thirds (67 percent) indicated that their projects would never have been implemented without their ARC award (not shown in tables).

The remaining respondents (32 percent) indicated that their projects probably would have been implemented using alternative funding sources. However, the majority of these 27 projects indicated that without ARC funding their projects would have offered dramatically fewer services (67 percent), would have reached significantly fewer people (56 percent), or would have suffered substantial delays in their implementation schedule (52 percent) (Figure 4-5). Overall, only three of the 27 respondents (12 percent) indicated that the scope, scale, and timetable of their projects would not have been adversely affected by a lack of ARC funding. Thus, without ARC support, even those projects that were implemented would have offered fewer services, reached fewer people, and been substantially delayed in implementation.

Figure 4-5. Percent of projects that believed the lack of ARC funding would have affected their projects in various ways (n=83)



NOTE: Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

4.6 Summary

Projects were successful in achieving the outcomes they set forth in their original requests for ARC support. Almost three-quarters of survey respondents reported that their level of accomplishment met or exceeded their original expectations. Just under half of the 203 outcomes that projects identified in their ARC proposals were ultimately achieved the same as planned, while 30 percent were achieved more than planned and 13 percent were achieved less than planned. Skeptics might discount some of these claims of success as being based on self-report. However, documentation from the mail surveys suggests that many of these claims were, in fact, based on either a study (e.g., pre- and post-intervention assessment of participants' basic skill levels) or external data source (e.g., students' scores on tests, school dropout rates, unemployment rates). Further, the case studies uncovered convincing evidence that the efforts of the projects in the study sample resulted in a broad range of educational, economic, and social gains.

Another important finding was that over four-fifths of the projects in the study sample were, in fact, able to describe at least one anticipated outcome or community benefit in their proposal to the ARC. These outcomes fit into three general categories—educational outcomes, economic outcomes, and family/individual outcomes—and cut across the different project types and characteristics. The outcomes outlined a skill or circumstance that would be enhanced as a result of their ARC grant. However, only a few of the outcomes described in the application materials had a measurable benchmark against which project success could be measured. Most projects used more general—and less quantifiable—language to describe their desired community goals. In addition, a small number of projects outlined a lofty goal that was beyond the possibility of a single project to achieve. Nonetheless, the fact that most projects had identified an outcome—and half appeared to have access to tangible evidence to back up their claims of success—suggests that a framework exists for ARC to build upon as it seeks to enhance its program monitoring capacities (discussed further in Chapter 6).

Finally, survey respondents were asked to hypothesize what would have happened if their project had not received federal funding through ARC. Two-thirds indicated that their projects would never have been implemented without their ARC awards. The remaining 27 respondents indicated that their projects probably would have been implemented using alternative funding sources. However, the majority of these 27 projects indicated that without ARC funding their projects would have offered dramatically fewer services, would have reached significantly fewer people, and would have suffered substantial delays in their implementation schedules.

5. PROJECT SUSTAINABILITY AND EXPANSION

A final measure of the success of an ARC project is its sustainability. In recent years, federal agencies have placed a premium on grant recipients' abilities to maintain projects after the initial period of funding. Funders are especially anxious to support projects that will remain operational over time—and expand to provide supplementary services or reach additional beneficiaries. In fact, the ARC's project guidelines stipulate that in approving a particular initiative, "the Commission must also consider whether the project will improve, on a continuing rather than a temporary basis, the opportunities for employment, the average level of income, or the economic and social development of the area served by the project."

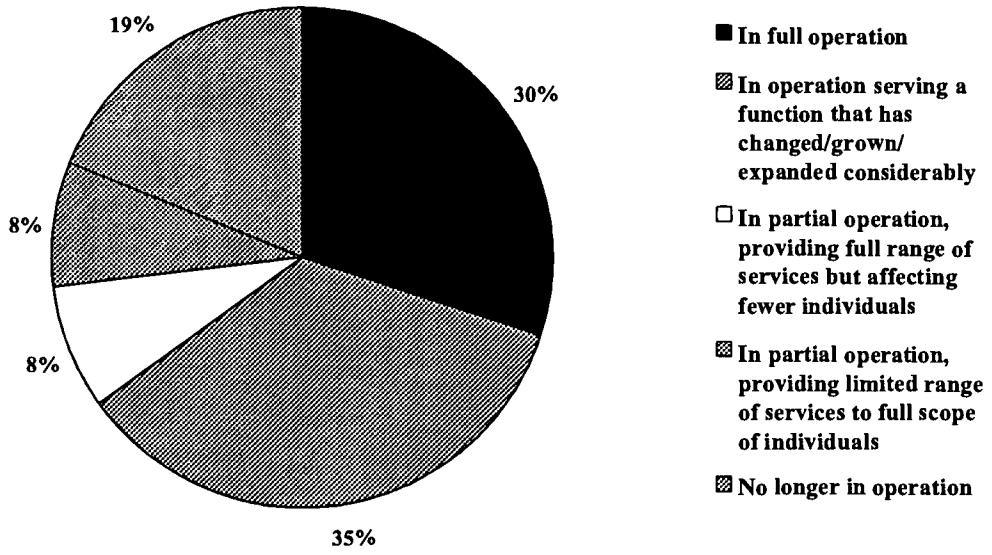
This chapter examines the operating status of projects at the time of the evaluation, as well as the extent to which initiatives had expanded or generated spinoff activities. It also describes factors that influenced whether projects were able to sustain themselves beyond their ARC grants.

5.1 Overall Project Status at the Time of the Mail Survey

To determine the longevity of ARC projects, respondents were asked to indicate the operating status of their project at the time of the survey (Figure 5-1). Just under one-third (30 percent) of the projects were operating at full capacity—and 35 percent were serving a function that had expanded, grown, or changed. Less than one-fifth percent were in partial operation, reaching either fewer people with the same services (8 percent) or reaching the same number of people with a more limited range of services than they had intended (8 percent). Finally, 19 percent of respondents indicated that their projects were no longer operation at the time of the survey.[1]

[1] As discussed in Chapter 1, projects lacking appropriate documentation and/or a knowledgeable survey respondent were excluded from the survey sample. It is therefore possible that the projects that sustained themselves were most likely to have the documentation and staff qualifications required for inclusion in the study sample.

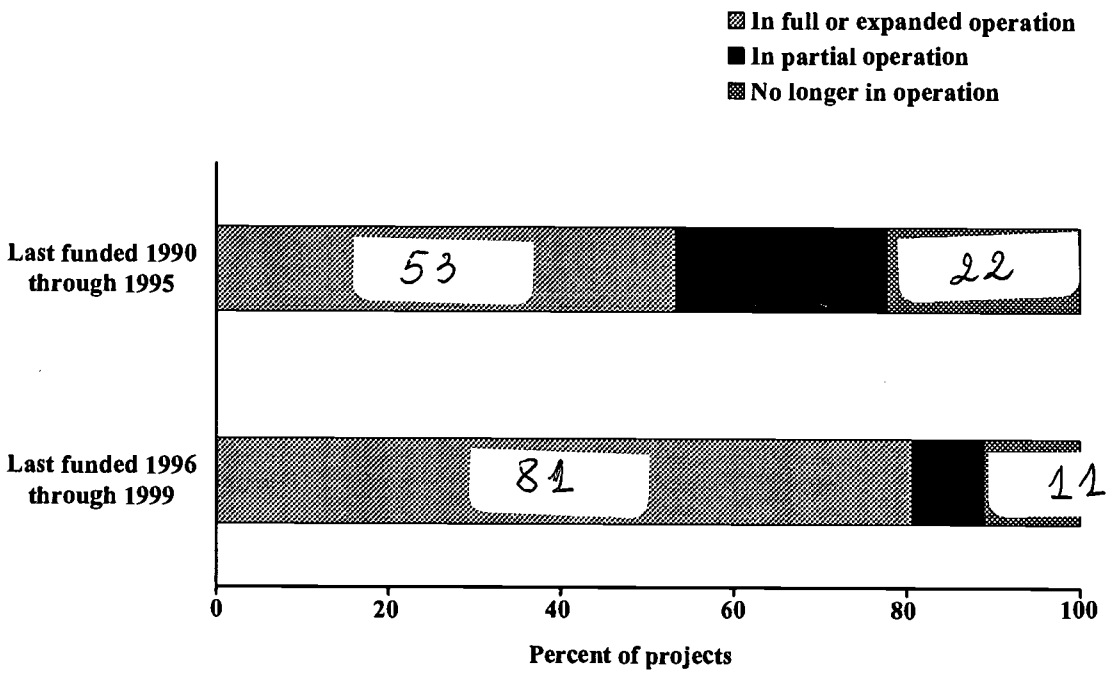
Figure 5-1. Current status of ARC-related project (n=84)



SOURCE: 2000 mail survey of ARC grantees.

As might be expected, projects that received ARC grants more recently were also most likely to be fully operational or providing expanded/changed services. Specifically, 81 percent of projects that had received ARC funding since 1996 percent were in full operation or had grown/changed at the time of the mail survey (Figure 5-2). Of projects last funded 5 or more years ago (i.e., 1995 and earlier), 53 percent were in full operation or had grown or changed. The effects of time hold true for projects in partial operation and projects no longer in operation. That is, only 8 percent of more recent grants were in partial operation, compared with 24 percent of older grants. Similarly, only 11 percent of recent grants were no longer in operation, whereas 22 percent of older grants were no longer in operation.

Figure 5-2. Percent of projects reporting current operating status, by last year funded (n=81)



NOTE: Percents may not sum to 100 due to rounding. Three projects did not provide any information about the years of funding.
SOURCE: 2000 mail survey of ARC grantees.

5.1.1 Trends Regarding Projects in Full/Expanded Operation

Approximately two-thirds (64 percent) of the projects in the study sample were in full operation or serving an expanded or changed function (Table 5-1). We found that project type was related to whether projects were still operational (or had expanded) at the time of the survey. Specifically, projects serving targeted elementary/secondary students (63 percent) were more likely than other projects to be in full operation. Additionally, projects serving preschool, all elementary/secondary students, or targeted elementary/secondary students were more likely than other projects to have expanded or changed since their ARC grant. However, the wide variety of approaches utilized by these projects (and the small sample size) negates our ability to unequivocally conclude that a given project type is more or less likely to sustain its operations beyond the ARC grant.

Table 5-1. Percent of projects reporting current operating status, by project characteristics

Project characteristic	In full operation	Expanded or changed	Offering full services to limited individuals	Offering limited services to full scope of individuals	No longer in operation
All projects (n=84)	30	34	8	8	19
Project type					
Preschool age (n=6)	33	50	0	17	0
Elementary/secondary, all students (n=32)	25	44	3	9	19
Elementary/secondary, targeted students (n=8)	63	38	0	0	0
Adults (n=28)	32	21	14	4	29
Communitywide (n=10)	10	30	20	20	20
Project scope					
Single town or county (n=28)	43	25	7	7	18
Adjacent counties (n=31)	19	45	10	7	19
Nonadjacent counties (n=25)	28	32	8	12	20
Economic status					
At least one distressed county (n=26)	42	27	8	15	8
No distressed counties (n=42)	26	41	7	2	24
Statewide or multistate (n=16)	19	31	13	13	25
Metropolitan status					
Metropolitan only (n=8)	25	25	13	0	38
Nonmetropolitan only (n=40)	38	35	8	8	13
Both metro and nonmetro (n=20)	25	40	5	10	20
Statewide or multistate (n=16)	19	31	13	13	25
ARC grant size					
Less than $50,000 (n=18)	28	22	17	17	17
$50,001 – $100,000 (n=25)	24	36	4	8	28
$100,001 – $200,000 (n=27)	30	37	7	4	22
More than $200,000 (n=14)	43	43	7	7	0
Total project cost					
Less than $100,000 (n=21)	24	29	14	10	24
$100,001 – $200,000 (n=28)	32	36	4	11	18
$200,001 – $900,000 (n=27)	26	40	7	4	22
More than $900,000 (n=8)	50	25	12	12	0
Years of ARC funding					
1 year (n=22)	27	32	14	9	18
2 years (n=34)	21	41	3	15	21
3 or more years (n=28)	43	29	11	0	18

NOTE: Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

5.1.2 Trends Regarding Projects No Longer in Operation

Just under one-fifth (19 percent) of the projects in the study sample were no longer in operation at the time of the mail survey (Table 5-1). Projects serving adults (29 percent) and communitywide projects (20 percent) appeared to be especially vulnerable to such closures. Two other trends are worth noting. First, projects serving no distressed counties (24 percent) were more likely than those serving at least one distressed county (8 percent) to have suspended operations. Second, none of the projects that received over $200,000 in ARC funding—or had a total project cost of over $900,000—had suspended operations. This finding suggests that projects that leveraged additional funding were most likely to obtain the financial support required to remain operational beyond the ARC grant period.

Again, it is important to note that we are unable to use these findings to draw definitive conclusions or recommend the types of projects that ARC should support. However, these findings do suggest some informal steps that ARC staff might take when working with adult and communitywide projects (as well as with projects that have not leveraged additional funding). For example, in reviewing proposals, project coordinators might focus on whether applicants describe how specific activities will be sustained beyond the ARC grant period. (As is discussed in Chapter 6, the revised application guidelines do not emphasize the need for projects to address long-term sustainability in their grant proposals.) In cases where this issue is not adequately addressed, the applicant might then be required to amend the proposal. Once funding has been approved, project coordinators might target these projects for site visits or more intensive technical assistance. (Findings on implementation barriers in Chapter 3 suggest that technical assistance might be provided in such areas as dealing with higher than expected demand, methods for maximizing the number of community members who do make use of project services, and making accurate estimates of the time and staff required to conduct specific tasks.) While ARC staff might routinely perform these procedures for all of their projects, these findings suggest criteria that might be used to identify initiatives that would ultimately benefit the most from a site visit or other form of technical support.

5.2 Status of ARC-Funded Activities and Equipment at the Time of the Mail Survey

In addition to assessing overall project-level sustainability (above), we also examined the extent to which individual ARC-funded activities within projects were still occurring at the time of the mail survey. Overall, 94 percent of projects indicated that at least some of their ARC-funded activities—and 69 percent indicated that *all* of their ARC-funded activities—were still operational at the time of the survey (Table 5-2). Only five projects (7 percent) indicated that none of their ARC-funded activities were in use. Once again, projects with a more narrow focus were most likely to report that more of their activities were still operational. For example, all of the projects serving targeted elementary/secondary students—and 79 percent of the projects serving a single town or county—reported that all of their ARC-funded activities were still in place. It is also worth noting that 83 percent of projects serving at least one distressed county reported that all of their ARC-funded activities were still operational.

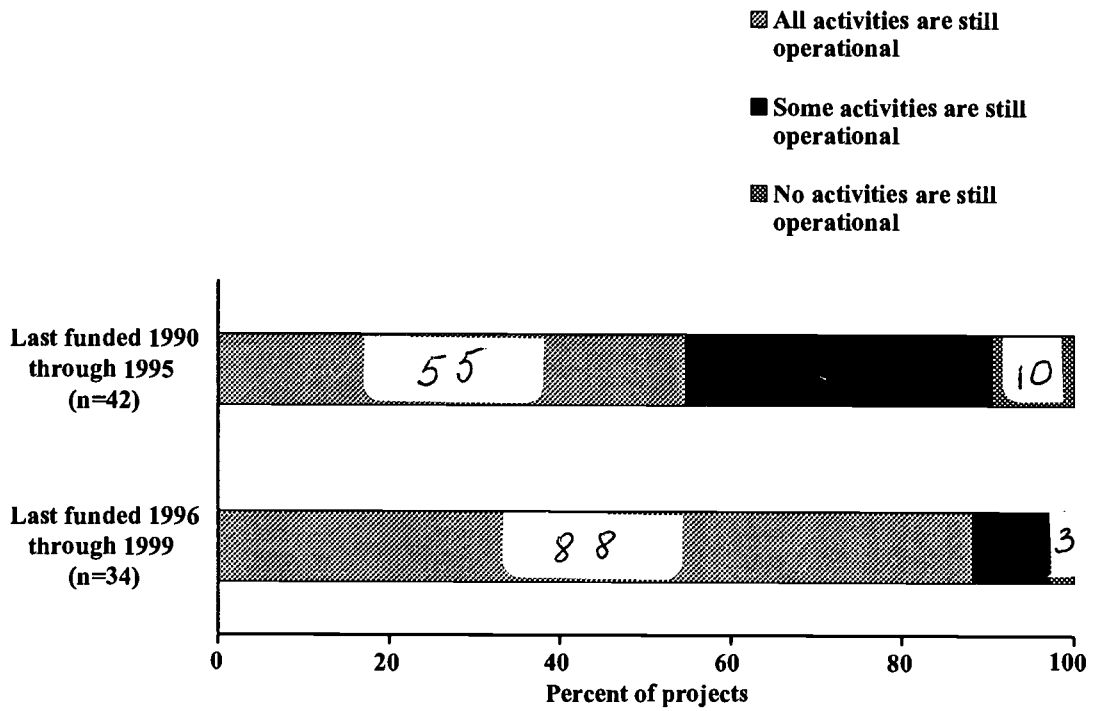
As would be expected, activities and equipment associated with more recently funded projects were more likely to be in use than were those associated with projects funded in the first half of the 1990s (Figure 5-3). Most (88 percent) projects that reported receiving ARC funding as late as 1996 through 1999 reported that all of their ARC-funded activities were operational the time of the survey. In fact, only three (9 percent) of these projects reported that only some activities were still operational, and only one (3 percent) reported that none of its activities were operational. In contrast, only 55 percent of projects that received their last ARC grant between 1990 and 1995 indicated that all of their activities were still active—while 36 percent reported that some activities were still operational, and 10 percent reported that none of their ARC-funded activities were still operational.

Table 5-2. Percent of projects that reported that their ARC-funded activities/equipment were still operational to various extents at the time of the mail survey, by project characteristics

Project characteristic	None	Some	All
All projects (n=77)	7	25	69
Project type			
Preschool age (n=6)	0	33	67
Elementary/secondary, all students (n=31)	7	26	67
Elementary/secondary, targeted students (n=7)	0	0	100
Adults (n=24)	8	29	63
Communitywide (n=9)	11	22	67
Project scope			
Single town or county (n=24)	4	17	79
Adjacent counties (n=30)	7	27	67
Nonadjacent counties (n=23)	9	30	61
Economic status			
At least one distressed county (n=24)	8	8	83
No distressed counties (n=37)	5	30	65
Statewide or multistate (n=16)	6	38	56
Metropolitan status			
Nonmetropolitan only (n=37)	5	16	78
Metropolitan only (n=6)	17	50	33
Both metro and nonmetro (n=18)	6	22	72
Statewide or multistate (n=16)	6	38	56
ARC grant size			
More than $50,000 (n=17)	12	24	65
$50,001-$100,000 (n=21)	10	29	62
$100,001-$200,000 (n=25)	4	24	72
$200,000 (n=14)	0	21	79
Total project cost			
Less than $100,000 (n=18)	11	28	61
$100,001-$200,000 (n=26)	4	31	65
$200,001-$900,000 (n=25)	8	16	76
More than $900,000 (n=8)	0	25	75
Years of ARC funding			
1 year (n=21)	5	14	81
2 years (n=32)	9	28	63
3 or more years (n=24)	4	29	67

NOTE: ARC-funded activities were those respondents marked "some" or "all" of the activity was ever funded by ARC. Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

Figure 5-3. Percent of projects reporting current operating status of activities, by last year funded



NOTE: Three projects did not provide any information about years of funding. Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

We also examined which types of ARC-funded activities were still active at the time of the survey. Most types of activities and equipment were still active—with at least 80 percent of projects that implemented a given approach reporting that is still in use (Table 5-3). In fact, *all* projects that implemented the following activities reported that they were still operational at the time of the survey: renovating existing or building new structures, developing distance education systems, installing science labs, providing family support, and providing career/college counseling. Only two activities that were specifically listed on the survey were still in operation at rates of less than 80 percent—i.e., providing emotional or psychological support (56 percent) and distributing mini-grants (57 percent).

Table 5-3. Percent of projects reporting that the following ARC-funded activities/equipment were still operational at the time of the mail survey

Type of activity	Percent of projects
Physical plant	
Install/replace mechanical equipment (n=14)	86
Renovate structures (n=6)	100
Build new structures (n=6)	100
Other physical plant activity (n=3)	67
Telecommunications	
Install computers (n=43)	88
Install/develop network (n=22)	96
Develop distance education system (n=13)	100
Other telecommunications activity (n=4)	75
Educational resources	
Install science lab (n=8)	100
Install other special use classroom (n=20)	85
Develop computer-based educational materials (n=21)	85
Develop paper-based educational materials (n=22)	91
Develop teacher training program/materials (n=27)	89
Provide teacher/tutor training (n=38)	82
Other educational resources activity (n=14)	71
Training	
Provide literacy training (n=31)	87
Provide computer training (n=38)	82
Provide GED preparation training (n=25)	84
Provide job skills training (n=29)	86
Provide parenting skills training (n=19)	95
Provide academic skills training (n=39)	92
Provide peer tutoring (n=14)	93
Other training activity (n=5)	80
Support services	
Provide emotional or psychological counseling (n=5)	56
Provide family support (n=8)	100
Provide career/college counseling (n=16)	100
Other support services activity (n=3)	100
Community outreach	
Provide outreach activities (n=26)	88
Establish partnerships (n=26)	96
Distribute mini-grants (n=7)	57
Other community outreach activity (n=4)	75

NOTE: ARC-funded activities were those respondents marked "some" or "all" of the activity was ever funded by ARC.
SOURCE: 2000 mail survey of ARC grantees.

5.3 Project Expansions and Spinoff Activities

A total of 30 projects (36 percent) in the study sample indicated that they were serving more beneficiaries than was originally anticipated (Table 5-4). In most cases, respondents indicated that they were serving a greater number of individuals than planned, but that the type of beneficiary had not changed. For example, several projects that had relocated were providing training to more adults:

> *Our center has relocated to a new facility. Our new facility has 8,100 square feet of space and seven classrooms. We have also opened a satellite classroom in a public housing unit.*
>
> *In the past 6 months, our program has opened an additional adult basic education learning center in a previously unserved community.*

Other projects were able to expand to include a broader group of people:

> *More community participants now have access to a wider variety of college courses.*
>
> *This project led to the development of a technology committee. The committee has written and been awarded numerous grants to continue developing technology in our school system.*
>
> *We have expanded from serving 8-10 counties to 20-25 counties, plus a full time program has been started to take care of the needs of students on a daily basis in [one county] and the surrounding counties.*

Still other projects expanded to serve different groups or individuals outside of the Appalachian regions:

> *English language classes are offered to foreign born and the center has moved to a larger and more accessible location.*
>
> *[It expanded to] all of our Michelin North America facilities.*
>
> *This year the USDA has asked us to create two similar projects for young people in the Mississippi Delta. Also, we have beefed up our year round program in the schools and in the communities.*

Table 5-4. Percent of projects that reported expanding to serve additional persons in locations or organizations beyond those originally targeted, by project characteristics

Project characteristic	Percent
All projects (n=83)	36
Project type	
Preschool age (n=6)	17
Elementary/secondary, all students (n=32)	41
Elementary/secondary, targeted students (n=8)	25
Adults (n=27)	33
Communitywide (n=10)	50
Project scope	
Single town or county (n=28)	36
Adjacent counties (n=30)	33
Nonadjacent counties (n=25)	40
Economic status	
At least one distressed county (n=26)	23
No distressed counties (n=41)	44
Statewide or multistate (n=16)	38
Metropolitan status	
Metropolitan only (n=8)	50
Nonmetropolitan only (n=40)	33
Both metro and nonmetro (n=19)	37
Statewide or multistate (n=16)	38
ARC grant size	
More than $50,000 (n=18)	28
$50,001-$100,000 (n=25)	28
$100,001-$200,000 (n=26)	39
$200,000 (n=14)	57
Total project cost	
Less than $100,000 (n=21)	29
$100,001-$200,000 (n=28)	36
$200,001-$900,000 (n=26)	42
More than $900,000 (n=8)	38
Years of ARC funding	
1 year (n=22)	41
2 years (n=34)	35
3 or more years (n=27)	33

SOURCE: 2000 mail survey of ARC grantees.

In addition, a total of 38 projects (45 percent) reported generating some spinoff activities (i.e., a new service or activity) since their grant period ended (Table 5-5). However, it should be noted that many of these activities actually constituted an expansion in the number of individuals served by the project, rather than additional types of services provided by the grant recipient or other agency. Examples of spinoff activities included:

> *In addition, a college scholarship program has now been created for GED graduates to pursue college. Twenty $1,000 scholarships are awarded annually.*
>
> *Website development and web-based instruction.*
>
> *Team case management involving multiple agencies to assist a person in the steps necessary to achieve self-sufficiency.*
>
> *We are also partnering with the National Science Resources Center and the Association of Science Materials Centers in projects with regional and vocational impact.*

The likelihood of projects generating spinoff activities did not vary by most project characteristics. However, projects with the largest ARC grants (greater than $200,000) were more likely than projects with smaller ARC grants (less than $50,000 and those $50,001 to $100,000) to report spinoff activities.

5.4 Factors That Facilitated Projects' Growth and Expansion

The 54 projects that indicated on the survey that they were either in full operation or that their projects were serving a function that had grown or changed from their original design were asked to indicate the factors that were responsible for their projects' success. Fourteen respondents indicated that the demand and need for the services was still present or had grown—that is, their projects had expanded because there were simply more people who needed their services:

> *Need of students for a broader base of math and science education to help attain job entry skills and/or enter postsecondary education.*
>
> *Increasing need of industry technology education and technical training.*

Table 5-5. Percent of ARC projects reporting spinoff activities, by project characteristics

Project characteristic	Percent
All projects (n=84)	45
Project type	
Preschool age (n=6)	33
Elementary/secondary, all students (n=32)	41
Elementary/secondary, targeted students (n=8)	50
Adults (n=28)	46
Communitywide (n=10)	60
Project scope	
Single town or county (n=28)	39
Adjacent counties (n=31)	52
Nonadjacent counties (n=25)	44
Economic status	
At least one distressed county (n=26)	27
No distressed counties (n=42)	50
Statewide or multistate (n=16)	63
Metropolitan status	
Metropolitan only (n=8)	50
Nonmetropolitan only (n=40)	43
Both metro and nonmetro (n=20)	35
Statewide or multistate (n=16)	63
ARC grant size	
More than $50,000 (n=18)	22
$50,001-$100,000 (n=25)	48
$100,001-$200,000 (n=27)	56
$200,000 (n=14)	50
Total project cost	
Less than $100,000 (n=21)	38
$100,001-$200,000 (n=28)	50
$200,001-$900,000 (n=27)	44
More than $900,000 (n=8)	50
Years of ARC funding	
1 year (n=22)	41
2 years (n=34)	50
3 or more years (n=28)	43

SOURCE: 2000 mail survey of ARC grantees.

Eleven projects indicated that increased support from funders, including local, state, and federal funders, allowed their projects to expand. With additional funding, they were able to broaden their services or provide them to more recipients because they had the means to do so.

