

DOCUMENT RESUME

ED 364 125

FL 800 702

TITLE National Evaluation of Adult Education Programs. Profiles of Client Characteristics. Second Interim Report.

INSTITUTION Development Associates, Inc., Arlington, Va.

SPONS AGENCY Department of Education, Washington, DC.

PUB DATE Sep 93

CONTRACT LC90065001

NOTE 112p.; For First Interim Report, see ED 354 371.

PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC05 Plus Postage.

DESCRIPTORS Academic Persistence; *Adult Basic Education; Attendance Patterns; English (Second Language); Limited English Speaking; *Program Evaluation; Statistical Analysis; Student Characteristics

ABSTRACT

This is the second of three interim reports from the National Evaluation of Adult Education Programs. The first interim report, completed in March 1992, describes the adult education service delivery system. This report describes the clients who entered adult education programs during the evaluation's 12-month intake period beginning April 1991. This report contains 5 chapters. Following the introductory chapter, chapter 2 estimates the number of new adult education clients who registered for instruction during the 12-month intake period, and presents preliminary findings on the total number of clients (new and continuing) served by local programs over the course of a year. Chapter 3 discusses the characteristics of new clients in terms of seven variables of interest. Chapter 4 analyzes client characteristics in relation to several policy-relevant issues. Chapter 5 previews the analyses to be presented in the study's third interim report, which is to be available in the fall of 1993. Because data collection has not yet ended, the findings reported in chapter 5 are preliminary, but are believed to be indicative of the type of information future reports are likely to contain. The statistics presented in this report are based on probability samples of adult education students. The sampling of errors for a stratified, multi-stage design such as the one used in this study generally differ to some extent from those associated with estimates from a simple random sample. Estimation of actual sampling errors must take account of these "design effects." To minimize costs, estimation of actual sampling errors will be deferred until the data are complete. (Author/AB)

* Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

NATIONAL EVALUATION OF ADULT EDUCATION PROGRAMS

Second Interim Report

PROFILES OF CLIENT CHARACTERISTICS

Contract No. LC90065001

September 1993

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

Prepared for:

U.S. Department of Education
400 Maryland Avenue, S.W., Room 3122
Washington, D.C. 20202

Prepared by:

Development Associates, Inc.
1730 North Lynn Street
Arlington, VA 22209-2009

FL 800 702

BEST COPY AVAILABLE

This report is pursuant to Contract No. LC90065001. The names of the persons employed or retained by Development Associates, Inc., with management or professional responsibility for this phase of the project and this report are listed below. The amount to be charged to the U.S. Department of Education for the entirety of this contract is approximately \$2,839,740.

Project Director	Malcolm B. Young
Associate Director for Data Processing and Analysis	Mark A. Morgan
Associate Director for Field Operations	Howard Fleischman
Evaluation Design and Analysis Specialists	Nicholas Fitzgerald Cynthia Hamill Paul J. Hopstock Kelly Linger Laura Williams Thomas B. Jabine Larry Hotchkiss
CASAS Project Directors	Patricia Rickard Virginia K. Posey

The views expressed in this report developed under contract to the U.S. Department of Education do not necessarily reflect the position or policy of the Department, and no official endorsement by the Department should be inferred.

EXECUTIVE SUMMARY

Study Purpose

In September 1990, the U.S. Department of Education initiated the national evaluation of federally supported adult education programs. The central purpose of the study is to evaluate the potential of programs supported by the Basic State Grants section of the federal Adult Education Act "for significantly reducing deficits in the adult population with respect to literacy, English proficiency, and secondary education." The purpose of the evaluation's second interim report is to provide descriptive information on the characteristics of the adult education clientele that entered the adult education system from April 1991 to April 1992.

Sources of Information

The report draws primarily on data on a sample of individuals who entered a participating adult education program during the one year period commencing April 22, 1991. Data were collected on 21,059 clients. Throughout the report, the data have been weighted so that they provide estimates of the universe of new clients.

Major Study Findings

Number of clients served

- About 1.3 million new clients enroll in the program each year. This amounts to 4 percent of the program's estimated target population of 46.2 million.
- Roughly 300,000 (17 percent) of these new enrollees drop out before receiving any instruction.
- The total number receiving at least 12 hours of instruction over a year's time (including those who started in previous years) is estimated at 1.9 to 2.4 million. The difference between this estimate and the number reported by the program's grantees needs further study.

Clients characteristics by service component

- Clients in Adult Secondary Education (ASE) account for 34 percent of all new clients. Nearly half (43 percent) are age 21 or younger, and most (59 percent) are not working (unemployed or not in the labor force).
- English as a Second Language (ESL) accounts for 42 percent of new clients. Nearly all (97 percent) of ESL participants) were born outside the U.S. and half entered the country since 1990. More than 90 percent are in metropolitan areas and over 70 percent are in the West.

- Clients in Adult Basic Education (ABE) account for the remaining 23 percent. As a group, ABE clients are relatively young (61 percent age 30 or under), more likely to be receiving public assistance (43 percent), and more likely to live in non-metropolitan areas (39 percent).

Differences in client populations served by community colleges versus local education agencies (LEAs)

- There are no significant differences with respect to prior education or employment; initial test scores are slightly lower for clients in LEAs.
- LEAs are more apt to serve ESL clients, while community colleges are more likely to serve ABE clients.
- There are related differences between the two client populations with respect to race/ethnicity, nativity, use of a non-English language, and urbanicity.

Appropriateness of clients being served

- The program is serving a population in need of adult education services. Although there is an overall youth bias in the program, an appropriate cross section of the target population in each age group is being served. There is no evidence that the program is "creaming."
- Clients tend to be placed at levels lower than their test scores indicate and program labels may not reflect the educational levels generally associated with them.

Client Attendance and Persistence

- About 36 percent of all new clients who enroll leave before completing 12 hours of instruction.
- Of all new clients who commence instruction in September or October (the peak months) over half were no longer active after 16 weeks.
- The median hours of instruction completed by all who started in September or October was 43.
- Above-average persistence was observed for clients in ESL, programs in the largest cities, women, older participants, and recipients of public assistance.

ACKNOWLEDGEMENTS

This report was made possible by the help and cooperation of many individuals and organizations. We wish to give special credit to our colleagues on the National Evaluation of Adult Education. Our Technical Advisory Group (TAG) has made numerous suggestions, and has provided many valuable insights. While their suggestions may not have always been followed, we have always been impressed and influenced by their thoughtful and carefully reasoned counsel. The TAG is comprised of: Hal Beder, Connie Eichorn, Rachel Hidaka, Noreen Lopez, Jane MacKillop, Lennox McLendon, and Jack Mezerow. We wish to absolve all of them for any shortcomings in this report.

Thomas B. Jabine has again provided many useful comments, suggestions, and has provided the section on the estimation procedures for intakes. He has offered consistently helpful, thoughtful, and practical advice. Any flaws with the estimations are beyond his control. Larry Hotchkiss provided several suggestions and constructive review comments.

We also wish to acknowledge the help received from staff inside Development Associates. Laura Williams has contributed greatly in the programming and development of this rather complex database. Kelly Linger has worked with local program directors to maintain the quality of our data, answer questions, and offer support. Cynthia Hamill provided the graphics and much of the table construction.

Rob Barnes, our project officer from the Department of Education, deserves credit for his review comments on draft report.

We have also received valuable input from the Department of Education's Ron Pugsley.

Finally, any acknowledgements would be inadequate if they failed to offer our thanks to the adult education providers that are participating in our study. Without their help, this study would have been impossible. Local Program Directors and their staff have continued to provide us with not only the data we request, but with a continuing source of insights into the workings of adult education. We want them to know that their efforts have not been overlooked, nor their importance underestimated.

Malcolm Young, Project Director
Mark A. Morgan
Nicholas Fitzgerald
Howard Flieschman

TABLE OF CONTENTS

	PAGE
Chapter 1 INTRODUCTION	1
Purpose of This Report	1
Overview of the National Evaluation	1
Sources of Information for This Report	2
Adjustments for Incomplete Data	3
Confidence Intervals Associated with Reported Data	4
Organization of This Report	5
Chapter 2 ESTIMATING THE NUMBER OF CLIENTS ENROLLED	6
Estimating the Number of New Clients Enrolled in a Year	6
Estimating the Total Number of Clients in a Year	8
Chapter 3 NEW CLIENT PROFILES AND PATTERNS	14
National Profile of the ESL Population	14
National Profile of the ABE/ASE Population	21
Summary	29
Chapter 4 SPECIAL ISSUES RELATED TO THE CHARACTERISTICS OF NEW CLIENTS	31
Policy Questions Considered	31
Differences in Client Characteristics	32
The Appropriateness of Instructional Placement	45
The Extent to Which the Neediest Are Served	48
Motivations for Enrollment in Adult Education	50
Summary	54
Chapter 5 PRELIMINARY FINDINGS ON CLIENT ATTENDANCE AND PERSISTENCE	55
Duration and Intensity of Instructional Service	55
Comparison of Clients Who Leave Quickly with Clients Who Persist	59
Clients' Reasons for Leaving the Program	67
Summary	69
REFERENCES	71

Chapter 1 INTRODUCTION

Purpose of This Report

This is the second of three interim reports from the National Evaluation of Adult Education Programs. The first interim report, completed in March 1992, describes the adult education service delivery system. This report describes the clients who entered adult education programs during the evaluation's 12-month intake period beginning in April 1991.

Overview of the National Evaluation

The Department of Education began the national evaluation of federally supported adult education services in September 1990. The central purpose of this study is to evaluate the potential of programs supported by the Basic State Grants section of the federal Adult Education Act "for significantly reducing deficits in the adult population with respect to literacy, English proficiency, and secondary education." The specific objectives of the national evaluation and an overview of the study's design are provided in appendix A of this report.

The evaluation began with a survey of all local adult education service providers receiving Adult Education Act funds in the program year ending June 30, 1990 (Universe Survey).¹ That survey, which was completed in December 1990 with a 93 percent response rate, was used to identify a sample of local programs for participation in the longitudinal phase of the study. During the longitudinal phase, the following data are being collected:

- Information about the characteristics and experiences of a nationally representative sample of adult education clients who entered local programs during a 12-month period;
- Information about the amount and nature of instructional services received by these clients for 18 months after intake, along with periodic information about their progress; and
- Follow-up information from a subsample of these clients obtained through telephone interviews 6 months after they ceased receiving instructional services.

¹ The Universe Survey, a mail survey of all federally supported adult education providers, was conducted in the fall of 1990. See the first interim report for a discussion of the findings.

A nationally representative sample of 139 local programs agreed to participate in the longitudinal phase of the study, and data collection began in April 1991. The programs participating in this phase agreed to complete a questionnaire (Comprehensive Program Profile) to provide data on the characteristics of a sample of clients who first enrolled in adult education between April 1991 and April 1992, and on the extent and type of instructional services all those clients received for up to 18 months from their time of entry.

Staff of the participating local programs were trained to complete data collection forms and protocols and were reimbursed for costs associated with data collection. The national evaluation's research staff provided technical assistance with the data collection and monitored the quality of the data received.

The national evaluation is to consist of three interim reports, a final report, and a national conference to discuss the implications of study findings. The first interim report was based on information from the Universe Survey and the Program Profiles. This, the second interim report, is to provide a description of the characteristics of the 12-month entry cohort within the program's major instructional components and across geographic regions. The third report, to be completed in the fall of 1993, will draw on attendance and participation data for the period following the clients' initial entry and will use the 1990 census data to estimate the participation rates of the program's target populations. The study's final report, scheduled for completion in late spring 1994, will draw on the full set of study data, including special studies of program costs and academic achievement, to address the study's major objectives as set forth in appendix A.

Sources of Information for This Report

The data on new clients presented in this report are taken from four data collection forms provided by a nationally representative sample of programs on a 12-month cohort of their newly entering clients:

1. The Client Intake Record, Part A, which was completed for each new client selected for participation in the study, provides basic demographic information on the client as well as program information such as placement level, scheduled starting date, and local intake procedures used for the client. Program staff completed the form from program intake records. (A copy of this form is in appendix B.)
2. The Client Intake Record, Part B, which was to be completed by or for all new clients who attended at least one instructional session, requested more detailed information on client characteristics, including data on receipt of public assistance, living arrangements, and employment status. Part B also asked clients to rate the importance of 14 reasons for

taking adult education instruction. Spanish versions of the form were provided as needed. (A copy of this form also is in appendix B.)

3. The Client Update Record, which provides instructional and attendance data for the client, is completed at 5-to-8-week intervals by local program staff for each client who received instruction during the reporting period for up to 18 months from the time of entry into the program.
4. The Client Test Record provides scores on tests of basic skills given at the time of enrollment, after 70 hours of instruction, and after 140 hours of instruction. (This testing information is available for clients from 111 local programs.)

Adjustments for Incomplete Data

Because the study calls for a substantial amount of information on each client, constructing the data base for this report meant examining the amount and quality of data received from participating programs during each month of the intake period. The examination consisted of contacting each participating program to determine the extent to which it was following the agreed-upon sampling plan, conducting statistical analyses of the number of new intakes reported for each site for each reporting period, contacting programs to discuss anomalies in the data, and making site visits to selected programs to observe and discuss the data collection process in detail.

It is clear from this review that some data we expect to use in subsequent analyses were not received or fully processed in time for inclusion in this report,² and that some data expected from certain programs selected for the study will never be received. To compensate for the incomplete information, we have taken these actions:

1. Developed counts of missing clients. Programs that did not provide data for the entire intake period were asked to provide a count of the number of new clients enrolled in the missing reporting periods. Where available, these numbers have been used to develop estimates of the number of new clients served. Ten programs informed us that some new clients entered their program during those periods, but they did not know how many. In such cases, we estimated the unknown

² The report contains information on approximately 85 percent of the clients expected to be included in the study's final report.

number of clients by applying the same ratio for the missing periods as for the periods in which all sites in those programs provided data.³

2. Imputed some responses. For a small number of variables we have used other responses from the same client to impute missing data. Generally, however, we have elected to let sample sizes vary according to the particular variables involved in different analyses.
3. Adjusted sampling weights. Data from each client in the study are assigned a sampling weight based on the probability that the client would be selected as part of the study. Any client's probability of selection is based on the probability that the client's program would be selected, that the instructional delivery site would be selected, and that any given client in the site would be selected. Changes in the expected number of programs, sites, and clients in certain sites led us to adjust the originally assigned sampling weights.⁴ The effect of these adjustments is to maintain the nationally representative nature of the study's data base. (See appendix C for a technical discussion of sampling adjustments.)

Confidence Intervals Associated with Reported Data

The statistics presented in this report are based on probability samples of adult education students. The sampling errors for a stratified, multistage design such as the one used in this study generally differ to some extent from those associated with estimates from a simple random sample. Estimation of actual sampling errors must take account of these "design effects." To minimize costs, estimation of actual sampling errors will be deferred until the data are complete.

³ For example, assume that program X has four sites, A-D. Sites A, B, and C each have 30 intakes per month, site D has 10 intakes per month, and site D lacks data for March and April 1992. If we have confirmed that site D has continued intakes but cannot provide intake data, we assume that site D has continued to contribute 10 percent of the total intakes for program X in each of the missing 2 months.

⁴ The original plan assumed 150 programs with about 325 instructional sites. Of the 150 selected programs, 2 were no longer in existence when the study began, 9 never agreed to participate, 11 dropped out of the study before providing a meaningful amount of data, and 2 are still expected to provide adequate data but have not yet done so. The data in this report are based on information from 233 sites in 126 programs.

Organization of This Report

The report contains five chapters. Following this introductory chapter, chapter 2 estimates the number of new adult education clients who registered for instruction during the 12-month intake period, and presents preliminary findings on the total number of clients (new and continuing) served by local programs over the course of a year. Chapter 3 discusses the characteristics of new clients in terms of seven variables of interest. Chapter 4 analyzes client characteristics in relation to several policy-relevant issues. Chapter 5 previews the analyses to be presented in the study's third interim report, which is to be available in the fall of 1993. Because data collection has not yet ended, the findings reported in chapter 5 are preliminary, but we believe they are indicative of the type of information future reports are likely to contain.

Chapter 2

ESTIMATING THE NUMBER OF CLIENTS ENROLLED

This chapter presents our estimate of the number of new clients who enrolled in federally funded adult education programs during the course of a full year and of the total number of clients—new and continuing—who were served. The study's sample was composed of clients who were newly enrolled for instruction in the selected adult education programs, with a newly enrolled client defined as one who had not received instruction in that program during the preceding year.

The chapter begins with our estimate of the number of new clients enrolling in adult education programs during the study's client intake year. This is followed by preliminary estimates of the total number of new and continuing clients served.

Estimating the Number of New Clients Enrolled in a Year

The plan for the National Evaluation of Adult Education Programs was designed to obtain a nationally representative sample of new clients, with a selection probability for any client of approximately 1 in 60.⁵ A multistage selection procedure was used. Attrition of programs or service delivery sites from the study required us to adjust the weights used to develop national estimates; those estimation procedures are documented in appendix C. As a result of these weight adjustments, the actual average weight is approximately 80. This report is based on a sample of about 20,000 new clients who enrolled for instructional services during the study's 12-month intake period. A rough approximation is 20,000 (new clients) \times 80 (weight per client) = 1,600,000. The actual process is considerably more complicated, but the yield is approximately the same.

Using the number of new clients reported as registering for instructional services at participating programs during the national evaluation's 12-month intake period, we estimate that 1.8 to 1.9 million new clients entered adult education programs in the year from mid-April 1991 through mid-April 1992. Using data included in analyses for this report we estimate the number of new clients at 1.64 million, but the inclusion of additional data will almost certainly increase the final estimate to more than 1.8 million new clients a year.

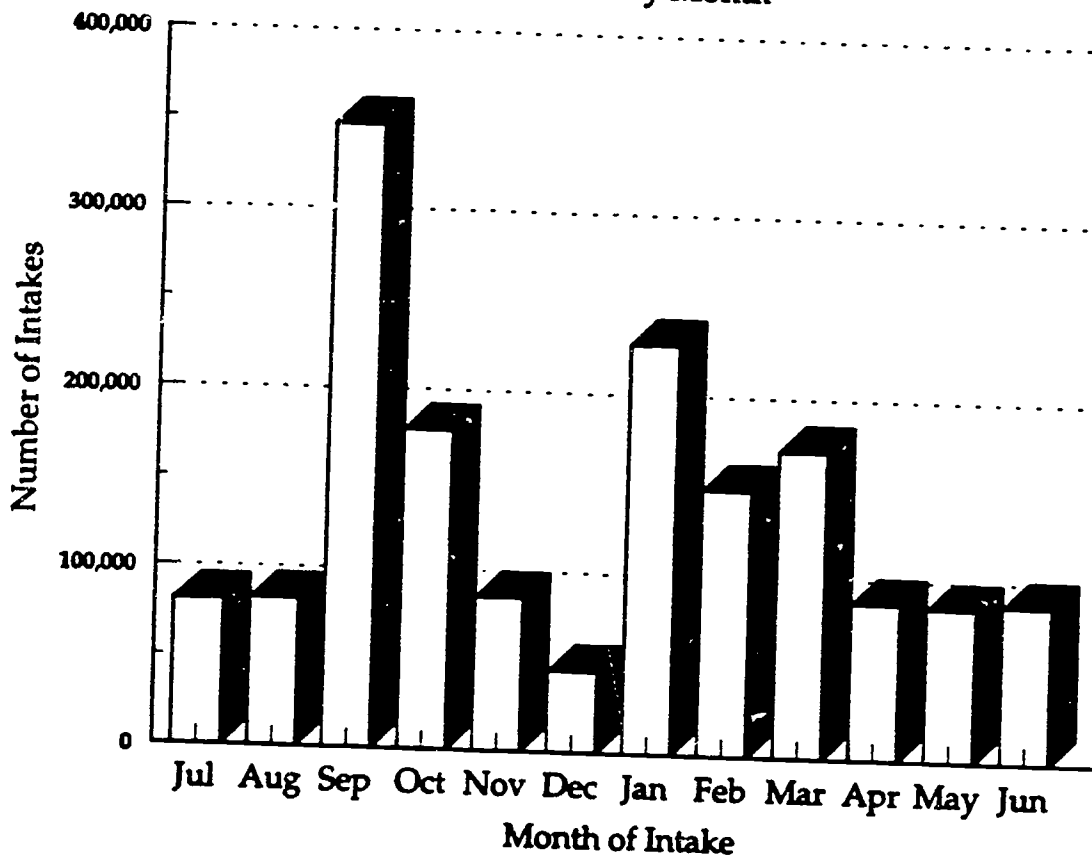
To draw conclusions about the flow of clients into and out of local programs and the average amounts of instruction that clients receive, we will need data from the study's entire 30-month intake and follow-up data collection period. However, the information currently available permits us to examine the pattern of client

⁵ Appendix A provides an overview of the sampling plan, and appendix C provides a technical explanation of the estimation procedures used in this study.

enrollments during the course of a year. Exhibit 2.1 shows the number of new clients by month of intake. Nearly one-third of all clients enter during September or October. The next large group of new clients enters in January. Far fewer new clients enter between April and August, largely because about a quarter of the local programs do not operate during the summer.

