Understanding our Past to Prepare for the Future: A Two-Year Comparison of Connecticut's Adult Education Programs 1996-1998

Report prepared by the Comprehensive Adult Student Assessment System (CASAS) for the Connecticut Department of Education

Table of Contents

| Chapter 1 - Introduction: An Overview of Adult Education in Connectic | ut . 6 |
|--|--------|
| Why This Study about Connecticut Adult Learners? | 6 |
| Adult Education in Connecticut | 8 |
| Information on Assessment Policy | 9 |
| The Contents of the Study | 10 |
| | |
| Chapter 2 - Program and Learner Information for the Total Enrollment | |
| Population: Who Are Our Learners and What Types of Programs Are Th | hev |
| Enrolling In? | - |
| Data Highlights | |
| Program Information | |
| Instructional Program | |
| Instructional Level | |
| Learner Information | |
| Gender | |
| Age | |
| Ethnic Background | |
| Educational Achievement | |
| Program Entry Performance Levels: Why Are Learners Enrolling and W Levels of Ability Do They Bring to the Learning Experience? | 21 |
| Data Highlights | |
| Reasons for Enrollment. | |
| Overall Appraisal Performance of Learners in Connecticut's Four Largest Education Programs: ESL, ABE, GED Preparation, and Adult High School ((AHS) | Credit |
| English as a Second Language (ESL) Classes – Appraisal Scores - Reading | |
| English as a Second Language (ESL) Classes – Appraisal Scores - Listening | |
| Adult Basic Education (ABE) Classes – Appraisal Scores - Reading | |
| Adult Basic Education (ABE) Classes – Appraisal Scores - Math | |
| General Education Preparation (GED) Classes – Appraisal Scores - Reading | |
| General Education Preparation (GED) Classes – Appraisal Scores - Math | |
| Adult High School (AHS) Credit Classes – Appraisal Scores - Reading | 30 |
| Adult High School (AHS) Credit Classes – Appraisal Scores - Math | 31 |
| Citizenship Classes – Appraisal Scores - Reading | |
| Citizenship Classes – Appraisal Scores - Listening | |
| Outcome Achievements | 34 |

| Chapter 4 – Program Status, Pretest Performance, Learner Gains, and | |
|---|----|
| Student Progress: What Percentage of Learners Remained in Their | |
| Instructional Programs and How Well Did They Perform? | 36 |
| Data Highlights | 36 |
| Program Status of Learners | 37 |
| Pretest Performance of Learners in ESL and ABE Classes | 38 |
| English as a Second Language (ESL) Classes – Pretest Scores | 38 |
| Adult Basic Education (ABE) Classes – Pretest Scores | 40 |
| Learning Gains | 41 |
| English as a Second Language Programs | 41 |
| Adult Basic Education Programs | 42 |
| Learner Progress | 43 |
| English as a Second Language Programs | 43 |
| Adult Basic Education Programs | 47 |
| | |
| Summary and Conclusion | 51 |