> *The development of interactive classrooms in this ARC-funded project leveraged the equipping of additional classrooms with funding from local and other sources.*

A number of projects also cited the cooperation, partnerships, and community support their projects garnered that enabled them to continue and grow:

> *The community working together to identify needs and bet on them.*
>
> *The working together of all agencies involved.*

Other projects listed the provision of quality services or dedicated staff and leadership as facilitators of expansion:

> *Excellent literacy services continue to be provided.*
>
> *The great need for this service, the willingness of outside funders to help with the costs, and dedicated staff and parents.*

Creating more accessible services or facilities and taking advantage of technological advances was also considered helpful in projects' growth:

> *Moving into town allowed us to service many more parents.*
>
> *The activities initiated by our project have expanded significantly along with the growing presence of the world wide web and the increased availability to new technologies for teaching and learning.*

With the exception of additional funding, most of the factors cited by projects did not directly provide material support for the expansions. These other factors suggest the impetus for growth but provide little insight into specific mechanisms that assisted projects once ARC support ended. The case studies conducted as part of the evaluation also revealed that for the most part, projects did not have specific plans for sustaining themselves. In six of the eight case study sites, the grant recipients took over

support and funding for the project at the end of the ARC grant, but their revenue streams did not change dramatically. (See Exhibit 5-1 for an example.)

Exhibit 5-1. Adair County Technology Center

The Adair County Technology Center was established to address the growing number of students inadequately prepared for, or even aware of, technology-oriented careers. The school-based center has continued in operation since the time of the ARC grant. This is due mostly to the adoption of the technology center as part of the high school's curriculum by the Adair County Board of Education. At the time of the ARC grant, the Board was fully in support of the center and was aware that it would need to take over funding after the ARC grant ended. The Board provides $1,500 annually for center upkeep and repair. The center instructor's salary is also paid by the Board.

Several case study projects indicated that they were planning to seek grant funding from foundations, local businesses, corporations, or other public agencies. Moreover, two of the case sites were adapting their objectives to the changing needs of the community and beneficiaries. (See Exhibit 5-2 for an example.) For the most part, however, case study respondents were generally quite certain that their projects would continue. For many projects, ARC funding provided a dramatic increase from the shoestring budgets with which projects had been previously operating. They were grateful for the jump-start ARC provided—and confident their efforts would be sustained. Most simply planned to "make do."

Exhibit 5-2. Michelin Learning Centers

Although the Michelin Learning Centers are still active, their purposes and methods have changed considerably since the period of the ARC grant. Now a part of Michelin's operating budget, with some instructional support provided by the county's adult education program, the three learning centers continue to take in new learners. However, with currently little remaining need for remediation (due to changed hiring practices and remediation provided through the ARC grant), employees now come to the centers to use sophisticated educational resources for training in a wide range of job-related skills. The original ARC-funded learning centers provided the impetus for the recognition that the educational resources available in the centers could be used for many kinds of job training. The shift from remediation to training has resulted in a modified curriculum and a broad set of resources within the learning centers.

5.4 Factors That Facilitated Projects' Growth and Expansion

The survey respondents that had indicated that their projects were either in partial operation or were no longer in operation were provided with a list of potential factors that often contribute to a project's end. These 30 projects were asked to indicate whether or not each factor may have contributed to their project's not operating at full capacity. Funding was generally considered to be the biggest problem for these projects, with 43 percent indicating they did not have enough money for operations, and 37 percent indicating they did not have enough money for maintenance (Figure 5-4). These findings highlight the importance of projects outlining plans for their future. In addition:

- One-third noted personnel changes (33 percent) and technical obsolescence (33 percent) and nearly one-quarter indicated mechanical obsolescence (23 percent) had affected their project.

- Lack of community need was not reported to be a problem for these projects. Only a small proportion (13 percent) indicated that they did not have enough participants to warrant continuation, while 10 percent cited a lack of community awareness and 13 percent a lack of community support. However, many projects that were sustained identified community support and an ongoing need for their services as contributing factors.

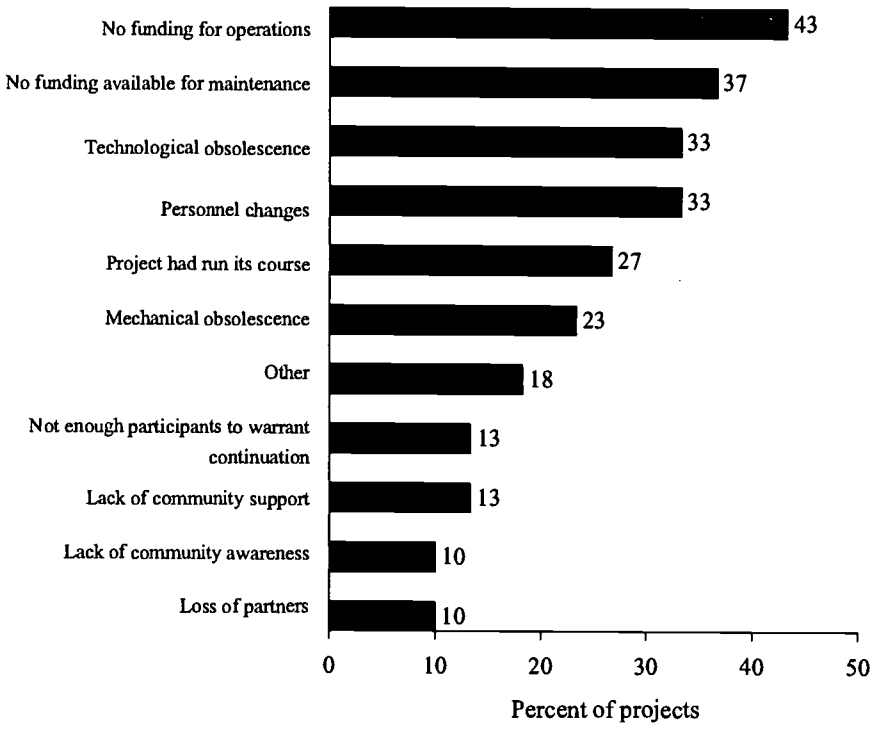
- Over a quarter (27 percent) of the projects no longer operating at full capacity indicated that they had simply run their course or met their original intent.

- Finally, four projects (13 percent) cited other factors, including policy changes that shifted the time and commitment of participating teachers and a change in the governor and that state's priorities. (Exhibit 5-3 provides another example of how a shift in policy can affect sustainability.)

5.6 Summary

Findings from both the survey and case studies suggest that many of the projects in the study sample were able to sustain themselves beyond their ARC grant. At the time the mail survey was administered, two-thirds of projects were still in full operation and/or had grown or expanded, and almost all projects reported that at least some of their ARC-funded activities or equipment were still in operation.

Figure 5-4. Percent of ARC projects no longer operating at full capacity (n=30) reporting impediments to full operation



SOURCE: 2000 mail survey of ARC grantees.

Exhibit 5-3. Science and Math To Go!

Science and Math To Go! (SMTG!) is an elementary curriculum, materials, and professional development system that employs kits filled with materials for a series of mathematics and science lessons. The biggest question facing SMTG!'s ultimate sustainability is whether the science and math kits will appear on the state textbook adoption list. If they do, state funding can be used for the purchase of new kits (and potentially their refurbishment). If not, districts will continue to feel the budget squeeze to maintain and expand their use. Staff report that districts are beginning to take ownership of the curriculum, particularly as it becomes teachers' expectations that the kits are the districts' established curriculum. To roll back now, when teachers are so pleased, would be politically difficult for the districts.

While projects appeared to have sustained themselves, it did not appear that many had expanded significantly *beyond* their original mission. A total of 30 projects were serving more beneficiaries than originally intended, although the characteristics of these beneficiaries had basically remained the same. Additionally, 38 projects reported generating spinoff activities, but most of these actually constituted an expansion in the number of persons served.

Several factors appeared to be responsible for the high proportion of projects that remained operational—or expanded—over time. In most cases, the general demand and need for the services were still present or had grown—i.e., their projects had expanded because there were simply more people who needed their services. Many projects also reported that they had enough financial and community support to allow them to continue or expand. Quality services, dedicated staff, strong leadership, and technological advances were also considered facilitators of expansion. While most of these projects were sustained, in many cases this result seemed serendipitous and achieved without a high degree of planning. This finding suggests that project coordinators might use the application process to encourage prospective projects to think ahead about steps they will take to sustain their efforts beyond the ARC grant period. In addition, findings from the case studies suggest several steps that individual projects can do to increase the likelihood of success and sustainability. These are highlighted in Appendix E.

6. SUMMARY AND RECOMMENDATIONS

6.1 Summary

This report has provided considerable evidence that the Commission succeeded in bringing about a series of targeted educational gains throughout the Appalachian Region.[1] The 84 ARC-funded projects in the study sample enhanced learning opportunities—and increased educational outcomes—in the Region. Equally important, these projects contributed to the Commission's goal of reaching those segments of Appalachia that are most in need, including persons in extreme poverty, persons who are geographically isolated, those who are unemployed or underemployed, youth at risk of dropping out of school, and persons with disabilities. The finding that two-thirds of projects would never have been implemented without ARC support—and that many of the remaining efforts would have been of limited scope—further suggests that ARC funding enabled these communities to address educational, economic, and social needs that might have otherwise gone unmet.

The survey and case studies obtained considerable information about the general approaches and specific activities that projects used to achieve their educational, economic, and individual/family well-being outcomes. Because the ARC's education portfolio encompasses a diverse range of strategies and activities, it is difficult to describe a "typical" ARC education project. The Commission enables and supports a myriad of education interventions—most notably teacher/tutor training, academic skills training, the installation of computers in classrooms, job skills training, and literacy training. This lack of a "one size fits all" model was viewed by many case study participants as an important feature of ARC's approach to selecting and funding education projects. It clearly reflects the Commission's emphasis on using its grant solicitation process to support the localized needs and capacities of individual communities. Through this process, ARC has provided community organizations the opportunity to address local disparities and take advantage of regional resources. Equally important, we found that the projects in the study sample successfully completed their intended activities, with most indicating that they met or exceeded all of their implementation objectives.

Unfortunately, the small size of the study sample limits the extent to which we can generalize about the types of education activities that ARC supports. It also limits our ability to use

[1] Because of the nonrandom process by which study sites were selected, these findings only reflect the contributions of the 84 projects in the study sample—i.e., we did not attempt to extrapolate these findings to the entire portfolio of ARC-funded education initiatives.

survey findings as a basis for offering conclusive policy guidance as to how ARC might further improve its education portfolio. For example, the survey found that projects in a single town or county were more likely to have achieved all of their implementation objectives and still be in full operation (at the time of the survey) than were those that spanned two or more counties. In spite of this general finding, we are not in a position to conclusively recommend that ARC focus its educational efforts on single-county projects. To arrive at such a conclusion, we would first need to systematically compare the implementation experiences (and outcomes) associated with small- and large-scale projects that attempted to conduct similar types of educational activities (e.g., by comparing the efforts of single and multi-county initiatives aimed at providing teacher/tutor training). While such an exercise might be useful, we do not believe it necessary, since most of the projects in the study sample appeared to have been able to implement their activities as planned. These findings do suggest, however, that ARC consider providing larger scale projects with additional (or more focused) monitoring and technical assistance. Smaller, single-county projects, which tend to be less ambitious, may not require any such support from ARC project coordinators.

Finally, this study obtained information on the types of outcomes that projects anticipated for themselves and on the methodologies that were used to assess whether these outcomes were achieved. We found that four-fifths of the projects described a skill or circumstance that would be enhanced as a result of their ARC grant, although only a few of these outcomes contained a measurable benchmark against which project success could be measured. These anticipated outcomes generally fell into one of three categories, i.e., increasing educational attainment, increasing economic well-being, and increasing family or individual well-being. Half of the projects appeared able to use data to back up their claims of success. These findings, coupled with recent efforts by ARC to assure that projects include measurable goals in their grant applications, suggest that a framework exists for enhancing the Commission's capacity to report on project-related outcomes. This framework is discussed in more detail throughout the remainder of this chapter.

What follows, therefore, is a series of recommendations designed to enhance the extent to which the ARC is able to document its successes and enhance its capacity to provide technical assistance to its grant recipients.

6.2 Recommendations

The lack of any prominent implementation barriers suggests that grant recipients were generally satisfied with the level of the financial and technical support they received from ARC.[2] Similarly, case study participants praised the role that ARC played in making their projects possible. The mail survey, case studies, and telephone interviews with state and LDD staff were not explicitly designed to assess whether ARC staff were successful in promoting project-level success. Nonetheless, the absence of criticism among some of the Commission's key stakeholders represents an important and encouraging study finding.

The Strategic Plan,[3] published in 1997, outlines a broad and dynamic role for ARC staff, including the need for project coordinators to:

- Identify state-of-the-art practices and serve as catalysts for economic opportunity;
- Serve as information brokers within the Region;
- Provide technical assistance aimed at aiding development and promoting initiatives to take full advantage of emerging opportunities and technological innovations; and
- Convene public forums and workshops, conduct program evaluations, and disseminate information to stakeholders at the national, state, and local levels.

The ultimate aim is for ARC to identify exemplary models of education improvement—and to develop strategies for duplicating these models throughout the Appalachian Region. In order for this to occur, ARC needs timely access to information about what is happening in the field. It also needs valid and reliable data on the types of educational interventions that are most likely to produce tangible results. The Commission has already begun to require that its grant recipients provide detailed information about their anticipated and actual outcomes. (These requirements predate most of the projects in the study sample.) This section addresses ways that ARC might further enhance its capacity to monitor and assist its educational projects. It also lays out steps that might be taken to help ARC document the extent to which projects are meeting their own objectives and furthering the Commission's strategic goals.

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[2] Specifically, item 8 on the mail survey obtains information on the extent to which a series of obstacles prevented projects from carrying out the activities of their ARC grant. Two of the response options focused on the role of ARC, including (1) grant not awarded in a timely manner, and (2) project funds were depleted before implementation.

[3] Setting a Regional Agenda, ARC Strategic Plan: 1997-2002.

Clarify and expand upon the performance goals for Goal 1. As discussed in Chapter 1, the current ARC Strategic Plan identifies two objectives under Goal 1 (one for workers and another for students), a range of potential strategies for meeting these objectives, and a single performance goal. However, this performance goal focuses on a broad output ("Provide access to education and training services to 45,000 students/trainees as a step to ensuring an educated, resourceful, and skilled population"), as opposed to a benefit that could be expected to occur if ARC education interventions are successful.

Findings from the study suggest a number of additional performance goals that might be incorporated into future versions of the ARC Strategic Plan. Shown in Exhibit 6-1, these additional goals build upon the educational, economic, and family/individual well-being outcomes that were reported on the mail survey. (Although these proposed performance goals appear as statements in the exhibit, the Commission could establish annual benchmarks for the number of workers and students who would meet these conditions. Or, as an alternative, it could set annual targets for the number of projects that would report gains in these areas.) Although many of these outcomes are already identified as performance measures in the Project Summary Format,[4] their inclusion in the ARC Strategic Plan might serve to further elevate their prominence and provide a formal link back to the Commission's two objectives for Goal 1. Their inclusion might also reinforce the need for projects to obtain outcome data—and for project coordinators to assure that proposals include applicants' plans for collecting baseline and follow-up information about outputs and accomplishments.

Continue to enhance ARC's application guidelines. In 1998, the Commission published an application workbook designed to improve the quality and consistency of the proposals submitted to the ARC.[5] Under these generic guidelines, applicants are required to describe the objectives of their proposed project, provide an explanation of how the effort pertains to one or more of ARC's five strategic goals, and offer a rationale for their proposed approach (see Exhibit 6-2). In addition, they must describe the "output and outcome benefits to be derived from the project with particular emphasis on the extent to which the benefits to the area being served by the project will be realized on a continuing rather than a temporary basis."

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[4] The Project Summary Format appears in the ARC Project Application Handbook.

[5] As discussed in Chapter 1, most of the projects in the study sample were funded before the ARC had revised its application guidelines or published the Project Application Workbook. However, our preliminary review of grant proposals submitted under these new guidelines (for an upcoming study of ARC's vocational education and workforce training projects) suggests that they have had the intended effect of increasing the amount of pertinent information provided in applications and improving the quality of anticipated outcomes.

Exhibit 6-1. Performance Indicator Framework for Goal 1

Goal 1: Appalachian residents will have the skills and knowledge necessary to compete in the world economy in the 21st century.	
Objective	**Potential Performance Goals** *(for inclusion in the ARC Strategic Plan)*
The percentage of workers receiving basic education and skills training, skills upgrading, and customized training will increase, leading to development of a workforce that is competitive in the 21st century world economy.	Number of adults who participate in skills training activities. Number of adults who increase their skill levels. Number of adults who obtain employment. Number of adults who retain employment. Number of adults/families that reduce their dependence on cash assistance and other social service systems.
The percentage of students participating in school readiness, dropout prevention, school-to-work transition, and GED programs will increase, thereby raising the college-going rate and preparing students for the world of work in the 21st century.	Number of students who participate in an educational activity. Number of students who increase their skill levels. Number of students who obtain a GED. Number of students who graduate from high school. Number of kindergarten students who complete a school readiness activity and test on grade level. Number of schools that report a decrease in their dropout rate. Number of students who enter college after high school. Number of students who will enter the workforce.

While the generic framework delineated in Exhibit 6-2 is sufficient, we would recommend that the Commission provide additional guidance and more explicit examples as to what constitutes an acceptable request for ARC assistance. The purpose would be to compel applicants (and ARC project coordinators) to think ahead about measuring project success and maximizing the likelihood of long-term sustainability. A secondary purpose would be devise a framework for collecting standardized information from all applicants that could be entered into the ARC database. (Such information would enhance the Commission's capacity to provide summary information about its portfolio of education projects.)

Exhibit 6-2. ARC Application Submission Format and Guideline Checklist: Current Instructions for the Project Narrative

1. **Goals and Objectives**—Relate the project to one or more of the ARC Strategic Plan goals and to one or more of the strategies in your State's Annual Strategy Statement.

2. **Purpose and Rationale for the Project**—Describe the principal purpose and rationale (need) for the project and the problem or issues the project will address.

3. **Project Description**—Provide a detailed description of the major project activities, including what will be done, who will complete each activity, and a projected timeline for project completion.

4. **Relation to Other Local/Regional Activities**—Describe how the project meets the priorities of local or regional community or economic development plans. Describe efforts to coordinate the project with other area economic development activities.

5. **Geographic Area**—Identify and describe the geographic area to be served.

6. **Benefits and Performance Measures**—State the expected benefits to be derived from the project in quantitative and qualitative terms. State the outputs and outcomes in accordance with ARC Performance Measurement Guidelines.

7. **Funding Need**—Detail the need for ARC funding and identify each different funding source for the project. Attach letters of commitment for **all** additional funding sources.

SOURCE: ARC Project Application Workbook.

One option would be to develop separate application workbooks (or goal-specific supplements) for each of the Commission's five strategic goals. This would enable ARC to provide applicants with precise instructions and customized examples that pertain to a particular issue area. Exhibit 6-3 illustrates how the existing generic guidelines might be expanded and adapted for an education (Goal 1) application workbook (or as a supplement to existing materials). In this example, applicants would receive specific guidance about the types of issues that they should address in their education proposals. They would also receive standardized criteria for estimating the number of persons expected to attain educational or economic benefit from their ARC grant. (The use of such standardized criteria might improve the quality of the statistics that are reported to ARC, thereby enhancing the Commission's capacity to aggregate outcome data across all of its education projects.)

Exhibit 6-3. Potential Enhancements to ARC's Submission Format and Guideline Checklist for Goal 1[6]

1. **Goals and Objectives**—Relate the project to one or more of the ARC Strategic Plan goals and to one or more of the strategies in your State's Annual Strategy Statement.

2. **Purpose and Rationale for the Project**—A compelling application defines a problem or set of needs that the project is seeking to address. There may be specific economic, cultural, or geographic issues—such as the lack of a skilled workforce, business disinvestment in the area, limited access to high quality teacher professional development, or high unemployment—that will be the focus of your project. You should use this section of your proposal to describe the principal purpose and rationale (need) for the project and the problems or issues the project will address, with special emphasis on (1) the specific educational, economic, or family/individual well-being need(s) that your initiative will attempt to address, (2) the characteristics of the intended beneficiaries (e.g., per capita income, percent of household's living in poverty, high school dropout rate, unemployment rate), and (3) the disparities (e.g., economic, educational) that exist within the regions to be affected by your project.

3. **Project Description**—Competitive applications demonstrate a logical link between the problem(s) they define and the solution(s) they propose. In this section, discuss how you will use your ARC grant to address the problem(s) you defined in the preceding section. In writing this section, you should attempt to address as many of the following points as possible:

   - How will the solution that you are proposing address your specific educational needs and/or enhance the learning opportunities of your intended beneficiaries?
   - Who will complete each activity?
   - What is the anticipated timeline for project completion?
   - What is your rationale for selecting this approach? Have you considered any alternative approaches for addressing your educational needs?
   - What steps have you taken to assess the needs of your intended beneficiaries? To assure that your beneficiaries will ultimately make use of the proposed activity?
   - *(if applicable)* What steps will be taken to sustain the effort beyond the ARC grant?
   - Do you anticipate that the project's scope will eventually increase? For example, are there plans to ultimately expand the number of beneficiaries or increase the range of services?

4. **Relation to Other Local/Regional Activities**—Once you have presented a coherent and convincing discussion of the project definition and shown that what you propose is feasible, you will want to show that the communities to be served by the project support it and will participate in its development by describing the steps you have taken to include a wide variety of community stakeholders in the planning and development processes. For example, have you held open meetings, conducted surveys, employed focus groups, met with representatives of different community groups, or developed a steering committee or advisory panel that involves end users and other key stakeholders?

[6] Some of the text for this example was taken from the FY2000 application guidelines for the U.S. Department of Commerce's Technology Opportunities Program (TOP). A complete set of TOP application guidelines can be found at http://www.ntia.doc.gov/otiahome/top/grants/grants.htm.

Exhibit 6-3. Potential Enhancements to ARC's Submission Format and Guideline Checklist for Goal 1 (continued)

5. **Geographic Area**—Identify and describe the geographic area to be served. You should consider presenting a profile of the community or communities to be served and the intended beneficiaries of the project, citing supporting statistics (e.g., per capita income, per cent of households living in poverty, population density, size of the region, relevant health statistics) as appropriate. You may wish to append materials such as maps and other geographical representations to illustrate the scope of the project. You can also bolster your presentation by using specific quantitative data to document the nature and extent of the community's needs.

6. **Benefits and Performance Measures**—State the expected benefits to be derived from the project in quantitative and qualitative terms. State the outputs and outcomes in accordance with the following ARC Performance Measurement Guidelines:

   Workers

   - Number of adults who participate in skills training activities.
   - Number of adults who increase their skill levels.
   - Number of adults who obtain employment.
   - Number of adults who retain employment.
   - Number of adults/families that reduce their dependence on cash assistance and other social service systems.

   Students

   - Number of students who participate in an educational activity.
   - Number of students who increase their skill levels.
   - Number of students who obtain a GED.
   - Number of students who graduate from high school.
   - Number of kindergarten students who complete a school readiness activity and test on grade level.
   - Number of schools that report a decrease in their dropout rate.
   - Number of students who enter college after high school.
   - Number of students who will enter the workforce.

   Your anticipated outcomes should be tied to your problem statement and include a range of measurements that actually help determine that the underlying need has been addressed. Some useful questions to consider include: What do you expect to change in your community? Who will be impacted? How will your initiative affect your intended beneficiaries? What specific, realistic outcomes do you expect to occur within the grant award period? Further, can you look beyond the grant award period and identify the longer term effects that you can expect to occur? To what extent will these outcomes be measurable and easily linked to the educational needs that are the driving force for your proposed effort?

   This section should also specify your plans and corresponding schedules for collecting the outcome data that will be needed to assess whether intended outcomes have been achieved.

7. **Funding Need**—Detail the need for ARC funding and identify each different funding source for the project. Attach letters of commitment for **all** additional funding sources.

Standardize ARC's final report requirements. ARC grant recipients are required to submit a final narrative and financial report when they complete their project. The most recent ARC Grant Administration Manual contains general guidelines and an example of topics that projects *might* address in their final report (see Exhibit 6-4).[7] However, few of the projects in the study sample used their closeout reports to provide the level of detail suggested by this model. (Most of these projects were funded before the sample guidelines were published. Nonetheless, our experience with other programs suggests that this lack of uniform reporting requirements will result in an uneven quality to ARC's closeout reports.) This lack of information ultimately hinders project coordinators' ability to obtain consistent data that can be used to assess project—and program—success. Under the Government Performance and Results Act (GPRA), such documentation is needed to demonstrate that the Commission's investments in educational initiatives are paying off. These data are also needed to identify potentially promising practices that warrant further study and/or replication in other communities. Finally, these data are needed so that ARC can identify practices that do not appear to be having their desired effect and should, therefore, be revised or discontinued.

We therefore recommend that ARC mandate the guidelines in Exhibit 6-4 for all of its projects—with customized examples of outputs and outcomes for each of the Commission's five strategic goals. (One approach would be to refer projects back to the same outputs and outcomes they delineated in their original proposal to ARC.) We also recommend that projects be encouraged to describe the methodologies that were used to document project success in the project outcome section. While some grant recipients may continue to rely primarily on anecdotal information, the use of standard reporting guidelines may compel projects to rely on more sophisticated and robust data collection and analysis techniques. Other issues that might be included in the final report are listed below:

- What impact did the project have on the community at large? How did the project make a difference in people's lives? What impact did the project have on traditionally disadvantaged or underserved populations? (under Project Outcomes)
- How has your project expanded to serve additional individuals in locations or settings beyond those targeted in your original request for ARC funding? (under Program Continuation and Sustainability)

[7] The instructions that accompany these guidelines state, "You may find the attached outline useful in compiling your report, though you have flexibility in how to best present information for your project."

Exhibit 6-4. Sample ARC Guidelines for Compiling Final Reports

Background. Provide a short statement regarding the need for this project. What problems did you hope to solve when you applied for ARC funding?

Activities. Describe in detail what actually happened during this grant cycle, and explain how you implemented the project activities. If there were significant changes to your program during the course of the project, or if the project was implemented differently than described in your original proposal, please describe those changes here. If you retained a consultant, list credentials and define exactly what they were paid to do for the project.

Project Outcomes. Provide any statistical information that helps document the outcomes of your project. Data will vary according to the type of project you completed, and it may be difficult to document outcomes at this time. However, it is very important to gather this kind of information so both your organization and ARC can document our successes.

In ARC's terms, outputs measure the specific number of actions taken or the number of people directly affected by your activities. Outcomes measure the longer term results of your activities. For example, a literacy training project organized three training classes—50 people attended regularly, and 25 people are now able to read as a result of the training classes.

Outputs—3 classes organized, 50 people attended
Outcomes—25 people can now read.

In addition to output and outcome measures, write an explanation of how your project has impacted the problems you were trying to solve. Were there unexpected benefits?

Problems Encountered. What would you do differently if you were starting this project again? Describe any major problems that may have occurred during the implementation of your project. Knowing the types of difficulties you encountered and how you resolved them will be helpful to other grantees that may be interested in replicating your program.

Program Continuation and Sustainability. This section should describe whether and how you intend to continue program activities after the end of the ARC grant period. Will the program continue with other funding, and if so, what other sources of funds have been identified? If the program is to be discontinued, has it served its purpose, or is there still a need to solve the problems you were addressing? What additional steps are being taken to obtain other resources needed to continue the project?

Conclusions and Recommendations. This section summarizes your project and the lessons learned during its implementation. Include a review of your successes and suggest ways that your experiences may be helpful to others.

Attachments. Attach any material that helps to describe your project and documents your success, such as photographs, news clippings, maps, videotapes, or website addresses. Also, please attach copies of any written evaluations that may have been completed for your project.