Many programs exert considerable effort to reach potential clients and help them through an intake and placement process,⁶ but enrolling clients and providing clients with regular instruction are not the same. Preliminary analyses indicate that 15 to 20 percent of clients who go through the intake process never attend any classes, and an additional 19 percent of all clients begin instruction but leave the program before receiving 12 instructional hours.

Exhibit 2.1
New Intakes By Month



⁶ See the *First Interim Report*, especially pp. 46-50, 59-61.

Estimating the Total Number of Clients in a Year

Going from our estimate of about 1.8 million new clients enrolled in a year to an estimate of all clients served that can be compared appropriately to counts available from the federal reporting system requires a series of assumptions. We need to: (1) exclude some clients from our estimate because such clients are not included in the federal numbers, (2) add some clients to our estimate because of the nature of our study design and its implementation, and (3) add an estimate of the number of clients who already were being served by the program when the study began. We made seven types of adjustments to our new client estimate in order to yield what we believe is a plausible estimate of all clients served. During the remainder of the study we will be collecting additional data and performing analyses that may refine our current estimate, but we believe the estimate presented here is reasonably sound.

1. Factors That Reduce Our Estimate of New Clients

- New client enrollees who never received instruction. We estimate that 15 to 20 percent of new enrollees who went through the intake process never attended any classes or received instruction. This represents about 300,000 clients nationally and reduces our initial estimate of the number of new clients who began instruction to about 1.5 million.
- New clients who received less than 12 hours of instruction. The federal reporting system asks for information from the states about clients who receive 12 hours or more of instruction. The Universe Survey sought information on the same population. We estimate that 19 percent of all new enrollees, about 340,000 clients, began instruction but left the program before receiving 12 instructional hours. Thus, our estimated number of new clients who received 12 hours of instruction or more is 1.16 million.

2. Factors That May Augment Our Estimate of New Clients

- Types of new clients who were systematically excluded from our sampling frame. The study design excluded clients in institutionalized settings such as prisons, hospitals, and homes for the retarded. Federal reported data indicate that about 12 percent of the total number of adult education enrollees receiving 12 or more hours a year were in such settings. This would add about 140,000 new clients, and thus increase our estimate to 1.3 million new clients served.

- Initiation of new local programs after the study began. The initial study sample of 150 local programs included 2 programs that ceased operation between the time of their selection and the start of data collection. These programs were not replaced, and we have estimated that 1 to 2 percent of local programs terminate operation each year. Discussions with selected state directors of adult education have led us to estimate that about the same number of new programs begin each year, and that, like the terminated programs in our initial sample, these tend to be programs serving a small number of clients (i.e., 100 or less). If we assume that 2 percent of the 2,800 local programs were excluded from the study because they began operation after the study began and that they serve about 100 clients a year, our estimated number of 1.3 million new clients would be increased by 6,000. The estimate of new clients served would become 1.31 million.
- Initiation of new instructional delivery sites after the study began. Our sample included all new, noninstitutionalized clients in 24 of the 128 participating local programs and probability samples of such clients in the rest. Where a sample was drawn, it is possible that the opening of new instructional delivery sites resulted in the exclusion of some clients from the sampling frame. Strictly speaking, clients included in the national evaluation were representative of clients nationally who were served by instructional delivery sites that were open in program years 1991 and 1992. If the proportion of clients served in such sites to all clients served was less in 1991 than in 1992, some clients who were served in 1992 were systematically excluded from the sample, and the estimated number of new clients served should be increased to reflect this situation. To estimate the extent to which this occurred, programs in which a sample of clients was drawn were contacted to determine whether new instructional sites were opened during the study intake year and, where sites were opened, to determine the proportion of the program's total enrollment served at those sites. Using this information, we estimate that 28,000 new clients were excluded from the study and that our estimated number of new clients should be increased to 1.34 million.
- Study implementation problems. It is possible that defects in the implementation of our study design contributed to a net undercount; in other words, some new clients were not included at the point of enrollment, and others who we believe received

little or no instructional services actually received 12 hours of instruction or more. The converse, of course, also may be true. What we are quite certain of is that the study did not proceed exactly as planned, and as a result, various types of sampling weight adjustments have been made and are reflected in the estimated number of 1.8 million new clients. These adjustments provide, for example, for the failure of 11 of the 139 programs originally included to provide any useful client-level data, the failure of staff in some sites to cooperate with the study, the reduction in the level of participation by some programs during the course of the study, and substantial modifications to the original sampling plan required by the participation in the study by one large program.

What may not be included, however, are provisions for problems of which we are unaware. To minimize the extent of this type of problem, we maintained regular and frequent written and telephone contact with all the participating programs, visited selected programs to review procedures, provided extra training in data collection procedures to local staff when there were changes in local personnel, and sent our own data collection personnel to several programs to help them overcome particular problems or better handle unanticipated situations. Despite these efforts, it would be naive to believe that we succeeded in learning about or appropriately adjusting for all of the field implementation problems that actually occurred. Consequently, we believe it would be appropriate to adjust our estimate of 1.34 million new clients by plus or minus 10 percent, thus resulting in an adjusted estimate of between 1.20 and 1.47 million new clients a year.

3. Adding in the Number of Clients Already Being Served

The study's client sample consisted of new clients, with a new client defined as a person who had not been active in a selected adult education program during the 12 months preceding enrollment. Clients who were already being served at the time the study began or who were re-enrolling after not having been served within the previous 12 months were not included in the study. To estimate the number of continuing clients, we made the following assumption and implemented the following procedure:

- Assumption. Entry and persistence rates are about the same from year to year. Estimates of the data base are based on the number of new clients who were identified during the study intake period (which consisted of 52 calendar weeks) and who completed at least 12 hours of instruction by study week 52. New clients for each week are treated as a separate cohort ($c=1,2,3,\dots,52$). Attendance data used are through week 104 of the study ($w=1,2,3,\dots,104$). Data collection for any client ends when the client has been in the study for 18 months (78 weeks). During this period the client may be active (receiving some instruction) or inactive (having completed instruction or dropped out). Client activity is tracked for the entire 18 months so that we can monitor each client's entry and exit from the program. Any particular client may become active again if he or she receives instruction prior to the end of the 78-week update window. Because the longitudinal phase of the study is not yet complete, each cohort after cohort 26 has had progressively less than the maximum possible of 78 weeks of data.⁷
- Estimation procedure. Our estimate of the number of clients already being served when the study began is based on the number of clients who enrolled and received 12 or more hours of instruction in program year 1 (program study weeks 1-52) and who also received at least 1 hour of instruction in program year 2. Under our assumption that entry and persistence rates are about the same each year, we assume that each client in our data base who persisted into the second year had a counterpart in the year prior to our data collection who is a match for the client we did observe. Thus, the sum of clients in each cohort in our study who were active for 12 hours or more in program year 1 and received some instruction in program year 2 provides an estimate of the number of clients continuing from one program year to the next.

We determined that about 40 percent of clients who entered during program year 1 (weeks 1-52) and had completed at least 12 hours of instruction during the

⁷ A reanalysis of the complete set of study data after the data collection process is complete in October 1993 will be based on a full 78 weeks of data for each of the 52 cohorts. Currently available persistence data for each of the 52 cohorts are presented in appendix F.

course of our data collection also were active during program year 2 (weeks 53-104). As shown in exhibit 2.2, using these data, we estimate that 659,000 to 955,000 clients already were enrolled in adult education programs when our study began. The larger number in the range (955,000) is based on the assumptions that there are 1.47 million new clients, that essentially no clients continue for more than 5 years, and that the rate of continuation is the same for years 3 through 5 as for years 1 to 2. Some 588,000 of this total had been enrolled during two program years and 367,000 for three program years or more. The smaller number (659,000) assumes 1.2 million new clients and 40 percent of all clients carried over from the first year prior to the start of the study, 30 percent from the second, 20 percent from the third, and 10 percent from the fourth year.

Adding these estimates of continuing clients to our estimate of between 1.2 and 1.47 million new clients results in a total of 1,859,000 to 2,425,000 clients being served by the adult education program during the year ending April 21, 1992. This period differs by 10 months from the period covered by the federal program year 1991, but this should not make a substantial difference.³

As reported in the national evaluation's first interim report, the Universe Survey indicated that the total number of clients served during the 1989-90 program year was 3.7 million. This is about the same number provided by the Department of Education's adult education reporting system for the program year ending June 30, 1991. The difference between these estimates and the range of estimates based on our sample of new clients is substantial. A full understanding of this apparent discrepancy would require a careful study of the state and federal reporting system, which lies outside the scope of our evaluation.

³ The federal program year begins July 1 and ends June 30 of the following year. Data from the program year ending in June 1992 are not available at the time of this writing.

Exhibit 2.2
High and Low Estimates of Number of Clients Served in the Study Year
April 22, 1991, to April 21, 1992

	High Estimate	Low Estimate
Clients who entered the program in the study's intake year (April 22, 1991, to April 21, 1992) and who satisfied the 12-hour requirement	1,470,000	1,200,000
Clients assumed to have entered the program 1 year earlier and to have been active during the intake year	588,000	482,000
Clients assumed to have entered the program 2 years prior to the intake year and to have been active during the intake year	235,000	145,000
Clients assumed to have entered the program 3 years prior to the intake year and to have been active during the intake year	94,000	29,000
Clients assumed to have entered the program 4 years prior to the intake year and to have been active during the intake year	38,000	3,000
Total Number of Clients Served	2,425,000	1,859,000

Note: Both high and low estimates are based on 1.8 million intakes, minus 36 percent for clients who did not attain the 12-hour threshold specified in the federal reporting instructions. In addition, both estimates include a 12 percent increase for institutionalized clients not included in our intake year sample, plus an additional 34,000 clients who might have been served by new programs or service delivery sites established after our sample was selected.

The high estimate differs from the low estimate by assuming a correction for a net undercount of 10 percent due to sample implementation problems and by assuming a uniform year-to-year persistence rate of 40 percent for the 4 years prior to the study's new client intake year. The low estimate corrects for an assumed overcount of 10 percent and postulates a pattern of declining year-to-year persistence rates of 40, 30, 20, and 10 percent for prior years 1-4.

Chapter 3 NEW CLIENT PROFILES AND PATTERNS

This chapter summarizes the characteristics of a nationally representative sample of clients who enrolled in federally supported local adult education programs over a period of 12 months. The findings reported in this chapter are based on a sample of 21,059 clients who completed a Client Intake Record form. With the application of sampling weights, the study sample accurately represents the new client population of the federal Adult Education Program, which we estimate to be 1.8 million.

New clients enrolling for English as a Second Language (ESL) services are different in many important ways from those enrolling in Adult Basic Education (ABE) and Adult Secondary Education (ASE), whereas new clients enrolling in ABE or ASE tend to be very similar. Consequently, we present separate national profiles for ESL clients and for ABE/ASE clients. Then we discuss the differences between ESL and ABE/ASE clients. The chapter concludes with a brief summary.

The sections of this chapter are organized according to the following seven descriptive categories, which progress from client origins to characteristics of the clients' current lives and finally to the contexts in which we find the clients participating in adult education:

1. National origin
2. Racial, ethnic, and language characteristics
3. Personal and family characteristics
4. Economic indicators
5. Prior education
6. Motivation for enrollment
7. Community and program contexts.

The methodological and statistical underpinnings of the findings reported in this chapter are explained in appendix D. Numerical findings reported in this chapter are national estimates based on weighted data, expressed as percentages rounded to whole numbers.

National Profile of the ESL Population

New clients enrolling in ESL constitute 42 percent of the 1-year intake cohort of new clients of the federal Adult Education Program population. This section describes the major characteristics of the ESL population.

National Origin

Almost all (97 percent) of the new adult education clients enrolling in ESL are foreign-born immigrants, half of whom arrived in the United States since the start of 1990.

Racial, Ethnic, and Language Characteristics

As one might expect with a population that is primarily foreign-born, racial/ethnic minority groups are heavily represented among new ESL clients. As can be seen in exhibit 3.1, Hispanics and Asians/Pacific Islanders, the two major ethnic groups, account for 89 percent of the ESL population in the federal Adult Education Program. The remaining 11 percent of ESL clients are spread among non-Hispanic whites (8 percent), non-Hispanic blacks (2 percent), and American Indians/Alaskan Natives (less than 1 percent).

Exhibit 3.1
Distribution of New ESL Clients by
Racial/Ethnic Composition
(N = 7,623)

Racial/Ethnic Group	New ESL Clients
American Indian/Alaskan Native	<1%
Asian/Pacific Islander	22
Black, non-Hispanic	2
Hispanic	67
White, non-Hispanic	8
Total	100%

Given the predominance of foreign-born racial/ethnic groups, it should come as no surprise that a language other than English is spoken in the home by 95 percent of the ESL population. And consistent with the major representation of Hispanics within this population, it should also come as no surprise that Spanish is the primary language spoken at home by most (69 percent) new ESL clients. In addition, 21 percent of ESL clients speak one of a variety of Asian languages (e.g., Chinese, Japanese, Vietnamese, or Korean).

Most new ESL clients who speak a language other than English at home report that they are able to read very well in their native language but not able to speak

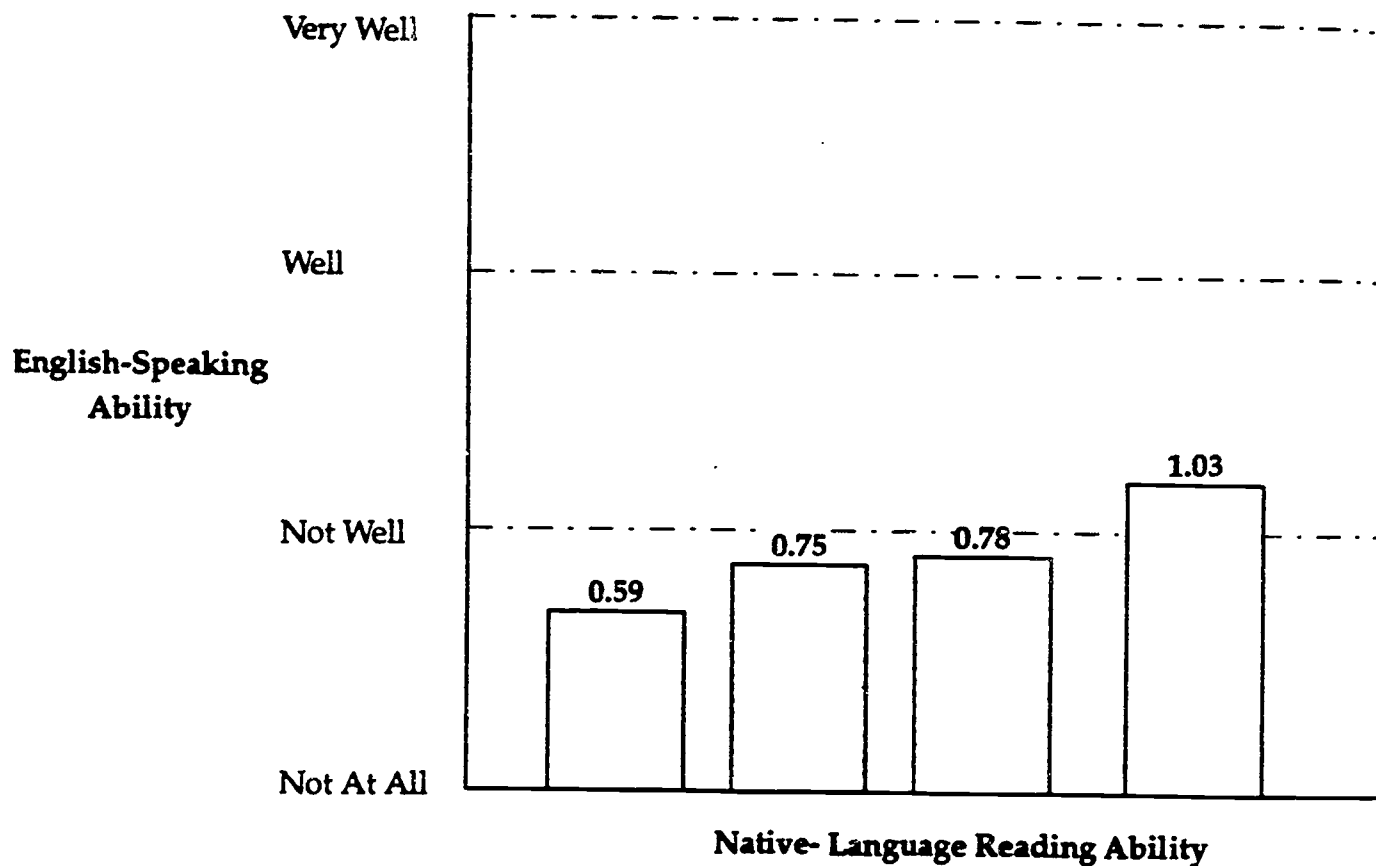
English well. The data displayed in exhibit 3.2 suggest that almost all new ESL clients are fairly literate in their own language (92 percent read well or very well), but fewer have a good grasp of the English language (86 percent speak English less than well).

Exhibit 3.2
Native-Language Reading Ability and English-Speaking Ability,
by Percent of New ESL Clients
Who Speak a Language Other Than English at Home
(N = 5,715)

Self-Rated Ability	Reading in Native Language	Speaking English
Not at all	1 %	24 %
Not well	7	62
Well	25	12
Very well	67	2
Total	100 %	100 %

The ability of ESL students to speak English appears to be directly related to their level of literacy in their own language. As shown in exhibit 3.3, English-speaking ability is lowest for those ESL clients who are not able to read in their native language, higher for those with some ability to read in their own language, and highest for those who read very well.

Exhibit 3.3
The Relationship Between Self-Reported Native Language Reading Ability
and English-Speaking Ability for New ESL Clients
Who Speak a Language Other Than English at Home
(N = 5,689)



Note: Values in chart are mean scores on a scale with "Not at all" = 0 and "Very well" = 3

Personal and Family Characteristics

Among new ESL clients, 54 percent are women and 46 percent are men. The adult education population as a whole is relatively young; new ESL clients with a median age of 28 tend to be among the older students. New ESL clients in our sample were as young as 16 and as old as 85, but most were between 19 and 43 years of age.⁹ (See exhibit 3.4.)