List of Tables

| Table 2.1 - | Total Enrollment Population by Instructional Program 14 |
|--------------|---|
| Table 2.2 - | Percentage of Learners Experiencing Each Class Environment 17 |
| Table 2.3 – | Percentage of Learners Within Each Instructional Program Categorized |
| | by Gender |
| Table 2.4 – | Percentage of Learners Within Each Instructional Program Categorized |
| | by Age |
| Table 2.5 – | Percentage of Learners Categorized by Ethnicity19 |
| | Mean Years of Education Among Learners In Each Instructional Program20 |
| Table 3.1 – | Two-Year Comparison of Mean Reading Appraisal Scores Among ESL |
| | Learners Across Reported Instructional Level and the CASAS National |
| | Level Descriptors |
| Table 3.3 – | Two-Year Comparison of Mean Listening Appraisal Scores Among ESL |
| | Learners Across Reported Instructional Level and the CASAS National |
| | Level Descriptors |
| Table 3.4 – | Two-Year Comparison of Mean Reading Appraisal Scores Among ABE |
| | Learners Across Reported Instructional Level and the CASAS National |
| | Level Descriptors |
| Table 3.5 – | Two-Year Comparison of Mean Math Appraisal Scores Among ABE |
| | Learners Across Reported Instructional Level and the CASAS National |
| | Level Descriptors |
| Table 3.7 – | Two-Year Comparison of Mean Reading Appraisal Scores Among GED |
| | Learners Across Reported Instructional Level and the CASAS National |
| | Level Descriptors |
| Table 3.8 – | Two-Year Comparison of Mean Math Appraisal Scores Among GED |
| | Learners Across Reported Instructional Level and the CASAS National |
| | Level Descriptors |
| Table 3.10 - | - Two-Year Comparison of Mean Reading Appraisal Scores Among Adult |
| | High School Learners Across Reported Instructional Level and the CASAS |
| | National Level Descriptors |
| Table 3.11- | Two-Year Comparison of Mean Math Appraisal Scores Among Adult |
| | High School Learners Across Reported Instructional Level and the CASAS |
| | National Level Descriptors |
| Table 3.13 - | - Two-Year Comparison of Mean Reading Appraisal Scores Among |
| | Citizenship Learners Across Reported Instructional Level and the CASAS |
| | National Level Descriptors |
| Table 3.15 - | |
| | Citizenship Learners Across Reported Instructional Level and the CASAS |
| | National Level Descriptors |
| Table 3.16 - | - Percentages of Learners Endorsing Each Achievement Outcome Across |
| | Program and Instructional Year |
| Table 4.1 – | Perrcentage of Learners Remaining in Their Instructional Program During |
| | the 1996-97 and 1997-98 Instructional Years |
| Table 4.2 – | Mean Listening and Reading Pretest Scores Across CASAS National Level |
| | Descriptors for ESL Learners 1996-97 |

| Table 4.3 - | Mean Listening and Reading Pretest Scores Across CASAS National Level |
|-------------|---|
| | Descriptors for ESL Learners 1997-98 |
| Table 4.4 - | - Mean Reading and Math Pretest Scores Across CASAS National Level |
| | Descriptors for ABE Learners 1996-97 40 |
| Table 4.5 – | Mean Reading and Math Pretest Scores Across CASAS National Level |
| | Descriptors for ABE Learners 1997-98 |
| Table 4.6 – | Mean Learning Gains Among ESL and ABE Learners for 1996-97 and 1997- |
| | 98 Instructional Years |
| Table 4.7– | Percentage of Learners Scoring at Least One Skill Level Higher at Post-test |
| | than at Program Entry 1996-97 and 1997-9850 |

List of Figures

| Figure 2.1 – Total Enrollment Population Distribution of Learners by Instructional | |
|--|----|
| Program (1996-97) | 12 |
| Figure 2.2 – Total Enrollment Population Distribution of Learners by Instructional | |
| Program (1997-98) | 13 |
| Figure 2.3 – Percentage of Learners Experiencing Each Class Environment | |
| 1996-97 | 15 |
| Figure 2.4 – Percentage of Learners Experiencing Each Class Environment | |
| 1997-98 | 16 |
| Figure 3.1 –Percentage of Learners Endorsing Various Reasons for Enrollment in | |
| Adult Education Programs 1996-97 / 1997-98 | 22 |
| | |

Understanding Our Past to Prepare for the Future: A Two-Year Comparison of Connecticut's Adult Education Programs

Chapter 1 - Introduction: An Overview of Adult Education in Connecticut

Understanding Our Past to Prepare for the Future: A Two-Year Comparison of Connecticut's Adult Education Programs examines a variety of demographic, student performance and achievement information about Connecticut adult learners over a two-year period from July 1, 1996 – June 30, 1998. Student enrollment demographics relative to participation in adult education programs and the variety of instructional levels are examined. A Connecticut enrollment profile is presented for gender, ethnicity, age, and years of education. This study also explores why students enroll in adult education. Reasons for enrollment are juxtaposed with ability levels that learners bring to the classroom experience. Attention is also paid to the relationship between reasons for enrollment and student goal attainment. In other words, what percentage of adults achieved a goal consistent with their reasons for enrolling in the program? Student attrition is an often-cited problem associated with adult learners. This study also examines student retention data across different program areas and instructional levels.