SOURCE: ARC Grant Administration Manual, updated February 16, 2000.

- How has your project expanded to conduct additional services beyond those described in your original request for ARC funding? (under Program Continuation and Sustainability)

Finally, we recommend that ARC encourage its grant recipients to address the issues under Problems Encountered and Conclusions and Recommendations in their closeout reports. Such candid discussions of lessons learned can often provide project coordinators with useful insights into the types of implementation barriers that future grant recipients can be expected to encounter.

Continue conducting validation visits to a sample of ARC projects. The Commission recently began conducting validation visits to projects that are no longer receiving ARC support. The purpose of these visits is to assess whether projects ultimately attained their longer term outcomes. In addition to helping uncover tangible evidence of project success, these visits have provided project coordinators additional justification for requiring that applicants identify outcomes that can be expected to occur several years after the end of their ARC grant period. We believe that these visits serve an important function—especially if they compel projects to consider how their efforts will be assessed in future years—and should therefore be continued.

Provide workshops in effective data collection and analysis strategies. Findings from both the survey and case studies suggest that projects had difficulty conceptualizing and operationalizing even the most basic data collection activities. As discussed in Chapter 4, many of the projects in the study sample appeared unable to provide tangible evidence that their objectives had been accomplished. Several of the projects we visited had clearly achieved their goals—yet had no evaluation data that could be used to quantify the extent of their success. In some cases, site visit respondents did not seem to know how they might go about collecting such data. This lack of evaluation data ultimately hinders ARC's ability to assess the effectiveness and impact of its education projects. Equally important, in an age of educational accountability, a project that lacks credible evaluation data may be at a disadvantage as its seeks funding from other sources.

A number of other federal programs that fund education activities routinely conduct evaluation workshops for their grant recipients. These workshops are generally designed to provide local project staff with basic expertise in how to develop a set of study questions, prepare an evaluation plan, devise appropriate survey protocols, collect data, and interpret and report findings. Some of these workshops also provide grant recipients with tips in working with local evaluators. We recommend that the ARC consider holding similar evaluation workshops with its LDDs and other interested stakeholders

on a periodic basis—with particular emphasis on techniques for collecting baseline and follow-up data on project participants' educational and economic status.

Enhance the ARC database. The ARC database contains a wealth of information about the projects that have received Commission funding over time. However, our experience in using this resource suggests that some of the data that ARC collects from its grant recipients are either incomplete or inaccessible. This has resulted in an underutilization of an important resource tool for systematically monitoring projects' activities and outcomes. The following recommendations are therefore aimed at enhancing the structure—and ultimately the quality—of the ARC database:

- **Add a field in the ARC database that links Commission-funded projects with successor state-funded projects.** The use of such a code would enable ARC to track what happens to state-funded projects that are inspired by (or represent a continuation of) Commission-funded projects.

- **Enter information on the economic designation and metropolitan status of all counties that a project is serving.** The ARC database currently contains information on whether a project is located in a distressed or nonmetropolitan county. However, it is cumbersome—if not impossible—to use the ARC database to ascertain the economic or metropolitan status of all counties that a project is serving. One option would be for ARC to develop a database that uses project codes and county-level FIPS codes to compile basic economic and geographic information about all of the counties that are expected to benefit from a particular project, rather than just the location of the grant recipient. Then, ARC could calculate a weighted average across counties served that more precisely describes the characteristics of the communities that receive ARC funding.

- **Refine the ARC project type codes.** As is discussed in the Introduction and Chapter 2, ARC's project type code pertains both to the population being served and the type of service being provided. These dual interpretations of what constitutes project type make it difficult to compare and aggregate information about projects, since it may be appropriate to assign a particular project to two or more categories. Moreover, project type is determined by each project coordinator, and these assignments are not always made in a consistent manner. As a result, we found numerous instances in which two projects that appeared to be similar had been assigned different project types.

We therefore recommend that project type be divided into two separate codes—one for the population that is to be served (e.g., adults, students, preschoolers, all community members) and one for the overall approach or type of service that is to be provided (e.g., distance learning, basic skills, math/science education). We further recommend that ARC develop a central process for assigning codes so that all projects are categorized in a systematic manner.

In addition, incorporating some of the new data items that we have recommended (i.e., from an enhanced application and closeout report) into the ARC database would further enhance ARC's capacity to monitor aggregate project trends over time.

Reinforce ARC's dissemination practices. The Commission's Strategic Plan specifies that ARC's national staff are to serve as information brokers within the Region by disseminating information to stakeholders through studies, public forums, and workshops. ARC is already using several mechanisms to disseminate information about successful projects, including articles about specific projects in *Appalachia Magazine*, annual best-practices conferences, and technical assistance with individual projects.

While these approaches are all valuable, there are additional steps that ARC might take to enhance the level of information (e.g., effective implementation strategies, cost-effective approaches for collecting and analyzing outcome data) that can be made available to current and future grant recipients. The application and data collection procedures that we have recommended would provide ARC project coordinators with considerably more information about project-level implementation practices and outcomes. These data could ultimately serve as the foundation for an on-line clearinghouse for LDDs and communities looking for ideas about how best to address an educational barrier.

6.3 Summary

Throughout this report, the success of ARC-funded education projects has been evident. This chapter has presented a collection of what lessons may be learned from their success and stated them as recommendations to ARC to ensure its continued success. Additionally, we presented lessons learned through Westat's evaluations of other federal programs that have been potential to further enhance ARC's policies and procedures for making successful grant awards. Together, these recommendations were aimed at enhancing how projects function, as well as providing guidance to ARC as its grants process continues to evolve.

Appendix A

Examples of Projects' ARC-Funded Outcomes

Appendix A-1. Examples of *educational attainment* outcomes that projects specified in their original proposal to ARC

Demonstrate measured increases in literacy skills in Knott County.

Increase adult literacy rates within the State of West Virginia.

Break the generational illiteracy cycle in the four county region.

Increase the reading and math skills of those participating in the program.

Reduce the drop out rate in Madison County by 50 percent in the next ten years.

Help students meet their personal literacy goals.

Reduce the number of students needing remediation after first grade in the 10 counties in the Appalachian region of Tennessee.

Reduce the number of at-risk students in the 10 counties in the Appalachian region of Tennessee.

Reduce the drop-out rate in the 10 counties in the Appalachian region of Tennessee.

Boost the number of GED graduates in Chattooga County.

Increase the numbers of adult learners in Chattooga County.

Produce students who are better prepared for the administration of the Ohio Proficiency Test.

Twenty percent or 7 individuals will upgrade their fundamental skill levels and social skill capabilities.

Seventy-five percent or 26 individuals served will upgrade their skill levels to those required for successful participation in vocational training programs.

Forty percent or 14 individuals served will upgrade their skill levels to those required for successful participation in further educational programs.

Enhance participating students' writing, speaking, and listening skills.

Increase the number of students participating in science fairs in the Tuscaloosa area, as well as in surrounding counties.

Decrease disruptive/dysfunctional behavior in the Buckhorn Montessori program and at home for participating children.

Mantachie High School students will attain higher achievement and ACT test scores in math and science.

Make math and science a priority for Falkner High School students.

Retain more students in the school district.

Increase the percentage of graduating students who successfully enter the workforce, post-secondary institutions, or the military by ten percent in the next biennium.

Increase high school graduation rates among students enrolled in the program.

Increase the number of students who pursue studies in math and/or science.

Appendix A-2. Examples of *economic well-being* outcomes that projects specified in their original proposal to ARC

Attract new business and industry to the area.

Upgrade adults' re-employment skills.

Upgrade adults' employability skills.

Increase income levels for the most at-risk population in the region, the adult non-reader.

Enable adult learners to become more employable.

Improve job performance of adult learners.

Increase the stability and competitiveness of the manufacturing community in the 6 participating counties.

Reduce the length of unemployment of impacted workers in the 6 participating counties.

Avert dislocation of workers in the 6 participating counties.

Reduce the likelihood of plant closures and layoffs in the 6 participating counties.

5 students who participated in the Success Bound program will gain employment.

Gain new employment as a result of training received at the facility.

Generate an increase in wages and family incomes in the 5 county region.

Reduce the unemployment rate in the 5 county region.

Students who graduate with technology background will be able to seek higher paying jobs.

Establish and maintain a thriving workforce in North Georgia.

Attract unemployed but employable persons to jobs that are open but which currently are unfilled due to a lack of developmentally appropriate child care for 0-3 year old children.

Increase the income for families with unemployed parents who can now become employed because of available, affordable, quality child care.

Transform the county's labor force into a much more competitive resource, one that will help to attract better jobs to Tippah County and Northeast Mississippi.

Individual students will become more competitive in the job market.

Create additional non-farm income.

Create seven new jobs after two years.

Enable Michelin employees to acquire or refresh the reading, writing, math, and computer skills needed to prepare for future jobs.

Appendix A-3. Examples of *family/individual well-being* outcomes that projects specified in their original proposal to ARC

Improve the overall quality of life for the citizens of SDA One.

Enable adult learners to be less economically dependent on the social service system.

Improve worker self-esteem and job attitude.

Build self-confidence and self-esteem which are critical to success.

Reduce the use of welfare and social services in the 5 county region.

Enhance students' capacity to make decisions concerning their future.

Make the residents of the facility active members of their respective communities.

Return men and women to the community as productive individuals.

Assist residents in crime-free and drug-free lives.

Seventy-five percent or 26 individuals served will experience a significant increase in the quality of their lives, and a significant decrease in dejection and vulnerability to exploitation.

Decrease the dejection and vulnerability to exploitation for the individuals served through the LIFT program.

Ninety-five percent or 33 individuals served, who have previously experienced failures in education and training programs, will experience success with LIFT program curricula, and thereby, experience a concomitant increase in self-esteem.

Increase the level of parental involvement in the area schools.

Improve participating students' personal goal setting and job preparation skills.

Create a positive home climate that enhances positive feeling, relationships and aspirations, and connect home to the school and mainstream community.

Prepare parents of participating students to use appropriate parenting skills.

Increase parental involvement in schools in the region.

Increase students' capacity to make informed decisions about their futures.

Decrease welfare dependency in the 3 county region.

Decrease life-long dependence upon social agencies of students enrolled in the program.

Students involved in the program will feel better about themselves.

Appendix A-4. Examples of evidence that respondents provided to demonstrate that their educational outcomes were achieved as much as or more than planned

Anticipated Outcome	Evidence of Achievement
Demonstrate measured increases in literacy skills in Knott County	The number of students that participated in this project and the number that received their GED were more than expected.
Higher scores in various testing situations for Wayne County High School students	For the first time in school history, ACT scores for Wayne County High School students matched the state average.
Produce more competitive students in academic and vocational areas	Students' self-concepts increased as they became more proficient in the measurements. Attitude changes were evident in all phases of the students' schooling and appearance.
Demonstrate measurable increases in literacy skills	Because of the establishment of a permanent full-time site for the literacy programs that housed the full-time teachers, the program has become another institution in the community and referrals are made regularly to the program from other agencies in the community because there are set hours and a known location.
Decrease disruptive/dysfunctional behavior in the Breathitt County Montessori Program and at home	Parent survey indicated parents see an improvement in their child's behavior at home. Teachers and aides definitely report improvements in disruptive behavior.
Motivate larger proportions of students to meet higher performance standards in English, math, and science classes	Based on the HSTW assessments conducted in 1996 and 1998, there was an increase in the mean reading score from 272 in 1996 to 277 in 1998; an increase in the mean mathematics score from 283 in 1996 to 298 in 1998; and an increase from 282 in 1996 to 294 in 1998 in the mean science score. Additionally, between 1996 and 1998, there was a decrease of 3 percent in the number of students scoring below basic on the HSTW assessment in reading, a decrease of 13 percent in mathematics, and a decrease of 3 percent in science.
Increase the proportion of students who meet higher performance standards in vocational classes	Of the 8,879 ARC vocational completers who participated in the 1998 HSTW assessment, 36 percent completed the recommended English curriculum with a mean reading score of 286 versus a score of 267 for those vocational completers in the NAEP public school sample; 75 percent completed the recommended mathematics with a mean score of 303 versus a mean score of 277 for the public school sample; and 56 completed the recommended science curriculum with a mean score of 300 versus a mean score of 267 for the public school sample.
Improve the performance and basic skills of the students enrolled in the Intervention Program	We did not have formal measurement. The "more than expected" outcome was chosen on the basis of classroom teacher, pupil, and parent reactions, and eagerness to have the project continue.
Enhance the growth and development of basic skills that students need to thrive in a traditional educational setting	We do pre and post testing to determine reading and math levels. The average reading gain was a little over 1 year—and the math gain was 8-10 months.

Appendix A-4. Examples of evidence that respondents provided to demonstrate that their *educational outcomes* were achieved as much as or more than planned (continued)

Anticipated Outcome	Evidence of Achievement
Foster the development of "knowledge workers"—students equipped to work with constantly changing information	Kids from potentially high dropout school districts finished school and either went on to college or to get professional work (Lucent Technologies, IBM, Lexington Inst).
Enhance students skills with computers in the 3 county region	Number of students served—without this grant the services would have been unavailable.
Increase adult literacy rates within the State of West Virginia	1,100 adults increased reading levels, 255 enrolled in further education/training, 2,125 improved basic skills, 433 improved basic skills, 700 improved basic parenting skills, 2,010 improved ability to help children in school.
Increase the reading and math skills of those participating in the program	High school diploma—30; GED—272 passed; this is what was expected.
Stop the cycle of illiteracy in Dawson County	Dawson County is primarily a rural county and those in need of family literacy in generally live in remote areas of the county with no or inadequate transportation. Many are apathetic toward education. However, [among] those we did serve, we made a difference and we believe the future generation will profit because of this intervention of family literacy into their life.
Break the cycle of illiteracy from generation to generation in Chattooga County	The number of GEDs earned—or course it is impossible to gauge the effect of this grant, short-term, when this outcome is covering a generation.
Prepare parents and their students for further learning	Of the ARC students assessed in 1998, 14 percent planned to continue their education at a trade or business school, 14 percent at a community college, and 35 percent at a four-year college. Seventy-two percent of the students indicated they received counseling about continuing their education and 65 percent indicated they were encouraged to take a combination of high level academic and vocational courses.
Mantachie High School students will attain higher achievement and ACT test scores in math and science	ACT test results over the past five years show that students enrolled in science at Mantachie consistently score higher in the science area of the ACT than any other area. Mantachie has had science students recognized for outstanding achievement at every science academic competition participated in over the past 5 years. This would include state, district, and regional competitions.
Make math and science a priority for Falkner High School students	More students enrolling in advanced math and science courses.
Keep students interested in school through this unique enrichment experience	Teachers indicated students looked forward to the Read Aloud days.

NOTE: Not all of the outcomes that were achieved as much or more than planned are included in this appendix. In addition, these examples are meant to illustrate the range of evidence that projects provided in support of their claims that their level of achievement was the same or more than planned. As such, the inclusion of a project's outcome/evidence does not serve as confirmation that the outcome was in fact achieved—or that the methodology was suitable and/or applied in an appropriate manner. Finally, some projects have multiple entries in this appendix.

Appendix A-5. Examples of evidence that respondents provided to demonstrate that their *economic outcomes* were achieved as much as or more than planned

Anticipated Outcome	Evidence of Achievement
Attract new business and industry to the area	From 1986 to 1993, our community experienced a growth of 12,000 jobs to our payrolls in a county of 8,000 total population.
Increase career awareness and job readiness for adults in Meigs County	Participating adults completed checklists of pre- and post-tests in conjunction with use of software related to this area. However, fewer adults participated than we expected.
Improve job performance of adult learners	We used supervisor surveys to see if any noticeable changes had occurred in individual employees or in departments.
Reduce the unemployment rate in the five county region	The unemployment rate has been reduced and has remained at a low rate. Proof of this can be gotten from the Department of Employment Security. Employers have also come to us to help find employees, indicating that the workforce is pretty well employed.
Students who graduate with technology background will be able to seek higher paying jobs	Information is power. Employers pay more for knowledge and ability.
Increase employee productivity in the two county region	Travel time is removed and productivity is increased.
Upgrade the skills of current workers at Michelin	Workplace skills inventory, job certification, GED achievement, teacher evaluations, CBT scores.
Upgrade adults' employability skills	We developed partnerships with local industries who utilized our lab to upgrade workers' skills.
Upgrade adults' re-employment skills	Unemployed workers were able to find better jobs after computer training.
Establish and maintain a thriving workforce in north Georgia	Growth of industry in the area and our ability to train employees to perform their jobs and be promoted to positions of higher responsibilities.
Individual students will become more competitive in the job market	In the 2 years since the completion of the project, several students have obtained jobs in computer operation. This evidence is obtained in a post-school survey done by the school.
Increase employability of the local labor market in the 3 county region	Positive job placement records.
The community will benefit from being able to recruit students with a technology background	Several students have their own consulting firms—service/repair of computers and systems.

Appendix A-6. Examples of evidence that respondents provided to demonstrate that their *family/individual* well-being outcomes were achieved as much as or more than planned

Anticipated Outcome	Evidence of Achievement
Enable adult learners to become more self-sufficient	Theoretically do pre- and post- TABE test. Some learners left before we were able to post-test. Those who were tested did improve their reading skills.
Improve worker self-esteem and job attitude	We used a post-training employee survey to document this.
Reduce the use of welfare and social services in the 5 county region	The number of people on public assistance has been reduced in the counties involved through the "Families First" Program. The figures are from the Department of Human Services.
Assist residents in crime-free and drug-free lives.	A condition of remaining in the facility where ARC-funded activities were provided is remaining free of drugs and criminal activity. In addition, the ARC-funded activities, in conjunction with treatment and other services, have helped clients successfully make the transition from halfway house to community living.
Increase self-expectations of participating students	Through teacher observation, it was found that student expectations had increased. Essays about the "future" and on "goals" were given early in the school year and later. Early on, many students felt there weren't any options other than quitting school for them. Later essays revealed a desire to finish school and be "successful."
Helping establish lasting patterns of parental support of learning and sustained success for the students.	Because of past feelings and attitudes, it is still hard to change [the parents] attitudes. We strive to teach them the importance of education.
Enhance students' attitude and self-esteem	Improved grades. Students take more difficult classes. Student movement into post-secondary path.
Improve social relations of students in participating families	The children go to school cleaner and have less problems with lice. This has increased their ability to participate more at school. It has also improved them and they are less isolated.
Increase students' level of self-esteem and create a more positive attitude toward learning	We do pre- and post-testing of the students to get a feel for how they feel about the program and we monitor their behavior daily. We also conference with their parents. All these things indicate higher self-esteem and a more positive attitude.
Increase self-sufficiency for program participants who chose the business-as-a-career option.	We are aware of two people who are still in business.
Enable adult learners to be less economically dependent on the social services system	Welfare reform has made a huge difference in the public assistance caseload here in Kentucky. Although eastern Kentucky remains the state's most challenging area of implementation.
Students involved in the program will feel better about themselves	The smiles on their faces, willingness to work, attendance, attitude, and progress shown is evidence that they feel better about themselves. Also, the fact that very few want to return to their regular school.

Appendix B

Analysis of Outcomes Associated with the Overall Project

APPENDIX B

ANALYSIS OF OUTCOMES ASSOCIATED WITH THE OVERALL PROJECT

As discussed in Chapter 2, many of the educational projects that ARC supported during the 1990s were part of other (and potentially larger) initiatives. This appendix provides information about the range of educational outcomes associated with the sum of activities conducted by projects (regardless of funding source).

B.1 Types of Projectwide Outcomes

Mail survey respondents were provided a list of 16 general educational outcomes and asked to indicate which ones had been anticipated by their overall project. The purpose was to identify the range of outcome types that were associated—directly or indirectly—with the ARC grant. On average, projects indicated that they had expected to achieve somewhere between 8 and 9 types of outcomes—with one project listing only a single outcome and nine projects (11 percent) listing as many as 15 or more outcome types. This finding suggests that projects were fairly ambitious in what they hoped to accomplish—with initiatives serving targeted elementary/secondary students anticipating an average of 12 different types of outcomes (Table B-1). Not surprisingly, initiatives with multiple funding sources (e.g., ARC was a primary or secondary source of funding) identified a greater number of projectwide outcome types than did those for which ARC was the sole source of funding. However, there was no clear relationship between the availability of funding (i.e., ARC grant size or total project cost) and the number of outcome types that projects anticipated.

Almost all (92 percent) respondents identified a projectwide outcome type associated with increasing educational attainment/preparation (Table B-2). In addition, well over half identified a projectwide outcome type associated with reducing barriers (77 percent), increasing economic well-being (76 percent), or increasing family/individual well-being (59 percent). The most commonly cited projectwide outcomes that projects anticipated were increased academic skills (79 percent), increased job skills (73 percent), increased access to educational support (71 percent), increased literacy rates (58 percent), increased vocational preparedness of students (57 percent), increased number of people attaining their GEDs (50 percent), and increased number of students remaining in school/decreased dropout rate/increased high school completion rate (46 percent). It is worth noting that 32 percent of projects anticipated that their efforts would help generate an increase in college attendance among participating students.

Table B-1. Average number of project outcome types, by project characteristics

Project characteristic	Average number of project outcomes
All projects (n=84)	8.4
Project type	
Preschool age (n=6)	9.3
Elementary/secondary (all students) (n=32)	6.8
Elementary/secondary (targeted students) (n=8)	12.3
Adults (n=28)	8.9
Communitywide (n=10)	8.9
Project scope	
Single town or county (n=28)	8.2
Adjacent counties (n=31)	8.6
Nonadjacent counties (n=25)	8.5
Economic status	
At least one distressed county (n=26)	10.1
No distressed counties (n=42)	8.3
Statewide or multistate (n=16)	6.0
Metropolitan status	
Nonmetropolitan only (n=40)	9.6
Metropolitan only (n=8)	7.1
Both metro and nonmetro (n=20)	8.5
Statewide or multistate (n=16)	6.0
Extent ARC-funded*	
Only funding source (n=19)	6.8
Primary funding source (n=36)	8.9
Secondary funding source (n=26)	9.3
ARC grant size	
Less than $50,000 (n=18)	7.8
$50,001 – $100,000 (n=25)	9.0
$100,001 – $200,000 (n=27)	8.6
More than $200,000 (n=14)	7.9
Total project cost	
Less than $100,000 (n=21)	7.7
$100,001 – $200,000 (n=28)	8.8
$200,001 – $900,000 (n=27)	8.3
More than $900,000 (n=8)	9.3
Years of ARC funding	
1 year (n=22)	7.8
2 years (n=34)	8.9
3 or more years (n=28)	8.3

*Three projects, which did not provide any information about the extent to which they were ARC-funded, are excluded from this calculation.
SOURCE: 2000 mail survey of ARC grantees.

Table B-2. Percent of projects reporting a project outcome in a given category (n=84)

Type of project outcome	Percent of projects
Increase educational attainment/preparation	92
Increase academic skills	79
Increase literacy rates	58
Increase vocational preparedness of students	57
Increase number of people completing GED	50
Increase number of students remaining in school/decrease dropout rate	46
Increase high school completion rate	46
Increase school readiness	38
Increase number of students attending college	32
Other educational outcomes	15
Reduce barriers	77
Increase access to educational support	71
Decrease student problem behaviors	33
Decrease travel time to services	30
Other barrier reduction outcomes	12
Increase economic well-being	76
Increase job skills	73
Decrease unemployment rates	43
Increase wages	37
Other economic well-being outcome	18
Increase family/individual well-being	59
Increase individual well-being	58
Increase family stability	33
Other well-being outcome	11

SOURCE: 2000 mail survey of ARC grantees.

B.2 Extent to Which Projectwide Outcomes Were Achieved

In general, the findings for projectwide outcomes were similar to those for the ARC-funded activities—i.e., most projects were able to attain their projectwide outcomes—with 72 percent indicating that they met or exceeded *all* of their projectwide outcomes (Table B-3). In addition, for any given projectwide outcome, between 69 percent and 96 percent of projects indicated that they achieved all of their anticipated projectwide goals (Table B-4).[1] Projects appeared to have the most success achieving the following projectwide outcomes—i.e., their level of attainment was *more* than planned: increasing the vocational preparedness of students (35 percent), increasing the number of people obtaining a GED (33 percent), increasing the number of students attending college (33 percent), and decreasing student problem behaviors (32 percent).

The projectwide outcomes that posed the greatest problems—i.e., projects' level of attainment was *less* than planned—were decreasing unemployment rates (with 25 percent falling short of their original goals), increasing family stability (18 percent), increasing wages (16 percent), and increasing the number of students remaining in school/decreasing the drop out rate (15 percent). Although a higher proportion of projects reported that their level of achievement was less than planned, it is important to note that for each of these goals, at least 70 percent reported that their level of achievement was as much or more than planned.

[1] Because respondents were not asked to indicate whether a given outcome represented a primary or secondary project goal, this discussion assumes that all outcomes were equally valued by the project. This most likely was not the case. For example, a project designed to increase academic skills among youth might have had as a secondary project goal increasing the number of parents who attained a GED. As such, even if both outcomes were achieved, the expectations for the youth-oriented outcomes might have been higher—and more difficult to achieve.

Table B-3. Percent of projects that achieved all of their project outcomes same as or more than expected, by project characteristics

Project characteristic	Percent of projects
All projects (n=78)	72
Project type	
Preschool age (n=6)	50
Elementary/secondary (all students) (n=30)	90
Elementary/secondary (targeted students) (n=7)	86
Adults (n=26)	61
Communitywide (n=9)	44
Project scope	
Single town or county (n=25)	80
Adjacent counties (n=30)	70
Nonadjacent counties (n=23)	65
Economic status	
At least one distressed county (n=25)	68
No distressed counties (n=38)	76
Statewide or multistate (n=15)	67
Metropolitan status	
Nonmetropolitan only (n=38)	71
Metropolitan only (n=6)	83
Both metro and nonmetro (n=19)	74
Statewide or multistate (n=15)	67
Extent ARC-funded*	
Only funding source (n=17)	71
Primary funding source (n=35)	69
Secondary funding source (n=25)	76
ARC grant size	
Less than $50,000 (n=17)	69
$50,001 – $100,000 (n=22)	82
$100,001 – $200,000 (n=25)	76
More than $200,000 (n=14)	50
Total project cost	
Less than $100,000 (n=18)	67
$100,001 – $200,000 (n=27)	81
$200,001 – $900,000 (n=25)	80
More than $900,000 (n=8)	25
Years of ARC funding	
1 year (n=20)	75
2 years (n=32)	66
3 or more years (n=26)	77

*One project, which did not provide any information about the extent to which they were ARC-funded, is excluded from this calculation.
NOTE: Six projects did not provide any information on project outcomes.
SOURCE: 2000 mail survey of ARC grantees.

Table B-4. Percent of project outcomes, by extent of achievement

Type of project outcome	Extent of achievement			
	Less then planned	Same as planned	More than planned	Not reported
Increase educational attainment/preparation				
Increase academic skills (n=66)	8	71	17	4
Increase vocational preparedness of students (n=48)	8	50	35	6
Increase literacy rates (n=49)	10	61	20	8
Increase number of people completing GED (n=42)	7	55	33	5
Increase number of students remaining in school/decrease drop out rate (n=39)	15	61	18	5
Increase high school completion rate (n=39)	13	67	15	5
Increase school readiness (n=32)	6	69	25	0
Increase number of students attending college (n=27)	4	59	33	4
Other educational outcomes (n=13)	8	46	46	0
Increase economic well-being				
Increase job skills (n=61)	10	69	18	3
Decrease unemployment rates (n=36)	25	58	11	6
Increase wages (n=31)	16	71	6	6
Other economic well-being outcome (n=15)	13	53	33	0
Increase family/individual well-being				
Increase individual well-being (n=49)	6	65	22	6
Increase family stability (n=28)	18	68	11	4
Other well-being outcome (n=10)	0	60	40	0
Reduce barriers				
Increase access to educational support (n=60)	3	65	27	5
Decrease student problem behaviors (n=28)	0	64	32	4
Decrease travel time to services (n=25)	12	56	24	8
Other barrier reduction outcomes (n=10)	10	40	50	0

NOTE: Percents may not sum to 100 due to rounding.
SOURCE: 2000 mail survey of ARC grantees.