Exhibit 3.4
Distribution of New ESL Clients
by Age Group
(N = 6,39^a)

Age Group	New ESL Clients
16-21	22 %
22-30	40
31-45	27
Over 45	11
Total	100 %

Some 51 percent of ESL clients have never married and 63 percent have no children in the household under the age of 6. Among the 49 percent who have been married, 41 percent are currently married, while the remainder are separated (3 percent), divorced (3 percent), or widowed (1.5 percent). About one-third of those ESL clients with young children in the household report that they read with the children nearly every day.

As with the adult education population as a whole, renting is the typical living arrangement among ESL clients (68 percent). Temporarily living with someone else is also common (22 percent). Approximately 9 percent of ESL clients are homeowners, while about 1 percent have no regular place of residence.

Economic Indicators

At the time of enrollment in the federally assisted Adult Education Program, about 46 percent of ESL clients were employed, 18 percent were unemployed, and 36

^a Mean age is 31 years with a standard deviation of 12 years.

percent were not in the work force.¹⁰ Relatively few (14 percent) received any public assistance or welfare payments (e.g., Supplemental Security Income or Aid to Families with Dependent Children) in the 12 months prior to adult education enrollment. It is not known if new ESL clients qualify for public assistance, are aware of public assistance opportunities available to them, or choose not to participate in public assistance programs.

Prior Education

Overall, 53 percent of ESL clients have attained at least a high school education. As exhibit 3.5 shows, 30 percent have a high school diploma or equivalent (only 1 percent had a General Education Development, GED). Another 23 percent of ESL clients have completed a postsecondary education, usually a 4-year college degree program (9 percent) rather than a technical school (8 percent), community college (3 percent), other program (3 percent).

Exhibit 3.5
Educational Attainment of New ESL Clients
(N = 6,019)

Highest Level of Education Attained	New ESL Clients
No high school diploma or GED	47 %
High school diploma or GED	30
Postsecondary degree	23
Total	100 %

Motivation for Enrollment

At the time of enrollment, clients were asked whether they enrolled in the program primarily because they were required to by an employer, because they were required to by another program or agency, because they wanted to satisfy family or friends, or because they wanted to satisfy other personal or employment goals. Some 89 percent of new ESL clients said that they enrolled in the federal Adult Education Program for personal reasons rather than because of an externally imposed requirement. (Client motivation for enrolling in ESL is one of the issues discussed in chapter 4.)

¹⁰ People who are "unemployed" are those who are looking for work but not working, whereas people "not in the work force" are those who are neither working nor looking for work.

Community and Program Context

As indicated in exhibit 3.6, more than three-quarters of new ESL students attend adult education classes in programs sponsored by public school systems. Community colleges are the other dominant type of sponsor, providing adult education services to 15 percent of the ESL population.

Exhibit 3.6
Distribution of New ESL Clients
by Type of Agency Sponsoring the Program
(N = 7,296)

Type of Program Sponsor	New ESL Clients
Public school system	79 %
Community college	15
Private voluntary organization	4
Regional education service agency	1
Technical institute	1
Total	100 %

As exhibit 3.7 shows, ESL participation is largely an urban phenomenon, with more than three-quarters of the new ESL clients enrolling in programs located within large metropolitan areas.

Exhibit 3.7
Distribution of New ESL Clients by Type of Community
(N = 7,367)

Type of Community	Percent of ESL Clients
Large city in major metro area	44 %
Remainder of major metro area	35
Small metro area	15
Nonmetro area	6
Total	100 %

Note: Community designations are based on 1990 census information plus responses to the Universe Survey on type of community served (item 3). Major metropolitan areas are defined as those having a population of 1.5 million or more; large cities in major metro areas as those having a population of 500,000 or more; and small metro areas as any community located within a standard metropolitan area with a population of less than 1.5 million.

As can be seen in exhibit 3.8, ESL clients are located predominantly in the western states. California and Arizona account for more than three-quarters of the ESL clients in the West. Other major ESL states in the West are Utah (6 percent) and New Mexico and Washington (4 percent each). Some 72 percent of the new Hispanic ESL clients are located in the West, as are 57 percent of the Asian ESL clients and 90 percent of the American Indian clients.

Exhibit 3.8
Distribution of New ESL Clients
by Census Region
(N = 7,296)

Census Region	New ESL Clients
Northeast	8 %
North Central	10
South	11
West	71
Total	100 %

National Profile of the ABE/ASE Population¹¹

Twenty-three percent of new adult education clients enroll for ABE services and 34 percent enroll in ASE. Because the ABE and ASE client groups are very similar, they are often treated in this section as a single population.

National Origin and Mobility

The vast majority (91 percent) of ABE/ASE clients are U.S. citizens by birth. In contrast, the ESL population is 97 percent foreign-born (see exhibit 3.9).

Although 65 percent of the ABE/ASE clients have moved at least once in the past 5 years, 80 percent of these moves have been within the same state and county. In contrast, only 11 percent of the ESL population reported that they were living in the same state 5 years prior to enrolling in adult education (only 8 percent were in the same state and county).

¹¹ The estimates differ marginally from those published in *Bulletin No. 4* of the National Evaluation of Adult Education Programs due to data submitted subsequently by some of the local programs.

Exhibit 3.9
National Origin of New Clients by Instructional Program
(N = 16,198)

National Origin	ESL	ABE/ASE	Overall Average
Native-born	23 %	91 %	53 %
Foreign-born	97	9	47
Total	100 %	100 %	100 %

Racial, Ethnic, and Language Characteristics

Consistent with the racial/ethnic makeup of the United States, non-Hispanic whites are the dominant group in the ABE/ASE population. (See exhibit 3.10.) Blacks are the largest racial/ethnic minority group within the ABE/ASE population (22 percent); moreover, they are represented at twice their rate in the general population in the United States. The other racial/ethnic groups in the ABE/ASE population are roughly proportional to their distribution in the general population, with Hispanics accounting for 12 percent, American Indians/Alaskan Natives for 3 percent, and Asians/Pacific Islanders for 2 percent.

Exhibit 3.10
Distribution of New ABE/ASE Clients by Racial/Ethnic Composition
(N = 12,992)

Ethnic Group	ABE	ASE	Overall Average
American Indian/Alaskan Native	2 %	4 %	3 %
Asian/Pacific Islander	2	2	2
Black, non-Hispanic	28	18	22
Hispanic	12	11	12
White, non-Hispanic	56	64	61
Total	100 %	100 %	100 %

All together, the vast majority of Asians or Pacific Islanders (99 percent) and Hispanics (98 percent) who enrolled in the federal Adult Education Program are foreign-born immigrants. Most of the foreign-born Asians (92 percent) and most of

the foreign-born Hispanics (81 percent) who enrolled in adult education were placed in the ESL program, whereas most American Indians/Alaskan Natives, non-Hispanic whites, and non-Hispanic blacks are native-born (98 percent, 90 percent, and 89 percent, respectively) and constitute the predominant racial/ethnic groups within the ABE/ASE population. The differences in group membership from the standpoint of instructional placement are displayed in exhibit 3.11.

Exhibit 3.11
Racial/Ethnic Distribution of New Clients
by Type of Instructional Program
(N = 20,255)

Ethnic Group	ESL	ABE/ASE	Overall Average
American Indian/Alaskan Native	<1 %	3 %	2 %
Asian/Pacific Islander	22	2	10
Black, non-Hispanic	2	22	14
Hispanic	67	12	35
White, non-Hispanic	8	61	39
Total	100 %	100 %	100 %

As exhibit 3.12 shows, English is the language spoken at home for 82 percent of ABE/ASE clients. Where this is not the case, Spanish is the primary language spoken in the home. However, unlike the ESL population, ABE/ASE clients whose primary language is not English generally claim to be able to speak English well.

Exhibit 3.12
Differences in Language Spoken in the Home
for New ESL and ABE/ASE Clients
(N = 16,383)

Language Spoken in the Home	ESL	ABE/ASE	Overall Average
English	5 %	82 %	53 %
Other than English	95	18	47
Total	100 %	100 %	100 %

Personal and Family Characteristics

Like the ESL population, a majority of the new clients enrolling in ABE/ASE are women (61 percent); men constitute 39 percent of the ABE/ASE enrollment. With a median age of 25 years, the ABE/ASE population is somewhat younger than the ESL population. ABE/ASE clients in our sample ranged from 16 to 92 years of age, with most between 16 and 30.¹² On the average, ASE clients are younger than ABE clients (median ages of 23 and 27, respectively). Note that in exhibit 3.13, while the median age group (50th percentile) for the ABE/ASE population is 22-30, the most frequent age group is 16-21. The latter figure suggests that teens and young adults who drop out of the regular education system often turn fairly quickly to ABE and ASE services in order to complete high school.

Exhibit 3.13
Distribution of New ABE/ASE Clients
by Age Group
(N = 11,604)

Age Group	ABE	ASE	Overall Average
16 - 21	31 %	43 %	39 %
22 - 30	30	29	29
31 - 45	28	21	24
Over 45	11	7	8
Total	100 %	100 %	100 %

Some 52 percent of ABE/ASE clients have never married, and 30 percent are currently married. The remainder are separated (6 percent), divorced (10 percent), or widowed (2 percent). About 63 percent of the ABE/ASE clients have no children in the household under the age of 6; those clients with young children (37 percent) report that they read with their children about once a week on average.

As is true of the ESL population, although to a lesser extent, renting is the typical living arrangement among ABE/ASE clients (47 percent). Temporarily living with someone else is also common (27 percent). Of the new ABE/ASE clients, 26 percent are homeowners, and only 1 percent have no regular place of residence.

¹² Mean age is 28 years with a standard deviation of 12 years.

Economic Indicators

We estimate the employment rate of the ABE/ASE population to be 40 percent, 6 percentage points lower than that of the ESL population. The unemployment rate of the ABE/ASE population is estimated to be 27 percent, and 33 percent are judged not to be in the work force. The unemployment rate is nine percentage points higher, and the work force participation rate five points lower, for the ABE/ASE group than for the ESL population. With respect to receipt of public assistance or public welfare payments in the prior 12 months, the rate for the ABE/ASE population (36 percent) is about 2.5 times the rate for the ESL group (14 percent).

ASE clients have higher employment (41 vs. 36 percent) and lower welfare reciprocity (31 vs. 43 percent) rates than the clients in the ABE subgroup.

Prior Education

The typical ABE/ASE client dropped out of high school after completing 10 years of education. Approximately 14 percent of these clients however, have, attained at least a high school education (see exhibit 3.14).

Exhibit 3.14
Educational Attainment of New ABE/ASE Clients
(N = 11,516)

Highest Level of Education Attained	ABE	ASE	Overall Average
No high school diploma	87 %	92 %	89 %
High school diploma	10	6	8
Postsecondary degree	3	2	3
Total	100 %	100 %	100 %

Upon entering the federal adult education system, new ABE/ASE clients have less education than their ESL counterparts. As exhibit 3.15 shows, 53 percent of the ESL clients have attained at least a high school diploma, compared with only 11 percent for the ABE/ASE population. At the postsecondary level, 23 percent of the ESL clients have attained a degree, compared with only 3 percent for the ABE/ASE group.

Overall, about 33 percent of the new adult education clients have attained at least a high school diploma, with this level of education being much more characteristic of ESL clients than of ABE/ASE clients. Among the general population, the high school completion rate is approximately 77 percent.

Exhibit 3.15
Differences in Educational Achievement
by New ESL and ABE/ASE Clients
(N = 17,535)

Highest Level of Education	ESL	ABE/ASE	Overall Average
No diploma	47 %	89 %	67 %
High school diploma	30	8	21
Postsecondary degree	23	3	12
Total	100 %	100 %	100 %

Motivation for Enrollment

Eighty-five percent of the ABE/ASE students said that they enrolled in the federal Adult Education Program for personal reasons rather than because of an externally imposed requirement from an employer or from another program or agency. This is quite similar to the information obtained with respect to clients enrolled in ESL (90 percent). (Reasons for enrollment are discussed more fully in chapter 4.)

Community and Program Context

As is the case for the ESL population, public school systems and community colleges (in that order) are the main sponsors of adult education for ABE/ASE students. (See exhibit 3.16.)

Exhibit 3.16
Distribution of New ABE/ASE Clients
by Type of Sponsoring Agency
(N = 12,957)

Type of Sponsor	ABE	ASE	Overall Average
Public school system	53 %	66 %	61 %
Community college	31	20	24
Technical institute	5	6	6
Private voluntary organization	8	4	5
Regional education service agency	3	4	4
Total	100 %	100 %	100 %

A slight plurality of new ABE/ASE students live in nonmetropolitan areas (see exhibit 3.17); most ESL clients live in large metropolitan population centers.

Exhibit 3.17
Distribution of New ABE/ASE Clients
by Type of Community
(N = 13,227)

Type of Community	ABE	ASE	Overall Average
Large city in major metro area	11 %	6 %	8 %
Remainder of major metro area	14	20	18
Small metro area	36	36	36
Nonmetro area	39	38	38
Total	100 %	100 %	100 %

Exhibit 3.8 shows that the ESL population is concentrated in the West, where most Hispanics and Asians live. In contrast, ABE/ASE clients most frequently

participate in adult education programs located in the South and North Central census regions of the United States. (See exhibit 3.18.) In addition, non-Hispanic whites and non-Hispanic blacks are the two dominant racial/ethnic groups in the national ABE/ASE population. Nationally, blacks represent 22 percent of the ABE/ASE population, and 53 percent of the national ABE/ASE non-Hispanic black clients live in the South. Nevertheless, the predominant racial/ethnic group within the southern ABE/ASE population is non-Hispanic white (60 percent), as it is nationally. In the North Central region, non-Hispanic whites represent 72 percent of the ABE/ASE population, whereas non-Hispanic blacks account for 15 percent of the new ABE/ASE clients in the North Central region.

Exhibit 3.18
Distribution of New ABE/ASE Clients
by Census Region
(N = 12,957)

Census Region	ABE	ASE	Overall Average
Northeast	19 %	15 %	17 %
North Central	35	30	31
South	37	35	36
West	9	20	16
Total	100 %	100 %	100 %

Summary

This chapter has described the characteristics of new clients participating in the federal Adult Education Program from a national perspective, and has contrasted the substantial differences between participants in ESL and ABE/ASE. The key findings may be summarized as follows:

National Origin

- The ESL population is primarily foreign-born, whereas the ABE/ASE population is primarily native-born.

Racial/Ethnic, and Language Characteristics

- The dominant racial/ethnic groups in the ESL population are Hispanics (67 percent) and Asians/Pacific Islanders (22 percent), whereas the dominant racial groups in the ABE/ASE population are non-Hispanic whites (61 percent) and non-Hispanic blacks (22 percent).
- English is the primary language spoken within the ABE/ASE population, but English is not the language spoken in the home for the vast majority of the ESL population.
- For the ESL population, English-speaking ability tends to be higher for persons with higher levels of native-language reading ability.

Personal and Family Characteristics

- The ESL and ABE/ASE populations are more similar than different with respect to sex, age, marital status, and living arrangements. Overall, the majority of federal Adult Education Program clients are female, young, and unmarried; they also typically rent their place of residence.

Economic Indicators

- The employment rate for the ESL population (46 percent) is somewhat higher than the rate for the ABE/ASE population (40 percent).
- A somewhat greater proportion of ESL clients are not in the work force (38 percent) as compared with the ABE/ASE population (33 percent).
- The unemployment rate for the ABE/ASE population (27 percent) is substantially higher than that for the ESL population (18 percent).

- The proportion of ABE/ASE clients who received public assistance or public welfare in the 12 months prior to enrolling for instruction is more than double the proportion for the ESL population.

Prior Education

- New ESL clients generally enter the federal adult education system with higher educational attainment than ABE/ASE clients.
- The typical ESL client is a high school graduate; the typical ABE/ASE client has not graduated from high school.

Motivation for Enrollment

- The vast majority of new clients enroll in the federal Adult Education Program for personal reasons rather than because of externally imposed requirements.

Community and Program Context

- Most clients are enrolled in programs administered by public school systems.
- ESL clients live primarily in major metropolitan areas. The ABE/ASE population lives largely in small metropolitan and nonmetropolitan areas.
- ESL clients are largely concentrated in the western states, notably California and Arizona. ABE/ASE clients primarily reside in the North Central and South census regions.

Chapter 4

SPECIAL ISSUES RELATED TO THE CHARACTERISTICS OF NEW CLIENTS

Policy Questions Considered

This chapter presents findings with respect to the following questions of interest to policymakers and educators:

1. Are there differences in the characteristics of new clients according to the --
 - type of agency sponsoring the adult education program,
 - client age group, or
 - type of community in which clients live?

The issue of whether certain types of sponsoring agencies are better able than others to attract clients who most need adult education services has long been debated. There also has been long-standing concern about the extent to which clients in different age cohorts might have substantially different characteristics and needs. More recently there has been interest in identifying differences between urban and rural program populations, and in investigating the extent to which the basic characteristics of clients in large city programs are different from those in smaller communities and nonmetropolitan areas. As is discussed in this chapter, we found few differences associated with type of sponsoring agency or client age. The striking differences in client characteristics are related to the type of community in which clients live, with the most notable being differences in national origin, ethnicity, and language spoken at home of clients in large metropolitan and nonmetropolitan areas.

2. To what extent are clients placed in appropriate levels of instruction?

Reports from local programs to state and federal funding sources contain information on the number of clients in each of the following instructional categories: beginning ABE, beginning ESL, intermediate ABE, intermediate ESL, advanced ESL, and adult secondary.¹³ The appropriateness of using data from these reports as indicators of the appropriate targeting of program services is a matter of some discussion among members of the adult education community, and for this reason we have conducted some preliminary analyses relating data on initial program placement

¹³ These categories are used, for example, in the Federal Annual Performance Report for the Adult Education State-Administered Program.

to a sample of clients' pretest scores and prior schooling. The results of these analyses indicate that clients are placed at levels lower than their test scores indicate. The data also indicate that although the program labels do not accurately reflect the educational levels generally associated with them, clients are being differentially grouped in an appropriate way.

3. To what extent does the program serve the clients with the greatest need?

The Adult Education Act limits the proportion of federal funds that may be spent on ASE programs to no more than 20 percent of the state's allocation, and there has been concern at the federal level for many years that the program may not be serving the people who are most in need. For this reason, we have analyzed data on clients' prior education and related that data to information from the 1990 census on the program's target population. These analyses indicate that the program is serving a population in need of adult education services and that an appropriate cross section of the target population is being served.

4. Why do new clients enroll in adult education?

A major theme in adult education research since the program began has been client motivation. Beliefs regarding who "needs" adult education services and why clients enroll influence decisions on program funding and design, as well as program outreach, instruction, and retention activities. As an extensive body of literature makes clear, determining client motivation is complex and problematic. In this chapter we present analyses of data pertaining to this issue obtained from clients at the time they began instruction. The information we obtained was not illuminating. Most of the clients rated more than half of the potential reasons for their taking instruction as "very important." The most we can conclude is that clients generally have multiple motives for seeking adult education services. It may well be that intake forms administered at the start of a client's adult education experience are not the best way of discovering motives for participation.

Differences in Client Characteristics

Differences Related to Type of Sponsoring Agency

Local adult education programs receive federal financial support in accordance with plans and procedures developed and implemented by their state. Some states (e.g., North Carolina and Iowa) provide for funding only to community colleges. Other states (e.g., New York and California) fund a variety of different types of organizations. In still others (e.g., Virginia), funding is provided to only one local service provider per county, which effectively but not technically limits direct awards to public institutions such as school districts and colleges.

The national evaluation's first interim report, which was based on aggregate program records, noted that most adult education programs were found to be administered by local education agencies (LEAs) (68 percent) and community colleges (17 percent). The remainder of local adult education programs are administered by private voluntary organizations, technical institutes, and regional education service agencies. As exhibit 4.1 shows, these earlier findings are quite similar to those derived from the client intake records.