Because all adult learners in English as a second language and basic skills programs are required to use a standard assessment measure, student gains are examined in substantial detail to determine how well these adults performed academically. The comparison report also presents information about learner advancement to the next level of instruction, an invaluable planning tool for a variety of adult education stakeholders.

Student performance and achievement data are essential for state and local agencies for planning purposes. This information is helpful for funders, legislators and policy makers to identify and target necessary resources and to establish national and state-level policies sensitive to the unique needs of undereducated populations. Additionally, data presented in this comparison report provide useful parameters for establishing realistic expectations around the length of time needed to complete each instructional level as students progress through the system toward program completion. Lastly, but certainly as importantly, trends in performance data provide important insights for program staff providing intake counseling and instructional services to assist students in setting realistic personal goals for themselves.

Why This Study about Connecticut Adult Learners?

A primary reason for conducting *A Two-Year Comparison of Connecticut's Adult Education Programs* is to position the Connecticut State Department of Education to respond to recently enacted federal legislation. The Workforce Investment Act (WIA) of 1998 recognizes adult education as a cornerstone for ensuring a well-prepared workforce. Title II of WIA, the Adult Education and Family Literacy Act, focuses on strengthening program quality by requiring states to give priority in awarding funds to local programs that are based on a solid foundation of research, address the diverse needs of adult learners, and utilize effective instructional techniques and strategies.

Beginning July 1, 1999, the stakes for states under the new law will become much higher. In order to optimize the return of investment, the WIA requires that each state set and document

progress toward meeting the following core indicators of performance established under the new legislation:

- Demonstrated improvements in literacy skill levels in reading, writing and speaking the English language, numeracy, problem-solving, English language acquisition, and other literacy skills;
- Placement in, retention in, or completion of, postsecondary education, training, unsubsidized employment or career advancement; and
- Receipt of a secondary school diploma or its recognized equivalent.

WIA also requires that each state have a high quality management information system that has the capacity to report participant outcomes and monitor program performance against the eligible agency performance measures.

Connecticut began to automate its data collection reporting process in 1990. Over the past nine years the Bureau of Career and Adult Education has worked through a variety of iterations to improve the system, to incorporate checks and balances, to streamline data entry methods, and to improve the quality of the data districts submit. It only has been in the last few years that the quality of the system and the quality of data entry have been adequate both qualitatively and quantitatively to begin to examine reliably a variety of demographic, student performance and other achievement characteristics of Connecticut's adult learners.

Because Connecticut now has a mature adult education database management system in place which captures comprehensive information on the students it serves, it is well-positioned to provide reliable data to the U.S. Department of Education, funders, policy makers and legislators. Connecticut, however, needed to conduct such a study to provide guidance in setting appropriate, *and achievable*, core indicators of performance. This study provides essential information the Bureau of Career and Adult Education needs to have as a framework for setting realistic goals it will incorporate into its state plan for the U.S. Department of Education, a requirement under the new legislation.

While the anticipation of WIA is clearly the most critical reason to conduct *A Two-Year Comparison of Connecticut's Adult Education Programs,* there are other compelling reasons for preparing this report. More than ten years ago, the Connecticut State Department of Education implemented a major competency-based initiative, the Connecticut Adult Performance Program (CAPP), now the Connecticut Competency System (CCS). The Connecticut State Board of Education requires that programs it funds utilize the CCS. This system provides consistent learner progress information across all programs funded.

With the exception of a final summative evaluation of the CAPP implementation, the Bureau of Career and Adult Education has not formally validated the efficacy of the CCS initiative. Examining the effectiveness of this instruction and assessment system is critical at this juncture, since CCS is used in large part to report progress information to the Connecticut State Board of Education and to local school districts through Strategic School Profiles. CCS data is also reported to the U.S. Department of Education and its other partners, such as the Departments of Labor and Social Services, as well as Connecticut's eight regional workforce development boards. Results from this report can also be used to share demographic and performance

information with other primary partners, such as family and workplace literacy collaborators. A study such as this will not only assist Connecticut Department of Education adult education professionals to examine the assessment system and the quality of assessment results, but it also will provide invaluable insight into the effectiveness of its assessment policies as well.