Appendix C

Survey Data Disaggregated by Project Characteristics

APPENDIX C

SURVEY DATA DISAGGREGATED BY PROJECT CHARACTERISTICS

This appendix contains tables of selected data broken out by several project characteristics. Each set of tables presents evaluation data drawn from responses to the mail survey. Each set is presented by the eight project characteristics identified in the text: project type, project scope, community economic status, community metropolitan status, extent to which the project was ARC-funded, the ARC grant amount, the total project cost, and the number of years of ARC funding received.

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Table C-1a. Number of projects reporting ARC-funded activities, by project type

Type of activity	Total number of projects	Project type				
		Preschool age (n=6)	Elem/Sec, all students (n=31)	Elem/Sec, targeted students (n=7)	Adults (n=25)	Community-wide (n=9)
Physical plant						
Install/replace mechanical equipment	14	0	6	1	4	3
Renovate structures	6	0	2	0	2	2
Build new structures	6	0	4	0	2	0
Other physical plant activity	3	0	1	1	1	0
At least one physical plant activity	21	0	10	1	6	4
Telecommunications						
Install computers	43	1	20	1	17	4
Install/develop network	22	1	12	1	5	3
Develop distance education system	13	0	3	0	4	6
Other telecommunications activity	4	0	1	0	0	3
At least one telecommunications activity	50	1	23	1	18	7
Educational resources						
Install science lab	8	0	7	0	1	0
Install other special use classroom	20	0	9	1	7	3
Develop computer-based educational materials	21	0	11	1	7	2
Develop paper-based educational materials	22	1	11	2	7	1
Develop teacher training program/materials	27	2	15	2	6	2
Provide teacher/tutor training	38	4	18	4	9	3
Other educational resources activity	14	2	8	1	2	1
At least one educational resources activity	61	5	29	6	15	6
Training						
Provide literacy training	31	1	3	3	21	3
Provide computer training	38	0	14	3	17	4
Provide GED preparation training	25	1	1	1	20	2
Provide job skills training	29	1	6	3	16	3
Provide parenting skills training	19	4	3	3	8	1
Provide academic skills training	39	0	13	6	18	2
Provide peer tutoring	14	0	7	3	3	1
Other training activity	5	1	2	1	0	1
At least one training activity	55	4	18	6	23	4
Support services						
Provide emotional or psychological counseling	5	1	0	3	1	0
Provide family support	8	2	1	3	2	0
Provide career/college counseling	16	2	5	3	5	1
Other support services activity	3	1	1	1	0	0
At least one support services activity	22	4	6	5	6	1
Community outreach						
Provide outreach activities	26	3	9	3	7	4
Establish partnerships	26	3	11	2	7	3
Distribute mini-grants	7	3	2	0	1	1
Other community outreach activity	4	1	1	1	0	1
At least one community outreach activity	33	4	12	4	8	5

NOTE: "Total number of projects" refers to the total number of projects that indicated conducting each activity with at least some funding from ARC being used to conduct the activity.
SOURCE: 2000 mail survey of ARC grantees.

Table C-1b. Activities partially or fully funded by ARC implemented same or more than planned, by project type

Type of activity	Total number of projects	Project type				
		Preschool age (n=6)	Elem/Sec, all students (n=31)	Elem/Sec, targeted students (n=7)	Adults (n=25)	Community-wide (n=9)
Physical plant						
Install/replace mechanical equipment	14	0	6	1	4	3
Renovate structures	6	0	2	0	2	2
Build new structures	6	0	4	0	2	0
Other physical plant activity	3	0	1	1	1	0
Telecommunications						
Install computers	43	0	20	1	17	4
Install/develop network	22	1	12	1	5	3
Develop distance education system	13	0	3	0	3	6
Other telecommunications activity	4	0	1	0	0	2
Educational resources						
Install science lab	8	0	7	0	1	0
Install other special use classroom	20	0	9	1	7	3
Develop computer-based educational materials	21	0	11	1	6	2
Develop paper-based educational materials	22	1	11	2	7	1
Develop teacher training program/materials	27	2	15	2	5	2
Provide teacher/tutor training	38	4	17	4	8	2
Other educational resources activity	14	2	8	1	1	1
Training						
Provide literacy training	31	0	3	3	19	3
Provide computer training	38	0	14	3	17	3
Provide GED preparation training	25	1	1	1	20	2
Provide job skills training	29	0	6	3	16	2
Provide parenting skills training	19	3	3	2	8	1
Provide academic skills training	39	0	13	6	18	2
Provide peer tutoring	14	0	7	3	3	1
Other training activity	5	1	2	1	0	0
Support services						
Provide emotional or psychological counseling	5	1	0	3	1	0
Provide family support	8	2	1	3	2	0
Provide career/college counseling	16	1	5	3	5	0
Other support services activity	3	1	1	1	0	0
Community outreach						
Provide outreach activities	26	3	8	2	7	3
Establish partnerships	26	3	11	1	7	2
Distribute mini-grants	7	2	3	0	1	1
Other community outreach activity	4	1	1	1	0	0

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-1c. Number of projects reporting a project outcome in a given category, by project type

Type of project outcome	Project type					
	Total number of projects	Preschool age (n=6)	Elem/Sec, all students (n=32)	Elem/Sec, targeted students (n=8)	Adults (n=28)	Community-wide (n=10)
Increase educational attainment/preparation						
Increase number of students remaining in school/decrease dropout rate	39	2	16	8	8	5
Increase high school completion rate	39	2	14	7	10	6
Increase number of students attending college	27	1	12	5	5	4
Increase number of people completing GED	42	4	6	5	22	5
Increase literacy rates	49	4	10	5	24	6
Increase academic skills	66	1	26	7	25	7
Increase vocational preparedness of students	48	1	16	7	19	5
Increase school readiness	32	5	11	5	8	3
Other educational outcomes	13	0	10	1	0	2
Any educational attainment outcome	77	5	30	8	26	8
Increase economic well-being						
Increase job skills	61	4	19	7	24	7
Decrease unemployment rates	36	4	8	4	13	7
Increase wages	31	3	4	3	15	6
Other economic well-being outcome	15	1	5	2	1	6
Any economic outcome	64	4	19	7	26	8
Increase family/individual well-being						
Increase family stability	28	5	3	5	15	0
Increase individual well-being	49	5	12	7	20	5
Other well-being outcome	10	2	4	2	2	0
Any well-being outcome	50	5	13	7	20	5
Reduce barriers						
Increase access to educational support	60	6	22	7	19	6
Decrease travel time to services	25	3	4	2	12	4
Decrease student problem behaviors	28	3	10	7	5	3
Other barrier reduction outcomes	10	0	4	2	2	2
Any barrier reduction outcome	65	6	24	8	20	7

NOTE: "Total number of projects" refers to the total number of projects reporting each outcome was anticipated.
SOURCE: 2000 mail survey of ARC grantees.

Table C-1d. Number of projects reporting that project outcomes were achieved same or more than planned, by project type

Type of project outcome	Total number of projects	Project type				
		Preschool age (n=6)	Elem/Sec, all students (n=32)	Elem/Sec, targeted students (n=8)	Adults (n=28)	Community-wide (n=10)
Increase educational attainment/preparation						
Increase number of students remaining in school/decrease dropout rate	31	2	14	7	5	3
Increase high school completion rate	32	2	13	6	6	5
Increase number of students attending college	25	1	12	4	5	3
Increase number of people completing GED	37	4	6	4	20	3
Increase literacy rates	40	2	10	4	19	5
Increase academic skills	58	1	26	6	21	4
Increase vocational preparedness of students	41	1	15	6	15	4
Increase school readiness	30	4	11	5	8	2
Other educational outcomes	12	0	10	1	0	1
Increase economic well-being						
Increase job skills	53	4	19	6	20	4
Decrease unemployment rates	25	4	7	3	7	4
Increase wages	24	3	4	2	11	4
Other economic well-being outcome	13	1	5	2	1	4
Increase family/individual well-being						
Increase family stability	22	5	2	3	12	0
Increase individual well-being	43	5	12	6	16	4
Other well-being outcome	10	2	4	2	2	0
Reduce barriers						
Increase access to educational support	60	6	22	6	17	4
Decrease travel time to services	20	1	4	2	10	3
Decrease student problem behaviors	27	3	10	6	5	3
Other barrier reduction outcomes	9	0	4	2	2	1

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-1e. Number of projects reporting at least one ARC outcome in a given category, by project type

Type of ARC outcome	Total number of projects	Project type				
		Preschool age	Elem/Sec, all students	Elem/Sec, targeted students	Adults	Community-wide
Increase educational attainment	60	4	23	8	19	6
Increase economic well-being	26	2	6	3	12	3
Increase family/individual well-being	26	4	5	8	7	2

NOTE: "Total number of projects" refers to the total number of projects that reported at least one of each type of outcome.
SOURCE: 2000 mail survey of ARC grantees.

Table C-1f. Number of projects reporting ARC outcomes were achieved same or more than planned, by project type

Type of ARC outcome	Total number of projects	Project type				
		Preschool age	Elem/Sec, all students	Elem/Sec, targeted students	Adults	Community-wide
Increase educational attainment/preparation	60	2	18	7	14	5
Increase economic well-being	26	1	5	3	10	2
Increase family/individual well-being	26	3	3	7	5	2
All ARC outcomes	72	2	19	6	20	6

NOTE: "Total number of projects" refers to the total number of projects that reported that each type of outcome, was anticipated. Rows may not sum to the total because they include only outcomes achieved "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-2a. Number of projects reporting ARC-funded activities, by project scope

Type of activity	Total number of projects	Project scope		
		Single town or county (n=25)	Adjacent counties (n=30)	Nonadjacent counties (n=23)
Physical plant				
Install/replace mechanical equipment	14	7	4	3
Renovate structures	6	2	3	1
Build new structures	6	2	2	2
Other physical plant activity	3	1	2	0
At least one physical plant activity	21	10	7	4
Telecommunications				
Install computers	43	21	16	6
Install/develop network	22	8	9	5
Develop distance education system	13	2	8	3
Other telecommunications activity	4	0	3	1
At least one telecommunications activity	50	22	21	7
Educational resources				
Install science lab	8	4	3	1
Install other special use classroom	20	6	10	4
Develop computer-based educational materials	21	8	6	7
Develop paper-based educational materials	22	5	6	11
Develop teacher training program/materials	27	3	15	9
Provide teacher/tutor training	38	7	17	14
Other educational resources activity	14	0	7	7
At least one educational resources activity	61	16	23	22
Training				
Provide literacy training	31	13	10	8
Provide computer training	38	15	11	12
Provide GED preparation training	25	12	7	6
Provide job skills training	29	11	9	9
Provide parenting skills training	19	6	5	8
Provide academic skills training	39	15	13	11
Provide peer tutoring	14	4	6	4
Other training activity	5	0	3	2
At least one training activity	55	19	20	16
Support services				
Provide emotional or psychological counseling	5	2	1	2
Provide family support	8	2	3	3
Provide career/college counseling	16	7	3	6
Other support services activity	3	1	2	0
At least one support services activity	22	8	6	8
Community outreach				
Provide outreach activities	26	8	8	10
Establish partnerships	26	6	10	10
Distribute mini-grants	7	1	3	3
Other community outreach activity	4	1	2	1
At least one community outreach activity	33	9	12	12

NOTE: "Total number of projects" refers to the total number of projects that indicated conducting each activity with at least some funding from ARC being used to conduct the activity.
SOURCE: 2000 mail survey of ARC grantees.

Table C-2b. Number of activities partially or fully funded by ARC implemented same or more than planned, by project scope

Type of activity	Total number of projects	Project scope		
		Single town or county (n=25)	Adjacent counties (n=30)	Nonadjacent counties (n=23)
Physical plant				
Install/replace mechanical equipment	14	7	4	3
Renovate structures	6	2	3	1
Build new structures	6	2	2	2
Other physical plant activity	3	1	2	0
Telecommunications				
Install computers	43	21	15	6
Install/develop network	22	8	9	5
Develop distance education system	13	2	8	2
Other telecommunications activity	4	0	3	0
Educational resources				
Install science lab	8	4	3	1
Install other special use classroom	20	6	10	4
Develop computer-based educational materials	21	8	5	7
Develop paper-based educational materials	22	5	6	11
Develop teacher training program/materials	27	3	14	9
Provide teacher/tutor training	38	7	16	12
Other educational resources activity	14	0	6	7
Training				
Provide literacy training	31	12	9	7
Provide computer training	38	15	11	11
Provide GED preparation training	25	12	7	6
Provide job skills training	29	11	8	8
Provide parenting skills training	19	6	4	7
Provide academic skills training	39	15	13	11
Provide peer tutoring	14	4	6	4
Other training activity	5	0	3	1
Support services				
Provide emotional or psychological counseling	5	2	1	2
Provide family support	8	2	3	3
Provide career/college counseling	16	7	2	5
Other support services activity	3	1	2	0
Community outreach				
Provide outreach activities	26	8	7	8
Establish partnerships	27	6	9	9
Distribute mini-grants	7	1	3	3
Other community outreach activity	4	1	2	0

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-2c. Number of projects reporting a project outcome in a given category, by project scope

Type of project outcome	Total number of projects	Project scope		
		Single town or county (n=28)	Multiple adjacent counties (n=31)	Multiple nonadjacent counties (n=25)
Increase educational attainment/preparation				
Increase number of students remaining in school/decrease dropout rate	39	11	16	12
Increase high school completion rate	39	11	15	13
Increase number of students attending college	27	7	7	13
Increase number of people completing GED	42	17	15	10
Increase literacy rates	49	18	20	11
Increase academic skills	66	25	23	18
Increase vocational preparedness of students	48	22	16	10
Increase school readiness	32	11	9	12
Other educational outcomes	13	1	7	5
Any educational attainment outcome	77	26	30	21
Increase economic well-being				
Increase job skills	61	22	22	17
Decrease unemployment rates	36	8	13	15
Increase wages	31	8	11	12
Other economic well-being outcome	15	3	4	8
Any economic outcome	64	22	23	19
Increase family/individual well-being				
Increase family stability	28	11	9	8
Increase individual well-being	49	16	19	14
Other well-being outcome	10	3	6	1
Any well-being outcome	50	16	19	15
Reduce barriers				
Increase access to educational support	60	17	25	18
Decrease travel time to services	25	8	12	5
Decrease student problem behaviors	28	9	13	6
Other barrier reduction outcomes	10	2	4	4
Any barrier reduction outcome	65	18	27	20

NOTE: "Total number of projects" refers to the total number of projects reporting each outcome was anticipated.
SOURCE: 2000 mail survey of ARC grantees.

Table C-2d. Number of projects reporting that project outcomes were achieved same or more than planned, by project scope

Type of project outcome	Total number of projects	Project scope		
		Single town or county (n=28)	Adjacent counties (n=31)	Nonadjacent counties (n=25)
Increase educational attainment/preparation				
Increase number of students remaining in school/decrease dropout rate	39	8	14	9
Increase high school completion rate	32	8	13	11
Increase number of students attending college	25	7	7	11
Increase number of people completing GED	37	15	15	7
Increase literacy rates	40	16	15	9
Increase academic skills	58	23	19	16
Increase vocational preparedness of students	41	20	13	8
Increase school readiness	30	11	8	11
Other educational outcomes	12	1	7	4
Increase economic well-being				
Increase job skills	53	21	19	13
Decrease unemployment rates	25	6	10	9
Increase wages	24	8	9	7
Other economic well-being outcome	13	3	4	6
Increase family/individual well-being				
Increase family stability	22	9	8	5
Increase individual well-being	43	14	17	12
Other well-being outcome	10	3	6	1
Reduce barriers				
Increase access to educational support	55	16	24	15
Decrease travel time to services	20	7	9	4
Decrease student problem behaviors	27	9	13	5
Other barrier reduction outcomes	9	2	4	3

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-2e. Number of projects reporting at least one ARC outcome in a given category, by project scope

Type of ARC outcome	Total number of projects	Project scope		
		Single town or county	Multiple adjacent counties	Multiple nonadjacent counties
Increase educational attainment	60	25	18	17
Increase economic well-being	26	7	12	7
Increase family/individual well-being	26	6	11	9

NOTE: "Total number of projects" refers to the total number of projects that reported at least one of each type of outcome.
SOURCE: 2000 mail survey of ARC grantees.

Table C-2f. Number of projects reporting ARC outcomes were achieved same or more than planned, by project scope

Type of ARC outcome	Total number of projects	Project scope		
		Single town or county	Adjacent counties	Nonadjacent counties
Increase educational attainment/preparation	60	20	12	14
Increase economic well-being	26	6	9	6
Increase family/individual well-being	26	5	9	6
All ARC outcomes	72	20	16	17

NOTE: "Total number of projects" refers to the total number of projects that reported that each type of outcome, was anticipated. Rows may not sum to the total because they include only outcomes achieved "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-3a. Number of projects reporting ARC-funded activities, by economic status

Type of activity	Total number of projects	Economic status		
		At least one distressed county (n=24)	No distressed counties (n= 38)	Statewide or multistate (n=16)
Physical plant				
Install/replace mechanical equipment	14	4	10	0
Renovate structures	6	1	5	0
Build new structures	6	1	4	1
Other physical plant activity	3	1	1	1
At least one physical plant activity	21	5	15	1
Telecommunications				
Install computers	43	11	29	3
Install/develop network	22	7	12	3
Develop distance education system	13	4	8	1
Other telecommunications activity	4	1	2	1
At least one telecommunications activity	50	12	32	6
Educational resources				
Install science lab	8	3	4	1
Install other special use classroom	20	5	14	1
Develop computer-based educational materials	21	8	12	1
Develop paper-based educational materials	22	6	10	6
Develop teacher training program/materials	27	9	11	7
Provide teacher/tutor training	38	13	15	10
Other educational resources activity	14	5	4	5
At least one educational resources activity	61	19	27	15
Training				
Provide literacy training	31	10	19	2
Provide computer training	38	12	22	4
Provide GED preparation training	25	6	17	2
Provide job skills training	29	9	18	2
Provide parenting skills training	19	7	8	4
Provide academic skills training	39	13	21	5
Provide peer tutoring	14	5	6	3
Other training activity	5	3	1	1
At least one training activity	55	18	28	9
Support services				
Provide emotional or psychological counseling	5	0	4	1
Provide family support	8	2	5	1
Provide career/college counseling	16	5	9	2
Other support services activity	3	2	0	1
At least one support services activity	22	7	11	4
Community outreach				
Provide outreach activities	26	8	13	5
Establish partnerships	26	8	13	5
Distribute mini-grants	7	3	1	3
Other community outreach activity	4	2	1	1
At least one community outreach activity	33	9	16	8

NOTE: "Total number of projects" refers to the total number of projects that indicated conducting each activity with at least some funding from ARC being used to conduct the activity.
SOURCE: 2000 mail survey of ARC grantees.

Table C-3b. Number of activities partially or fully funded by ARC implemented same or more than planned, by economic status

Type of activity	Total number of projects	Economic status		
		At least one distressed county (n=24)	No distressed counties (n=38)	Statewide or multistate (n=16)
Physical plant				
Install/replace mechanical equipment	14	4	10	0
Renovate structures	6	1	5	0
Build new structures	6	1	4	1
Other physical plant activity	3	1	1	1
Telecommunications				
Install computers	43	10	29	3
Install/develop network	22	6	12	4
Develop distance education system	13	4	7	1
Other telecommunications activity	4	0	2	1
Educational resources				
Install science lab	8	3	4	1
Install other special use classroom	20	5	14	1
Develop computer-based educational materials	21	8	11	1
Develop paper-based educational materials	22	4	10	8
Develop teacher training program/materials	27	8	10	8
Provide teacher/tutor training	38	11	14	10
Other educational resources activity	14	3	4	6
Training				
Provide literacy training	31	9	17	2
Provide computer training	38	11	22	4
Provide GED preparation training	25	5	17	3
Provide job skills training	29	7	18	2
Provide parenting skills training	19	4	8	5
Provide academic skills training	39	13	21	5
Provide peer tutoring	14	5	6	3
Other training activity	5	1	1	2
Support services				
Provide emotional or psychological counseling	5	0	4	1
Provide family support	8	1	5	2
Provide career/college counseling	16	3	9	2
Other support services activity	3	2	1	0
Community outreach				
Provide outreach activities	26	5	12	6
Establish partnerships	26	6	12	6
Distribute mini-grants	7	1	1	5
Other community outreach activity	4	1	1	1

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-3c. Number of projects reporting a project outcome in a given category, by economic status

Type of project outcome	Total number of projects	Economic status		
		At least one distressed county	No distressed counties	Statewide or multistate
Increase educational attainment/preparation				
Increase number of students remaining in school/decrease dropout rate	39	16	19	4
Increase high school completion rate	39	16	20	3
Increase number of students attending college	27	14	8	5
Increase number of people completing GED	42	15	23	4
Increase literacy rates	49	17	27	5
Increase academic skills	66	20	37	9
Increase vocational preparedness of students	48	16	29	3
Increase school readiness	32	15	12	5
Other educational outcomes	13	7	4	2
Any educational attainment outcome	77	26	39	12
Increase economic well-being				
Increase job skills	61	20	33	8
Decrease unemployment rates	36	16	14	6
Increase wages	31	12	15	4
Other economic well-being outcome	15	5	7	3
Any economic outcome	64	20	35	9
Increase family/individual well-being				
Increase family stability	28	11	12	5
Increase individual well-being	49	17	24	8
Other well-being outcome	10	4	3	3
Any well-being outcome	50	18	24	8
Reduce barriers				
Increase access to educational support	60	20	29	11
Decrease travel time to services	25	5	15	5
Decrease student problem behaviors	28	14	13	1
Other barrier reduction outcomes	10	3	5	2
Any barrier reduction outcome	65	22	31	12

NOTE: "Total number of projects" refers to the total number of projects reporting each outcome was anticipated.
SOURCE: 2000 mail survey of ARC grantees.

Table C-3d. Number of projects reporting that project outcomes were achieved same or more than planned, by economic status

Type of project outcome	Total number of projects	Economic status		
		At least one distressed county (n=26)	No distressed counties (n=42)	Statewide or multistate (n=16)
Increase educational attainment/preparation				
Increase number of students remaining in school/decrease dropout rate	31	12	15	4
Increase high school completion rate	32	13	17	2
Increase number of students attending college	25	12	8	5
Increase number of people completing GED	37	11	22	4
Increase literacy rates	40	14	24	2
Increase academic skills	58	17	33	8
Increase vocational preparedness of students	41	12	28	1
Increase school readiness	30	13	12	5
Other educational outcomes	12	6	4	2
Increase economic well-being				
Increase job skills	53	14	32	7
Decrease unemployment rates	25	10	12	3
Increase wages	24	9	13	2
Other economic well-being outcome	13	3	7	3
Increase family/individual well-being				
Increase family stability	22	8	10	4
Increase individual well-being	43	14	22	7
Other well-being outcome	10	4	3	3
Reduce barriers				
Increase access to educational support	55	17	27	11
Decrease travel time to services	20	4	13	3
Decrease student problem behaviors	27	13	13	1
Other barrier reduction outcomes	9	2	5	2

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-3e. Number of projects reporting at least one ARC outcome in a given category, by economic status

Type of ARC outcome	Total number of projects	Economic status		
		At least one distressed county	No distressed counties	Statewide or multistate
Increase educational attainment	60	23	30	7
Increase economic well-being	26	9	14	3
Increase family/individual well-being	26	10	12	4

NOTE: "Total number of projects" refers to the total number of projects that reported at least one of each type of outcome.
SOURCE: 2000 mail survey of ARC grantees.

Table C-3f. Number of projects reporting ARC outcomes were achieved same or more than planned, by economic status

Type of ARC outcome	Total number of projects	Economic status		
		At least one distressed county	No distressed counties	Statewide or multistate
Increase educational attainment/preparation	60	18	23	5
Increase economic well-being	26	7	12	2
Increase family/individual well-being	26	8	10	2
All ARC outcomes	72	18	28	7

NOTE: "Total number of projects" refers to the total number of projects that reported that each type of outcome, was anticipated. Rows may not sum to the total because they include only outcomes achieved "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-4a. Number of projects reporting ARC-funded activities, by metropolitan status

Type of activity	Total number of projects	Metropolitan status			
		Metro only (n=6)	Nonmetro only (n=38)	Both metro And nonmetro (n=18)	Statewide or multistate (n=16)
Physical plant					
Install/replace mechanical equipment	14	2	8	4	0
Renovate structures	6	1	3	2	0
Build new structures	6	0	4	1	1
Other physical plant activity	3	0	2	0	1
At least one physical plant activity	21	2	13	5	1
Telecommunications					
Install computers	43	4	28	7	4
Install/develop network	22	0	14	4	4
Develop distance education system	13	1	6	5	1
Other telecommunications activity	4	0	3	0	1
At least one telecommunications activity	50	5	30	9	6
Educational resources					
Install science lab	8	1	6	0	1
Install other special use classroom	20	1	14	4	1
Develop computer-based educational materials	21	1	14	5	1
Develop paper-based educational materials	22	1	7	6	8
Develop teacher training program/ materials	27	2	10	7	8
Provide teacher/tutor training	38	2	17	8	11
Other educational resources activity	14	0	3	4	7
At least one educational resources activity	61	3	28	15	15
Training					
Provide literacy training	31	4	16	8	3
Provide computer training	38	4	22	8	4
Provide GED preparation training	25	4	12	6	3
Provide job skills training	29	4	18	5	2
Provide parenting skills training	19	1	9	4	5
Provide academic skills training	39	3	23	8	5
Provide peer tutoring	14	1	9	1	3
Other training activity	5	0	2	1	2
At least one training activity	55	5	31	10	9
Support services					
Provide emotional or psychological counseling	5	0	3	1	1
Provide family support	8	0	4	2	2
Provide career/college counseling	16	1	11	2	2
Other support services activity	3	0	2	0	1
At least one support services activity	22	1	13	4	4
Community outreach					
Provide outreach activities	26	3	10	6	7
Establish partnerships	26	3	11	6	6
Distribute mini-grants	7	0	1	1	5
Other community outreach activity	4	0	3	0	1
At least one community outreach activity	33	4	15	6	8

NOTE: "Total number of projects" refers to the total number of projects that indicated conducting each activity with at least some funding from ARC being used to conduct the activity.
SOURCE: 2000 mail survey of ARC grantees.