Exhibit 4.1
Distribution of New Clients by Type of Sponsoring Agency
and Program Component
(N = 20,718)

Type of Sponsor	ESL	ABE	ASE	Average
Local education agency (LEA)	79 %	53 %	66 %	69 %
Community college	15	31	20	20
Private voluntary organization	4	8	4	4
Technical institute	1	3	4	3
Regional education service agency	1	5	6	4
Total	100 %	100 %	100 %	100 %

People in the adult education field have long debated whether different sponsoring agencies attract clients with different personal characteristics. With the exception of place of birth, the answer is, essentially, no. Regardless of program sponsorship, new clients are predominantly:

- Native-born (46 percent in programs sponsored by LEAs; 65 percent, by community colleges; and 69 percent by others);
- Female (58 percent in programs sponsored by LEAs and 58 percent by community colleges; 61 percent by others);
- Relatively young (median age 26 years in programs sponsored by LEAs; 25 years by community colleges; 26 years by others);
- Not married (65 percent in programs sponsored by LEAs; 66 percent by community colleges; 65 percent by others); and

- Enrolled for personal reasons other than because of an agency or employer requirement (89 percent in programs sponsored by LEAs; 89 percent by community colleges; 88 percent by others).

Regardless of the type of program sponsorship, new clients also typically speak English in the home (59 to 63 percent), rent their place of residence (52 to 56 percent), and do not have young children in their household under the age of 6 (62 to 64 percent).

Although, as shown in exhibit 4.2, minorities are somewhat underrepresented in programs sponsored by "other agencies," the majority of the technical institutes, regional education service agencies, and private voluntary agencies in our sample were located in predominantly white, non-Hispanic communities.

Exhibit 4.2
Distribution of New Clients by Type of Sponsoring Agency
and Race/Ethnicity
(N = 20,373)

Type of Sponsoring Agency	American Indian/Alaskan Native	Asian Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic	Total
Local education agency (LEA)	3 %	12 %	14 %	39 %	32 %	100 %
Community college	1	8	14	31	46	100
Other	1	5	9	22	63	100

Indicators of economic status and prior education also show that new clients are similar, regardless of program sponsorship. The typical client in programs sponsored by public schools, community colleges, and other types of organizations is employed, is not on welfare, has completed 10 years of school, and is a high school dropout. More specifically:

- 41 to 45 percent are employed (41 percent in programs sponsored by LEAs; 45 percent by community colleges; 41 percent by other);
- 31 to 35 percent are not in the labor force (35 percent in programs sponsored by LEAs; 31 percent by community colleges; 35 percent by other);
- 24 to 26 percent are unemployed (25 percent in programs sponsored by LEAs; 24 percent by community colleges; 26 percent by other);
- 25 to 31 percent are on welfare (25 percent in programs sponsored by LEAs; 27 percent by community colleges; and 31 percent by other); and
- 68 to 80 percent had no high school diploma (68 percent in programs sponsored by LEAs; 72 percent by community colleges; and 80 percent by other).

As an indicator of clients' proficiency in basic academic skills at the time instruction began, standardized achievement tests were administered to clients. Although achievement data were collected from service providers through a number of different instruments, in this chapter we discuss results only from the Comprehensive Adult Student Assessment System (CASAS) and from the Test of Adult Basic Education (TABE), because these two measures provided the largest test samples and are reasonably representative of the study's client sample.¹⁴

As exhibit 4.3 shows, the average pretest scores of clients beginning instruction are consistently lower for clients in local education agencies than for clients in community colleges, with the difference being greatest for clients receiving ABE and ESL instruction entering programs operated by various sponsors. Regardless of type of sponsor, the CASAS achievement tests administered at the time clients began

¹⁴ The CASAS achievement test is a criterion-referenced measure of basic and life skills considered to be important to adult education students from beginning ESL through ASE placement levels; the sample size obtained for the CASAS achievement test in the national evaluation was 4,643 cases.

The TABE is a norm-referenced measure of achievement in reading, mathematics, language, and spelling. The content of the TABE was derived from basic skills curricula commonly found in adult education classes. In the national evaluation, the sample size obtained from the TABE was 3,994 cases.

instruction indicate that the typical ESL client should be placed at an intermediate level of instruction. Both the CASAS and TABE data indicate that the typical client in ABE or ASE instruction scores at a high school level, that is, at a level normally associated with ASE, and that this is the case regardless of type of sponsor. CASAS publications indicate that scale scores of 200 and below are appropriate for placement into beginning ESL and 225 for beginning ASE placement. (See appendix F for a more complete interpretation of CASAS scale scores.) For tests using grade-equivalent scores such as the TABE, adult education professionals use grade 4 and below for beginning ABE placement, grades 5-8 for intermediate ABE placement, and grades 9-12 for ASE placement.

Exhibit 4.3
Mean Pretest Achievement Scores of New Clients
by Program Sponsorship

Indicator	Local Public Education Agency	Community College	Other Type of Sponsor	Average for Adult Education Population
CASAS (ESL) (N = 1,850) scale score	207	213	201	209
CASAS (ABE) (N = 1,100) scale score	226	231	228	228
CASAS (ASE) (N = 1,655) scale score	234	236	229	234
TABE (ABE) (N = 1,554) grade-equivalent score	7.6	8.3	7.1	7.6
TABE (ASE) (N = 2,348) grade-equivalent score	10.0	10.3	11.3	10.3

Differences Related to Client Age

To capture potentially important differences in need and motivation among clients of different ages, the study's technical advisory panel suggested a focus on the following four age groups:

- Ages 16-21 (the youth group)
- Ages 22-30 (the young adult group)
- Ages 31-45 (the middle age group)
- Age 45 and older (the older client group).

The panel views important differences in client characteristics and needs which should be taken into consideration in program design and which may be related to program persistence and achievement outcomes. As the analyses presented below shows, there are indeed some differences among the age groups, but most of them are neither surprising nor profound.

Exhibit 4.4 indicates that the youth and young adult groups each account for approximately one-third of the federal Adult Education Program population. Only 9 percent of the new client population consists of persons in the older client group. Thus, the majority of new clients of the federal Adult Education Program are under 31 years of age.

Exhibit 4.4
Distribution of New Clients
by Age Group and Program Component
(N = 18,357)

Age Group	ESL	ABE	ASE	Average
Youth group (ages 16-21)	22 %	31 %	43 %	31 %
Young adult group (ages 22-30)	40	30	29	35
Middle age group (ages 31-45)	27	28	21	25
Older client group (over age 45)	11	11	7	9
Total	100 %	100 %	100 %	100 %

Exhibit 4.5 shows that although the majority of new clients at each level are native-born, the proportion of native-born clients is highest in the youth group. Similarly, although the majority of new clients are women, the proportion of female clients tends to increase with each age level.

Exhibit 4.5
Distribution of New Clients by Personal and Family Characteristics
and Age Group
(N = 16,747)

Characteristic	Youth Group (ages 16-21)	Young Adult Group (ages 22-30)	Middle Age Group (ages 31-45)	Older Client Group (over age 45)	Adult Education Population Mean
National origin	Native-born (73%)	Native-born (51%)	Native-born (53%)	Native-born (54%)	Native-born (59%)
Sex	Female (51%)	Female (58%)	Female (65%)	Female (65%)	Female (58%)
Language other than English spoken at home	English (64%)	Other (53%)	Other (51%)	Other (52%)	English (53%)
Young children	None (64%)	None (52%)	None (68%)	None (85%)	None (63%)

As shown in exhibit 4.6, the largest racial/ethnic group in all but one of the age categories is white non-Hispanic.

Exhibit 4.6
Distribution of New Clients by Age Group
and Race/Ethnicity
(N = 16,747)

Age Group	American Indian/Alaskan Native	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic	Total
Youth group (ages 16-21)	2 %	5 %	15 %	31 %	47 %	100 %
Young adult group (ages 22-30)	2	12	12	41	33	100
Middle age group (ages 31-45)	2	13	15	34	36	100
Older client group (over age 45)	2	17	17	29	35	100

With respect to language use, English is the primary language spoken in the home only within the youngest group. As would be expected, self-reported English-language ability is higher for clients born in the United States than for the foreign-born clients. Also, foreign-born clients who speak a language other than English at home, regardless of age group, report they do not speak English well, while the self-reported ability of native-born clients whose home language is other than English declines somewhat with age.

Analyses by age category also indicate the following:

- The proportion of clients who currently are married increases with age (youth, 9 percent; young adult, 35 percent; middle age, 56 percent; older, 58 percent).
- Living arrangements become more stable with age. Members of the youngest group are most frequently (48 percent) in a temporary living arrangement; this is true for 31 percent or less of the other three groups. Renting is the most frequent arrangement for the three older groups (youth, 47 percent; young adult, 67 percent; middle age, 63 percent; older, 52 percent), and homeownership is most common for the

members of the oldest group of clients (youth, 14 percent; young adult, 10 percent; middle age, 22 percent; older, 33 percent).

- Almost all clients are enrolled for personal reasons rather than because they were required to do so by their employer or another program or agency (between 88 and 91 percent).

With respect to economic indicators, between 38 and 44 percent of new clients in all age categories are employed while receiving adult education. As exhibit 4.7 shows, this is the most common employment status for the three younger age groups. Also, regardless of age group, the typical new client has not received public assistance or welfare payments in the 12 months prior to enrolling in adult education (youth, 76 percent; young adult, 71 percent; middle age, 69 percent; older, 73 percent).

Exhibit 4.7
Distribution of New Clients by Employment Status
and Age Group
(N = 16,747)

Indicator	Youth Group (ages 16-21)	Young Adult Group (ages 22-30)	Middle Age Group (ages 31-45)	Older Client Group (over age 45)	Average for Adult Education Population
Employed	37 %	46 %	44 %	40 %	42 %
Unemployed	32	21	22	19	25
Not in work force	31	33	34	41	33
Total	100 %	100 %	100 %	100 %	100 %

With respect to education, as exhibit 4.8 shows, regardless of age group, most clients (between 65 and 86 percent) do not have a high school diploma and, on average, have completed only 9 or 10 years of school. As the exhibit also shows, members of the older ABE and ESL client groups score lower than younger students on both the CASAS achievement test and the TABE. Although ESL students enter adult education with lower test scores than ABE/ASE students, the scores may reflect English-language ability more than basic academic or life skills because both the CASAS achievement test and the TABE were administered in English.

Exhibit 4.8
Distribution of New Clients by Education Characteristics
and Age Groups
(N = 16,747)

Indicator	Youth Group (ages 16-21)	Young Adult Group (ages 22-30)	Middle Age Group (ages 31-45)	Older Client Group (Over age 45)	Average for Adult Education Population
Median years of schooling	10	10	10	9	10
Percentage without a high school diploma	86	66	65	71	73
CASAS (ESL) mean scale score	206	210	210	201	207
CASAS (ABE) mean scale score	231	231	228	219	228
CASAS (ASE) mean scale score	235	234	235	235	235
TABE (ABE) mean scale score	7.7	7.7	7.6	6.8	7.6
TABE (ASE) mean grade equivalent	10.2	10.3	10.4	10.1	10.3

Differences Related to Type of Community

Conventional wisdom among many adult educators is that the clients served by programs in large cities and metropolitan areas are more diverse and in greater need than clients living in smaller communities. To investigate the extent to which clients in large city programs differ from clients in smaller communities and nonmetropolitan areas, we categorized programs and their clients in terms of four community designations developed from the 1990 census on the basis of the responses by program staff to the Universe Survey regarding the type of community they served.

As exhibit 4.9 shows, the two major metropolitan area subcategories account for 48 percent of the adult education client population. As also shown, most ESL clients are located in major metropolitan areas (79 percent), whereas most ABE and ASE clients are enrolled in programs located in small metropolitan or nonmetropolitan areas.

Exhibit 4.9
Distribution of New Clients
by Type of Community and Program Component
(N = 20,418)

Type of Community	ESL	ABE	ASE	Average
Large city in major metropolitan area	44 %	12 %	6 %	23 %
Remainder of major metropolitan area	35	14	20	25
Small metropolitan area	15	36	36	27
Nonmetropolitan area	6	38	38	25
Total	100 %	100 %	100 %	100 %

Note: major metropolitan area was defined as having a population of 1.5 million or more; large cities in major metropolitan areas as having a population of 500,000 or more; and small metropolitan areas as any community located within a standard metropolitan area with a population of less than 1.5 million.

From a different perspective, analysis of these data also shows that:

- 80 percent of all clients in large cities in major metro areas are enrolled in ESL;
- 59 percent of all clients in programs located in the remainder of large metro areas are enrolled in ESL;
- 77 percent of all clients in small metro areas are enrolled in ABE or ASE; and
- 90 percent of all clients in nonmetropolitan areas are in ABE or ASE.

Essentially, the major characteristics that differentiate clients along community lines are national origin, ethnicity, and language spoken at home. Personal and family characteristics that are similar for clients across community types are sex, age, marital status, living arrangement, and the absence of young children. Differences in national origin, ethnicity, and language are as follows:

- Foreign-born clients tend to live in major metropolitan areas; native-born clients are found largely in small metropolitan or nonmetropolitan areas.

- New clients in major metropolitan areas are predominantly Hispanic, whereas the typical new client in small metropolitan and nonmetropolitan areas is a non-Hispanic white.
- In major metropolitan areas, clients tend to speak a language other than English in the home, whereas in small metropolitan and nonmetropolitan areas clients tend to speak English in the home.

Client differences in race/ethnicity, as related to type of community, are summarized in exhibit 4.10. As can be seen, Hispanic and Asian clients tend to live in the major metropolitan areas, and non-Hispanic white and American Indian clients are concentrated in nonmetropolitan and small metropolitan areas. Non-Hispanic black clients, however, are about equally distributed across type of community.

Exhibit 4.10
Distribution of New Clients by Race/Ethnicity and Type of Community
(N = 20,711)

Race/ Ethnicity	Large City in Major Metro Area	Remainder of Major Metro Area	Small Metro Area	Nonmetro Area	Average for Ethnicity
American Indian	<1 %	1 %	2 %	6 %	2 %
Asian/Pacific Islander	13	15	9	4	10
Black, non- Hispanic	9	15	16	15	14
Hispanic	68	49	18	10	36
White, non- Hispanic	9	20	56	66	38
Average for Type of Community	23 %	25 %	27 %	25 %	100 %

Exhibit 4.11 summarizes our findings on the distribution of new clients by census region and type of community. As the exhibit shows, type of communities in which new clients live vary substantially by region:

- New clients living in the West tend to be enrolled in adult education programs located in cities within major metropolitan areas.

- New clients living in the South are most likely to be enrolled in adult education programs located in nonmetropolitan areas. Southern clients are least likely to be enrolled in programs located in major metropolitan areas.
- New clients living in the North Central region are most likely to be enrolled in adult education programs located in nonmetropolitan areas. North Central clients are least likely to be enrolled in programs located in small cities within major metropolitan areas.
- New clients living in the Northeast are most likely to be enrolled in adult education programs located in small metropolitan areas. Clients in the Northeast are least likely to be enrolled in programs located in nonmetropolitan areas.

Exhibit 4.11
Distribution of New Clients by Census Region and Type of Community
(N = 20,718)

Census Region	Large City in Major Metro Area	Remainder of Major Metro Area	Small Metro Area	Nonmetro Area	Total Region
Northeast	15 %	26 %	58 %	1 %	14 %
North Central	18	10	30	41	22
South	2	24	31	44	25
West	43	34	12	11	39
U.S. Average	23 %	25 %	27 %	25 %	100 %

Economic and education indicators show few substantial differences in client characteristics related to type of community. Regardless of the type of community clients live in, most new clients have attended school for about 10 years. The employment rate varies little in major metropolitan and nonmetropolitan areas (from 42 percent to 45 percent). In small metropolitan areas, however, fewer new clients tend to be employed or not in the work force (38 percent). The highest rates of unemployment (27 percent) and receipt of public assistance (34 percent) are in nonmetropolitan areas. Furthermore, as shown in exhibit 4.12, the standardized test data indicate relatively high ability and instructional placement levels, regardless of community. Although test scores for ABE clients in communities surrounding large cities are lower than in other communities, relationships between type of community

and ability, as measured by test scores, are not consistent, and no conclusions about the instructional needs of new clients can be made on the basis of type of community.

Exhibit 4.12
Mean Pretest Achievement Scores of New Clients by
Type of Community

Indicator	Large City in Major Metro Area	Remainder of Major Metro Area	Small Metro Area	Nonmetro Area	Average for Adult Education Population
CASAS (ESL) scale score (N=1,850)	206	208	211	211	207
CASAS (ABE) scale score (N=1,100)	231	225	228	228	229
CASAS (ASE) scale score (N=1,655)	236	235	235	234	235
TABE (ABE) grade-equivalent score (N=1,544)	8.1	6.0	7.2	8.3	7.6
TABE (ASE) grade-equivalent score (N=2,348)	9.6	10.0	10.5	10.3	10.3

The Appropriateness of Instructional Placement

To examine the extent to which clients are appropriately placed in instructional services, we examined pretest scores for clients enrolled in the various levels of ESL and ABE/ASE instruction. Although pretest scores are only one of several factors that programs use in making placement decisions, their analysis provides a basis for comparisons across programs. Our assessment of ABE and ASE placement was based on comparing the actual placement of new ABE and ASE clients with their ability levels as measured by the CASAS and TABE tests. Our assessment of ESL placement was limited to data from the CASAS test because insufficient TABE data were obtained from ESL clients.

According to CASAS publications (see appendix E), a scale score of 181-200 indicates an ability level appropriate for ESL beginning; scores of 201-215 are appropriate for ESL intermediate; and scores of 216-224 are appropriate for ESL advanced. For ABE/ASE, CASAS materials state that scores of 214 and below indicate ability levels appropriate for ABE beginning; scores of 215-224 are appropriate for ABE intermediate; and scores of 225 and above are appropriate for ASE/GED. In the grade equivalent terms

of the TABE, a score of below 6th grade is generally associated with ABE beginning, 6th grade through 8th grade with ABE intermediate, and 9th grade and above with ASE.

Exhibit 4.13 presents the expected and actual placement ratios for the full sample of clients with data for both pretest and placement levels. As the exhibit shows, the actual placement of new ESL clients in the CASAS testing sample is quite different from what is indicated by the CASAS test materials. Rather than being evenly spread over the three levels, clients are heavily concentrated in the beginning level. For the ABE and ASE samples, the data suggest that there is a tendency for clients in the CASAS subsample to be placed at an instructional level lower than their ability level would indicate (i.e., 40 percent placed in ABE rather than the 22 percent expected).

To look at this issue from a slightly different perspective, we assigned each client with a pretest score to an "appropriately placed" or "inappropriately placed" category on the basis of the placement criteria described above. For example, ABE/ASE clients who were "appropriately placed" at the ABE beginning level had scores of 214 or below on the CASAS or 6th grade or below on the TABE. As exhibit 4.14 shows, less than half of the clients in all but the ASE/GED level are placed as their test scores would indicate.¹⁵

Exhibit 4.14 also shows the mean scores on the CASAS and TABE for new clients grouped by their initial program placement. As shown, the mean scores for new ESL clients in our study sample fall above the expected ranges. The same is true for the mean scores for ABE/ASE clients, with the scores for clients in the CASAS subsample being considerably higher than expected.

From the data presented in exhibits 4.13 and 4.14, we conclude that clients are being placed at levels lower than test scores indicate. From the data in exhibit 4.14 it also is of interest to note that there is a clear and appropriate difference in the mean pretest scores for each of the instructional groups. As the ESL and ABE placement levels increased, so did the mean scores.¹⁶ This suggests that although the program labels may not accurately reflect the educational levels generally associated with them, clients are being differentially grouped in an appropriate way.

¹⁵ In every level except ASE, the mean scores of those clients in the "inappropriately placed" category are higher than and statistically significantly different from the scores of the other clients in their respective placement group.

¹⁶ An analysis of variance of the mean scores indicates that there is a statistically significant difference between each of the ESL groups and between the two ABE groups; the difference between ABE Intermediate and ASE for the CASAS subsample is not statistically significant.