A Two-year Comparison of Connecticut's Adult Education Programs will serve an additional primary purpose. During 1998-1999 the Bureau of Career and Adult Education introduced a statewide, multi-year Program Development Initiative (PDI) utilizing the CASAS Continuous Improvement Measure (CIM). This project entails full staff participation in examining current program practices and requires a task force, using group consensus, to develop a program improvement plan that spans several years. The first year of the project has focused on Connecticut's five urban districts and eventually will include all programs the Connecticut Department of Education funds. The PDI utilizes a standardized process, the CASAS Continuous Improvement Measure (CIM), to facilitate the procedure. Being able to present the data results of this study will be useful to program providers in helping them view their current program practices and performance.

Adult Education in Connecticut

Connecticut state legislation requires that the adult education services described in this section be provided by local school districts free of charge to any adult 16 years of age or over who is no longer enrolled in a public elementary or secondary school program. Local school districts, and other eligible agencies, providing mandated adult education programs are reimbursed by the Connecticut State Department of Education on a cost-sharing, sliding scale of 0 - 65% based on the relative wealth of a district.

Federal adult education dollars are used to fund adult education programs that are provided under the mandates of the Adult Education Act, as amended by the National Literacy Act of 1991. Funding for federal adult education programs is distributed through a direct and equitable request-for-proposal process. Federal funds are awarded to a variety of eligible applicants including state and local education agencies and private non-profit organizations. Although this two-year study was conducted prior to new federal legislation, it should be noted that beginning July 1, 1999, the Workforce Investment Act of 1998 (discussed below) supercedes the Adult Education Act, as amended by the National Literacy Act of 1991.

The variety of adult education programs funded under federal, state, and local resources in Connecticut are discussed briefly below:

Adult Basic Education (ABE) This instruction is designed for adults who are unable to read, write, and compute sufficiently well to meet the requirements of adult life and for adults who lack mastery of basic educational skills that will enable them to function effectively in society. Instruction can be individualized, offered in a classroom setting, or in a learning lab. Persons completing ABE are prepared to benefit from secondary level instruction.

Americanization/Citizenship Training This program provides instruction for foreign-born adults who wish to become United States citizens. Persons completing this program are prepared to pursue citizenship through the prescribed Immigration and Naturalization Service process.

English as a Second Language (ESL)/English for Adults with Limited English Proficiency (LEP) Instruction is designed for adults who have limited proficiency in the English language or whose native language is not English. Instructional emphasis is on listening and speaking, as

well as on reading and writing. Instruction is provided in English as a unifying means of serving the broad ethnic diversity of LEP adults in Connecticut.

Secondary School Completion Programs Connecticut adults enjoy a choice in selecting a high school completion option that is suited to their instructional needs and goals as well as to their academic backgrounds.

General Educational Development (GED) This preparation program prepares adults who have not completed high school for the rigorous GED examination. This battery of tests assesses academic skills and concepts normally required for graduation from a traditional high school program. Persons passing this examination are awarded a Connecticut High School Diploma.

Adult High School Credit Diploma (AHSD) This secondary completion program requires that students earn credits toward a high school diploma in a prescribed plan of study which requires at least 20 credits in academic and elective areas. Credits for experiential learning, military and work experience, independent study, and self-paced curricula are additional methods for obtaining credit. Diplomas are awarded by local school districts to students who complete the course of study successfully.

External Diploma Program (EDP) This program provides an alternative secondary credential designed for adults who have gained skills through life experiences and demonstrated competence in a particular job, talent or academic area. The EDP is a portfolio assessment program which offers no formal classroom instruction. An adult who successfully completes this program is awarded a local school district diploma.

Coordinated Education and Training Opportunities (CETO):

The CETO initiative originated as a strategy for joining resources to provide better education and training services to educationally and economically disadvantaged populations. During the period of this two-year report, CETO funds consisted of federal adult education, Carl D. Perkins, Job Training Partnership Act (Education and Coordination – 8%), and Department of Labor/Temporary Family Assistance dollars. These funds are distributed to the eight regional workforce development boards who, in turn, distribute these monies competitively to education and training providers to ensure a well-prepared workforce in each of Connecticut's labor market areas. This initiative offers many of the programs listed above in addition to career counseling and life skills programs.