Table C-4b. Number of activities partially or fully funded by ARC implemented same or more than planned, by metropolitan status

Type of activity	Total number of projects	Metropolitan status			
		Nonmetro only (n=6)	Metro only (n=38)	Both metro and nonmetro (n=18)	Statewide or multistate (n=16)
Physical plant					
Install/replace mechanical equipment	14	8	2	4	0
Renovate structures	6	3	1	2	0
Build new structures	6	4	0	1	1
Other physical plant activity	3	2	0	0	1
Telecommunications					
Install computers	43	28	4	7	3
Install/develop network	22	14	0	4	4
Develop distance education system	13	6	1	4	1
Other telecommunications activity	4	3	0	0	1
Educational resources					
Install science lab	8	6	1	0	1
Install other special use classroom	20	14	1	4	1
Develop computer-based educational materials	21	13	1	5	1
Develop paper-based educational materials	22	7	1	6	8
Develop teacher training program/materials	27	9	2	7	8
Provide teacher/tutor training	38	15	2	8	10
Other educational resources activity	14	3	0	4	6
Training					
Provide literacy training	31	16	3	7	2
Provide computer training	38	21	4	8	4
Provide GED preparation training	25	12	4	6	3
Provide job skills training	29	16	4	5	2
Provide parenting skills training	19	1	8	3	5
Provide academic skills training	39	23	3	8	5
Provide peer tutoring	14	9	1	1	3
Other training activity	5	1	0	1	2
Support services					
Provide emotional or psychological counseling	5	3	0	1	1
Provide family support	8	4	0	2	2
Provide career/college counseling	16	9	1	2	2
Other support services activity	3	2	0	0	1
Community outreach					
Provide outreach activities	26	8	3	6	6
Establish partnerships	26	9	3	6	6
Distribute mini-grants	7	1	0	1	5
Other community outreach activity	4	2	0	0	1

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-4c. Number of projects reporting a project outcome in a given category, by metropolitan status

Type of project outcome	Total number of projects	Metropolitan status			
		Nonmetro counties only (n=40)	Metro counties only (n=8)	Both metro and nonmetro counties (n=20)	Statewide or multistate (n=16)
Increase educational attainment/preparation					
Increase number of students remaining in school/decrease dropout rate	39	23	1	11	4
Increase high school completion rate	39	24	1	11	3
Increase number of students attending college	27	15	0	7	5
Increase number of people completing GED	42	24	5	9	4
Increase literacy rates	49	28	5	11	5
Increase academic skills	66	36	7	14	9
Increase vocational preparedness of students	48	32	4	9	3
Increase school readiness	32	18	1	8	5
Other educational outcomes	13	5	1	5	2
Any educational attainment outcome	77	39	7	19	12
Increase economic well-being					
Increase job skills	61	34	4	15	8
Decrease unemployment rates	36	18	2	10	6
Increase wages	31	16	2	9	4
Other economic well-being outcome	15	8	1	3	3
Any economic outcome	64	34	4	17	9
Increase family/individual well-being					
Increase family stability	28	14	4	5	5
Increase individual well-being	49	24	5	12	8
Other well-being outcome	10	6	1	0	3
Any well-being outcome	50	25	5	12	8
Reduce barriers					
Increase access to educational support	60	27	7	15	11
Decrease travel time to services	25	11	4	5	5
Decrease student problem behaviors	28	19	1	7	1
Other barrier reduction outcomes	10	4	1	3	2
Any barrier reduction outcome	65	7	29	17	12

NOTE: "Total number of projects" refers to the total number of projects reporting each outcome was anticipated.
SOURCE: 2000 mail survey of ARC grantees.

Table C-4d. Number of projects reporting that project outcomes were achieved same or more than planned, by metropolitan status

Type of project outcome	Total number of projects	Metropolitan status			
		Nonmetro only (n=40)	Metro only (n=8)	Both metro and nonmetro (n=20)	Statewide or multistate (n=16)
Increase educational attainment/preparation					
Increase number of students remaining in school/decrease dropout rate	31	18	0	9	4
Increase high school completion rate	32	20	0	10	2
Increase number of students attending college	25	13	0	7	5
Increase number of people completing GED	37	21	4	8	4
Increase literacy rates	40	25	4	9	2
Increase academic skills	58	31	6	13	8
Increase vocational preparedness of students	41	28	4	8	1
Increase school readiness	30	16	1	8	5
Other educational outcomes	12	4	1	5	2
Increase economic well-being					
Increase job skills	53	30	4	12	7
Decrease unemployment rates	25	13	2	7	3
Increase wages	24	14	2	6	2
Other economic well-being outcome	13	7	1	2	3
Increase family/individual well-being					
Increase family stability	22	11	4	3	4
Increase individual well-being	43	21	4	11	7
Other well-being outcome	10	6	1	0	3
Reduce barriers					
Increase access to educational support	55	25	6	13	11
Decrease travel time to services	20	10	3	4	3
Decrease student problem behaviors	27	18	1	7	1
Other barrier reduction outcomes	9	3	1	3	2

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-4e. Number of projects reporting at least one ARC outcome in a given category, by metropolitan status

Type of ARC outcome	Total number of projects	Metropolitan status			
		Nonmetro counties only	Metro counties only	Both metro and nonmetro counties	Statewide or multistate
Increase educational attainment	60	34	5	14	7
Increase economic well-being	26	15	2	6	3
Increase family/individual well-being	26	13	2	7	4

NOTE: "Total number of projects" refers to the total number of projects that reported at least one of each type of outcome.
SOURCE: 2000 mail survey of ARC grantees.

Table C-4f. Number of projects reporting ARC outcomes were achieved same or more than planned, by metropolitan status

Type of ARC outcome	Total number of projects	Metropolitan status			
		Nonmetro only	Metro only	Both metro and nonmetro	Statewide or multistate
Increase educational attainment/preparation	60	3	26	12	5
Increase economic well-being	26	2	12	5	2
Increase family/individual well-being	26	2	11	5	2
All ARC outcomes	72	5	27	14	7

NOTE: "Total number of projects" refers to the total number of projects that reported that each type of outcome, was anticipated. Rows may not sum to the total because they include only outcomes achieved "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-5a. Number of projects reporting ARC-funded activities, by ARC grant size

Type of activity	Total number of projects	ARC grant amount			
		Less than $50,000 (n=17)	$50,001 - $100,000 (n=22)	$100,001 - $200,000 (n=25)	More than $200,000 (n=14)
Physical plant					
Install/replace mechanical equipment	14	0	7	4	3
Renovate structures	6	0	2	2	2
Build new structures	6	0	3	1	2
Other physical plant activity	3	0	2	0	1
At least one physical plant activity	21	0	11	5	5
Telecommunications					
Install computers	43	8	15	13	7
Install/develop network	22	3	5	10	4
Develop distance education system	13	1	1	5	6
Other telecommunications activity	4	0	0	3	1
At least one telecommunications activity	50	9	15	17	9
Educational resources					
Install science lab	8	0	4	2	2
Install other special use classroom	20	3	7	8	2
Develop computer-based educational materials	21	4	10	5	2
Develop paper-based educational materials	22	3	8	8	3
Develop teacher training program/ materials	27	6	8	6	7
Provide teacher/tutor training	38	8	9	12	9
Other educational resources activity	14	5	2	4	3
At least one educational resources activity	61	13	16	20	12
Training					
Provide literacy training	31	6	10	10	5
Provide computer training	38	9	13	11	5
Provide GED preparation training	25	5	8	7	5
Provide job skills training	29	5	10	8	6
Provide parenting skills training	19	3	6	6	4
Provide academic skills training	39	9	12	13	5
Provide peer tutoring	14	2	5	6	1
Other training activity	5	0	1	2	2
At least one training activity	55	12	17	18	8
Support services					
Provide emotional or psychological counseling	5	0	3	2	0
Provide family support	8	0	4	4	0
Provide career/college counseling	16	2	8	3	3
Other support services activity	3	0	1	2	0
At least one support services activity	22	2	10	7	3
Community outreach					
Provide outreach activities	26	2	7	11	6
Establish partnerships	26	2	7	11	6
Distribute mini-grants	7	1	2	4	0
Other community outreach activity	4	0	1	1	2
At least one community outreach activity	33	3	10	13	7

NOTE: "Total number of projects" refers to the total number of projects that indicated conducting each activity with at least some funding from ARC being used to conduct the activity.
SOURCE: 2000 mail survey of ARC grantees.

Table C-5b. Number of activities partially or fully funded by ARC implemented same or more than planned, by ARC grant amount

Type of activity	Total number of projects	ARC grant amount			
		Less than $50,000 (n=17)	$50,001 - $100,000 (n=22)	$100,001 - $200,000 (n=25)	More than $200,000 (n=14)
Physical plant					
Install/replace mechanical equipment	14	0	7	4	3
Renovate structures	6	0	2	2	2
Build new structures	6	0	3	1	2
Other physical plant activity	3	0	2	0	1
Telecommunications					
Install computers	43	8	15	12	7
Install/develop network	22	3	5	10	4
Develop distance education system	13	1	1	4	6
Other telecommunications activity	4	0	0	3	0
Develop educational resources					
Install science lab	8	0	4	2	2
Install other special use classroom	20	3	7	8	2
Develop computer-based educational materials	21	4	9	5	2
Develop paper-based educational materials	22	3	8	8	3
Develop teacher training program/materials	27	6	8	5	7
Provide teacher/tutor training	38	8	9	11	7
Other educational resources activity	14	5	2	4	2
Training					
Provide literacy training	31	5	10	8	5
Provide computer training	38	9	13	11	4
Provide GED preparation training	25	5	8	7	5
Provide job skills training	29	5	10	8	4
Provide parenting skills training	19	2	6	6	3
Provide academic skills training	39	9	12	13	5
Provide peer tutoring	14	2	5	6	1
Other training activity	5	0	1	2	0
Support services					
Provide emotional or psychological counseling	5	0	3	2	0
Provide family support	8	0	4	4	0
Provide career/college counseling	16	2	8	3	1
Other support services activity	3	0	1	2	0
Community outreach					
Provide outreach activities	26	2	7	9	5
Establish partnerships	26	2	7	10	5
Distribute mini-grants	7	1	2	4	0
Other community outreach activity	4	0	1	1	1

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-5c. Number of projects reporting a project outcome in a given category, by ARC grant amount

Type of project outcome	Total number of projects	ARC grant amount			
		Less than $50,000 (n=18)	$50,001 - $100,000 (n=25)	$100,001 - $200,000 (n=27)	More than $200,000 (n=14)
Increase educational attainment/preparation					
Increase number of students remaining in school/decrease dropout rate	39	8	11	14	6
Increase high school completion rate	39	8	11	14	6
Increase number of students attending college	27	5	9	7	6
Increase number of people completing GED	42	9	13	13	7
Increase literacy rates	49	9	17	15	8
Increase academic skills	66	12	22	21	11
Increase vocational preparedness of students	48	9	15	16	8
Increase school readiness	32	5	10	12	5
Other educational outcomes	13	4	4	3	2
Any educational attainment outcome	77	15	23	26	13
Increase economic well-being					
Increase job skills	61	13	18	21	9
Decrease unemployment rates	36	9	11	9	7
Increase wages	31	6	13	9	3
Other economic well-being outcome	15	4	4	5	2
Any economic outcome	64	15	19	21	9
Increase family/individual well-being					
Increase family stability	28	6	11	8	3
Increase individual well-being	49	11	17	15	6
Other well-being outcome	10	1	2	5	2
Any well-being outcome	50	12	17	15	6
Reduce barriers					
Increase access to educational support	60	12	18	19	11
Decrease travel time to services	25	4	7	9	5
Decrease student problem behaviors	28	4	10	12	2
Other barrier reduction outcomes	10	2	2	4	2
Any barrier reduction outcome	65	14	20	20	11

NOTE: "Total number of projects" refers to the total number of projects reporting each outcome was anticipated.
SOURCE: 2000 mail survey of ARC grantees.

Table C-5d. Number of projects reporting that project outcomes were achieved same or more than planned, by ARC grant amount

Type of project outcome	Total number of projects	ARC grant amount			
		Less than $50,000 (n=18)	$50,001 - $100,000 (n=25)	$100,001 - $200,000 (n=-27)	More than $200,000 (n=14)
Increase educational attainment/preparation					
Increase number of students remaining in school/decrease dropout rate	31	4	10	12	5
Increase high school completion rate	32	5	10	13	4
Increase number of students attending college	25	5	8	7	5
Increase number of people completing GED	37	8	11	13	5
Increase literacy rates	40	7	15	13	5
Increase academic skills	58	10	20	19	9
Increase vocational preparedness of students	41	6	14	16	5
Increase school readiness	30	5	10	12	3
Other educational outcomes	12	4	4	3	1
Increase economic well-being					
Increase job skills	53	12	17	19	5
Decrease unemployment rates	25	6	8	8	3
Increase wages	24	5	10	8	1
Other economic well-being outcome	13	4	4	4	1
Increase family/individual well-being					
Increase family stability	22	4	9	7	2
Increase individual well-being	43	9	15	15	4
Other well-being outcome	10	1	2	5	2
Reduce barriers					
Increase access to educational support	55	11	16	18	10
Decrease travel time to services	20	3	6	8	3
Decrease student problem behaviors	27	4	9	12	2
Other barrier reduction outcomes	9	2	2	4	1

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-5e. Number of projects reporting at least one ARC outcome in a given category, by ARC grant amount

Type of ARC outcome	Total number of projects	ARC grant amount			
		Less than $50,000	$50,001 - $100,000	$100,001 - $200,000	More than $200,000
Increase educational attainment	60	12	20	20	8
Increase economic well-being	26	6	5	10	5
Increase family/individual well-being	26	8	6	10	2

NOTE: "Total number of projects" refers to the total number of projects that reported at least one of each type of outcome.
SOURCE: 2000 mail survey of ARC grantees.

Table C-5f. Number of projects reporting ARC outcomes were achieved same or more than planned, by ARC grant amount

Type of ARC outcome	Total number of projects	ARC grant amount			
		Less than $50,000	$50,001 - $100,000	$100,001 - $200,000	More than $200,000
Increase educational attainment/preparation	60	10	14	16	6
Increase economic well-being	26	6	5	8	2
Increase family/individual well-being	26	6	4	8	2
All ARC outcomes	72	13	16	17	7

NOTE: "Total number of projects" refers to the total number of projects that reported that each type of outcome was anticipated. Rows may not sum to the total because they include only outcomes achieved "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-6a. Number of projects reporting ARC-funded activities, by total project cost

Type of activity	Total number of projects	Total project cost			
		Less than $100,000 (n=18)	$100,001 - $200,000 (n=27)	$200,001 - $900,000 (n=25)	More than $900,000 (n=8)
Physical plant					
Install/replace mechanical equipment	14	3	6	4	1
Renovate structures	6	0	3	2	1
Build new structures	6	0	3	1	2
Other physical plant activity	3	1	1	0	1
At least one physical plant activity	21	3	9	6	3
Telecommunications					
Install computers	43	8	18	13	4
Install/develop network	22	3	9	7	3
Develop distance education system	13	1	1	8	3
Other telecommunications activity	4	0	0	3	1
At least one telecommunications activity	50	9	19	17	5
Educational resources					
Install science lab	8	0	5	1	2
Install other special use classroom	20	3	7	8	2
Develop computer-based educational materials	21	4	10	6	1
Develop paper-based educational materials	22	4	10	7	1
Develop teacher training program/ materials	27	6	7	12	2
Provide teacher/tutor training	38	8	11	15	4
Other educational resources activity	14	5	4	4	1
At least one educational resources activity	61	14	20	21	6
Training					
Provide literacy training	31	6	13	9	3
Provide computer training	38	9	13	13	3
Provide GED preparation training	25	6	10	6	3
Provide job skills training	29	5	12	8	4
Provide parenting skills training	19	4	9	4	2
Provide academic skills training	39	8	14	14	3
Provide peer tutoring	14	2	4	8	0
Other training activity	5	1	2	0	2
At least one training activity	55	13	20	17	5
Support services					
Provide emotional or psychological counseling	5	1	2	2	0
Provide family support	8	1	4	3	0
Provide career/college counseling	16	4	6	5	1
Other support services activity	3	1	0	2	0
At least one support services activity	22	5	9	7	1
Community outreach					
Provide outreach activities	26	4	10	10	2
Establish partnerships	26	3	11	9	3
Distribute mini-grants	7	2	4	1	0
Other community outreach activity	4	1	1	0	2
At least one community outreach activity	33	6	12	12	3

NOTE: "Total number of projects" refers to the total number of projects that indicated conducting each activity with at least some funding from ARC being used to conduct the activity.
SOURCE: 2000 mail survey of ARC grantees.

Table C-6b. Number of activities partially or fully funded by ARC implemented same or more than planned, by total project cost

Type of activity	Total number of projects	Total project cost			
		Less than $100,000 (n=18)	$100,001 - $200,000 (n=27)	$200,001 - $900,000 (n=25)	More than $900,000 (n=8)
Physical plant					
Install/replace mechanical equipment	14	3	6	4	1
Renovate structures	6	0	3	2	1
Build new structures	6	0	3	1	2
Other physical plant activity	3	1	1	0	1
Telecommunications					
Install computers	43	8	17	13	4
Install/develop network	22	3	9	7	3
Develop distance education system	13	1	0	8	3
Other telecommunications activity	4	0	0	3	0
Educational resources					
Install science lab	8	0	5	1	2
Install other special use classroom	20	3	7	8	2
Develop computer-based educational materials	21	4	9	6	1
Develop paper-based educational materials	22	4	10	7	1
Develop teacher training program/materials	27	6	7	11	2
Provide teacher/tutor training	38	8	11	13	3
Other educational resources activity	14	5	4	4	0
Training					
Provide literacy training	31	5	11	9	3
Provide computer training	38	9	13	13	2
Provide GED preparation training	25	6	10	6	3
Provide job skills training	29	5	12	7	3
Provide parenting skills training	19	4	8	3	2
Provide academic skills training	39	8	14	14	3
Provide peer tutoring	14	2	4	8	0
Other training activity	5	1	2	0	1
Support services					
Provide emotional or psychological counseling	5	1	2	2	0
Provide family support	8	1	4	3	0
Provide career/college counseling	16	4	6	4	0
Other support services activity	3	1	0	2	0
Community outreach					
Provide outreach activities	26	4	9	9	1
Establish partnerships	26	3	11	8	2
Distribute mini-grants	7	2	4	1	0
Other community outreach activity	4	1	1	0	1

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-6c. Number of projects reporting a project outcome in a given category, by total project cost

Type of project outcome	Total number of projects	Total project cost			
		Less than $100,000 (n=21)	$100,001 - $200,000 (n=28)	$200,001 - $900,000 (n=27)	More than $900,000 (n=8)
Increase educational attainment/preparation					
Increase number of students remaining in school/decrease dropout rate	39	9	10	17	3
Increase high school completion rate	39	9	11	15	4
Increase number of students attending college	27	7	7	8	5
Increase number of people completing GED	42	11	15	11	5
Increase literacy rates	49	11	18	15	5
Increase academic skills	66	14	25	20	7
Increase vocational preparedness of students	48	8	19	16	5
Increase school readiness	32	5	14	9	4
Other educational outcomes	13	5	3	4	1
Any educational attainment outcome	77	17	27	25	8
Increase economic well-being					
Increase job skills	61	14	22	19	6
Decrease unemployment rates	36	11	11	8	6
Increase wages	31	9	11	9	2
Other economic well-being outcome	15	5	4	4	2
Any economic outcome	64	17	22	19	6
Increase family/individual well-being					
Increase family stability	28	6	13	7	2
Increase individual well-being	49	13	18	13	5
Other well-being outcome	10	1	3	4	2
Any well-being outcome	50	14	18	13	5
Reduce barriers					
Increase access to educational support	60	13	21	20	6
Decrease travel time to services	25	4	8	9	4
Decrease student problem behaviors	28	5	10	13	0
Other barrier reduction outcomes	10	2	4	3	1
Any barrier reduction outcome	65	15	23	21	6

NOTE: "Total number of projects" refers to the total number of projects reporting each outcome was anticipated.
SOURCE: 2000 mail survey of ARC grantees.

Table C-6d. Number of projects reporting that project outcomes were achieved same or more than planned, by total project cost

Type of project outcome	Total number of projects	Total project cost			
		Less than $100,000 (n=21)	$100,001 - $200,000 (n=28)	$200,001 - $900,000 (n=27)	More than $900,000 (n=8)
Increase educational attainment/preparation					
Increase number of students remaining in school/decrease dropout rate	31	5	9	15	2
Increase high school completion rate	32	6	10	14	2
Increase number of students attending college	25	6	7	8	4
Increase number of people completing GED	37	8	15	11	3
Increase literacy rates	40	7	17	14	2
Increase academic skills	58	10	25	18	5
Increase vocational preparedness of students	41	5	18	16	2
Increase school readiness	30	5	14	8	3
Other educational outcomes	12	5	3	4	0
Increase economic well-being					
Increase job skills	53	12	22	17	2
Decrease unemployment rates	25	6	10	7	2
Increase wages	24	5	11	8	0
Other economic well-being outcome	13	5	4	3	1
Increase family/individual well-being					
Increase family stability	22	4	10	7	1
Increase individual well-being	43	9	18	13	3
Other well-being outcome	10	1	3	4	2
Reduce barriers					
Increase access to educational support	55	10	21	19	5
Decrease travel time to services	20	2	7	9	2
Decrease student problem behaviors	27	4	10	13	0
Other barrier reduction outcomes	9	2	4	3	0

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-6e. Number of projects reporting at least one ARC outcome in a given category, by total project cost

Type of ARC outcome	Total number of projects	Total project cost			
		Less than $100,000	$100,001 - $200,000	$200,001 - $900,000	More than $900,000
Increase educational attainment	60	16	20	20	4
Increase economic well-being	26	6	6	11	3
Increase family/individual well-being	26	8	10	7	1

NOTE: "Total number of projects" refers to the total number of projects that reported at least one of each type of outcome.
SOURCE: 2000 mail survey of ARC grantees.

Table C-6f. Number of projects reporting ARC outcomes were achieved same or more than planned, by total project cost

Type of ARC outcome	Total number of projects	Total project cost			
		Less than $100,000	$100,001 - $200,000	$200,001 - $900,000	More than $900,000
Increase educational attainment/preparation	60	12	16	15	3
Increase economic well-being	26	6	6	8	1
Increase family/individual well-being	26	5	7	7	1
All ARC outcomes	72	13	20	16	4

NOTE: "Total number of projects" refers to the total number of projects that reported that each type of outcome, was anticipated. Rows may not sum to the total because they include only outcomes achieved "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-7a. Number of projects reporting ARC-funded activities, by years of ARC funding

Type of activity	Total number of projects	Years of ARC funding		
		1 year (n=21)	2 years (n=33)	3 or more years (n=24)
Physical plant				
Install/replace mechanical equipment	14	4	5	5
Renovate structures	6	1	4	1
Build new structures	6	3	3	0
Other physical plant activity	3	0	2	1
At least one physical plant activity	21	6	10	5
Telecommunications				
Install computers	43	13	18	12
Install/develop network	22	6	8	8
Develop distance education system	13	3	8	2
Other telecommunications activity	4	1	2	1
At least one telecommunications activity	50	15	21	14
Educational resources				
Install science lab	8	5	3	0
Install other special use classroom	20	6	10	4
Develop computer-based educational materials	21	7	9	5
Develop paper-based educational materials	22	3	10	9
Develop teacher training program/materials	27	10	12	5
Provide teacher/tutor training	38	10	17	11
Other educational resources activity	14	4	6	4
At least one educational resources activity	61	19	27	15
Training				
Provide literacy training	31	6	13	12
Provide computer training	38	12	15	11
Provide GED preparation training	25	3	11	11
Provide job skills training	29	9	9	11
Provide parenting skills training	19	4	7	8
Provide academic skills training	39	11	16	12
Provide peer tutoring	14	3	6	5
Other training activity	5	1	1	3
At least one training activity	55	14	21	20
Support services				
Provide emotional or psychological counseling	5	1	1	3
Provide family support	8	2	2	4
Provide career/college counseling	16	4	6	6
Other support services activity	3	0	1	2
At least one support services activity	22	5	7	10
Community outreach				
Provide outreach activities	26	4	12	10
Establish partnerships	26	7	11	8
Distribute mini-grants	7	1	2	4
Other community outreach activity	4	2	1	1
At least one community outreach activity	33	8	14	11

NOTE: "Total number of projects" refers to the total number of projects that indicated conducting each activity with at least some funding from ARC being used to conduct the activity.
SOURCE: 2000 mail survey of ARC grantees.

Table C-7b. Number of activities partially or fully funded by ARC implemented same or more than planned, by years of ARC funding

Type of activity	Total number of projects	Years of ARC funding		
		1 year (n=21)	2 years (n=33)	3 or more years (n=24)
Physical plant				
Install/replace mechanical equipment	14	4	5	5
Renovate structures	6	1	4	1
Build new structures	6	3	3	0
Other physical plant activity	3	0	2	1
Telecommunications				
Install computers	43	13	18	11
Install/develop network	22	6	8	8
Develop distance education system	13	3	8	1
Other telecommunications activity	14	0	2	1
Educational resources				
Install science lab	8	5	3	0
Install other special use classroom	20	6	10	4
Develop computer-based educational materials	21	6	9	5
Develop paper-based educational materials	22	3	10	9
Develop teacher training program/materials	27	10	11	5
Provide teacher/tutor training	38	9	15	11
Other educational resources activity	14	4	5	4
Training				
Provide literacy training	31	6	13	9
Provide computer training	38	11	15	11
Provide GED preparation training	25	3	11	11
Provide job skills training	29	8	8	11
Provide parenting skills training	19	3	6	8
Provide academic skills training	39	11	16	12
Provide peer tutoring	14	3	6	5
Other training activity	5	0	1	3
Support services				
Provide emotional or psychological counseling	5	1	1	3
Provide family support	8	2	2	4
Provide career/college counseling	16	3	5	6
Other support services activity	3	0	1	2
Community outreach				
Provide outreach activities	26	3	12	8
Establish partnerships	26	6	11	7
Distribute mini-grants	7	1	2	4
Other community outreach activity	4	1	1	1

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-7c. Number of projects reporting a project outcome in a given category, by years of ARC funding

Type of project outcome	Total number of projects	Years of ARC funding		
		1 year (n=22)	2 years (n=34)	3 or more years (n=28)
Increase educational attainment/preparation				
Increase number of students remaining in school/decrease dropout rate	39	11	17	11
Increase high school completion rate	39	12	18	9
Increase number of students attending college	27	8	11	8
Increase number of people completing GED	42	8	18	16
Increase literacy rates	49	10	22	17
Increase academic skills	66	17	27	22
Increase vocational preparedness of students	48	15	21	12
Increase school readiness	32	6	13	13
Other educational outcomes	13	6	2	5
Any educational attainment outcome	77	20	30	27
Increase economic well-being				
Increase job skills	61	15	25	21
Decrease unemployment rates	36	10	15	11
Increase wages	31	7	14	10
Other economic well-being outcome	15	4	7	4
Any economic outcome	64	15	27	22
Increase family/individual well-being				
Increase family stability	28	5	11	12
Increase individual well-being	49	10	22	17
Other well-being outcome	10	3	3	4
Any well-being outcome	50	11	22	17
Reduce barriers				
Increase access to educational support	60	11	26	23
Decrease travel time to services	25	4	13	8
Decrease student problem behaviors	28	7	13	8
Other barrier reduction outcomes	10	3	4	3
Any barrier reduction outcome	65	13	29	23

NOTE: "Total number of projects" refers to the total number of projects reporting each outcome was anticipated.
SOURCE: 2000 mail survey of ARC grantees.