Exhibit 4.13
Expected and Actual Placement for Clients Based on Test Scores
 (N = 1,850 for CASAS ESL; 2,755 for CASAS ABE/ASE; 3,902 for TABE)

Placement Level	Percentage of CASAS Sub-Sample		Percentage of TABE Sub-Sample	
	Expected	Actual	Expected	Actual
ESL Beginning	31%	69%	--	--
ESL Intermediate	36	18	--	--
ESL Advanced	33	13	--	--
ABE-1	10%	11%	8%	17%
ABE-2	12	29	38	23
ASE	78	60	54	60

Exhibit 4.14
Appropriateness of New Clients Placement
Mean Pre-Test scores by Program Placement Level*
 (Ns range from 261-2,346, depending on the cell)

Initial Program Placement	Expected Scores		Percent Appropriately Placed	Mean CASAS Scale Score	Mean TABE Grade-Equivalent Score
	CASAS	TABE			
ESL Beginning	181-200	--	44%	202.5	--
ESL Intermediate	201-215	--	29	217.5	--
ESL Advanced	216-224	--	28	226.9	--
ABE Beginning	214 or below	6.0 or below	38	223.2	6.6
ABE Intermediate	215-224	6.1-8.9	35	231.1	8.5
ASE/GED	225 or above	9.0 or above	74	234.6	10.3

*Appropriate placement is defined as having a pretest score falling within the "Expected Scores" range for the level at which clients began receiving services.

The Extent to Which the Neediest Are Served

For many years researchers in the adult education field have been concerned about the extent to which programs were "creaming" or selecting clients who are the easiest to serve, rather than those who might be considered "most in need."¹⁷ This concern is again raised by the intake data collected as part of this national evaluation, which show that 60 percent of newly enrolled non-ESL clients were placed in ASE, while 40 percent were placed in ABE.

As a basis for examining this issue, exhibit 4.15 provides a comparison of the past educational experience of members of the Adult Education Program's target population and the program's population of new clients.¹⁸ As the exhibit shows, persons with 8 years or less of school are underrepresented in the client population (25 percent of new clients versus 40 percent in the target population).

The age distributions of the target population and client population differ substantially, however. For example, persons 60 years or older with 8 or fewer years of school constitute approximately 55 percent of the target population but only 2 percent of the clients being served. To control for the major differences in age, exhibit 4.16 provides a comparison of the target and client populations for each of four age cohorts defined by available data from the 1990 census.

Comparing the data in exhibits 4.15 and 4.16 shows that while there are some sizeable differences when comparing the overall target population and client population, the differences are small when comparisons are made within each age group. From an overall perspective, for example, members of the target population with 8 years or less of school appear to be underrepresented in the client population (40 percent versus 25 percent). The program, however, tends to serve the relatively younger groups—nearly 91 percent of the program clients without a high school diploma are in the 16-24 and 25-44 age categories. In these groups the extent of underrepresentation is very slight (only 1 and 2 percentage points).

¹⁷For example, see Mezirow, Darkenwald, and Knox (1975, Chapter 8).

¹⁸ The target population for ABE and ASE is defined as those individuals who are 16 years of age and older, who are out-of-school, and who have not received a high school diploma or GED certificate. Data on the target population are from: *Adult Education Target Population: National and Area Totals*; prepared from the 5 percent Public Use Microdata Samples (PUMS) from the U.S. Census by Judy Thorne and Julie Fleenor, Research Triangle Institute (July, 1993).

Exhibit 4.15
Comparison of Past Educational Experience of the Adult Education Program Target Population and New Client Population

Years of School Completed	Target Population	New Clients
8 or less	40 %	25 %
9	13	18
10	17	19
11	15	18
12	15	20
Total	100 %	100 %

Note: The "target population" is defined as individuals aged 16 years and older who have not attained a high school diploma or equivalent and are not currently enrolled in school. To be more equivalent to the target population data, the adult education client population represented in this table excludes ABE/ASE clients (about 6 percent of all clients) with a high school diploma or equivalent. The Adult Education Act permits serving clients with a high school diploma if they meet other criteria of need.

Exhibit 4.16
Comparison of Past Educational Experience of Adult Education Program Target Population and of the Program's New Client Population

Years of School Completed	16-24 years		25-44 years		45-59 years		60 years and older	
	Target Pop.	New Clients	Target Pop.	New Clients	Target Pop.	New Clients	Target Pop.	New Clients
8 or less	20 %	19 %	28 %	26%	38 %	42 %	53 %	53 %
9	15	20	13	17	13	14	12	14
10	22	22	19	17	18	14	14	8
11	23	23	19	16	16	10	10	9
12 (no diploma)	20	16	21	24	15	20	11	16
Total	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

Note: The "target population" is defined as individuals aged 16 years and older who have not attained a high school diploma or equivalent and are not currently enrolled in school. To be more equivalent to the target population data, the adult education client population represented in this table excludes ABE/ASE clients (about 6 percent of all clients) with a high school diploma or equivalent. The Adult Education Act permits serving clients with a high school diploma if they meet other criteria of need.

To examine the issue further for clients receiving ESL instruction, we compared the English-speaking ability at program entry of new ESL clients to the English-speaking ability of the adult population identified by the census as speaking a language other than English at home. Exhibit 4.17 shows the English-speaking ability of ESL clients in our study sample as compared to the total ESL population. The measure of English-speaking ability examined was a report made on a four point scale ("not at all," "not well," "well," and "very well"), which was included in the census and in the study's client intake form. As shown on exhibit 4.17, ESL clients were much more likely than the total ESL population to speak English "not at all" or "not well."

Exhibit 4.17
Comparison of English Speaking Ability of ESL Clients and Target Population

English Speaking Ability	Total ESL Population	New ESL Clients	Ratio of Percent New Clients to Percent Target Population
Not at All	14 %	24 %	1.7
Not Well	25	62	2.5
Well	25	12	.5
Very Well	36	2	.1
Total	100 %	100 %	

Based on all of the above, we conclude that there is no evidence that the program is "creaming." There is a clear youth bias in the program, which is consistent with program purposes related to human resource development. However, within each age group the data indicate that the program is serving a fairly representative group of the target population, and quite clearly it is serving the neediest of those who speak a language other than English at home.

Motivations for Enrollment in Adult Education

The final issue dealt with in this chapter concerns the underlying reasons new clients enroll in adult education. In chapter 3, it was reported that the overwhelming majority of new clients enroll in adult education because they want to, rather than because of externally imposed requirements. At the time of initial enrollment, we asked clients to choose one of four reasons as most important for enrolling in the program. Our main goal was to identify clients whose participation was required by someone else: an employer or perhaps a caseworker as a condition for welfare eligibility. Only about 12 percent of the new clients fell into this "required participation" category.

In addition, new clients were asked to rate each of 14 possible reasons for their taking adult education courses on a simple three-point scale: "very important,"

"somewhat important," and "not important."¹⁹ The response pattern in two-thirds of the cases was to rate at least 8 of the reasons "very important" and no more than 2 as "unimportant." The reverse pattern, 3 or fewer rated "very important" and at least 7 rated "unimportant," was observed in just 1 percent of the cases.

The tendency to rate most reasons as "very important" is stronger in some groups than others. Beginning ESL clients and clients in the middle age groups (32-44) were especially likely to respond in this way, while the reverse pattern, or an approximation of it, was more likely to occur among clients enrolled in ASE/GED and in the youngest (under 18) and oldest (45 and over) groups of clients. There also is reason to question the validity of some of these responses; for example, 56 percent said that "entering college" was a "very important" reason for their participation, and another 22 percent rated this as "somewhat important." It may be that intake forms administered at the start of the first class are not the best way of discovering motives for participation. With these caveats in mind, we still believe it may be useful to report the results of using factor analytic methods to discover clients' underlying motivations and to detect the differences in motivation among various groups of clients by placement level, age, and type of community. The findings reported here may help recruitment and retention efforts by pointing to the underlying reasons that are most important for new clients when they enroll in adult education.

The national evaluation found that four factors represent the underlying motivations of new clients for enrolling in the federal Adult Education Program.²⁰ Exhibit 4.18 presents the four factors in the order of their importance to new adult education clients.

Exhibit 4.18
Ranking of Factors Underlying Enrollment
in Adult Education
(N = 15,624)

Factor	Mean Importance Rating ^a
1. Literacy	2.722
2. Self-concept	2.668
3. Basic skills	2.656
4. Employability	2.383

^a The mean importance rating represents the average rating for the factor across the items that cluster under that factor. The original items measured importance on a three-point scale, as follows: not important (1); somewhat important (2); very important (3).

¹⁹ For a list of the reasons, see appendix B, Client Intake Record, Part B, question 10.

²⁰ The statistical results of the factor analysis and related factor score analyses can be found in appendix D. Here we simply report the results of those analyses and discuss their significance.

1. Literacy. New clients motivated by literacy goals enroll in adult education to improve their speaking and listening skills, as well as to improve their reading and writing skills. New clients who are motivated most by literacy goals are ESL students and clients who live in cities within large urban metropolitan areas. Motivation to attend adult education to achieve literacy goals increases with age among new adult education clients, particularly among the foreign-born.
2. Self-concept. New clients motivated by self-concept goals enroll in adult education to feel better about themselves, to become more independent, to gain the respect of their family and friends, and to contribute more to their family and community. As is the case with literacy goals, the new clients who are most motivated to improve their self-concept are ESL students and clients living in major metropolitan centers. Motivation to attend adult education in order to improve self-concept increases with age, particularly among the foreign-born.
3. Basic Skills. New clients motivated by basic skills goals are most interested in improving basic academic skills, such as the everyday application of mathematics; these students also are interested in developing basic skills competencies in order to complete their high school education by obtaining a GED. Students placed in ABE and ASE, particularly those in the youth group, are motivated most by the development of basic skills. Interest in developing basic skills through adult education decreases with age. Also, consistent with the community residency patterns of ABE and ASE students, new clients from nonmetropolitan and small metropolitan areas are motivated most by basic skill goals.
4. Employability. New clients motivated by employability goals are most interested in using adult education to help them get a job or to improve their job performance, often through vocational training. These students also indicate much interest in going on to college after completion of their adult education courses of study. The ESL group has the highest motivation for the enhancement of employability. Consistent with the interests of the ESL population, new clients living in the major metropolitan centers are most interested in employability as a goal of adult education, and members of the young adult group are motivated most by employability.

As exhibit 4.19 shows, our analyses indicate that two-thirds of the new clients have no dominant underlying motive. For about 16 percent of the new client population, however, improvement in basic skills is the prime motivation. Only about 1 percent of the new clients enroll in adult education solely because they want to improve their employability.

Exhibit 4.19
Dominant Motives of New Clients for
Enrolling in Adult Education
(N = 14,109)

Dominant Motive	New Clients Who Have a Dominant Motive
Basic skills	16 %
Literacy	11
Self-concept	6
Employability	1
No dominant motive	66
Total	100 %

From the standpoint of instructional placement, new ESL clients rate several factors as important in motivating their enrollment: the development of literacy, the improvement of self-concept, and the enhancement of employability. The development of basic skills is more important to the ABE/ASE population than to the ESL population. Within the ABE/ASE population, the development of literacy skills and the improvement of self-concept are more important to ABE students than to ASE students, while enhancement of employability is more important to ASE students than it is to ABE students.

Literacy, self-concept, and employability are primary motives for clients living in cities within large metropolitan areas, whereas the development of basic skills tends to be more important to clients from nonmetropolitan and small metropolitan areas.

With respect to improved employability (i.e., the human capital development objectives of the federal Adult Education Program), this motive is most important to young adults and least important to persons over 45 years of age. The employability motive is equally important to clients in the youth group and to clients between the ages of 31 and 45. Finally, client enrollment motivation is unrelated to differences in program sponsorship.

Summary

This chapter has reviewed findings from the national evaluation in terms of differences in new client characteristics according to type of program sponsoring agency, client age group, and type of community in which clients live; the appropriateness of client placement; the extent to which potential clients who are most in need of services are those being served; and motivations for enrolling in adult education.

Except that average pretest scores were consistently somewhat lower for clients in programs operated by local education agencies than for clients in community colleges, no important differences in client characteristics were found to be associated with the different types of sponsoring agencies. Most clients are served by public schools or community colleges, and the profiles of clients in both types of institutions are almost identical. Some differences in client profiles, however, are associated with age groups and community characteristics.

With respect to age, the federal Adult Education Program clients are relatively young; the average new client is under 31 years of age. Only 9 percent of the new clients are over 45 years of age. However, new clients over 45 years of age have a greater need for instruction than do younger clients, and English-speaking ability decreases with age for native-born clients who speak a language other than English in the home.

The data on new clients suggest that the program tends to serve persons with somewhat higher levels of education than might be expected. Overall, however, the clients being served appear to be in need, and they appear to represent a reasonably appropriate cross section of the national target population.

Finally, most clients indicate that they have several important reasons for enrolling in adult education. In order of importance to new clients, these factors are the improvement of literacy, self-concept, basic skills, and employability. But most new clients have no single dominant motive for enrolling. New ESL clients attach greatest importance to the improvement of literacy, self-concept, and employability. New ABE/ASE clients rate the development of basic skills as most important. Enrollment motivations also vary somewhat by type of community and client age.

Chapter 5

PRELIMINARY FINDINGS ON CLIENT ATTENDANCE AND PERSISTENCE

This chapter previews some potentially interesting findings that will be explored in more depth in the study's third interim report, which will draw on attendance and participation data for the 1-year period following the clients' initial entry (or application for service). Complete data are not yet available in a form suitable for analysis, but because attendance and participation data for many clients in our study are available, some preliminary analysis of these data may be useful.

These data permit a brief discussion of three important questions:

1. How long do clients stay in adult education programs, and how many hours of instruction do they generally receive?
2. How do clients who terminate their instructional services after a relatively few hours compare with clients who persist longer?
3. What do we know about clients' reasons for leaving, and to what extent are these reasons related to their motivations for enrolling or to the provision of support services they use?

It is important to note that although terms such as "persistence," "attrition," and "client flow" are widely used in discussions and in the literature, they are rarely operationally defined. In the third interim report we will present our definitions and interpretations of these concepts, as well as models of participation and persistence of the target populations and active applicants. We hope that these efforts will provide a more complete accounting of the attendance patterns for the adult education clientele than is available anywhere at this time, as well as insight into the difficulties associated with offering educational opportunities to a diverse and changing population.

Duration and Intensity of Instructional Service

To provide a preliminary estimate of the number of hours and days that clients received instruction, we analyzed weekly client attendance data from the client update records for the 5,672 clients in our sample who began receiving instruction in September or October 1991 and were enrolled long enough to receive a substantial

amount of service.²¹ This cohort of clients represents about 30 percent of the total number of new clients in the study and, when sample weights are applied, is representative of about 500,000 new clients nationwide.

The number of hours of instruction received by clients who went through a local program intake process in September or October 1991 (which is referred to here as the entry cohort) and who subsequently received at least 1 hour of instruction ranged from 1 to 1,032. The median number of hours of instruction was 43 and the mean was 86. These figures probably will rise somewhat once the hours of instruction for those clients who are still active and those who may return to instruction are fully calculated, but we do not expect the increase to be substantial.

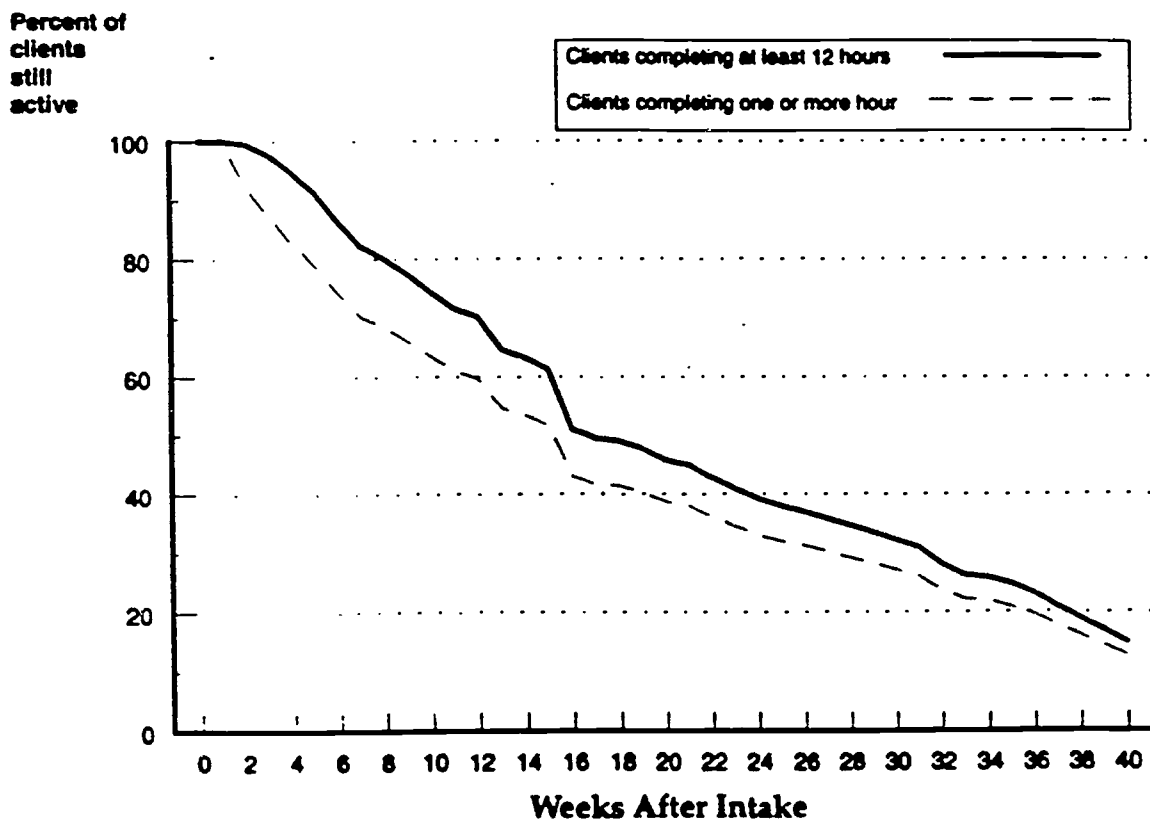
Exhibit 5.1 shows the persistence rates for clients who began in September or October of 1991 and received at least 1 hour of instruction. The exhibit also shows the pattern for the subgroups of clients who completed at least 12 hours of instruction, which, according to federal regulations, is to be the threshold for reporting client information to the Department of Education. About 18 percent of clients who received any instruction failed to attain the 12-hour level. Both groups showed a marked decline in numbers after the fall term (weeks 15 and 16).

The line showing the persistence rates for all clients roughly parallels the line for those completing 12 hours or more, because nearly 82 percent of those who receive any instruction complete 12 hours. For example, the exhibit shows that after only 6 weeks, more than 20 percent of those who have started a program are no longer attending. It also shows that after 16 weeks (which coincides with the end of the fall term), more than 50 percent of all beginning clients have left. The persistence rate for those who received at least 12 hours of instruction slopes steadily downward through the entire period.

²¹ The total number of clients who went through intake in September or October of 1991 was 6,899, of which 5,672 actually received at least 1 hour of instruction. Those clients who actually received instruction are the subject of examination in this chapter, because for the questions at hand they are the population of greatest interest and because we do not have Intake Record Part B, information on clients who did not begin receiving instruction. To ensure the accuracy of our findings, we have limited analyses of attendance to the period from September 1, 1991, through May 31, 1992. A number of programs are closed during the summer months and do not begin their fall term until October, and current update (attendance) data for all the September-October 1991 cohorts are not yet available.