Information on Assessment Policy

A significant portion of *A Two-Year Comparison of Connecticut's Adult Education Programs* is devoted to assessment information. In order to understand the assessment data presented, it is necessary to understand the types of assessment used by adult education programs in Connecticut. Essential information about specific assessment instruments is described in the section below.

Each new student is required at initial program entry to take an appraisal test developed by CASAS. The primary purpose of appraisal testing is to determine the educational placement for incoming students, so that instruction can begin at an appropriate level.

Appraisal testing requirements essentially fall into two different categories based on the degree of English proficiency. All adults who are English proficient (primarily native speakers of English) are administered a reading and math appraisal test. These tests determine if a student is functioning at an adult basic education level or can benefit from secondary level instruction. Appraisal tests also provide information for ABE students in terms of determining their basic skills functioning level (e.g., pre-literacy, beginning basic skills, intermediate basic skills).

Limited English proficient students are given different tests determined by their levels of ability. Unless students are exempted from appraisal testing because they speak little or no English, a listening test is given to measure listening comprehension. Depending on how well students perform on this assessment, they may also be administered a reading test. Limited English proficient adults are assigned to an appropriate instructional level based on the results of these assessments.

Students who wish to enroll in citizenship classes are given a reading test if they are English proficient, or they follow the testing procedures prescribed for limited English proficient adults in the paragraph above.

Students who are placed in either basic skills classes or English as a second language classes are administered CASAS pre- and post-achievement tests to determine learner progress. Again, English proficient adults are pre- and post-tested in reading and math; limited English proficient adults are assessed for progress using listening and/or reading achievement tests. Achievement testing is conducted for each semester in which a student is enrolled. It is also important to note that student progress can only be determined if there is a corresponding post-test for each pretest administered. Student progress is measured by examining learner gains between pre- and post-test administrations.

The Contents of the Study

A Two-Year Comparison of Connecticut's Adult Education Programs is divided into three additional chapters. Chapter 2 explores what types of learners are enrolled in Connecticut's adult education programs and in which programs are they enrolling. Chapter 3 presents data on why learners enroll in adult education programs and what their ability levels are at the time of enrollment. It also provides useful information between appraisal test results and the resulting educational placements of students. Chapter 3 further examines learner achievements by program as reported by local education providers; data results demonstrate the challenges adult educators face in collecting meaningful achievement information on students who often leave without prior notification. The final chapter examines retention rates by program, learner gains, and student progress information. One of the Core Indicators of Performance in the Workforce Investment Act requires that states establish what percentage of clients advance at least one instructional level. Chapter 4 presents data to assist the Connecticut Department of Education in determining appropriate percentages of students who will advance to the next instructional level. Prior to this study, Connecticut had no reliable way to predict student level advancement; having an objective, reliable procedure for setting realistic student performance goals positions Connecticut well for the future.

Chapter 2 - Program and Learner Information for the Total Enrollment Population: Who Are Our Learners and What Types of Programs Are They Enrolling In?

Chapter Two provides information about program services and individuals served in Connecticut's Adult Education programs that submitted data. This chapter is based on data from learners enrolled in Connecticut's adult education programs from fall 1996 to spring 1998. Data were collected from learners enrolled in Citizenship, ESL/LEP, ABE, GED preparation, Adult High School credit, EDP, CETO, Career Counseling, Life Skills, and other educational programs. Due to the low number of learners providing data from classes other than Citizenship, ESL, ABE, GED preparation, and Adult High School credit, those data were collapsed into the "Other" category for purposes of comparison. Data are presented across two years, namely, 1996-97 and 1997-98, each representing learners enrolled in either the spring and/or fall semesters.