Table C-7d. Number of projects reporting that project outcomes were achieved same or more than planned, by years of ARC funding

Type of project outcome	Total number of projects	Years of ARC funding		
		1 year (n=22)	2 years (n=34)	3 or more years (n=28)
Increase educational attainment/preparation				
Increase number of students remaining in school/decrease dropout rate	31	8	14	9
Increase high school completion rate	32	10	15	7
Increase number of students attending college	25	7	11	7
Increase number of people completing GED	37	6	16	15
Increase literacy rates	40	8	18	14
Increase academic skills	58	15	22	21
Increase vocational preparedness of students	41	12	18	11
Increase school readiness	30	5	12	13
Other educational outcomes	12	5	2	5
Increase economic well-being				
Increase job skills	53	13	22	18
Decrease unemployment rates	25	8	8	9
Increase wages	24	6	11	7
Other economic well-being outcome	13	3	6	4
Increase family/individual well-being				
Increase family stability	22	3	9	10
Increase individual well-being	43	9	18	16
Other well-being outcome	10	3	3	4
Reduce barriers				
Increase access to educational support	55	10	23	22
Decrease travel time to services	20	3	10	7
Decrease student problem behaviors	27	7	13	7
Other barrier reduction outcomes	9	2	4	3

NOTE: "Total number of projects" refers to the total number of projects reporting each activity. Rows may not sum to the total because rows indicate the number of projects implementing the activity "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Table C-7e. Number of projects reporting at least one ARC outcome in a given category, by years of ARC funding

Type of ARC outcome	Total number of projects	Years of ARC funding		
		1 year	2 years	3 or more years
Increase educational attainment	60	17	22	21
Increase economic well-being	26	6	12	8
Increase family/individual well-being	26	8	8	10

NOTE: "Total number of projects" refers to the total number of projects that reported at least one of each type of outcome.
SOURCE: 2000 mail survey of ARC grantees.

Table C-7f. Number of projects reporting ARC outcomes were achieved same or more than planned, by years of ARC funding

Type of ARC outcome	Total number of projects	Years of ARC funding		
		1 year	2 years	3 or more years
Increase educational attainment/preparation	60	15	16	17
Increase economic well-being	26	5	9	7
Increase family/individual well-being	26	7	6	7
All ARC outcomes	72	14	20	19

NOTE: "Total number of projects" refers to the total number of projects that reported that each type of outcome, was anticipated. Rows may not sum to the total because they include only outcomes achieved "same as planned" or "more than planned."
SOURCE: 2000 mail survey of ARC grantees.

Appendix D

Notes on the Technical Approach

APPENDIX D

NOTES ON THE TECHNICAL APPROACH

This appendix provides an overview of the data collection and sampling procedures that were used to conduct the study. Specifically, information is provided on the methodologies used to (1) select the study sample, (2) conduct the document review, (3) access information from ARC databases, (4) conduct telephone interviews with state representatives, and (5) conduct the mail survey. The case study methodology is discussed in Appendix E.

D.1 Process Used to Select the Study Sample

The evaluation was designed to focus on approximately 100 of ARC's education projects that received funding in the 1990s. The ARC database contained information about 734 education grants that were awarded between 1990 and 1998.[1] The following types of projects were removed from consideration because they conducted activities that were not a focus of the study: workforce training and vocational education, child care, higher education, and library. Grants funding conferences and technical assistance were also removed, leaving a universe of 425 projects from which to select the study sample. ARC staff pulled project files for over 150 of these 425 initiatives. Every effort was made to achieve a balance of project type (using ARC designations that combine population served and type of service provided) and the states that make up Appalachia. Projects were only considered for inclusion in the study sample if there was sufficient information in the file for the document review (e.g., an application and monthly/end of project reports).

Education projects funded by ARC occasionally spanned more than 1 year. More often, however, longer projects were split into separate grants, one for each year. Among the 150 sampled projects, in actuality there were only about 100 discrete projects. In several cases, the same project actually spread across two grant numbers. These 150 grants were ultimately collapsed into 95 projects (see Document Review, Section D.2 for an explanation of this process).

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[1] These 734 education grants represent a duplicate count—i.e., a project that received ARC funding in multiple years would have separate entries (and in some cases, separate identification numbers) in the ARC database for *each* year that funding was received.

Once projects' data were collapsed, contact information was extracted from the documentation. This enabled us to establish a point of contact with each project and determine whether someone with knowledge of the ARC grant was still available to reply to the mail survey. We were able to identify a knowledgeable contact in 91 of the 95 projects. Although these 91 projects composed the final study sample, the data presented in this report pertain to the 84 projects that ultimately responded to the mail survey.

D.2 Document Review

ARC provided Westat with copies of available documentation for the 91 projects in the study sample. The most widely available form of documentation was the initial proposal to ARC (89 percent of projects), followed by final or close-out reports (63 percent of projects) and progress reports (50 percent of projects). Ten percent of the projects had separate and detailed evaluation reports.[2] The following information about the projects was entered into an Access database:

- Project description;
- Problems projects were designed to address;
- Education-related population segments served;
- Activities conducted as part of the ARC grant;
- Obstacles/barriers to implementation;
- Intended outputs and outcomes; and
- Actual outputs/outcomes.

We made considerable use of the information obtained through the document review. First, these data were used to provide project staff with background information about the types of educational activities and outcomes that were supported by ARC during the 1990s. Second, the document review database was used to develop some of the close-ended options for the mail survey. Third, we used projects' original language regarding anticipated outcomes to develop an addendum to the mail survey. This addendum, customized for each project, provided respondents with an opportunity to more precisely

[2] The documents that we reviewed reflected what was in the project files at the time of the study. It is possible that some of the materials that individual projects submitted were not in their file at the time the review was conducted.

benchmark their level of achievement against the performance standards set forth in their proposals to ARC. Fourth, we used the materials in a subset of project files to inform the selection of the case study sites. Finally, examples from the document review were used to illustrate findings in the final report.

D.3 ARC Database

Additional descriptive data regarding grant amounts, total project costs, and county status (e.g., metropolitan, economic) were obtained from two ARC databases. Several issues regarding this task are worth noting. First, in working with the financial database, we collapsed grant amounts and total project costs for initiatives that spanned 2 or more years. Second, the county database contained codes for the economic and metropolitan status of projects. In cases where projects operated in multiple counties, we considered the project to be serving a distressed county if at least one of the counties listed in its original application was designated as being distressed at the time the ARC grant was first awarded. Finally, we did not attempt to classify the economic or metropolitan status of projects serving all ARC counties in a state (or serving communities in two or more states). Rather, statewide and multistate projects were treated as a separate designation—even though it is likely that some of their services were provided to residents in distressed and/or nonmetropolitan regions.

D.4 Interviews with State Coordinators

The interviews with state-level and LDD-level ARC coordinators were designed to gather further background information about the grantmaking process in each of the 13 states. Other topics of interest included the reporting and evaluation requirements of states and LDDs, the current and future funding priorities in the states, educational issues that state and local staff would like to see in an evaluation report, recommendations on case study sites, and updates on project staffing (for identifying potential survey respondents).

D.5 Mail Survey

The mail survey represented the primary data collection activity. The survey was designed to obtain a common set of data concerning project implementation and accomplishments, as well as

information about the extent to which projects achieved the outcomes they had anticipated for themselves. Specifically, Part 1 of the survey contained close-ended items relevant to all ARC-funded education projects. Part 2 focused on the specific outcomes that projects had described in their applications to ARC. Thus, while Part 1 asked about generic project outcomes (e.g., decrease dropout rates), Part 2 asked about specific outcome goals (e.g., decrease student dropout rate by 10 percent over 3 years). Appendix G provides copies of Parts 1 and 2 of the mail survey.

The survey was pre-tested with five projects in the survey sample. The survey was subsequently revised and mailed to the sample of 91 projects at the end of January 2000. Respondents were asked to return completed surveys to Westat prior by February 22, 2000. Telephone followup for survey nonresponse began in late February 2000—and telephone followup for item nonresponse was conducted throughout April and May 2000. The final survey sample consisted of 84 projects, for a 92.3 percent response rate. The nonresponse rate for individual items (i.e., respondents either refused to answer the question, the respondent indicated "don't know," or the response could not otherwise be ascertained) ranged from 0 percent to 12 percent.

Appendix E

Case Study Methodology, Findings, and Abstracts

APPENDIX E

CASE STUDY ABSTRACTS

This appendix provides case study methodology, lessons learned, and summary information for each of the eight case studies conducted as part of the evaluation.

E1. Case Study Methodology

The site visits were designed to allow for a more detailed examination of successful ARC-funded education projects, with an emphasis on the lessons learned by these projects and their efforts at sustainability. Eight projects were selected for intensive visits, and information gained through these site visits was summarized in a series of case studies. In addition, specific findings are used throughout the final report to illustrate key findings.

The following criteria were used to narrow the pool of projects that were to be considered for a site visit:

- Projects had to still be in operation (full, partial, or changed). This was ascertained through telephone contacts conducted by Westat in November 1999.
- Projects had to have achieved at least some of their stated goals. This was ascertained through a review of project documentation and telephone contacts conducted by Westat in November 1999.
- Projects had to have focused on service-delivery or capacity-building, or other non-construction projects. This was ascertained through a review of project documentation.
- Projects had to have been serving distressed or transitional counties (or serving a multicounty region with at least some distressed or transitional areas) at the time of the grant award.

Thirty-four projects met these requirements. From these, projects were then selected to represent a range of the following:

- ARC project type—i.e., secondary education, adult literacy, math/science education, basic skills, distance learning, elementary education, preschool, educational partnerships, and dropout prevention.
- States, with Commission projects representing the states in which they are located.

- Project scope and size, measured by grant amount and number of counties or breadth of the region served.
- Grantee organization types—i.e., schools or districts, state government, economic or community development organizations, postsecondary institutions.

Eight primary sites and six alternates sites were selected. Following a brief telephone call to ensure that projects were willing to host a site visit and that ARC-funded activities were still in operation, the original eight primary sites were selected as the final case study sample (Exhibit E-1).

Exhibit E-1. ARC Case Study Projects

Michelin Learning Centers, Greenville, Anderson, and Spartanburg, South Carolina
Mobile Technology Project, Hiawasee, Towns County, Georgia
Partnering with Parents for Successful Early Childhood Development, Eastern Tennessee
School Outreach Program, Jasper, Georgia
Science and Math To Go!, Clemson, South Carolina
Science Center of West Virginia, Bluefield, West Virginia
Technology Center Project, Adair County, Kentucky
The David School/Success Bound, David, Kentucky

Teams of two site visitors spent 2 days at each of the eight sites. While onsite, the evaluation team met with project directors and other key staff, interviewed or conducted informal focus groups with project beneficiaries, including teachers, students, families, and adult learners, and visited facilities supported through the grants. The resulting case studies were reviewed for accuracy by each project's primary respondent. Abstracts for these case studies are provided following the lessons learned.

E2. Lessons Learned From Case Studies

During the site visits, local stakeholders were asked to identify any project-related lessons they had learned that might be of use to other ARC-supported educational projects. Although some of these lessons were specific to a particular project, several themes emerged across the majority of sites that were visited. This section outlines some broader practices that may help future grant recipients maximize the likelihood that their projects are successful and sustainable.

Clear Vision and Realistic Goals. Many of the grant recipients stressed that even before a project begins, there should be a clear vision of what the project hopes to accomplish. The project's vision, purpose, activities, and intended outcomes should be clearly articulated to project staff, participants, and the surrounding community. Furthermore, this vision should be consistent with local needs. Finally, the vision should include clear and measurable goals—and a means of assessing whether or not they have been met.

Community Buy-in. One of the most consistent themes that emerged during the site visits was the need to cultivate community support for the project. Community stakeholders were most likely to be supportive when they perceived that the project was providing a service that was responsive to local needs. One project director noted that because "small communities tend to rely on each other," it was important to assure that key stakeholders were involved in the planning process. This involvement can take many forms, including soliciting local leaders for the advisory board, engaging local businesses as project partners, having frequent meetings with key stakeholders, and being responsive to stakeholders' input. Most noted that community stakeholders were most likely to take ownership of a project if an effort was made to provide services consistent with the community's perceived need.

Thorough Planning and Design. As described in Chapter 3, the most prominent barrier that projects identified was underestimating the amount of time required to implement a particular task. It is therefore not surprising that case study participants emphasized the need to set aside ample time and resources for designing and planning a project. Participants in several sites emphasized that project success requires the clear and calculated framing of project aims. For example, staff may be more willing to support a new approach if they know ahead of time why a specific course of action is being recommended—and how it will ultimately benefit the community.

Several projects suggested conducting a comprehensive needs assessment to maximize the likelihood that the resulting approach matches the needs of their intended beneficiaries, to examine potentially replicable models, and to research different potential vendors. Many projects indicated that such planning should also include some consideration of how the project will be evaluated over time. Indeed, several of the projects had used their needs assessments to collect baseline data that could eventually be used to gauge their long-term impact.

Specific Target Population. Several sites stressed the importance of specifying the distinct community segments that are to participate in and benefit from project-related activities. For example, one project, designed to increase students' exposure to and knowledge of computers, recognized that with limited resources it would only be able to serve a small number of the students. As a result, project staff

determined ahead of time which group of students would most benefit from the available resources. Another project, designed to intervene with students at risk of not completing high school, eventually decided to focus its efforts on those students who had already dropped out (as opposed to also providing services to those students who had been suspended from school or were missing school for medical reasons).

Others noted the difficulties associated with getting intended beneficiaries to participate in project-related activities. For example, several case study sites indicated that some parents were reluctant to engage in any activities associated with their child's school (especially if they themselves had had bad experiences in the same educational institution). They recommended that future projects develop creative mechanisms (e.g., intensive marketing and advertising) aimed at locating and engaging at-risk families.

Tailored Approach. Case study participants also emphasized the need for projects to anticipate—and make adjustments for—the needs and capabilities of their intended beneficiaries. For example, one case study site noted that providing educational services to individuals who had not been in a school setting for many years was made easier by designing non-threatening learning spaces and developing a curriculum that accommodated various learning styles. Other projects noted that materials must be developed to be at the appropriate skill-level for the participants—e.g., in areas with high rates of illiteracy, project materials should be at a very basic reading level. Finally, several case study sites emphasized that services in isolated communities be provided in such a way that they are accessible to as many prospective beneficiaries as possible. When this is not possible, they suggested using formal or informal methods to transport community residents to and from a central site.

Staff Skills and Commitment. Ultimately, the implementation of project activities must rely on the front-line staff responsible for providing services. Many of the projects we visited emphasized the importance of selecting staff who have an optimal combination of academic, technical, and interpersonal skills, as well as a passionate commitment to serving the community, all of which are necessary for working with at-risk youth and adults. The degree to which each of these qualities mattered varied from project to project. In general, we found that staff who worked directly with participants had to be technically oriented, organized, flexible, adaptable, and able to relate to people at various levels within the community. Equally important, these staff frequently had to be willing to put in long days and be unafraid of going into unknown—and potentially dangerous—situations. Finally, it appeared that staff were often most successful when they came from within the affected community. This knowledge of the history and customs of the locale was sometimes what was needed to give staff a "foot in the door," since it served as something that families could relate to and trust.

A number of sites acknowledged that the need to hire the best staff often had to be weighed against the low salaries that grant recipients were typically able to offer. At the time of the site visits, several projects were barely able to match the wages being offered by other local public (e.g., hospitals) and private (e.g., fast food establishments) entities, thereby complicating their efforts to hire and retain qualified staff.

Strong Leadership. In addition to having a highly qualified and skilled staff, projects benefited from strong leadership that keeps staff motivated and focused. Successful project leadership generally required someone with drive, persuasiveness, and strong organizational skills who could coordinate the activities and negotiate the concerns of a variety of interested parties (e.g., school administrators, faculty, parents, local businesses, and industry). Some projects also emphasized the need for having a leader who could convey the importance of the effort to local (or state) leaders as a means of ensuring sustainability after ARC funding ended.

Integration of Services. A number of projects provided a service that was easily integrated with those already being offered through another community agency. In such cases, participants and community stakeholders were often better served (since they did not have to travel lengthy distances to receive a new service) and costs were often consolidated. One form of integration that was common across the case study sites was cross-referral—e.g., after identifying a specific need, an agency would refer an individual to another service provider. This ability (and willingness) to integrate services required that all agencies have an awareness of how their informal "partners" could assist a particular individual. Several projects suggested that having key members of their staff active in other agencies (e.g., serving on a board of directors) was one means of ensuring collaboration. (It is worth noting that at least one site suggested that there was sometimes a need for a clear distinction between the ARC project and other agencies—especially in cases where project participants potentially have something to fear (e.g., loss of a child) from an external agency (e.g., social services).)

Focus on All Family Members. A number of projects indicated that many of the education problems they were confronting required intervention for both the students and their families. As such, merely providing short-term services to one child was not enough to change how the family functioned, particularly when parental academic encouragement was required. The best of these projects appeared to take a proactive approach to tackling intergenerational issues (e.g., illiteracy, low self-esteem, lack of job skills) by encouraging parents to serve as educational role models for their children—and vice versa.

For example, one project that was seeking to increase parents' involvement in their children's schoolwork would not allow students to receive a laptop computer for home use until after at

least one of the parents had received training and signed a permission form. According to the project director, this was also done to maximize the likelihood that parents would also make use of the computers, and thereby elect to further their own education. In another project, preference for admittance to an alternative school was given to students whose parents were interested in furthering their education or would be contributing members to the school. This policy reflected the director's belief that the school alone could not successfully educate a child. The high proportion of mail survey respondents that sought to simultaneously tackle a combination of youth and adult-oriented objectives provides evidence that this dual focus was prevalent in many of the projects in the study sample.

Project Evaluation. Timely and robust evaluations can help projects determine whether—and to what extent—their primary goals have been attained. These data can then be used for a variety of purposes, such as to identify and correct operational inefficiencies (e.g., terminating inefficient activities) and to attract additional funding from other sources. Although we found few examples of strong evaluations, many of the case study sites indicated that they would have benefited from having given more thought to evaluation at the outset of their projects. For example, one project had not considered evaluation a priority. With limited resources, they have been more inclined to ensure that services are provided to beneficiaries. However, project staff do appreciate that having more and better outcome data would enable them to garner more funding.

Nevertheless, individual projects, like the ARC itself, face issues of attribution. When beneficiaries of ARC projects are recipients of assistance from other sources, project staff are faced with difficult evaluations to conduct. This, then, may be another area for ARC to provide technical assistance.

E3. Case Study Abstracts

On the following pages are abstracts from each of the eight case studies. The full case studies are provided in a separate volume.

Adair County Technology Center

Project Location	Columbia, Kentucky
Grant Recipient	Adair County Board of Education
ARC Number	CO 11256-I
ARC Project Type	Secondary Education
Grant Amount	$100,000
Matching Funding	$70,000
Dates of Site Visit	May 3-4, 2000
Site Visitors	Brian Kleiner and Nicole Bartfai

The Adair County Technology Center project, successfully sustained to this day, was initiated in 1993 to address the problem of graduating secondary students being inadequately prepared for the technically trained workforce of the 1990s. The primary aim of the project has been to expose students to a variety of technology-oriented career paths to make way for their transition into technical fields either in the workforce or in postsecondary educational settings. Through their hands-on experience in the technology education courses, students are afforded opportunities to acquire new technical skills that may help to prepare them for the workforce or postsecondary education. The courses prepare students by stressing independent thinking and problem-solving and offering new kinds of knowledge, as well as practice in team-oriented activities.

The project has proven to be a valuable educational venture that has impacted a small Appalachian community in Kentucky. Most significantly, the center exposes large numbers of students to an array of technology-related fields. The center has served roughly 150 students per year since its inception. The enthusiasm generated by the center's instructor and its courses should continue to help to propel at least some students toward career paths in those directions.

The David School and Success Bound

Project Location	David, Kentucky
Grant Recipient	The David School
ARC Number	KY 12112-95-I & CO 12632-97-I
ARC Project Type	Basic Skills
Grant Amount	$70,000
Matching Funding	$24,000
Dates of Site Visit	April 10-11, 2000
Site Visitors	Nicole Bartfai and Gary Silverstein

The David School, located in Floyd County, Kentucky, serves as an alternative school for students who are in danger of dropping out of the public school system. With ARC assistance, the David School initiated a pilot project, Success Bound, which added supplemental training in the area of pre-employment/work maturity and job-specific skills. Initially, only 40 students were enrolled in the Success Bound component. Since then, it has been thoroughly integrated into the David School approach. Students are provided academic, vocational, and job training skills through a variety of educational and hands-on experiences. Equally important, they are required to create a postsecondary plan that identifies specific long-term educational and professional goals—e.g., vocational school, college or community college, military, employment. This plan focuses attention on how the David School can best serve a student's long-term needs—and serves as a standard against which "success" can be measured.

Michelin Learning Centers

Project Location	Greenville, Anderson, and Spartanburg, South Carolina
Grant Recipient	State of SC Office of the Governor for the Michelin Tire Corporation
ARC Number	CO 10947J
ARC Project Type	Adult Literacy
Grant Amount	$250,000
Matching Funding	$85,551
Dates of Site Visit	April 18-19, 2000
Site Visitors	Brian Kleiner and Glenn Nyre

Despite its growing prosperity, the Appalachian Region of South Carolina has not yet outgrown some of the social ills that afflict poorer rural areas. One of these is undereducation, including illiteracy and poor basic math and computer skills. From the perspective of many corporations, an undereducated workforce can potentially compromise the quality of products and overall profits. Thus, there appears to exist a growing interest among corporations in promoting the continuing education of workers.

The flattening of organization in manufacturing operations in evidence at Michelin requires a greater degree of responsibility, more flexibility, and a wider range of knowledge and skills on the part of workers. It also requires that they are literate, competent in math, and computer savvy. The ARC grant for the Michelin Learning Centers project was an initiative aimed at improving the basic reading, writing, math, and computer skills of employees within the Michelin Tire Corporation. Under the period of the ARC grant, the approach of this initiative involved the installment of three learning centers, the crafting and use of an assessment instrument for all current and new employees, and the design of a curriculum for use in the learning centers for the remediation of skills, as well as for job training and other kinds of continuing education.

Mobile Technology Project

Project Location	Hiawassee, Georgia
Grant Recipient	Towns County Middle School
ARC Number	GA-12935-RI-302
ARC Project Type	Dropout Prevention
Grant Amount	$320,000
Matching Funding	$80,000
Dates of Site Visit	February 28, 2000
Site Visitors	Gary Silverstein and Laurie (Somers) Plishker

The Mobile Technology Project was designed to provide every student in the Towns County (Georgia) Middle School with a laptop computer (teachers were provided with both a laptop computer and printer). To take full advantage of the computers, the project was also used to incorporate and transform curriculum materials and worksheets for all middle school classes, including language arts, reading, social studies, science, and mathematics, into a laptop environment. The vendor was responsible for (1) supplying the laptop computers, (2) providing training in the use of the laptop computers to teachers, students, and parents, (3) providing ongoing support for maintaining the laptop computers, and (4) providing teachers with information about online resources that were aligned to Georgia's curriculum.

The project has achieved all of the implementation targets and outcomes that were delineated in the original proposal to the Appalachian Regional Commission. The provision of laptops to all middle school students—coupled with extensive professional development and online curriculum resources—has provided teachers an opportunity to modernize their instructional practices. The project has also provided all students equal access to the Internet and other emerging technologies. Our interviews with administrators, teachers, and students, as well as our limited observations of classroom practices, suggest that teachers and students are making good use of their new opportunities.

Partnering with Parents for Successful Early Childhood Development

Project Location	Eastern Tennessee
Grant Recipient	Tennessee State Department of Education
ARC Number	CO 10947H
ARC Project Type	Preschool
Grant Amount	$75,000
Matching Funding	No matching funds
Dates of Site Visit	March 16-17, 2000
Site Visitors	Brian Kleiner and Kyle Snow

Teenage pregnancy (often over generations) and the disintegration of extended families and communities have resulted in the diminishing of parenting knowledge passed across generations among many of eastern Tennessee's Appalachian poor. Additionally, other social and economic ills endemic to this region directly or indirectly touch the lives of children, leaving them unprepared to adequately face the challenges of school and life. Partnering with Parents for Successful Early Childhood Development was designed to address these problems. The project targeted parents of children ages 0-5, years in which the foundation is built for healthy development. The project's general aim was to inform parents of at-risk children about parenting practices that will spur healthy development.

The tools employed to accomplish the goals of the project were described as "three legs of the milking stool." The first leg was the dissemination of 20 "Smart from the Start" sheets containing developmental information and suggested activities appropriate for each 3-month period between birth and 5 years. The second leg involved free parenting classes providing instruction to parents in techniques to promote their children's healthy development. The third leg involved encouraging parents to attend Adult Basic Education classes.

During the grant period, the most successful of the three legs was the parenting class component. The project director, class teacher, and an external evaluation of the classes all revealed powerful effects of class attendance. The Smart from the Start sheets were developed and distributed by the end of the grant period. These have since been revised and continue to be distributed to at-risk parents. The efforts to encourage parents to also enroll in Adult Basic Education classes had limited impact.

School Outreach Project

Project Location	Jasper, Georgia
Grant Recipient	North Georgia Community Action, Inc.
ARC Number	GA 11307-93-I, GA 11307-94-C1
ARC Project Type	Elementary Education
Grant Amount	$115,500
Matching Funding	$148,500
Dates of Site Visit	March 1-2, 2000
Site Visitors	Laurie (Somers) Plishker and Gary Silverstein

The School Outreach Project provides families of at-risk kindergarten and first grade students in three counties in North Georgia the individualized support necessary to maximize the likelihood that children arrive at school healthy and ready to learn. Following a referral by a teacher, a student's parents are contacted by the outreach worker, who offers to help with their child's academics and any other problem areas. Outreach workers then visit families' homes to tell them about the program and the types of services offered. If parents are interested, the outreach worker secures parental permission for the child to participate. Significantly, the outreach workers work with the entire family, including parents, grandparents, and other siblings. Most often they help children with reading and mathematics and other enrichment activities, and educate families about hygiene, stressing the importance of bathing and watching for head lice. They provide access to multiple resources, such as referrals to mental health providers, assistance obtaining Medicaid, transportation to doctors, and assistance in navigating complex education, public assistance, and child care systems.

During the family's first year in the program, the household is considered a "focus family," indicating that its members are provided weekly or twice weekly services. After that, the family is a "contact family," and the outreach worker makes infrequent checks with the family and teachers to ensure that the problems have not returned. The outreach workers generally maintain contact until the family moves out of the NGCA service area or refuses services.

For the children and families served by School Outreach, the project has met its goal of improving school performance, self-confidence, social skills, and interest in learning. The program is currently serving 125 children, 75 of whom are in their first year of intensive services. It is clear from talking with outreach workers that the children and families all benefit in some way.

Science and Math To Go!

Project Location	Clemson, South Carolina
Grant Recipient	Clemson University for Anderson Oconee Pickens Hub
ARC Number	SC-12415-I, SC-12415-C1
ARC Project Type	Math/Science Education
Grant Amount	$156,000, $50,000
Matching Funding	$172,090, $97,665
Dates of Site Visit	April 27-28, 2000
Site Visitors	Laurie (Somers) Plishker and Nicole Bartfai

Science and Math To Go! is an elementary curriculum, materials, and professional development system. The model has five components: exemplary curriculum, materials support, professional development, assessment, and community support. SMTG! uses research-based Science and Technology for Children (STC) kits that correlate with state and national science standards and provide approximately 9 weeks of hands-on learning on a given broad topic. The kits are distributed through the Materials Resource Center, a centralized kit supply and refurbishment center. Each kit is sent to a teacher with materials measured and prepared for 30 students and all teacher materials needed for the 16 to 18 lesson plans, each designed for 45- to 55-minute lessons. After the teacher returns the nonconsumable items, the kit is replenished with all necessary materials. Prior to receiving a kit, each teacher participates in a day-long training in inquiry-based learning and a day exploring, observing, and practicing with each kit the teacher would like to use. Professional development also covers student assessment and integrating science and math with other subjects.