The exhibit also shows that after 20 weeks about 40 percent—and after 40 weeks only 12.5 percent—of clients are still active.²² Thus the long-standing concerns in the field regarding high rates of attrition clearly are well founded. The study's third interim report will include data on how many of those who leave after the fall term return for the next fall term without attending in the spring.

Exhibit 5.1
Persistence Rates for All Members of the September-October, 1991,
Entry Cohort Who Began Instruction
(N = 5,672)



²² To simplify the dynamic of client flow for presentation here, we have taken small liberties with the data. The September-October 1991 period we present in this chapter represents an intake window of 9 weeks, but we are presenting it as a single cohort group. To accomplish this we calculated the maximum possible number of weeks a client could attend between his or her intake date and May 31, 1991, and converted the number of weeks a client was active to a proportion of that maximum. We then multiplied that proportion by 40 (the number of weeks from September to June) to provide a single metric, rather than presenting a different attendance line for each weekly cohort group. As a result, the average hours per week attended may be slightly undercounted because we made no similar correction for the calculation of hours. This approach does not, however, affect the results from a policy perspective. The complicated mathematics needed to provide an absolutely accurate accounting for statistical purposes are not warranted at this point, because the findings in this chapter are meant to be illustrative, not definitive.

Exhibit 5.2 shows the hours and weeks of instruction received by clients in the different instructional components. Because simple comparisons of the amount of time that clients spend in adult education may be misleading, the exhibit also provides information on the intensity of instruction (average number of hours per week). The exhibit shows that although clients in the ESL instructional component, on average, do not attend classes for appreciably more calendar time than clients in the other two groups, ESL clients receive about 30 percent more instruction per week.

Exhibit 5.2
Average Number of Instructional Hours and Weeks
by Program Component for Clients Who Began
Instruction in September-October, 1991
(N = 5,672)

Component	Mean Length of Persistence ^a		Average Number of Hours/Week	Percent of All Clients in Component
	Hours	Weeks		
ABE	74	17	4.4	28 %
ASE	63	15	4.2	40
ESL	107	18	5.9	32
Overall	80	17	4.9	100 %

^aPersistence is measured from the week during which instruction began to May 31, 1991.

Exhibit 5.3 shows the relationship among type of community, program component, client persistence, and instructional intensity. Clients in nonmetropolitan programs have received fewer hours of instruction in ABE and ESL than clients in other settings. Overall, clients in the nonmetropolitan areas receive an average of 4.5 hours per week of instruction, compared with 5.6 hours in small metropolitan areas, 6.2 hours in those areas defined as the remainder of major metropolitan area, and 7.1 hours per week in the large city in major metropolitan area programs. The lower average number of hours per week in the nonmetropolitan areas is probably due to the fewer number of course hours available in these programs. It is common for smaller programs to offer instruction fewer days per week than large programs.²³

²³ The average number of days per week that classes were scheduled for those clients in our sample was 2.5 for those enrolled in the smallest programs (annual enrollment of less than 300), 3.5 for those enrolled in the medium-size programs (annual enrollment of 300-19,999), and 4.1 for those in the largest programs (annual enrollment of 20,000 or more).

Exhibit 5.3
Mean Number of Instructional Hours and Weeks Completed by Clients Who
Began Instruction in September-October, 1991, by Type of Community and
Program Component
(N = 5,672)

Type of Community	ABE			ASE			ESL			Mean Hours per Week: All Components
	Hrs	Wks	Mean Hrs per Week	Hrs	Wks	Mean Hrs per Week	Hrs	Wks	Mean Hrs per Week	
Large city in major metro area	86	16	6.4	83	16	6.6	132	19	7.5	7.1
Remainder of major metro area	69	17	4.9	73	15	5.4	101	17	7.0	6.2
Small metro area	92	17	6.5	64	15	5.0	105	20	5.6	5.6
Nonmetro area	54	17	3.7	56	16	4.6	71	17	4.8	4.5

Note: Community designations are based on 1990 census information plus responses to the Universe Survey on type of community served (item 3). Major metropolitan areas are defined as having a population of 1.5 million or more; large cities in major metro areas as having a population of 500,000 or more; and small metro areas as any community located within a standard metropolitan area with a population of less than 1.5 million.

Comparison of Clients Who Leave Quickly with Clients Who Persist

As just shown, there are marked differences in the amount of time clients spend in instruction. In order to form some hypotheses about why some clients leave quickly while others persist for a long time, we compared the characteristics of clients in the September-October entry cohort who were among the first to stop receiving services with the characteristics of those who will be among the last (i.e., clients who were in the lowest and highest 25 percent of all clients who received any instruction). Clients in the lowest quartile received less than 16 hours of instruction between September 1991 and June 1992, while those in the highest quartile received 96 hours or more during the same period of time.

Exhibit 5.4 presents the distribution of clients who left quickly and those who persisted a relatively long time by instructional component. As the exhibit shows,

only 17 percent of ESL clients left after less than 16 hours, whereas nearly 29 percent of those in ASE left. Similarly, 36 percent of ESL clients stayed for at least 96 hours, as opposed to 23 percent of ABE clients, and 20 percent for the ASE clients.

Exhibit 5.4
Distribution of Clients in Each Instructional Component
Who Began Instruction in September-October, 1991,
by Total Hours of Instruction
(N = 5,672)

Instructional Component	Total Hours of Instruction Completed by Clients			
	Lowest Quartile (< 16)	Middle Quartiles (16 to 95)	Highest Quartile (96 or more)	Total
ESL	17 %	47 %	36 %	100 %
ABE	26	51	23	100
ASE	29	51	20	100

Exhibit 5.5 presents the distribution of clients who left quickly and those who persisted by the type of community. As the exhibit shows, knowing the component and location of a program provides some indication of how persistent clients are likely to be. For example, ESL clients in nonmetro areas are about three times as likely to leave ESL programs before completing 16 hours of instruction as are ESL clients in large city programs (28 percent vs. 9 percent), while ESL clients in large city programs are almost twice as likely to persist for a relatively long period of time (45 percent vs. 24 percent). Similarly, ABE and ASE clients in large city programs are about twice as likely to leave quickly (18 percent vs. 35 percent and 14 percent vs. 30 percent) and also twice as likely to persist greatly (30 percent vs. 16 percent and 35 vs. 17 percent) as clients in nonmetro areas.

Exhibit 5.5
Distribution of Clients in Each Type of Community by
Hours of Instruction and Program Component for Clients
Who Began Instruction in September-October, 1991
(N = 5,646)

Type of Community	Total Hours of Instruction Completed by Client					
	ESL		ABE		ASE	
	Lowest Quartile (< 16)	Highest Quartile (≥ 96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)
Large city	9 %	45 %	18 %	30 %	14 %	35 %
Balance of major metro area	18	35	17	22	29	23
Small metro area	14	40	18	31	30	20
Nonmetro area	28	24	35	16	30	17
All Areas	17 %	36 %	26 %	23 %	29 %	20 %

Note: Cells indicate row percentages for within-column group populations. Row 1, for example, reads: Of ESL clients in large cities in major metro areas who began instruction, 9 percent completed less than 16 hours and 45 percent completed at least 96 hours. The rest of ESL clients in large cities (46 percent) received from 16 to 95 hours.

Exhibit 5.6 shows that men in ABE or ASE are more likely than women to drop out early, and among those who persisted, more women than men continued for at least 96 hours. The same is true for ESL clients.

Exhibit 5.6
Distribution of Male and Female Clients by Hours of Instruction and
Program Component for Clients Who Began Instruction in
September-October, 1991
(N = 5,632)

Type of Client	Total Hours of Instruction Completed by Client					
	ESL		ABE		ASE	
	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (<16)	Highest Quartile (96 or more)	Lowest Quartile (<16)	Highest Quartile (96 or more)
Male	19 %	34 %	28 %	20 %	33 %	16 %
Female	17	38	26	24	29	22
All Clients	18 %	36 %	27 %	23 %	30 %	20 %

Note: Cells indicate row percentages for within-column group populations. Row 1, for example, reads: Of male ESL clients who began instruction, 19 percent completed less than 16 hours and 34 percent completed at least 96 hours. The rest of male ESL clients (50 percent) received from 16 to 95 hours.

As shown in exhibit 5.7, it is clear that persistence increases with client age. Whereas 30 percent of 16-to-21-year-olds in the ABE component left before completing 16 hours of instruction, only 21 percent of those who were at least 46 years old did so. For the ESL clients, the early departure rates are far lower in each age group, with the highest ESL attrition rate considerably lower than the lowest attrition ABE or ASE rate. Generally, the findings are in keeping with the conventional wisdom that older students are more mature and more dedicated to their education. It is also consistent with the data reported in chapter 3 indicating that younger clients were predominantly enrolled in ASE components and may need fewer hours of instruction in order to achieve their adult education goals.

Exhibit 5.7
Distribution of Clients in Selected Age Categories by
Hours of Instruction and Program Component
for Clients Who Began Instruction in
September-October, 1991
(N = 5,031)

Age at Intake	Total Hours of Instruction Completed by Client					
	ESL		ABE		ASE	
	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)
16-21	18 %	32 %	30 %	22 %	33 %	19 %
22-30	20	33	30	19	31	18
31-45	15	40	23	22	27	25
46 and older	15	40	21	34	20	25
All Ages	17 %	36 %	27 %	22 %	30 %	20 %

Note: Cells indicate row percentages for within-column group populations. Row 1, for example, reads: Of ESL clients ages 16-21, 18 percent completed less than 16 hours and 32 percent completed at least 96 hours. The rest of 16 to 21-year-old ESL clients (50 percent) received from 16 to 95 hours.

Exhibit 5.8 compares the persistence for native-born and non-native-born clients. As shown, there are proportionately more native-born clients in the less persistent group. Only 13 percent of foreign-born ESL clients, as contrasted with 20 percent of native-born ESL clients, leave after less than 16 hours of instruction. At the upper end of persistence, 39 percent of foreign-born ESL clients are still active, whereas only 23 percent of native-born ESL clients meet the 96-hour criteria.

Exhibit 5.8
Distribution of Clients by Country of Birth, Hours of Instruction
and Program Component for Clients Who Began Instruction in
September-October, 1991
(N = 4,915)

Client's Country of Birth	Total Hours of Instruction Completed by Client					
	ESL		ABE		ASE	
	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)
United States	20 %	23 %	23 %	25 %	29 %	21 %
Other	13	39	12	31	19	24
All Clients	14 %	38 %	23 %	25 %	28 %	21 %

Note: Cells indicate row percentages for within-column group populations. Row 1, for example, reads: Of U.S.-born ESL clients who began instruction, 20 percent completed less than 16 hours and 23 percent completed at least 96 hours. The rest of U.S.-born ESL clients (57 percent) received from 16 to 95 hours.

We also investigated the relationship between the extent to which clients relied on public assistance and their persistence in adult education. Exhibit 5.9 shows that 56 percent of ESL clients who reached the 96-hour level received public assistance, compared with only 32 percent of ABE clients and 28 percent of ASE clients. Overall, almost 39 percent of those receiving assistance persisted past 95 hours, whereas 25 percent of those not receiving assistance stayed that long.

Exhibit 5.9
Distribution of Clients by Public Assistance Status, Hours of Instruction,
and Program Component for Clients Who Began Instruction in
September-October, 1991
(N = 4,975)

Received Public Assistance	Total Hours of Instruction Completed by Client					
	ESL		ABE		ASE	
	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)
Yes	9 %	56 %	19 %	32 %	22 %	28 %
No	15	35	25	21	30	19
All Clients	14 %	38 %	23 %	25 %	28 %	22 %

Note: Cells indicate row percentages for within-column group populations. Row 1, for example, reads: Of ESL clients receiving public assistance who began instruction, 9 percent completed less than 16 hours and 56 percent completed at least 96 hours. The rest of ESL clients who received public assistance (35 percent) received from 16 to 95 hours of instruction.

The relationship between employment and persistence is summarized by exhibit 5.10. ABE and ASE clients who were employed left earlier than those who were unemployed and at considerably higher rates than ESL clients. Also, a substantially greater proportion of the ESL unemployed clients completed at least 96 hours of instruction than did their ABE or ASE counterparts.

Exhibit 5.10
Distribution of Clients by Employment Status, Hours of Instruction,
and Program Component for Clients Who Began Instruction
in September-October, 1991
(N = 4,956)

Employed	Total Hours of Instruction Completed by Client					
	ESL		ABE		ASE	
	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)
Yes	15 %	28 %	26 %	18 %	31 %	17 %
No	13	46	20	30	29	26
All Clients	14 %	38 %	22 %	25 %	28 %	22 %

Note: Cells indicate row percentages for within-column group populations. Row 1, for example, reads: Of ESL clients who were employed and who began instruction, 15 percent completed less than 16 hours and 28 percent completed at least 96 hours. The rest of ESL clients who were employed (57 percent) received from 16 to 95 hours.

To explore whether the reason that clients were enrolled in adult education is related to their persistence, we compared the two groups in terms of their response to a question asking clients to identify the most important reason they enrolled in the program (Intake Record B, item 1). Exhibit 5.11 indicates that there is little difference in rates of persistence among clients who said that they enrolled in adult education to satisfy some external requirements and among clients who enrolled to satisfy some internal or personal goals. This is true for both component groups.

Exhibit 5.11
Distribution of Clients by Reason for Enrollment, Hours of Instruction
and Program Component for Clients Who Began Instruction
in September-October, 1991
(N = 4,956)

Reason for Enrollment	Total Hours of Instruction Completed by Client					
	ESL		ABE		ASE	
	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)	Lowest Quartile (< 16)	Highest Quartile (96 or more)
Required by employer or social agency	11 %	45 %	20 %	33 %	26 %	22 %
To satisfy family or personal goals	14	38	23	24	28	21
All Clients	14 %	39 %	23 %	26 %	28 %	22 %

Note: Cells indicate row percentages for within-column group populations. Row 1, for example, read: Of ESL clients who enrolled because their employer or social agency required them to and who began instruction, 11 percent completed less than 16 hours and 45 percent completed at least 96 hours. The rest of those ESL clients (44 percent) received from 16 to 95 hours.

Clients' Reasons for Leaving the Program

A recurring concern among educators of adults is the extent to which clients leave instruction before accomplishing their, or the program's, educational goals. But most studies have focused on the clients who achieved certain goals rather than on those who left without reaching certain mileposts. States are required to submit data to the federal government showing the reasons for termination of service, but the data indicate there are large numbers of unknowns, and the data forms allow for duplicate counts of responses to that item.

The national evaluation will address the issue of termination in three ways:

- By seeking information from the program staff when a client terminates service;
- By directly asking clients in the telephone follow-up survey questions about the extent to which their goals were accomplished, and why they ceased receiving instruction; and

- By analyzing relative persistence in terms of program characteristics, including clients' exposure to various instructional strategies and the use of support services, such as child care and transportation.

Only the first approach can be addressed here, because only the data from program staff are available for analysis at this time. When a client terminates service in our study, we ask the program personnel to pick one of the nine reasons shown in exhibit 5.12 for the client's departure.

Exhibit 5.12 indicates that, for the great majority of clients, the reasons for termination in each component were unknown. Many clients simply stop attending, without indicating any reasons to program staff. Thus our initial data indicate that in approximately 62 percent of the cases, local program administrators were unable to tell us why individual clients left.

Exhibit 5.12
Distribution of Clients by Reasons for Terminating Instruction
(N = 4,228)

Reason for Not Receiving Instruction	Percent of Clients
Client no longer attends, reason unknown	62 %
Completed instructional program, not interested in going further	3
Completed highest level of instruction offered	10
Completed requirements of employer/other agency/other program	2
Forced to leave by personal circumstances	13
Did not complete program, but left expressing satisfaction	1
Did not complete program and left expressing dissatisfaction	1
Transferred to another site	2
Participation ended for other reasons	6

It should be noted with respect to the information on reasons for termination that local program administrative staff complete the client update records in the national evaluation. Thus even though the reasons for termination are reported as unknown, it is quite possible that the instructors of many of these clients know why their students left the program. Nevertheless, our preliminary findings call into question the utility of the program report data on this topic which local program

administrators have been submitting in response to federal adult education reporting requirements for many years.

Summary

This chapter has previewed some issues that will be addressed more fully in the study's third interim report. Our initial findings show that a large number of registrants never begin class, a large number of those who begin stay for a very short time, and only a small number persist. The data are preliminary, however, and it is important to recall that the National Evaluation of Adult Education Programs is a longitudinal study and that there are dangers inherent in drawing conclusions from partial data.

REFERENCES

- Beder, Hal. (1991). Adult Literacy: Issues for Policy and Practice. Krieger Publishing Company. Malabar, FL.
- CTB/McGraw-Hill. (1987). Tests of Adult Basic Education, Forms 5 and 6, Technical Report. Monterey, CA: Author.
- Davis, J.N., Rickard, P., Stiles, R. L., and Wise, J. (1984). CASAS: An Effective Measurement System for Life Skills. A Symposium Presented at the National Council on Measurement in Education. New Orleans, LA.
- Eu, Hongsook. (1993). Target Populations and Participation Rates of Adult Education Programs in 1990. A paper prepared for the National Evaluation of Adult Education Programs. Arlington, VA: Development Associates, Inc.
- Mezirow, J., Darkenwald, G., and Knox, A. (1975). Last Gamble on Education. Washington, DC: Adult Education Association of the U.S.A.
- National Adult Education Professional Development Consortium (NAEPDC). (1992). The Adult Education Program Annual Report: Program Year 1990. Washington, DC: 29.
- Rickard, Patricia. (1988). CASAS: Comprehensive Adult Student Assessment System. A Paper Prepared for the National Adult Literacy Symposium, National Press Club. Washington, DC.
- TABE Technical Report. (1987). Monterey, CA: CTB/McGraw-Hill.
- United States Bureau of the Census. (1980). 1980 Census of Population and Housing. United States Bureau of the Census. Washington, DC.
- United States Bureau of the Census. (1991). Statistical Abstract of the United States: 1991 (111th Edition). Washington, DC.
- Young, Malcolm, Mark A. Morgan, and Howard Fleischman. (1992). National Evaluation of Adult Education Programs: First Interim Report: Profiles of Service Providers. Arlington, VA: Development Associates, Inc.
- Young, Malcolm, et al. (1980). An Assessment of the State-Administered Program of the Adult Education Act: Final Report. Arlington, VA: Development Associates, Inc.

**APPENDIX A
OVERVIEW OF STUDY DESIGN**

APPENDIX A OVERVIEW OF STUDY DESIGN

The National Evaluation of Adult Education Programs was designed to address 12 major objectives. These are presented in Exhibit A-1. The central purpose of the study is to evaluate the potential of programs supported by the federal Adult Education Act for significantly reducing deficits in the adult population with respect to literacy, English proficiency, and secondary education. This is to be done by collecting descriptive data on program offerings and client service levels, and linking those data to benchmark data on costs and learning gains and to independent estimates of the program's target populations from the 1990 Census and national studies of adult literacy.

The first phase of the evaluation included a short mail survey of the universe of local adult education service providers which received Adult Education Act funding in Program Year 1989-90. That survey was conducted during October and November 1990. The results of the universe survey were used to draw a national sample of service providers for participation in the second phase of the study. The sampled providers were expected to complete a mail questionnaire designed to yield a comprehensive profile of program and service characteristics. These programs were also to provide data for 12 months on the characteristics of a sample of their clients at the time they begin to receive instructional services. For a period of 18 months thereafter, they were also to provide data on the extent and type of instructional services those clients receive. Test data on client learning gains after 70 and 140 hours of instruction are to be provided from a sub-sample of programs, and sub-sample of clients will be contacted by telephone six months after they cease receiving instructional services in order to obtain information about employment related outcomes of the program and about the extent to which the personal objectives of the clients were achieved.

Exhibit A-1

STUDY OBJECTIVES

1. Client populations and patterns of participation. To construct empirically based models of client "flows" through each of the program's service components (ABE, ASE, and ESL) which will permit detailed estimates of client intake, participation, and attrition over time.
2. Factors contributing to client persistence. To identify client background and service-program variables that are positively related to client persistence (or negatively related to client attrition).
3. Reaching adults with basic literacy needs. To identify service-program characteristics that are positively or negatively related to attracting and holding adults with basic literacy needs.
4. Support and cooperation at the local level. To assess the extent to which Federal and State funds for adult education are effectively supplemented by other resources at the local level.
5. Program capacity and demand for services. To develop and compare regional and national measures of unmet (or deferred) demand for adult education services and excess (or under-utilized) service capacity, and to assess the extent to which improved management of existing adult education resources might bring supply and demand into closer balance.
6. Participation rates of target populations. To develop estimates of the size and composition of target populations for each of the program's service components, and, by relating these estimates to data on program clients, to assess levels and rates of program participation for these target populations.
7. Learning gains. To develop estimates of average learning gains as related to hours of instruction and/or tutoring for each program component, and, by applying these estimates to data on participation, to assess aggregate learning outcomes generated by the program over a one-year period.
8. Service costs. To develop estimates of average service costs as related to hours of instruction and/or tutoring for each program component, and, by relating these estimates to data on participation and learning gains, to assess the service costs associated with producing successful outcomes.
9. Employment outcomes. To evaluate the extent to which sustained program participation is significantly associated with favorable employment outcomes, using employment outcomes of early leavers as the standard of comparison.
10. Dissemination. To stimulate wider interest in a discussion of policy issues in adult education by means of timely dissemination of findings and interim reports, commissioned papers on selected issues, and a national conference at the conclusion of the study.
11. Independent research. To facilitate independent research on adult education by issuing unit-record data files for the national samples of service providers and new clients, along with provisions for linking these two files and high-quality user-oriented technical documentation.
12. Analytic agenda. To develop recommendations concerning future analytic agendas for adult education, with special reference to further uses of data from the 1992 National Survey of Adult Literacy and the 1990 Census.

Sample of Programs and Clients: The study objectives called for collecting of information for a probability sample of approximately 50,000 new clients in 150 programs. Because programs vary in size of enrollment, a multi-stage selection procedure was used. At the first stage, programs were selected with probability proportionate to size, i.e., the larger programs were given a greater probability of selection. The next stage in the sampling process involved selection of sites and clients with their programs. Except for the very large programs, sampling of sites and clients within each program was designed to produce a sample of roughly 366. In order to accommodate the widely varied structure and administrative arrangements of programs, a flexible set of procedures was used. For example, in the larger programs, samples of sites and, when necessary, clients within sites were selected. While in the smallest programs, all clients were included in the sample. For nearly all sample programs, the overall selection probabilities for clients were close to a target value of 1 in 60.

The first step in the program selection process was to group the programs by the four Census regions. Within each region, they were then ordered by their enrollments for the previous year as reported in their response to the Universe Survey of Adult Education Providers. Eighteen programs were determined to be so large as to fall into the study with certainty (a probability of selection equal to one). These 18 "certainty programs" all had enrollments of 20,000 or more.

To ensure that small programs were adequately represented, those with 300 or fewer clients were separated and ordered by size within region. Every sixtieth small program was selected for inclusion in the Study. There were 20 small programs selected. Since the study target was a total of approximately 150 programs and 50,000 clients, we determined the total enrollment of all programs that were neither certainty programs nor small programs and divided by 112, which was the number of programs that were needed to reach the target of 150. The result--21,948 clients--was the sampling interval that was used to select the remaining "mid-sized" programs. Within each Census region, the mid-sized programs were ordered by size and sample programs were selected systematically with probability proportionate to their reported enrollment, using a random starting point between 1 and 21,948.

This process provided the study with the programs to be selected. In the few cases (25) where programs were unable to participate, they were replaced by randomly selecting one of the programs that fell closest to the originally selected program in the list of providers.

In order to maintain the desired overall selection probability for clients at the level of about 1 in 60, it was necessary to select a sample of sites and, in some instances a sample of clients within sites, for each of the certainty programs and most of the mid-sized programs selected for the sample. In order to make it relatively easy for programs to participate in the study, we adopted a strategy that limited the number of their sites included in the study sample but adequately reflected variations in size and other characteristics of interest. For the small sites, all sites and clients are included. For large and mid-sized programs the process followed the following guidelines:

- Lists of program sites and their enrollments were obtained.
- When a program had several sites they were assigned to one of a number of "clusters." The number of clusters developed for a program depended on the enrollments which they reported and number of clients needed per program.
- If the *number* of clients in a site or cluster was significantly larger than the number needed for the sample from that program, a sample of clients in that site or cluster was selected.

In two instances, programs that were selected from the group of smallest programs closed after their selection for participation. These programs were not replaced, inasmuch as the active "life" of programs is of interest to the study.

Ten other programs, subsequent to being selected and having agreed to participate in the Study, elected to not participate. These programs, none of which were certainty programs, left the Study at too late a date to be replaced. Estimation procedures have taken these losses into account in the analyses of results.

Data Collection Procedures and Processing: The research design for the evaluation incorporates the following data collection activities:

Universe Survey: This was a survey of all providers of adult education which received monies through the Basic State Grants portion of the federal Adult Education Act during 1989-1990. A list of the universe of grantees was prepared based on information obtained from the states. A mail survey, with extensive follow-up, was implemented in October and November 1990. Responses were obtained from 2,619 (93 percent) of the 2,819 local service providers. Of the respondents, 306 (11.7 percent) were interviewed by telephone, and were asked only a subset of the questions from the mail questionnaire.

Comprehensive Program Profile: This was a survey to be completed by the directors of the programs participating in the longitudinal phase of the study. Of the 150 selected programs, 138 actually began participation in the study and, at the time of the preparation of the report, completed profiles had been received from 116 local programs.

Client Intake Record: This form consists of two parts. The first part is completed from program intake records, and the second part by newly enrolled clients. These forms provide demographic information about the client and the clients' reasons for their participation in the program. This information is to be obtained on the sample of clients who enrolled in adult education programs during a twelve month period beginning in mid-April 1991.

Client Update Record: This form is completed by program staff and provide instructional attendance data about each of the sampled clients for 18 months after they begin instruction. In addition, scores on tests of basic skills given at the time of enrollment and after 70 and 140 hours of instruction will be obtained from approximately half of the clients.

Telephone Follow-up Interview: Questions regarding employment status, accomplishment clients' personal objectives, and an assessment of the instruction received will be asked of a sample of 9,000 clients six months after they have left the instructional program.

To keep costs within reasonable bounds, the evaluation was designed to rely heavily on staff from local programs for the compilation and transmission of data. Local personnel were trained in the data collection requirements in the Spring of 1991. Monitoring and related quality control procedures were implemented on an on-going basis, and programs regularly provided follow-up information by telephone and mail. In addition, where necessary, supplemental training was provided.

All of the data collection instruments were designed so they could function as source documents for data processing purposes. When data collection instruments were received, they were carefully reviewed for completeness and legibility by program staff. Where needed, follow-up telephone calls were made to clarify or complete particular items. Following this manual edit, coding of open-ended responses was done in accordance with standard research procedures. Forms were then keypunched, with 100 percent verification, and computer editing was conducted under the guidance of specific editing instructions developed for each form. These generally consisted of checks for completeness, accuracy, internal consistency, and out-of-range values. Analyses of the data were conducted using the SAS statistical packages for microcomputers. Documented data files may be obtained on microcomputer diskettes at cost from the U.S. Department of Education or Development Associates, Inc.

APPENDIX B
CLIENT INTAKE RECORD: PART A
AND
CLIENT INTAKE RECORD: PART B

Client Intake Record

Client Name: _____

NATIONAL EVALUATION OF ADULT EDUCATION PROGRAMS

U.S. Department of Education
Washington, D.C.

Please send completed form to:

Development Associates, Inc.
1730 North Lynn St.
Arlington, VA 22209-2000
Telephone (703) 278-8677

Comprehensive Adult Student
Assessment System (CASAS)
2725 Congress Street, Suite 1-M
San Diego, CA 92110
Telephone (619) 298-4681

For information call 1-800-348-7222

General Instructions

The Client Intake Record must be completed at the time of intake for every client who participates in the survey. Part A of this form is to be completed by or for every client who participates in the intake and enrollment procedures for the adult education program, even if he/she is placed on a waiting list or does not return for instruction. Existing registration and enrollment information can be used to complete this part of the form.

Part B is to be completed after the client enrolls and is participating in the instructional activity. It should be completed by the end of the client's first or second class or session. Clients who are known to have good English reading skills may be asked to complete Part B on their own, with assistance if necessary. Clients with good Spanish reading skills may be given the Spanish version of Part B to complete on their own. Nonreaders of English and Spanish should be helped by program staff to the extent necessary.

Screening

Use the initial questions from Part A to ask about name, address, and telephone number as a screening device to determine whether clients have the skills to complete Part B on their own in English. For clients who cannot complete the form on their own in English:

Spanish-speaking clients:

- Determine whether they can complete the form on their own in Spanish
- If they cannot complete the form on their own in Spanish, administer the form orally, preferably in Spanish

Non-Spanish-speaking clients:

- If the client has difficulty understanding English, administer the form orally in a language the client can understand, if possible.
- Administer the form orally in English and obtain as much information as possible.

3/12/91

Client Intake Record – Part A, page 2

Name of Site _____

National Evaluation of Adult Education Programs Client Intake Record

Site I.D. Number	Education Provider's Client/Class I.D. Number
<input type="text"/>	<input type="text"/>
0 0	0 0 0 0 0 0 0 0 0 0
1 1	1 1 1 1 1 1 1 1 1 1
2	2 2 2 2 2 2 2 2 2 2
3	3 3 3 3 3 3 3 3 3 3
4	4 4 4 4 4 4 4 4 4 4
5	5 5 5 5 5 5 5 5 5 5
6	6 6 6 6 6 6 6 6 6 6
7	7 7 7 7 7 7 7 7 7 7
8	8 8 8 8 8 8 8 8 8 8
9	9 9 9 9 9 9 9 9 9 9

Purpose of the Study

This National Evaluation of Adult Education Programs is sponsored by the U.S. Department of Education. It is the first major study of adult education in ten years. The purpose of this four-year study is to evaluate how well adult education instruction is meeting the needs of clients and how it can be improved.

Participation Voluntary and Confidential

Approximately 50,000 people enrolled in adult education programs across the U.S. are being asked to participate in this study. Your responses to this survey and follow-up interviews are very important. The results of this study may influence future directions and funding of adult education programs. Complete and accurate answers will help to make this study successful. Your participation is voluntary. Names will not be given to anyone outside the study and answers will be kept confidential.

Public reporting burden for this collection of information is estimated to vary from 4 to 5 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U. S. Department of Education, Information Management and Compliance Division, Washington, D.C. 20202-4651; and to the Office of Management and Budget, Paperwork Reduction Project 1875-NEW, Washington, D.C. 20503.

Part A. (Questions 1-10 may be completed by using existing registration and enrollment information whenever possible.)

Name _____
 Last First Middle Initial

Address _____
 House Number Street Apartment Number

 City State Zip Code

Telephone (____) _____ If no telephone, fill circle. ○
 Area Code Phone Number

DIRECTIONS FOR MARKING ANSWERS

- Use No. 2 pencil only.
- Do not use ink or ballpoint pen.
- Make dark marks that fill circle completely.
- Erase cleanly any answers you change.

EXAMPLES

○ ○ ● ○ — RIGHT

● ✕ ○ ○

○ ○ ○ ○

○ ○ ○ ○

○ ○ ○ ○

○ ○ ○ ○

○ ○ ○ ○

WRONG

1. Date of application for service?
 Print the month, day and year and fill in the matching circles.

Month	Day	Year
<input type="text"/>	<input type="text"/>	1 9 9
0 0	0 0	0 0 0
1 1	1 1	● 1 1 1
2	2	2 2 2 2
3	3	3 3 3
4	4	4 4 4
5	5	5 5 5
6	6	6 6 6
7	7	7 7 7
8	8	8 8 8
9	9	9 ● ●



Client Intake Record – Part A, page 3

2. Client's birthdate?

Print month, day and year and fill in the matching circles for each box.

Month	Day	Year
<input type="text"/>	<input type="text"/>	19 <input type="text"/>
<input type="radio"/> 0	<input type="radio"/> 0	<input type="radio"/> 0
<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1
<input type="radio"/> 2	<input type="radio"/> 2	<input type="radio"/> 2
<input type="radio"/> 3	<input type="radio"/> 3	<input type="radio"/> 3
<input type="radio"/> 4	<input type="radio"/> 4	<input type="radio"/> 4
<input type="radio"/> 5	<input type="radio"/> 5	<input type="radio"/> 5
<input type="radio"/> 6	<input type="radio"/> 6	<input type="radio"/> 6
<input type="radio"/> 7	<input type="radio"/> 7	<input type="radio"/> 7
<input type="radio"/> 8	<input type="radio"/> 8	<input type="radio"/> 8
<input type="radio"/> 9	<input type="radio"/> 9	<input type="radio"/> 9

3. Sex? Fill ONE circle.

- Male
- Female

4. Marital status? Fill ONE circle.

- Now married
- Widowed
- Divorced
- Separated
- Never married

5. Race or ethnic group? Fill ONE circle.

- American Indian or Alaskan Native
- Asian or Pacific Islander
- Black, not of Hispanic origin
- Hispanic
- White, not of Hispanic origin

6. Schooling completed?

Fill ONE circle for the number of years of school completed, including the years completed in native country.

Fill ONE circle for the highest diploma or degree received in the United States or in native country.

Number of Years of School Completed	Highest Diploma/ Degree Obtained
<input type="radio"/> None	<input type="radio"/> None
<input type="radio"/> 1-4 years	<input type="radio"/> GED
<input type="radio"/> 5-8 years	<input type="radio"/> Certificate
<input type="radio"/> 9 years	<input type="radio"/> High School Diploma
<input type="radio"/> 10 years	<input type="radio"/> Technical Certificate
<input type="radio"/> 11 years	<input type="radio"/> A.A. Degree
<input type="radio"/> 12 years	<input type="radio"/> 4 yr. College Graduate
<input type="radio"/> More than 12 years	<input type="radio"/> Other

7. Any adult education instruction taken at this agency or any other agency within the past twelve months?

- Yes Fill in circle and continue below.
- No Fill in circle and skip to 8.

If yes, which program?

- ABE
- ESL
- ASE/GED

8. Program or placement level that is planned?

Fill ONE circle.

Program or Placement Level
(Mark all that apply).
<input type="radio"/> ESL Beg.
<input type="radio"/> ESL Int.
<input type="radio"/> ESL Adv.
<input type="radio"/> ABE Beg.
<input type="radio"/> ABE Int.
<input type="radio"/> ASE/GED

Client Intake Record – Part A, page 4

9. Is the start date of program scheduled?
- Yes *Fill in circle and continue below.*
 - No *Fill in circle and skip to 10.*

If yes, print date service is scheduled to begin.

Fill in the matching circles.

Month	Day	Year
<input type="text"/>	<input type="text"/>	1 9 9 <input type="text"/>
<input type="radio"/> 0	<input type="radio"/> 0	<input type="radio"/> 0
<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1
<input type="radio"/> 2	<input type="radio"/> 2	<input type="radio"/> 2
<input type="radio"/> 3	<input type="radio"/> 3	<input type="radio"/> 3
<input type="radio"/> 4	<input type="radio"/> 4	<input type="radio"/> 4
<input type="radio"/> 5	<input type="radio"/> 5	<input type="radio"/> 5
<input type="radio"/> 6	<input type="radio"/> 6	<input type="radio"/> 6
<input type="radio"/> 7	<input type="radio"/> 7	<input type="radio"/> 7
<input type="radio"/> 8	<input type="radio"/> 8	<input type="radio"/> 8
<input type="radio"/> 9	<input type="radio"/> 9	<input type="radio"/> 9

10. Local intake procedures used for this client?

Mark all that apply.

<input type="radio"/>	Intake Interview
<input type="radio"/>	Placement/Diagnostic Testing
<input type="radio"/>	Assessment of Client Goals
<input type="radio"/>	None of the above.

For Official Use Only									
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

National Evaluation of Adult Education Programs Client Intake Record - Part B

OMB Approval No. 1875-0055
Expiration Date 8-31-93

Client Name _____

Name of Site _____

Site I.D. Number	
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

The reporting burden for this collection of information is estimated to vary from 10 to 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U. S. Department of Education, Information Management and Compliance Division, Washington, D.C. 20202-4651; and to the Office of Management and Budget, Paperwork Reduction Project 1875-NEW, Washington, D.C. 20503.

Introduction: This form is part of a national study of adult education programs. Information is being collected about the background and progress of persons such as yourself who are clients of programs receiving funds from the federal Adult Education Act. Your participation in the study is voluntary, but we hope you will answer the following questions as completely and honestly as you can.

Part B.

1. What is the most important reason you enrolled in this program?

Mark only one response.

- Required by employer
- Required by another program or agency
- To satisfy family or friends
- To satisfy other personal or employment goals

2. Were you born in the United States?

- Yes *Fill in circle and skip to 3.*
- No *Fill in circle and continue below.*

If no, when did you come to the United States to stay?

Print year and fill in circles.

1	9		
0	0	0	0
● 1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	● 9	9	9

3. Do you speak a language other than English at home?

- Yes *Fill in circle and continue below.*
- No *Fill in circle and skip to 4.*

What language do you speak?

Fill ONE circle.

- Spanish
- Asian (Chinese, Vietnamese, Korean, etc.)
- Other

How well do you read in that language?
Fill ONE circle.

- Very well
- Well
- Not well
- Not at all

How well do you speak English?

Fill ONE circle.

- Very well
- Well
- Not well
- Not at all

Note to staff: Part B is to be completed by the client with assistance from program staff, if necessary. Nonreaders of English and Spanish should be helped by program staff to the extent necessary. This part should be completed by the end of the client's first or second class/session.

Client Intake Record – Part B, page 2

4. Are you currently receiving any public assistance or public welfare payments, for example Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC)?

- Yes *Fill in circle and skip to 5.*
- No *Fill in circle and continue below.*
Did you receive in the last 12 months any public assistance or public welfare payments, for example Supplemental Security Income (SSI), Aid for Families with Dependent Children (AFDC)?

- Yes
- No

5. What is your current living arrangement?

- Own home
- Renting
- Temporarily living with someone else
- No regular place of residence

6. Any children in household under age 6?

- Yes *Fill in circle and continue below.*
- No *Fill in circle and skip to 7.*

How often do you read to or with the children?

- Almost never
- About once or twice a month
- About once a week
- Nearly every day

7. Did you live at your current address 5 years ago?

- Yes *Fill in circle and skip to 8.*
- No *Fill in circle and continue below.*

Where did you live 5 years ago?

Outside United States?

- Yes *Fill in circle and skip to 8.*
- No *Fill in circle and continue below.*

Same state?

- Yes *Fill in circle and continue below.*
- No *Fill in circle and skip to 8.*

Same county?

- Yes
- No

8. Did you work at any time LAST WEEK?

- Yes—Fill this circle if you worked fulltime or part-time. (Count part-time work such as delivering papers, or helping without pay in a family business or farm. Also count active duty in the Armed Forces.)
Fill in circle and skip to 9.

- No—Fill this circle if you did not work or did only own housework, school work, or volunteer work. *Fill in circle and continue below.*

Were you looking for work during the LAST FOUR WEEKS?

- Yes *Fill in circle and continue below.*
- No *Fill in circle and skip to 9.*

Could you have taken a job LAST WEEK if one had been offered?

- No, already have a job
- No, temporarily ill
- No, other reasons (in school, etc.)
- Yes, could have taken a job

9. How did you learn about this instructional program?

Fill all circles that apply.