The overwhelmingly positive response from teachers and students regarding their new science and math opportunities—and sponsors' interest in continuing the program—suggest that SMTG! is indeed a success. Staff believe it has been successful because it acknowledges that the change process is complex and lengthy and provides extended professional development and a support system. Where other programs provide a short inservice and require teachers to gather their own materials and consider themselves implemented, SMTG! provides a full complement of teacher support. This allows teachers to do what they know best: teach.

The Science Center of West Virginia

Project Location	Bluefield, West Virginia
Grant Recipient	Alliance for the Arts, Ltd.
ARC Number	WV-11511-94-I
ARC Project Type	Mathematics and Science
Grant Amount	$150,000
Matching Funding	$202,000
Dates of Site Visit	April 4-5, 2000
Site Visitors	Nicole Bartfai and Glenn Nyre

The Science Center of West Virginia is a hands-on science museum serving students and adults in several counties of southern West Virginia and southwestern Virginia. The purpose of the ARC grant was to improve the quality of mathematics and science education in the area by helping the new Center become more fully established. Funds were used to purchase 23 new exhibits for the gallery. These included a *Bone Zone*, which contains the skeletal remains from a variety of species, and the popular *City Grocery*, within which students learn a variety of skills as they walk the aisles and "shop" for items. A van is used to transport a portable planetarium to schools. The grant also enabled the Science Center to hire two full-time-equivalent staff.

The most frequent visitors to the Center are elementary and middle school students. These students are provided the opportunity to discover exhibits on their own and can view a presentation that is geared toward the current classroom curriculum. The Center has established a good working relationship with the local school district, and they work in collaboration to encourage teachers to bring students to the Science Center.

The Science Center has grown in size and greatly expanded its services, programs, and local influence over the years. The surrounding communities and their schools have been positively impacted by the Science Center and will help to celebrate its sixth anniversary in July 2000.

Appendix F

Project Descriptions

APPENDIX F

PROJECT DESCRIPTIONS

Achieving High Goals in Appalachia. This project, Achieving High Goals in Appalachia, combined exemplary teaching materials with an innovative instructor training program designed to stimulate interest and excitement in mathematics and science for children enrolled in grades K-5. As part of this project, eight teacher training workshops, accompanied by video and print material to stimulate interest in math, science, and technology, were held. *(KY-12431)*

Adult Skills and Academics Project. The Adult Skills and Academics Project (A.S.A.P.), a cooperative venture of the West Virginia Department of Education and the Thanks A Million Foundation, was designed to address the basic skill needs of adults preparing to enter the workforce or adults presently employed at work sites in West Virginia. Through the requested ARC funds, the Thanks A Million Foundation provided competitive grants to organizations that demonstrated the ability to conduct functional workplace education projects. *(WV-11494)*

Agricultural High School Education Equipment and Site Development. This grant was for the development and implementation of Itawamba Agricultural High School, a new high school facility to be located in Fulton County with a capacity for 600 students. It would serve grades 10 through 12. ARC funds were to be used to purchase equipment and pave the parking lot. *(CO-11004)*

Appalachian Rural Systemic Initiative (ARSI). ARC funds provided technical assistance to support the implementation of the Appalachian Rural Systemic Initiative (ARSI). Technical assistance activities included leadership training, training to implement the ARSI Program Improvement Review, the development of a Community Engagement Manual, mini-grants to catalyst schools, and additional training workshops. In addition, video-conferencing took place at several workshops. *(CO-12203)*

Appalshop Learning Laboratory. Appalshop, in conjunction with the State Department of Education and other partners, established a prototype media and technology learning laboratory in southeastern Kentucky. The laboratory served as a pilot program for appropriate use of new learning technologies. Specifically, the project provided training and support for teachers as they integrate media analysis, production, and presentation in their everyday teaching; provided training for students in media production and analysis; provided access for students and teachers to both media production equipment and human support in the use of that equipment; and helped other districts develop plans for their own

media education centers. ARC funds covered the costs of the students participating along with the teachers from their school. *(KY-11293)*

Ashland House Preemployment Program. The purpose of the program was to provide residents of Ashland House with skills to become employed upon release from Ashland House. ARC funds were to be used to support an employment counselor, purchase curricula and materials for a pre-employment course, and purchase a van to provide transportation to job interviews, medical treatment, vocational school, and weekly drug- and alcohol-related meetings related to these activities. *(CO-12266)*

Basic Adult Education and 1995 Summer Tutorial Program. This project addressed the problem of adult illiteracy in Knott County. The program began in 1989 with volunteer tutors from the Mennonite Central Committee. Over 300 adults were involved in the program. This grant paid for the room and board of three volunteers from the Mennonite Central Committee over a 2-year period. *(KY-12057)*

Basic Skills and Employability Development. The project involved students attending the Computer Center for intervention services. It was designed to enhance their basic skills development and academic/applied academic skills correlated to their vocational program. Intervention services, performed by vocational and academic instructors and instructional aides, were to empower students to achieve competencies for the mandated Ohio Proficiency Test, obtain a high school diploma, and enter the competitive workforce or postsecondary education program. *(OH-11643)*

Broome Employment Self-sufficiency Program. The project was a cooperative effort between the Broome County Community Health Services, Broome County Department of Social Services, Broome County Office of Employment and Training, Broome County Drug Awareness Center, The Alcoholism Center, and the New York Disabilities and Vocation and Educational Services. The project provided case management, vocational, and prevocational services to those Broome County individuals who, by virtue of mental illness and/or chemical dependency or abuse, were unemployed or underemployed. *(NY-10994)*

Buckhorn Montessori Expansion Project Operating and Equipment Funds. With financial assistance provided by ARC, the Presbyterian Child Welfare Agency (PCWA), one of Kentucky's oldest and most respected social service agencies, proposed to open its second child care center in the Kentucky River Area Development District (KRADD) for infants and toddlers ranging from as young as 2 weeks to 3 years of age. Twenty new openings were to be made available through this grant. *(KY-12436)*

Business Skills Labs. This project established a 26-station Business Skills Laboratory in three local high schools—Lynchburg-Clay High School, Whiteoak High School, and Fairfield High School. Courses were offered in word processing, database management, and electronic spreadsheets. *(OH-11433)*

Career Academy. This was an effort to develop a Career Academy for grades 6-8 to prevent students from dropping out of school. This project was in the planning stage until 1994. The Career Academy represented a partnership between teachers, parents, students, business/industry, and other community members. The academy provided 60 potential dropouts and/or college-bound students not achieving at maximum potential an opportunity to link school work to real work and still maintain academic rigor. *(NY-12405)*

Cherokee Adult Literacy Project. This project was designed to expand the adult literacy services provided in Cherokee County. ARC funding was used for salaries and for the purchase of computer equipment. Salaries included a full-time program manager, a teacher for 20 hours per week, and a part-time teacher's aide/secretary. Prior to receiving ARC funding, Cherokee Education Enhancement Foundation had no computers or software. *(GA-11343)*

Children with Dyslexic Characteristics. This multiyear grant provided assistance for the Hindman School's full-time program for children with dyslexic characteristics. Several years of the grant also included a summer program for dyslexic students. *(KY-11206)*

Columbiana County Business/Ed Partnership for Interactive TV Technology Labs. Columbiana County Board of Education, along with six area school districts, formed a partnership with Ohio Bell to provide the technology and human resources necessary to make possible a full two-way interactive distance learning program. Each school will be linked by fiber-optic cable and equipped with communication equipment. Along with other equipment, this enabled each classroom to broadcast or receive instruction. *(OH-11191)*

Coming Together to Meet the Needs of Kids. This project works to encourage effective community and parental involvement that will help schools better meet the needs of young people. This project provided support to local school efforts to make sure that children leave school equipped with skills that will enable them to live full and productive lives. This project was designed to increase parental involvement for the benefit of individual students and community involvement for the benefit of individual schools. *(KY-12430)*

Community Learning Equipment. The Community as a Learning Environment purchased and installed computer equipment and software in order to train staff for a computer-assisted integration program. This program was located in the Tishomingo County High School Complex housing grades 9-12, a vocational day care training program, and a comprehensive university program. *(CO-10947E)*

Cullman County Schools/Dowling and West Point Emergency. This project provided temporary classrooms for students at two schools in Cullman County that were destroyed by fire. Funds were used to lease 15 classrooms and one office trailer for 1 year, to be used during the reconstruction of permanent structures. Funds also purchased 400 desks and replaced office equipment and computers. *CO-12597)*

The David School: Success Bound. These grants were designed to support the David School, an alternative school for youth who had dropped out of school or were at risk of dropping out of school. The Success Bound program was a comprehensive approach to better prepare students who had dropped out of school to join the labor market. This program was designed to add supplemental training to the David School's current curriculum in the area of pre-employment/work maturity and job-specific skills. Funding was also included to assist with the development of an extensive fundraising plan for the David School. *(KY-12112 and CO-12632)*

Distance Learning Network in Cattaraugus/Allegany BOCES. This telecommunications project was designed to establish a fiber-optics-based telecommunications network that would serve as the backbone across Cattaraugus and Allegany counties. Funds were to be used to equip three distance learning classrooms (one in each of the Vo-Tech centers in Olean, Ellicottville, and Belmont), connect each telecommunication classroom to the fiber-optic backbone, provide user training, develop a comprehensive engineering and management study, complete classroom modifications, and cover a portion of a term-of-project staff specialist position. ARC funds were used for the acquisition of telecommunications equipment, personnel support services, contractual services, classroom modifications, and general supplies. *(NY-11721)*

Distance Learning Network Linkage. This telecommunications project established new distance learning classrooms in the Cattaraugus and Allegany BOCES service area. The new distance learning classrooms were expected to serve over 1,300 people during the first year of operation. The ARC funds were used for additional staff training and classroom modifications. *(NY-12219)*

Diversified Technology Program. This program was designed to develop a technology program at the secondary level that would teach students about various technologies and job opportunities. Special emphasis was to be given to the technologies in local industry and, with their input and assistance, to develop a program that would train students for the local workforce. This program was to be an extension of the program at the junior high level. *(TN-11373)*

Dropout Prevention. This grant continued a comprehensive program to attack the student dropout problem in Appalachian Kentucky's. Various approaches to dropout prevention were funded in 25 of Kentucky's 49 Appalachian Counties. Some of the programs that were supported included the Appalachian Dropout Prevention Outreach Program Team (ADOPT), the David School, Pine Mountain Settlement, and Hindman Settlement School. *(KY-9423)*

Drop-out Prevention/Career and Voc Awareness and Training. This project worked to implement a worksite apprenticeship training program targeted toward at-risk high school youth who needed to increase their employment skills and work opportunities. The major focus of this project was to form a solid partnership with the local business community to address their work skill needs through a vocation program designed jointly by business leaders and educators. The project had three components: (1) the development and implementation of an apprenticeship and job-shadowing program; (2) implementation of a Summer Career Exploration program in the local workforce; and (3) implementation of an educational program to assist students who have already dropped out of school and students who are potential dropouts. *(NY-10808)*

Drop-out Prevention Math Acceleration Project. This project developed and implemented appropriate training for teachers, aides, and tutors who work in the Appalachian program for at-risk youth. The training was designed for participants to attain specialized math acceleration teaching techniques and knowledge of successful math acceleration programs and activities. This was accomplished through mini-grants to selected schools and higher education institutions. *(CO-10947D)*

Eastern Kentucky Teachers Network. This project received 5 years of ARC funding in order to support the Eastern Kentucky Teachers Network to refine education curriculum relative to the Kentucky Education Reform Act using the Foxfire concept. Throughout the years of ARC funding, workshops were held to train teacher in the Foxfire approach. Equipment was also purchased to create an online network of teachers utilizing the Foxfire approach. *(KY-10174)*

Education Excellence/Distance Learning. This project requested funds from ARC to do the following: (1) build a fiber optic infrastructure between the pilot Distance Learning Consortium in

Tioga County and the component districts of the Broome-Delaware-Tioga BOCES, BOCES Education Center, Broome Community College, State University Center, WSKG, and Roberson Museum and Science Center in order to provide educational opportunities for the students and community members of the region; (2) equip classrooms for two-way interactive instruction; (3) access satellite programming by providing downlink capabilities for distribution to participants; and (4) provide for the migration of current data communications to the fiber-optic infrastructure. *(NY-11167)*

Educational Equipment for the Children's Hands On Museum. CHOM'S resource labs included a hands-on discovery center designed to stimulate questions primarily in the sciences, a "student-friendly" laboratory for children with equipment, materials, and computer systems for research, and a design studio to assist children with project displays and exhibitions. The resource lab was available to individual children and school groups to use for questioning, for investigation, and for research as an extension of classroom science education. *(AL-10984)*

Electricity/Electronics Instruction Equipment. This project was designed to obtain an technologically advanced electricity/electronics training system and equipment in order to provide training to area high school and adult students preparing for electricity/electronics-oriented careers. Further, ARC funding helped to provide a coordinated network of job placement service providers. *OH-11189)*

Ensuring the Future. This grant was developed to offer three training programs to business and industry in Appalachian South Carolina. These include (1) the Pre-Working Curriculum (PWK) to assist those employees with the most severe basic skill deficiencies (a preparatory course designed to teach targeted employees the foundation skills that would enable them to benefit from additional training); (2) Learning to Learn to provide critical thinking skills for the workplace; and (3) Workplace Success System (WSS), an industry-validated, SCANS-based work readiness evaluation system. *(SC-11773)*

Forward in the Fifth Math and Science Project. This Math and Science Project provided math and science teachers workshops that teach math by concept, rather than through rote memorization. A hands-on workshops for science teachers focused on teaching science through activity centers. *(CO-11090)*

High Schools That Work. This project was designed to provide advanced technical assistance and staff training opportunities to current Southern Regional Education Board sites in Appalachia, enabling them to continue their High Schools That Work school-to-work improvement

efforts. Services provided were to include two school-to-work improvement workshops, technical assistance, curriculum integration grants, demonstration site grants, and the collection of student assessment data. *(CO-11349)*

Infrastructure Development for the 21st Century-Phase II. This project purchased six Codecs (digital switching equipment) and other related hardware associated with the expansion of the existing telecommunications network known as the Southwest Virginia Educational Training Network. The expanded network provided advanced educational programming at both the high school and college level, inservice training programs, workforce training programs, and video conferencing capabilities that can be used by numerous users. *(VA-11403)*

Itawamba County School Math/Science Improvement Project. ARC funding was requested to equip new state-of-the art laboratories for chemistry, physics, and biology courses. *(MS-11632)*

Jackson County Certified Literate Community Program. The Jackson County Certified Literacy Community Program was designed through Lanier Tech to increase literacy. ARC funds were used to provide for instructional software, a printer, and a copy machine. The funds were also to be used to hire a part-time director for the Certified Literate Community Program. *(GA-12081)*

Juniata Valley School District Curriculum Project. This project was designed to develop a model aquaculture site and an aquaculture curriculum for a secondary school district. After completion of the demonstration site, local farmers, landowners, and entrepreneurs will receive training and assistance in establishing fish farms. A conference on aquaculture was held to promote the interchange of ideas, and materials were distributed to other educational institutions. *(PA-10518)*

Lawrenceville Literacy Project. This grant helped to expand adult literacy services in Gwinnett County by publicizing the adult literacy opportunities, securing instructors, purchasing additional materials and supplies, and establishing a literacy lab at Central Gwinnett High School. *(GA-11242)*

Learn-By-Computer Adult Literacy Program. This grant was designed to provide adult learners an opportunity to use computer-based instruction in basic skills and GED studies. Specifically, the project provided 15 computers at 15 sites in the six-county area. In addition, the grantee coordinated and conducted training for 41 instructors on how to help adult learners, in the use of computers for basic skills, and in employability skills training. *(GA-11240)*

Lifelong Learning Center. This grant provided funds for the construction of a Lifelong Learning Center. This facility served as the centerpiece for a focused adult literacy program and as the center of operations for a full-time adult literacy teacher. The Center contained a 10-station computer lab and satellite downlink connection for the Statewide Literacy Network. *(CO-11828)*

Lifetime Literacy Collaborative Project. This project built on the strategic planning efforts of eight organizations that are attempting to break the generational literacy problem at various points in the community. The project addressed early intervention services as well as traditional adult literacy programs. Centers were set up to test for literacy and scholarship programs, and support services were provided to attract individuals that would not normally be able to enter the program. *(GA-12347)*

Linking Education to Economic Development. This project was designed to work with Cullman County Schools, Madison County Schools, Morgan County Schools, and Decatur City Schools in the development and implementation of a curriculum for high school students to address the skill needs of industry. The driving force behind changing the structure of education was a Technology Preparation Team in each school system. The Team was composed of educators, business and industry representatives, and parents. *(AL-11296)*

Linking Individuals to Fundamental Training (LIFT). The LIFT program used a team approach that combined remedial education in fundamental skills with extensive case management. These services were to be delivered on an in-home basis to 35 low-income adults who lacked the ability to engage in high school equivalency level training and were unable, due to transportation and/or other barriers, to access existing services or programs. *(NY-10744)*

Literacy Program to Provide Education Opportunities to Adults. The ARC grant permitted the existing center to expand operation to a larger number of individuals. Specifically, the grant underwrote minor handicap renovations to the new center; upgraded electrical services; purchased educational "module" teaching materials; acquired computers, fax, and copy machines; and supported personnel costs and other administrative costs. *(GA-12403)*

Local Affiliate Expansion Project. This project worked to organize and support community-based organizations in 12 eastern Kentucky counties. The project goals were to form 12 Local Affiliates over a 3-year period (four a year) and to provide ongoing support and technical assistance to the Affiliates after they were organized. *(KY-11347)*

Lotts Creek Community School Equipment. This project purchased new classroom and laboratory equipment for a newly constructed school building at the Lotts Creek Community School. Science classrooms were equipped with demonstration desks and laboratory workstations. The computer lab was constructed with 36 workstations. *(KY-12734)*

Madison County Adult Literacy Phase II "Project Connect." This grant was to aid the Madison County Library Learning Center expand its "Project Connect" program and provide approximately 60 individuals with enhanced literacy services. The ARC grant underwrote the cost of adding one full-time teacher and a part-time director to the existing staff. The new staff permitted the center to implement necessary programs to enable the community to receive the Certified Literate Community Program designation. ARC funds were specifically to cover the personnel costs; travel; instructional, promotional, and advertising materials; software; and other supplies. *(GA-11831)*

Marion County Comprehensive Education and Training Center. This project was designed to cover the cost of completing classroom space of the rapidly growing adult education skills center. In 1995, the Marion County Comprehensive Education and Training Center erected a building structural shell, and this grant was designed to fix the expansion to the center. *(TN-12802)*

McCreary County Learning Center Expansion Project. This project entailed equipping the McCreary County Learning Center with technology and furnishings to meet the educational, training, and retaining requirements of area residents. Risers and seating were provided for the lecture hall and the community conference room. In addition to technology and furnishings, the parking areas were renovated and expanded to accommodate the increased number of participants at the facility. Outdoor seating was also to be added to the campus. *(KY-12828)*

Meigs County Adult Basic Literacy Program Enhanced Learning. This project was designed to purchase computer, software, and furniture for the adult education program operated by Meigs County Board of Education. Three learning centers were implemented, one each at Middleport, Pomeroy, and Racine. *(OH-12123)*

Michelin Learning Centers Project. The Michelin Learning Centers were designed to upgrade the skills of current workers who do not meet the basic skill level necessary to be flexible in Michelin's rapidly changing manufacturing environment. The three learning centers were located in Greenville, Spartanburg, and Anderson, South Carolina. *(CO-10947J)*

Mississippi Mobile Literacy Laboratory. Through the Northeast Mississippi Community Services, Inc., ARC funds were used as operational funds for the Mississippi Mobile Literacy laboratory to provide basic skills and workplace literacy training to residents. *(MS-10604)*

Montessori Preschool Relocation and Expansion. With financial assistance provided by ARC, the Presbyterian Child Welfare Agency (PCWA), proposed to expand the Breathitt County Montessori Preschool program. The program was to increase the entire county's access to child care services. A modular unit was constructed on a lot adjacent to Mountain Comprehensive Health, Inc. to provide 40 preschool slots, 20 more than were available prior to the grant. *(KY-12111)*

NASA Summer Institute. This project was to train teachers and students to become proficient in computerized data collection, charting, and analysis, as well as critical thinking and problem solving. Each team, which consisted of an eighth grade teacher and five students, attended the summer institute for 1 week. *(CO-12263)*

NC Rural Initiative-Outreach and Education. ARC funding was part of a statewide rural initiative designed to provide millions of dollars to small towns and rural communities, streamline the delivery of state and federal funds, and increase local economic development capacity. *(NC-11457)*

Networking Master Classes. This project provided a full workshop in each of the three programming systems—Novell, Windows NT, and Macintosh AppleTalk. Each workshop specifically prepared individuals for the certification test for that type of networking management. Training was available for qualified individuals directly employed by school districts, SchoolNet, or the ARSI program. *(CO-12628T(d))*

North Tippah Schools Science Equipment. This grant was for the purchase of equipment for the new math and science laboratories at Falkner High School. The equipment and supplies were to allow the school district to offer improved instruction in basic math and science courses and in advanced placement courses. *(MS-11624)*

Operation Read. This project enabled the Kentucky Literacy Commission and the Kentucky Department for Adult and Technical Education to (1) establish two regional sites in Appalachian Kentucky to provide workplace literacy assistance to a consortium of the area's small businesses, (2) provide human resources development via KET's STAR Channel, and (3) establish four regional resource centers for literacy programs in Appalachian Kentucky. *(KY-10766)*

Parental Volunteer Reading Project. This grant was designed to assist with implementing a Parental Volunteer Reading Project in six Appalachian counties of Kentucky's Fifth Congressional District. The Project brought parents into the first- and second-grade classrooms to read stories aloud to students. It also placed a set of 10 books in each participating classroom to provide additional learning resources for the schools. This project was intended to help keep children in school by enhancing their literacy skills and providing an interesting and entertaining experience. *(KY-10791)*

Partnering with Parents for Successful Early Childhood Development. This three-phase project was designed to promote development of early childhood by (1) partnering with parents, (2) increasing parents' knowledge of learning processes of young children 0 - 5 years to enhance children's readiness for school, and (3) encouraging undereducated parents to participate in adult basic education and parenting skills training. *(CO-10947H)*

Partners in Opportunity Development. This project was designed to provide a wide spectrum of nontraditional education and business-as-a-career opportunities for educationally, economically, and socially disadvantaged youth and adult populations. Some of the opportunities included 4-week precollege skills improvement courses, basic computer classes, mentor appointments, one-on-one technical services for potential business owners, business workshops, and one-to-one research assistance. *(PA-11048)*

Pine Mountain Settlement School Student Intervention Program. This program, through the Pine Mountain Settlement School, was an intervention program to improve the basic skills by providing tutoring service to at-risk students. Four intervention teachers were employed to provide tutoring services to the students at four elementary schools involved in the program. *(KY-10792)*

Promoting a "Smart Start" for Appalachian Children. The Promoting a "Smart Start" for Appalachian Children project was funded through ARC for 5 years. The grant was designed to assist Appalachian counties in North Carolina develop their Smart Start plans and build their capacity for the overall improvement of child care in the Appalachian Region. Mini-grants were given to individual counties who applied to work on their state Smart Start plans. *(NC-11446)*

Replacement of Lab and Computer Equipment. The ARC grant was used to purchase computer equipment, software, and other media for a math/science/technology laboratory and classrooms at Ackerman High School and Choctaw County Vocational School. Some of the equipment was purchased to replace items that were lost in a school fire. *(MS-11480)*

School Outreach Project. The School Outreach project was a sustained, home-centered, school-connected program that assisted families of elementary school children who were experiencing low achievement levels and who ran a high risk of failure through their school career. The School Outreach Worker facilitated a wide range of home-based, school-based, and group-oriented experiences that empowered parents to actively participate in the school learning process of their children. Between 12-20 at-risk children were identified by each school, based on attendance, academic performance, classroom behavior, test scores, and peer relationships. The School Outreach Worker worked intensively with these families on a weekly basis through the school year and the summer. *(GA-11307)*

School-After-School Program. The School-After-School Program operated after regular school hours from 3:00 to 6:30 p.m. on a 5-day per week basis. The overall goal of the project addressed the academic and employability needs of out-of-school youth in the 16 - 20 year age bracket. Students entering the program were expected to adhere to high attendance, academic, and behavioral standards. *(NY-12395)*

Science and Math To Go!. The Science and Math To Go! project was an inquiry into the Effectiveness of a Regional Materials Resource Support Center Model to enhance implementation of the South Carolina Science and Math Frameworks. *(SC-12415)*

Science Center of West Virginia. The Science Center was a project initiated by the Alliance for the Arts, Ltd. It offered hands-on exhibits and educational outreach. It was also designed to be a resource for local educators who lacked scientific equipment. *(WV-11511)*

Smart Start Capacity Building for Local Partnership for Children. This grant was designed to fund a Regional "Smart Start" Grants Assistance Project. A specific purpose of the project was to facilitate development of the technical expertise that counties must have in order to secure state or other funding for Smart Start programs. Another purpose was to serve as a clearinghouse that provided access to information and a forum to exchange knowledge about funding opportunities, grant details, and program strategies. *(NC-11871)*

South Tippah Magnet School Math and Science Equipment. ARC assistance was requested to purchase equipment for a new math and science magnet school in Ripley. The equipment would enable the school district to add three new course offerings, to significantly improve instructional resources and methods for the math and science courses, and to provide computer-based research capabilities. *(MS-11386)*

Summer Academy for High School Students and Teachers at Oak Ridge National Laboratory (ORNL). This multiyear project, in collaboration with the Department of Energy, provided a summer research experience for students and teachers to participate in science and math programs with scientists at ORNL and Continuous Electronic Beam Accelerator Facility. The location and number of participants varied each year for this 2-week summer program. During the last 2 years of funding, a Teacher Leadership Institute and a Student/Teacher Math/Science Institute were held for selected participants. The focus was on hands-on laboratory research used in ongoing projects. *(CO-10971)*

Summer Tutorial Program for Dyslexic Students. This grant funded a summer tutorial program for approximately 20 dyslexic students from eastern Kentucky. Students were housed and trained in an intensive 6-week Summer Tutorial Program. *(KY-10788)*

Technology Center Project. The Technology Center was designed to provide technical exploration and high-tech preparation training to high school students in grades 9-12. It was also available in the evenings for business and industry, municipal offices, and the local college for training courses, workshops, or small-group conferences and team meetings. *(CO-11256)*

Technology for Literacy Project. This project added computer-assisted instruction to the Gordon County Adult Learning Center in Calhoun. This included the latest in learning technologies to deal with an increased number of students in the area of adult literacy, adult basic education, preparation of the high school equivalency exam, and English as a Second Language. *(GA-10802)*

Technology for Literacy. This project added computer-assisted instruction to the Rome-Floyd Adult Education Center in Rome and the Polk Adult Education Center in Cedartown. The technology-assisted instruction enhanced each program area including adult beginning reading, all areas of adult basic education, preparation for the high school equivalency exam, and English as a Second Language. *(GA-11252)*