- Family members
- Friend/neighbor
- Work associate/employer
- Newspaper
- Radio
- Television
- Letter, notice or leaflet from school or other community organizations
- Other

Client Intake Record – Part B, page 3

How important to you are the following reasons for taking adult education instruction?

Fill one circle for each reason.

To improve reading/writing skills

Very Important
 Somewhat Important
 Not Important

To improve math skills

Very Important
 Somewhat Important
 Not Important

To improve speaking and listening skills

Very Important
 Somewhat Important
 Not Important

To get a GED or high school diploma

Very Important
 Somewhat Important
 Not Important

To enter a vocational or job training program

Very Important
 Somewhat Important
 Not Important

To get a job or a better job or qualify for higher pay

Very Important
 Somewhat Important
 Not Important

To improve job performance

Very Important
 Somewhat Important
 Not Important

To qualify for United States citizenship

Very Important
 Somewhat Important
 Not Important

To feel better about myself

Very Important
 Somewhat Important
 Not Important

To contribute better to my family and community

Very Important
 Somewhat Important
 Not Important

To help my children with schoolwork

Very Important
 Somewhat Important
 Not Important

To become less dependent on others for help

Very Important
 Somewhat Important
 Not Important

To make others feel better about me

Very Important
 Somewhat Important
 Not Important

To enter college

Very Important
 Somewhat Important
 Not Important

For Program Use Only

Who completed Part B of this record?

Client alone
 Client with assistance

Was Intake Record interpreted into another language for client?

Yes
 No

If interpreted, in what language?

Spanish
 Other
 If other, specify: _____

Placement test administered?

Yes
 No

Pretest administered?

Yes
 No

Client Intake Record – Part B, page 4

Persons to Contact

Thank you for answering the questions about yourself and your reasons for taking adult education instruction. To find out how well your needs were met, we would like to call you on the telephone several months after you complete or leave the program. To help us contact you, please print clearly the names, addresses and telephone numbers of three relatives, friends, employers or other persons who will know how to contact you after you leave your class or instructional program.

Name _____
Last First Middle Initial

Address _____
House Number Street Apartment Number

_____ City State _____

Telephone () _____
Area Code Phone Number

Name _____
Last First Middle Initial

Address _____
House Number Street Apartment Number

_____ City State _____

Telephone () _____
Area Code Phone Number

Name _____
Last First Middle Initial

Address _____
House Number Street Apartment Number

_____ City State _____

Telephone () _____
Area Code Phone Number

Good Faith Cooperative Agreement

I agree to participate in this study by authorizing release of my participation records and to respond to a telephone follow-up interview six months after I leave the program, if I am called.

Signature _____ Date _____
Student Sign Name Here Month Day Year

tion.
er you
phone
ou

**APPENDIX C
ESTIMATION PROCEDURES FOR INTAKES**

ed.

Appendix C

ESTIMATION PROCEDURES FOR INTAKES

This appendix shows the estimation formulas that were used to develop estimates of new clients (intakes) from the sample data. The weighting of the sample data was carried out separately for each stratum (3 size groups x 4 regions). The overall weights that were applied to the intake data for each stratum were the products of 4 factors, whose formulas are given in steps 1 through 4 below. Factor 1 is a sampling weight that reflects the overall selection probability for each sample intake. Factor 2 is designed to reduce sampling variability through the use of ratio estimates to known universe or program totals. Factors 3 and 4 are adjustments for programs and sites, respectively, that did not respond.

Basic Notation

- C = census enrollment. in program
- S = site enrollment, generally available only for sample programs in which sites were sampled.
- M = total programs
- m = sample programs
- N = total sites
- n = sample sites

Subscripts

- i = program within stratum
- j = site within program
- R = responding programs or sites

Sample selection probabilities

The overall client selection probability for site ij is the product of the probabilities for program, site within program, and client within site:

$$P_{ij} = P(p_i) P(s_{ij}) P(c_{ij}) \tag{1}$$

STEP 1 - Sampling weights

For all strata, F_1 for each site is the reciprocal of the overall client selection probability of selection P_{ij} for that site.

STEP 2 - Adjustment to reduce sampling error (ratio estimate to adjustments)

For responding programs only:

M = Programs
N = Sites
R = Responding
S = Site Enrollments

Medium Strata

$$F_2 = \frac{\sum_i^M C_i}{\sum_i^m \frac{C_i}{P(p_i)}} \quad (3)$$

Small Strata:

$$F_2 = \frac{\sum_i^M C_i}{60 \sum_i^m C_i} \quad (4)$$

STEP 3 - Adjustment for missing programs (Required only for strata with one or more missing programs).

Large Strata:

$$F_3 = \frac{\sum_i^M C_i}{\sum} \quad (5)$$

Medium Strata

$$F_3 = \frac{\sum_i^m \frac{C_i}{P(p_i)}}{\sum} \quad (6)$$

Small Strata:

$$F_3 = \frac{\sum_i^m C_i}{\sum_i^{m_2} C_i} \quad (7)$$

STEP 4 - Adjustments for missing sites in responding programs:

Large Strata

$$F_4 = \frac{\sum_i^{M_2} \sum_j^{n_2} \frac{S_{ij}}{P(s_{ij})}}{\sum_i^{M_2} \sum_j^{n_2} \frac{S_{ij}}{P(s_{ij})}} \quad (8)$$

Medium Strata:

$$F_4 = \frac{\sum_i^{m_2} \frac{C_i}{P(p_i)}}{\sum_i^{m_2} \frac{C_i}{P(p_i)} \frac{\sum_j^{M_2} \frac{S_{ij}}{P(s_{ij})}}{\sum_j^{M_2} \frac{S_{ij}}{P(s_{ij})}}} \quad (9)$$

Small Strata:

$$F_4 = \frac{\sum_i^{m_s} C_i}{\sum_i^{m_s} C_i \frac{N_{iR}}{N_i}} \quad (10)$$

**APPENDIX D
STATISTICAL METHODS**

Appendix D Statistical Methods

In Chapters 3 and 4, the analysis database consisted of responses from 21,059 new clients to the Client Intake Record and scores from the CASAS achievement test and the Test of Adult Basic Education (TABE). Descriptive statistics were computed for all variables in this database.

Findings in Chapters 3 and 4 were derived from a variety of comparative analyses of weighted data. Comparisons involving variables measured at a nominal level (i.e., categorical data such as gender) were carried out using the Chi Square test of significance. To establish the strength of nominal level relationships, appropriate nonparametric correlation coefficients were computed (for 2x2 classifications, the Phi coefficient of correlation; for larger analyses tables the contingency coefficient). Ordinal level data (e.g., ordered categories such as years of school completed) analyses were carried out using the Mann-Whitney U Test or the Kruskal-Wallis nonparametric analysis of variance test depending on the number of groups in the comparison. The strength of an ordinal level relationship was examined using Kendall's Tau. For interval level data (e.g., test scores, ratings, factor scores, age) analyses were carried out in several ways depending on the number of groups and variables being examined. These included: T-tests for two group comparisons on a single factor, one-way analysis of variance procedures along with Scheffe's post hoc comparison test to detect differences in specific pair-wise contrasts, factorial analyses of variance to examine client differences on multiple factors; and regression analyses in order to discover the main predictors of a given outcome.

The examination of new client motivations for enrollment in adult education was carried out using a principal components factor analysis with a varimax rotation (unweighted N = 15,624). Four factors emerged from the factor analysis, accounting for 57 percent of the variance among the fourteen items measuring the importance of reasons for enrollment. The four factors were interpreted within the context of the factor structure depicted in Exhibit D.1. Factor loadings were considered to be substantively significant if an item-factor correlation was equal to or greater than .50; two items failed to load on any factor under this criterion.¹

¹ Factor loadings for Item B10.8 (To qualify for U.S. Citizenship) ranged from .15 to .47; loadings for Item B10.11 (To help my children with homework) ranged from .12 to .36, with the highest loading failing to discriminate between two of the factors.

Exhibit D.1
Factor Structure of New Client Motivations for Enrollment

Factor I: Employability

<u>Item</u>	<u>Factor Loading</u>
To get a job or a better job.	.75
To enter a job training program.	.74
To improve job performance.	.68
To enter college.	.53

Factor II: Self-Concept

To feel better about myself.	.71
To become less dependent on others.	.69
To make others feel better about me.	.68
To contribute better to my family.	.62

Factor III: Literacy

To improve speaking and listening skills.	.84
To improve reading/writing skills.	.84

Factor IV: Basic Skills

To improve math skills.	.74
To get a GED or high school diploma.	.63

Factor rankings derived from eigenvalues (as indicated by the factor order in Exhibit D.1) indicate the relative importance of the factors from a measurement standpoint in terms of variance accounted for in the items used to measure client motivation; these rankings are not an indication of importance from the perspective of new clients. In order to estimate the relative importance of the four factors from the clients' perspective, the item mean ranks associated with a factor were averaged

and then the factors were ranked on the basis of the resulting total importance means for each factor. As reported in Chapter 4, new clients ranked the importance of the four factors in the following order: Literacy, Self-Concept, Basic Skills, and Employability.

Factor scores were computer-generated for all new clients in the database who responded to the fourteen motivation items.² Using one-way ANOVA procedures, the factor scores were subsequently analyzed for differences in the enrollment motivations of new clients according to group differences in placement, age, type of community and sponsorship. Exhibits D.2-D.5 summarize the factor score results for each of the four factor score analyses. These tables also show the correlation between a factor and the dimension of interest.

Exhibit D.2
Service Component Differences in Factor Scores
 (Unweighted N = 14,025)

Correlation of Factor with Placement Dimension	Factor Name	ESL Group	ABE Group	ASE Group
r = -.39	Literacy	.511	-.098	-.379
r = -.14	Self Concept	.167	-.001	-.145
r = .44	Basic Skills	-.707	.409	.346
r = .10	Employability	.192	-.165	-.063

² A factor score is a standard score in z-score form which indicates a new client's score on each motivation factor relative to the population mean of zero. For analysis purposes, client ratings on the three point importance scale were reversed so that higher scores indicated greater importance. Higher positive factor scores indicate that a motivation is more important to a group than are lower or negative factor scores associated with other groups.

Exhibit D.3
Differences in Factor Scores by Age Group
(Unweighted N = 12,576)

Correlation of Factor with Age Dimension	Factor	Age Group			
		16-21	22-30	31-45	Over 45
r = .21	Literacy	-.372	.109	.213	.298
r = .10	Self-Concept	-.181	.067	.096	.153
r = -.13	Basic Skills	.105	.029	-.066	-.359
r = -.18	Employability	.021	.119	.029	-.634

Exhibit D.4
Community Type Differences in Factor Scores
(Unweighted N = 13,861)

Correlation of Factor with Community Dimension	Factor	City in Major Metro Area	Remainder of Major Metro Area	Small Metro Area	Non-Metro
r = -.22	Literacy	.334	.205	-.085	-.254
r = -.08	Self-Concept	.157	.023	-.036	-.067
r = .21	Basic Skills	-.111	-.389	.138	.244
r = -.13	Employability	.302	.034	-.069	-.122

Exhibit D.5
Differences in Factor Scores by Type of Sponsorship
 (Unweighted N = 13,862)

Correlation of Factor with Sponsorship Dimension	Factor	Public Schools	Community Colleges	Other Sponsor
r = -.02	Literacy	.042	-.090	-.113
r = .00	Self-Concept	.019	-.029	-.081
r = -.03	Basic Skills	-.077	.162	.129
r = -.06	Employability	-.015	.058	-.033

APPENDIX E
CASAS TEST SCALE INTERPRETATION

APPENDIX E
Program Placement
Functional Abilities Related to CASAS Scores/Levels

CASAS Scale Score	Level	Program Placement	Description¹
165 - 180		ESL Pre-Literate/ Orientation	Functions minimally, if at all, in English. Minimal, if any, ability to read. Can state previous occupation(s) and current job status in simple terms. Can ask simple clarification questions about job tasks and instructions. Can respond to simple direct questions about work in progress. Can ask for help. Can sign name. Can respond to simple oral warnings. Can read common warning or safety signs.
181 - 190	A	ESL Beginning	Functions in a very limited way in situations related to immediate needs. Can interpret simplified forms that include name, address, telephone number and dates. Can read very simple signs. Can follow simple oral instructions to begin and to perform a demonstrated task.
191 - 200	A	ESL Beginning	Functions with some difficulty in situations related to immediate needs. Can read at low level with assistance. Can respond to questions about previous work experience including occupation length, and dates of employment. Can fill out simple job application form. Can inquire about job openings. Can follow simple oral instructions.
201 - 208	B	ESL Intermediate	Can satisfy basic survival needs and a very few routine social demands. Can read want ads and identify skills needed for a job. Can describe previous work experience, job skills, qualifications, and training. Can read signs and notices advertising available positions. Can answer basic questions about educational background. Can give and follow simple directions and report specific problems encountered in completing a job task.
209 - 215	B	ESL Intermediate	Can satisfy basic survival needs and some limited social demands. Can begin and end interview appropriately and ask and answer questions appropriately. Can respond to multiple-step oral instructions.
216 - 224	C	ESL Advanced	Can satisfy most survival needs and limited social demands. Can use the telephone to inquire about available jobs. Can report and describe nature of problems on job. Can read a simple work memo. Can interpret wages, wage deductions and benefits, including wage informational charts, pamphlets and forms.

CASAS Scale Score	Level	Program Placement	Description ¹
255+	C	ESL Advanced	Can satisfy survival needs and routine social and work demands. Can participate effectively in social and familiar work situations. Can read written text at a high school level. Can write basic cover letter and follow-up letter when applying for job. Can read written safety regulations and operating instructions for tools and equipment. Can write short work memo.

CASAS Scale Score Interpretation For ABE and Pre-employment Programs

- Below 200** Participants functioning below 200 have difficulty with basic literacy and computational skills necessary to function in employment and in the community. These participants have difficulty in providing basic personal identification in written form (e.g., job applications), are not able to compute wages and deductions on paychecks, and cannot follow simple basic written directions and safety procedures. (A Level)
- 200 - 214** Participants functioning between 200 and 214 have low literacy skills and have difficulty pursuing other than entry level programs requiring minimal literacy skills. They can fill out simple job application forms and demonstrate basic computations only. (B Level)
- 215 - 224** Participants functioning between 215 and 224 are functioning above a basic literacy level and are able to handle basic literacy tasks and basic computational skills in a functional setting related to employment. They have difficulty following more complex sets of directions and are functioning below a high school level. (C Level)
- 225 and above** Participants functioning at or above 225 can function at a high school entry level in basic reading and math and if they do not have a high school diploma can profit from instruction at the high school level. They can usually perform work that involves following oral and written directions in familiar and some unfamiliar situations. Those participants 18 years of age and above can profit from instruction in General Educational Development (GED) preparation and, in a short time, have a high probability of passing the GED test.

appendix.cas

1. Adapted from the Mainstream English Language Test (MELT) Project.

al
e
,
c

v
t

d
s
d

**APPENDIX F
PERSISTENCE DATA FOR EACH OF THE 52 COHORTS**

Persistence Data For Each of the 52 Cohorts

Week of Initial Enrollment	Number of Clients	Continuing in Year 2	% Continuing in Year 2	Week of Initial Enrollment	Number of Clients	Continuing in Year 2	% Continuing in Year 2
Apr 21, 1991	20,903	3,497	0.17	Oct 21, 1991	30,020	10,920	0.36
2	12,200	3,367	0.28	28	22,891	8,629	0.38
3	15,551	3,280	0.21	29	16,727	5,790	0.35
4	14,063	2,646	0.19	30	18,083	6,749	0.37
5	14,523	2,986	0.21	31	10,314	3,567	0.35
6	12,531	2,835	0.23	32	13,530	5,410	0.40
7	6,749	1,084	0.16	33	9,880	4,013	0.41
8	13,201	2,212	0.17	34	9,496	4,693	0.49
9	18,087	2,768	0.15	35	10,138	4,458	0.44
Jun 24, 1991	12,851	2,303	0.18	Dec 23, 1991	6,680	3,305	0.49
11	10,238	1,520	0.15	37	2,466	2,077	0.84
12	11,813	2,375	0.20	38	1,304	739	0.57
13	20,333	2,521	0.12	39	40,125	24,079	0.60
14	13,474	2,583	0.19	40	44,079	26,744	0.61
15	8,798	1,948	0.22	41	26,969	13,813	0.51
16	5,397	1,297	0.24	42	26,366	15,197	0.58
17	8,306	1,959	0.24	43	21,418	13,471	0.63
18	8,092	2,185	0.27	44	17,921	11,117	0.62
19	10,927	4,497	0.41	45	33,058	26,448	0.80
Sep 2, 1991	19,591	9,219	0.47	Mar 2, 1992	14,863	10,214	0.69
21	99,899	15,396	0.15	47	18,391	15,218	0.83
22	81,478	24,937	0.31	48	12,833	9,589	0.75
23	75,550	30,137	0.40	49	59,874	45,746	0.76
24	73,018	16,958	0.23	50	10,009	9,184	0.92
25	49,037	12,201	0.25	51	13,196	12,976	0.98
26	24,975	9,429	0.38	52	8,248	7,183	0.87
				TOTALS	1,160,464	467,473	0.40

INDEX

- ABE 15, 22-31, 33, 35, 37-39, 42-44, 46-51, 54-56, 60-69
- Age Group 19, 25, 33, 39-43, 50, 52, 56, 64
- Alaskan native 16, 23, 24, 36, 41
- American Indian 16, 22-24, 36, 41, 45
- ASE 15, 22-31, 34, 35, 37-39, 42-44, 47-51, 53-56, 60-69
- Asian 16, 22-24, 36, 41, 45
- Attrition 7, 57, 59, 64
- CASAS 37, 38, 42, 43, 47-49, 73, E-1
- Client flow 57, 59
- Client Intake 2, 7, 14, 15, 35, 52, 53, B-1
- Client Update 3, 57, 70
- Community 15, 20, 21, 27, 28, 31, 33-38, 43-47, 53, 54, 56, 60-63
- Community college 20, 21, 28, 35, 36, 38
- Economic Indicators 15, 19, 26, 30, 42
- Educational attainment 20, 26, 31
- Enrollment 3, 10, 11, 15, 19, 20, 25, 27, 31, 52, 53, 55, 56, 60, 69
- ESL 15-28, 30, 31, 33, 35, 37-39, 42-44, 47-50, 52-56, 60-69
- Ethnic Group 16, 23, 24, 29, 41
- Family Characteristics 15, 19, 25, 30, 40, 44
- Federal Adult Education Program 15, 16, 20, 23, 27, 30, 31, 39, 53, 55, 56
- Hispanic 16, 22-24, 29, 30, 36, 41, 45
- Language 15-18, 23, 24, 30, 33, 37, 40-42, 44, 45, 52, 56
- Language spoken in the home 24, 30, 41
- LEA 35, 36
- living arrangement 19, 25, 41, 44
- Local public education agency 38
- Motivation 15, 20, 27, 31, 34, 39, 53-55
- National origin 15, 16, 22, 23, 30, 33, 40, 44
- non-Hispanic Black 29, 45
- non-Hispanic White 29, 45
- Pacific Islander 16, 23, 24, 36, 41, 45
- Persistence 12, 14, 39, 57-60, 64-68, 70, F-1
- Prior education 15, 20, 26, 31, 34, 37
- Private voluntary organization 21, 28, 35
- Program placement 33, 48, 49
- Program Sponsor 21
- Public assistance 2, 20, 26, 31, 42, 46, 66, 67
- Race 36, 41, 45
- Reading Ability 17, 18, 30
- Region 22, 29, 45, 46

Index-1

Regional education service agency 21, 28, 35
Sponsoring agency 28, 33-36, 56, 35
TAFE 37, 38, 42, 43, 47-49, 73
Technical institute 21, 28, 35
Welfare 20, 26, 31, 37, 42, 52

Index-2

112