Technology Learning Center for Workforce Academy. The goal of this project was to prepare economically disadvantaged residents for entry-level manufacturing jobs. The project was designed to enable the Workforce Academy to open its program to individuals who did not fit within the defined JTPA eligibility requirements. *(GA-11830)*

Thanks A Million. Through a cooperative partnership between the West Virginia Department of Education and the Thanks A Million Foundation, this project was designed to support local programs that were most likely to increase adult literacy within the state of West Virginia. The

project assisted existing literacy programs in need of additional resources and allowed for the development of new innovative initiatives through a competitive grants process. *(WV-11267)*

Tompkins Cortland Community College: Integrating Information Technologies. Integrating Information Technologies project was designed to integrate information skills using electronic technology into college programs and curricula at Tompkins-Cortland Community College. The expected outcome was a better mastery of basic skills and application of information in a computerized setting. ARC funds were used to purchase computers and software. *(NY-11726)*

Towns County Dropout Prevention/Computerized Network. This project received 2 years of funding in order to fund the Towns County Computerized Classroom project. The network was designed to upgrade the school curriculum and to address needs of at-risk students. The 1994 funding included the addition of 30 new computers so that the computer network could be broadened. And the 1995 funding consisted of 32 computers and printers to be used in the lower elementary grades. *(GA-11517)*

Towns County Mobile Technology Project. This project was designed to obtain laptop computers for teachers and students at the Towns County Middle School. Besides the laptop computers, students and their parents received instruction on the proper use of laptop computers. Internet access was also provided in the home. This project planned to incorporate computer technology in all middle school classes and promote parents' use of the computers. *(GA-12935)*

Using Technology to Empower Mathematics and Science Students. ARC funds paid for the acquisition of four computers, four mobile carts with high intensity projectors, interface LCD panels, and software to develop an on-demand LAN accessible to the Internet and other online services available from NSF and other educational sources. This project provided teacher training seminars, workshops, and specialized technical assistance in math and science education. *(CO-12628T(a))*

Visions Five Plus Telecommunications Project. This grant provided funding for the implementation and startup of the Visions Five Plus interactive television network in public secondary schools in distressed counties. The overall purpose of the project was to establish a cooperative network of community learning centers. *(TN-11149)*

Walker Technical Institute Strategic Plan. This grant funded a survey of the vast array of services that address adult literacy in Dade, Walker, Catoosa, and Chattooga Counties. This comprehensive study was to identify existing adult literacy activities, facilities, and the human,

technological, and funding resources in the region; barriers to using existing services; as well as the potential collaborative partnerships and strategies to eliminate the undereducation of the adult population in these four counties. From this, the project developed a web site with an inventory of all state, county, and local community service agencies in the four-county region. *(GA-12694)*

War on Illiteracy. This multiyear grant was dispersed in 18 Appalachian counties to support a literacy coordinator whose responsibilities included recruiting and training volunteer tutors, recruiting students, increasing public awareness about the problem of adult illiteracy, teaching literacy classes, working with literacy councils in the county, and providing transitional literacy skills leading to postsecondary technical education. *(TN-9808)*

Wayne County Schools Modular Technology Lab. This project was designed to equip a modular technology lab in the Wayne County High School to provide students with an introduction and exploratory technology education program. ARC grant funds assisted in purchasing equipment to be utilized in a classroom setting. *(KY-12426)*

West Georgia Technical Institute Technology for Literacy Program. This project established a Heard County Community Education Center. Specifically, funds were used to employ an onsite coordinator to assess students' educational needs, coordinate onsite training by West Georgia Tech instructors, and work with Heard County School System educators to reduce dropout rates. This centralized location was to provide a variety of educational experiences designed to meet their basic skills and vocation training needs, along with providing support services. This "one-stop" center was also designed to enable eligible citizens to receive assistance from a variety of community support agencies. *(GA-11520)*

Western Maryland Math-Science Teacher Training Project. This project was designed with two components. The first component was a summer/fall training session designed to equip 48 teachers with skills to facilitate the integration of math/science at the elementary and middle school level. The second component of this project was to provide more indepth training for the teacher teams and access to consultants who would work with teachers within the counties to assist in the transition to an integrated curriculum in math and science. *(CO-10947C)*

Winder-Barrow Adult Literacy Project. This grant was designed to help the Winder-Barrow Certified Literate Community Coalition to expand its existing adult literacy program. The ARC grant nearly doubled the capacity of the primary educational computer center in the program. The ARC grant funded the GED program and the English as a Second Language program. *(GA-12404)*

Work Place Literacy Training Projects for Business and Industry. This project provided basic skills training in the workplace through partnership arrangements among education providers, business, and labor. It provided direct educational services, educational assessment, educational and life-skills counseling and support services as necessary to approximately 360 existing employees throughout the Southern Tier Region. *(NY-10285A)*

Workplace Learning Program for Dalton/Whitfield County. This project was designed to work with the carpet industry in Dalton. During the first year of the grant, project goals were to (1) publicize the READ program, (2) recruit students for the program, (3) install computers, and (4) evaluate the program. During year 2, ARC funds were used to (1) assist in developing a baseline profile of the education level of the workforce, (2) conduct job and literacy task analyses on 15 entry-level jobs in the carpet industry, and (3) continue and expand the services of the Education is Essential Foundation. *(GA-10801)*

Write to Read Project. This grant was provided to evaluate the Writing to Read program sites that had been implemented with ARC assistance in West Virginia, Kentucky, and Virginia. The Writing to Read project, funded by ARC in 1990, was a collaborative effort between ARC and IBM in which 55 Writing to Read labs were installed in elementary schools in these three states. The schools agreed to continue the project for 3 years, use the equipment only for Writing to Read projects, provide the resource and material support to conduct the program, and provide an annual report of the project. *(CO-10963)*

Writing to Read. This grant, in collaboration with IBM, established Write to Read Projects in 10 counties. IBM provided a total of 100 computers to the 10 counties. The project trained 91 teachers and 10 program coordinators in the delivery of instruction. The Write to Read computer laboratory provided instruction for 1,587 kindergarten and first grade students. *(CO-10549)*

Appendix G

Mail Survey

Appalachian Regional Commission

Survey of ARC-Funded Education Projects
Part 1: ARC Grants and Projects

This survey has been authorized by the Appalachian Regional Commission. While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

INSTRUCTIONS FOR COMPLETING THE SURVEY

The Appalachian Regional Commission (ARC) is conducting a survey of its educational projects funded since 1990. The purpose is to evaluate the impact of their grants and to identify ways in which the program might be improved. Part 1 of the survey obtains general information about the ARC grant and the overall project, while Part 2 obtains project-specific information about the outcomes that you identified in your original proposal to ARC. Your responses to these items will only be used to assess the extent to which the sum of the ARC-funded projects in the study sample were able to achieve their proposed educational outcomes.

Please complete both Part 1 and Part 2 of this survey.

We ask that the requested information be provided by the person who is most knowledgeable about the history and current status of the project. The name, contact information, and other descriptive information about the project appear below. Please correct the label if any of the information is incorrect.

AFFIX LABEL HERE

If any of the above information is incorrect, please update directly on the label.

RETURN COMPLETED FORM **BY FEBRUARY 22, 2000** TO:	IF YOU HAVE ANY QUESTIONS, CALL:
ARC Evaluation Westat TB120F 1650 Research Boulevard Rockville, Maryland 20850	Kyle Snow 1-800-937-8281, ext. 2285

DEFINITIONS USED IN THIS SURVEY

The study sample for the Evaluation of ARC-Funded Education Projects consists of grants awarded by the Appalachian Regional Commission for the completion of education-related activities.

On some occasions, these grants (and their matches) provided complete funding for a project and all related activities. In other cases, the ARC grant was awarded as part of a larger project. In such cases, ARC funding (and any related matches) supported only a portion of the goals, objectives, and/or activities that a project was designed to achieve. In completing Parts 1 and 2 of this survey, we are therefore asking you to distinguish between the following two terms:

ARC-funded activities refers to any goal, objective, or activity that was at least partially funded by your ARC grant.

Overall project refers to all of a given project's goals, objectives, and activities—including those that were not directly or indirectly supported with ARC funding.

You should provide responses to all questions. However, some items refer only to ARC-funded activities, some questions refer to the overall project, and some refer to both the ARC-funded activities and the overall project.

- Items 2, 3, 10, 16, 17, and 22 in Part 1 and all of the items in Part 2 pertain to **ARC-funded activities** (in cases where ARC funded all aspects of the project, you should provide information about the entire project).

- Items 5, 6, 9, 11, 12, 13, 14, and 15 in Part 1 pertain to the **overall project**.

- Items 1, 4, 7, 8, 18, 19, 20, and 21 in Part 1 pertain to both **ARC-funded activities** AND the **overall project**.

SECTION 1: ABOUT THE ARC GRANT

1. Please use the options below to indicate the relationship between the ARC grant (*which includes matching funds*) and other project activities. *(Circle <u>one</u> number.)*

   a. The entire project was completed with ARC funding (including matching funds)..... 1

   b. The project was completed primarily with ARC funding (including matching funds), with other sources contributing minimum amounts of support..... 2

   c. The project was completed primarily with other funding, of which the ARC grant (including matching funds) was a *moderate* contributor..... 3

   d. The project was completed primarily with other funding, of which the ARC grant (and matching funds) was a *small* part..... 4

2. Using the list below, indicate the number of each type of organization that provided sources of additional funding and/or resources for the ARC-funded portion of your project. Use "0" to indicate that there were no organizations of a given type. **Please do not leave any spaces blank.**

Organization type	Number
a. Government agency	_____
b. State agency (not an education agency	_____
c. Local (county/township) agency	_____
d. State education agency	_____
e. Local education agency	_____
f. Private sector company	_____
g. Private foundation	_____
h. Nonprofit organization	_____
i. Other (*specify*) _____	_____

3. Please specify the total number of organizations providing each service or resource listed below. Use "0" to indicate that there were no organizations providing a given service or resource. **Do not leave any spaces blank.**

Type of service or resource provided	Number of organizations
a. Cash	_____
b. Equipment or equipment discounts	_____
c. In-kind services	_____
d. Personnel	_____
e. Space or facilities	_____
f. Other (*specify*) _____	_____

4. During what year(s) did you receive ARC funds for this project? *(Circle all that apply.)*

1990 1991 1992 1993 1994 1995 1996 1997 1998 1999

SECTION 2: CHARACTERISTICS OF THE COMMUNITY SERVED BY THE ARC-FUNDED PROJECT

5. Which one of the following best describes the geographic distribution of the individuals expected to *benefit* from this project? *(Circle <u>one</u> number.)*

a.	In a single city or town	01
b.	In a single county	02
c.	In a major metropolitan area (i.e., a central city and its adjacent counties)	03
d.	In two or more adjacent counties within a single state (not associated with a common metropolitan area)	04
e.	In two or more nonadjacent counties within a single state	05
f.	In all counties within a single state	06
g.	In two or more adjacent states	07
h.	In two or more nonadjacent states	08
i.	Other area definition not listed above (*specify*) _____	09

6. Indicate whether each of the following disadvantaged or underserved community segments were intended to use project-related services or resources or to otherwise benefit from your project. *(Circle Yes or No for each item.)*

Community Segment		Project beneficiaries	
		Yes	No
a.	Extreme poverty	1	2
b.	Illiterate	1	2
c.	Limited English speaking	1	2
d.	Disabled	1	2
e.	Geographically isolated	1	2
f.	Unemployed/underemployed	1	2
g.	Migrant workers/students	1	2
h.	School dropouts	1	2
i.	Other group not listed (*specify*) _____	1	2

SECTION 3: ACTIVITIES UNDERTAKEN THROUGH ARC FUNDING

7. Below is a list of activities commonly undertaken by education projects. Use *Column A* to indicate if each activity has ever been conducted by your project.

For each activity conducted (i.e., marked "*Yes*" in *Column A*), use *Column B* to indicate the extent to which the activity was ever actually implemented. In *Column C*, indicate the extent to which ARC funds were ever used to support the activity. In *Column D*, indicate if the activity has continued or the equipment is currently in use.

Activity	A. Conducted?		B. Extent of implementation			C. What proportion of the activity was ever funded by ARC?			D. Is activity or equipment still in use?	
	Yes	No	Less than planned	Same as planned	More than planned	None	Some	All	Yes	No
Improve physical plant										
a. Install/replace mechanical equipment (except telecommunication)	1	2	1	2	3	1	2	3	1	2
b. Renovate existing structures	1	2	1	2	3	1	2	3	1	2
c. Build new structures	1	2	1	2	3	1	2	3	1	2
d. Other construction activity *(specify)* _____	1	2	1	2	3	1	2	3	1	2
Telecommunications applications										
e. Install computers	1	2	1	2	3	1	2	3	1	2
f. Install/develop LAN/WAN (including Internet connections	1	2	1	2	3	1	2	3	1	2
g. Develop distance education system	1	2	1	2	3	1	2	3	1	2
h. Other telecommunications activity *(specify)* _____	1	2	1	2	3	1	2	3	1	2
Develop educational resources										
i. Install science lab	1	2	1	2	3	1	2	3	1	2
j. Install other special use classroom	1	2	1	2	3	1	2	3	1	2
k. Develop computer-based educational materials	1	2	1	2	3	1	2	3	1	2
l. Develop paper-based educational materials	1	2	1	2	3	1	2	3	1	2

7. (continued)

Activity	A. Conducted?		B. Extent of implementation			C. What proportion of the activity was ever funded by ARC?			D. Is activity or equipment still in use?	
	Yes	No	Less than planned	Same as planned	More than planned	None	Some	All	Yes	No
Develop educational resources (cont.)										
m. Develop teacher training program/ materials	1	2	1	2	3	1	2	3	1	2
n. Provide teacher/tutor training	1	2	1	2	3	1	2	3	1	2
o. Other educational resources activity *(specify)* _____	1	2	1	2	3	1	2	3	1	2
Provide training to students and other community residents										
p. Literacy training	1	2	1	2	3	1	2	3	1	2
q. Computer training	1	2	1	2	3	1	2	3	1	2
r. GED preparation training	1	2	1	2	3	1	2	3	1	2
s. Job skills training	1	2	1	2	3	1	2	3	1	2
t. Parenting skills training	1	2	1	2	3	1	2	3	1	2
u. Academic skills training	1	2	1	2	3	1	2	3	1	2
v. Peer tutoring	1	2	1	2	3	1	2	3	1	2
w. Other training activity *(specify)* _____	1	2	1	2	3	1	2	3	1	2
Provide support services										
x. Provide emotional or psychological counseling	1	2	1	2	3	1	2	3	1	2
y. Provide family support	1	2	1	2	3	1	2	3	1	2
z. Provide career/college counseling	1	2	1	2	3	1	2	3	1	2
aa. Other service activity *(specify)* _____	1	2	1	2	3	1	2	3	1	2
Community outreach										
bb. Provide outreach activities	1	2	1	2	3	1	2	3	1	2
cc. Establish new community partnerships	1	2	1	2	3	1	2	3	1	2
dd. Distribute funds/mini-grants	1	2	1	2	3	1	2	3	1	2
ee. Other outreach activity *(specify)* _____	1	2	1	2	3	1	2	3	1	2

8. Please indicate whether <u>each</u> of the following obstacles or impediments prevented you from carrying out the activities of the ARC grant and/or the overall project as well as you might otherwise have done. *(Circle Yes or No for each item.)*

Please refer to Question 1 on page 1:

- If the ARC grant funded the entire project (If you answered "*1*" to *Question 1*), complete only *Column A*.
- If the ARC grant was part of a larger project (If you answered "*2*," "*3*," or "*4* " to *Question 1*), complete both *Column A* and *Column B*. Use *Column A* to identify problems in carrying out the activities funded by ARC only, and *Column B* to indicate problems the entire project encountered.

Obstacles	A. ARC activities		B. Overall project	
	Yes	No	Yes	No
Planning				
a. Underestimated the resources needed	1	2	1	2
b. Underestimated time/effort needed	1	2	1	2
c. Underestimated the demand for services or magnitude of the problem	1	2	1	2
Administrative				
d. Local administrative delays	1	2	1	2
e. Grant not awarded in timely manner	1	2	1	2
Personnel				
f. Inadequate or underqualified staff	1	2	1	2
g. Excessive staff turnover	1	2	1	2
h. Communication problems/misunderstanding of roles	1	2	1	2
Implementation				
i. Construction delays	1	2	1	2
j. Delays incurred by outside providers	1	2	1	2
k. Installing equipment	1	2	1	2
l. Development of program materials	1	2	1	2
Community				
m. Community/families not supportive	1	2	1	2
n. Participants not maximizing use of services	1	2	1	2
Cost				
p. Project funds were depleted before implementation	1	2	1	2
q. Matching funds never received	1	2	1	2
r. Matching funds were less than expected/needed	1	2	1	2
Other				
s. *Specify* _____	1	2	1	2
t. *Specify* _____	1	2	1	2

SECTION 4: OVERALL PROJECT OUTCOMES

9. Listed below are outcomes commonly achieved by education projects. Indicate in *Column A* if the outcome was expected to occur as a result of this project. *(Circle Yes or No for each item.)*

(Please note that this item refers to outcomes associated with your entire project. Part 2 of this survey focuses on ARC-specific outcomes.)

For each outcome marked "*Yes*" in *Column A*, use *Column B* to indicate how successful your project has been in achieving the specified outcome. *(Circle <u>one</u> for each applicable item.)*

Outcome	A. Anticipated?		B. Extent of achievement		
	Yes	No	Less than expected	Same as expected	More than expected
Increase educational attainment/preparation					
a. Increase number of students remaining in school/decrease drop-out rate	1	2	1	2	3
b. Increase high school completion rate	1	2	1	2	3
c. Increase number of students attending college	1	2	1	2	3
d. Increase number of people completing GED	1	2	1	2	3
e. Increase literacy rates	1	2	1	2	3
f. Increase academic skills	1	2	1	2	3
g. Increase vocational preparedness of students	1	2	1	2	3
h. Increase school readiness	1	2	1	2	3
i. Other educational outcome *(specify)* _____	1	2	1	2	3
Increase economic well-being					
j. Increase job skills	1	2	1	2	3
k. Decrease unemployment rates	1	2	1	2	3
l. Increase wages	1	2	1	2	3
m. Other economic well-being outcome *(specify)* _____	1	2	1	2	3
Increase family/individual well-being					
n. Increase family stability	1	2	1	2	3
o. Increase individual well-being	1	2	1	2	3
p. Other well-being outcome *(specify)* _____	1	2	1	2	3
Reduce barriers					
q. Increase access to educational support	1	2	1	2	3
r. Decrease travel time to services	1	2	1	2	3
s. Decrease student problem behaviors	1	2	1	2	3
t. Other barrier reduction outcomes *(specify)* _____	1	2	1	2	3

10. What was the major or most important outcome (anticipated or not) to result from the *ARC grant*?

SECTION 5: CURRENT STATUS OF THE OVERALL PROJECT

11. What is the current status of this project? *(Circle one.)*

a.	In full operation	1	*(Continue with question 12)*
b.	In operation and serving a function that has changed/grown/expanded considerably from what was originally envisioned	2	*(Continue with question 12)*
c.	In partial operation providing the full range of services but affecting fewer individuals than intended	3	*(Skip to question 13)*
d.	In partial operation serving the full scope of individuals, but providing a limited range of services	4	*(Skip to question 13)*
e.	No longer in operation	5	*(Skip to question 13)*

12. *For projects answering "a" or "b" for question 10,* please identify any factors that facilitated your project's growth and expansion.

_____

_____

_____

13. *For projects answering "c," "d," or "e" for question 10,* which of the following factors are responsible for the project to be no longer operating at full capacity? *(Circle Yes or No for each item.)*

		Yes	No
a.	Mechanical obsolescence (equipment became inoperable, unreliable, worn out)	1	2
b.	Technological obsolescence (faster, more accurate, better alternatives became available)	1	2
c.	Personnel changes (project staff most interested are no longer involved)	1	2
d.	No funding available for maintenance	1	2
e.	No funding for operations (staff, facilities, etc.)	1	2
f.	Not enough participants to warrant continuation	1	2
g.	Lack of community awareness	1	2
h.	Loss of partners	1	2
i.	Lack of community support	1	2
j.	Project had run its course (no longer any need)	1	2
k.	Other (*specify*) _____	1	2

14. Has your project expanded to serve additional persons in locations or organizations beyond those originally targeted? *(Circle one.)*

Yes	1	*(Continue with question 15)*
No	2	*(Skip to question 16)*

15. Please describe the additional individuals being served.

16. Did the ARC grant lead to any spinoff activities, i.e., additional services that were not included in the original project?

Yes	1	*(Continue with question 17)*
No	2	*(Skip to question 18)*

17. Please describe any spinoff activities and additional services provided.

SECTION 6: IMPACT OF THE ARC GRANT

18. What do you believe would have been the most likely outcome of your project if you had not received funds through the Appalachian Regional Commission? *(Circle <u>one</u> only.)*

a.	The project would probably never have been implemented	1	*(Skip to question 22)*
b.	The project would probably have been implemented using alternative funding sources	2	*(Continue with questions 19-21)*

19. How do you believe the absence of ARC funding would have affected the *range of services* offered by your project? *(Circle <u>one</u> only.)*

a.	The project would still be able to offer the full range of services	1
b.	The range of services offered by the project would have been minimally reduced	2
c.	The range of services offered by the project would have been dramatically reduced	3

20. How do you believe the absence of ARC funding would have affected the *scale* of your project? *(Circle <u>one</u> only.)*

a.	The project would have reached an equivalent number of people	1
b.	The project would have reached a slightly smaller number of people	2
c.	The project would have reached significantly fewer people	3

21. How do you believe the absence of ARC funding would have affected the *implementation schedule* of your project? *(Circle <u>one</u> only.)*

a.	The project would have been implemented on the same schedule	1
b.	Project implementation would have been delayed slightly	2
c.	Project implementation would have been substantially delayed	3

SECTION 7: ABOUT THE RECIPIENT OF THE ARC GRANT

22. From the list below, please indicate the category that best describes the grant recipient organization.

Enter number from list below: _____

Organization Type

Education organizations

21. Early childhood education organization
22. K-12 school or school system
23. Higher education institution or consortium
24. Adult education organization
25. Local education agency
26. Other education entity
    (*specify*)_____

Government organizations

41. State government agency
42. County government agency
43. City or municipal government agency
44. Tribal government
45. Other government entity
    (*specify*)_____

Other organizations

51. Social service agency
52. Library
53. Museum or other cultural entity
54. Community development organization
55. Professional organization/union
56. Public broadcasting station
57. Religious organization
58. Health care organization
59. Public safety organization
60. Nonprofit organization
61. Other community organization
    (*specify*)_____

23. Please provide the name, telephone number, e-mail address, and the most convenient days/times to reach the primary respondent for this survey. The information will be used only if it is necessary to clarify any of your responses.

Name
Title
Telephone (with area code)
E-mail address

Convenient days/times to reach you, if necessary.	
Day	Time
	☐ a.m. ☐ p.m.
	☐ a.m. ☐ p.m.
	☐ a.m. ☐ p.m.

THANK YOU FOR ASSISTING US IN THIS SURVEY.
YOUR TIME AND EFFORT ARE APPRECIATED.

Please return this questionnaire in the enclosed envelope or send to:

Westat
TB 120F
1650 Research Boulevard
Rockville, MD 20850

If you have any questions, please call Kyle Snow at
1-800-937-8281, ext. 2285

Appalachian Regional Commission

Survey of ARC-Funded Education Projects
Part 2: ARC-Related Outcomes

This survey has been authorized by the Appalachian Regional Commission. While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

INSTRUCTIONS FOR COMPLETING THE SURVEY

The items contained in Part 2 are designed to obtain information about the extent to which your project was able to achieve the outcomes that you identified in your original proposal to the Appalachian Regional Commission during the 1990s. This same question will be repeated for each of the objectives that you identified in your ARC proposal. You will also be provided an opportunity to identify any other ARC-related outcomes that are not already listed in Part 2 of the survey. *In constructing these items, we relied upon documents (e.g., proposals to ARC, final reports) that were made available for this evaluation project. Please contact Nicole Bartfai (1-800-937-8281, ext. 3865) if you believe that any of these outcomes are not representative of what your ARC project was designed to achieve.*

We ask that the requested information be provided by the person who is most knowledgeable about the history and current status of the project. The name, contact information, and other descriptive information about the project appear below. Please correct the label if any of the information is incorrect.

AFFIX LABEL HERE

If any of the above information is incorrect, please update directly on the label.

RETURN COMPLETED FORM **BY FEBRUARY 22, 2000** TO:	IF YOU HAVE ANY QUESTIONS, CALL:
ARC Evaluation Westat TB120F 1650 Research Boulevard Rockville, Maryland 20850	Nicole Bartfai 1-800-937-8281, ext. 3865

1a. To what extent were you able to achieve the following outcome that you identified in your original proposal to ARC:

Outcome	Extent of achievement *(circle one)*		
	Less than expected	Same as expected	More than expected
[Specific outcome taken from ARC document review]	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

1b. To what extent were you able to achieve the following outcome that you identified in your original proposal to ARC:

Outcome	Extent of achievement *(circle one)*		
	Less than expected	Same as expected	More than expected
[Specific outcome taken from ARC document review]	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

1c. To what extent were you able to achieve the following outcome that you identified in your original proposal to ARC:

Outcome	Extent of achievement *(circle one)*		
	Less than expected	Same as expected	More than expected
[Specific outcome taken from ARC document review]	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

1d. To what extent were you able to achieve the following outcome that you identified in your original proposal to ARC:

Outcome	Extent of achievement *(circle one)*		
	Less than expected	Same as expected	More than expected
[Specific outcome taken from ARC document review]	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

1e. To what extent were you able to achieve the following outcome that you identified in your original proposal to ARC:

Outcome	Extent of achievement *(circle one)*		
	Less than expected	Same as expected	More than expected
[Specific outcome taken from ARC document review]	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

1f. To what extent were you able to achieve the following outcome that you identified in your original proposal to ARC:

Outcome	Extent of achievement *(circle one)*		
	Less than expected	Same as expected	More than expected
[Specific outcome taken from ARC document review]	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

1g. To what extent were you able to achieve the following outcome that you identified in your original proposal to ARC:

Outcome	Extent of achievement *(circle one)*		
	Less than expected	Same as expected	More than expected
[Specific outcome taken from ARC document review]	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

1h. To what extent were you able to achieve the following outcome that you identified in your original proposal to ARC:

Outcome	Extent of achievement *(circle one)*		
	Less than expected	Same as expected	More than expected
[Specific outcome taken from ARC document review]	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

1i. To what extent were you able to achieve the following outcome that you identified in your original proposal to ARC:

Outcome	Extent of achievement *(circle one)*		
	Less than expected	Same as expected	More than expected
[Specific outcome taken from ARC document review]	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

2. Please use the space below to identify any additional outcomes that the ***ARC-funded*** portion of your project was designed to achieve. *(You should copy this page if you need to provide information about two or more additional ARC-funded outcomes.)*

   For each additional outcome, provide the following information about the extent to which this additional outcome was achieved.

Additional outcome *(Specify)*	**Extent of achievement** *(circle one)*		
	Less than expected	Same as expected	More than expected
	1	2	3

If you indicated *"same as expected"* or *"more than expected,"* use the space below to describe the evidence that was used to document that the outcome had been achieved.

If you indicated *"less than expected,"* use the space below to describe any factors that hindered your project's ability to achieve the desired outcomes.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

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