Data Highlights

- Student Entry Records were obtained from 27,171 learners enrolled in Connecticut's adult education programs during the 1996-97 academic year. The largest percentage of learners, 38.8 percent, was served in English as a second language (ESL) programs.
- Student Entry Records were obtained from 33,665 learners enrolled in Connecticut's adult education programs during the 1997-98 academic year. The largest percentage of these learners, 36.8 percent, was served in English as a second language (ESL) programs.
- 20.9% of learners in 1996-97 were enrolled in classes that were taught at the beginning level.
- In 1997-98, 22.7% of learners were instructed at the beginning level.
- Connecticut's adult education programs serve more females than males (57.4% in 1996-97; 56.2% in 1997-98).
- In both instructional years, more than one-half (1996-97: 52.8%; 1997-98: 53.6%) of Connecticut adult learners were between 18 and 30 years old.
- Hispanic learners were the highest percentage (36.9%) of learners served during the 1996-97 instructional period. Caucasian learners were most represented (36.8%) during the 1997-98 instructional period.
- In the context of the general population, Connecticut's adult education programs served individuals with little prior education. Data indicate that no more than 30% of learners in either year earned a diploma from high school and more than 70% overall have not completed more than 11 years of education.

Program Information

Program information includes type of instructional program and instructional level. These data were provided by instructors and learners on the Student Entry Record form completed by each learner.

Instructional Program

Student Entry Records were obtained from 27,171 learners enrolled in Connecticut's adult education programs during the 1996-97 academic year. The largest percentage of learners, 38.8 percent, was served in English as a second language (ESL) programs, with 21.0 percent served by Adult High School credit programs. Slightly more than 18% of learners were served by GED preparation programs, 17.8% enrolled in Adult Basic Education (ABE) programs, and 2.2% were served by Citizenship programs. The remaining 2.0 percent of learners were served by EDP, CETO, Career, or Life Skills programs (See Figure 2.1).

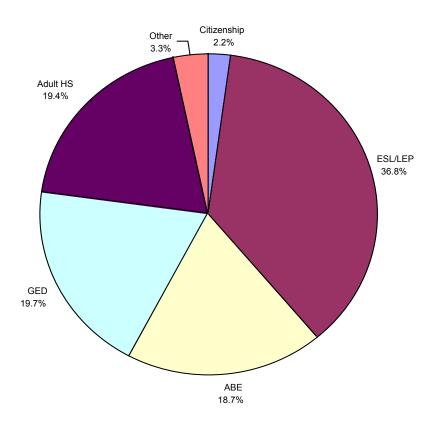
Figure 2.1 – Total Enrollment Population Distribution of Learners by Instructional Program (1996-97)

Adult HS 4 duit HS 1.0% 6 duit HS 1.0% 1

(N = 27, 171)

Student Entry Records were also obtained from 33,665 learners enrolled in Connecticut's adult education programs during the 1997-98 academic year. The largest percentage of these learners, 36.8 percent, was served in English as a second language (ESL) programs, with 19.7% served by GED preparation programs. Additionally, 19.4% percent were served by Adult High School credit programs, 18.7% by Adult Basic Education (ABE) programs, and 2.2% by Citizenship programs. The remaining 3.3 percent were served by EDP, CETO, Career, or Life Skills programs (See Figure 2.2).

Figure 2.2 – Total Enrollment Population Distribution of Learners by Instructional Program (1997-98) (<u>N</u> = 33,092)



A comparison of the data across the two academic years indicates that the total number of learners increased 23.9% from 1996-97 ($\underline{N} = 27,171$) to 1997-98 ($\underline{N} = 33,665$). While the overall number of students increased during 1997-98, there were few observable differences in enrollment patterns across each of the instructional programs. In fact, no program demonstrated more than a 2% fluctuation in enrollment from 1996-97 to 1997-98 (see Table 2.1).

| | 1996 | -97 | 1997-98* | | |
|-------------|----------|------|----------|------|--|
| Program | <u>N</u> | % | N | % | |
| Citizenship | 611 | 2.2 | 730 | 2.2 | |
| ESL/LEP | 10,555 | 38.8 | 12,176 | 36.8 | |
| ABE | 4,846 | 17.8 | 6,184 | 18.7 | |
| GED | 4,925 | 18.1 | 6,507 | 19.7 | |
| Adult HS | 5,696 | 21.0 | 6,408 | 19.4 | |
| Other | 538 | 2.0 | 1,087 | 3.3 | |
| Total | 27,171 | 100 | 33,092 | 100 | |

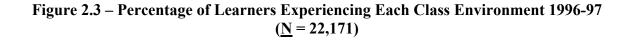
Table 2.1 – Total Enrollment Population by Instructional Program(1996-97 to 1997-98)

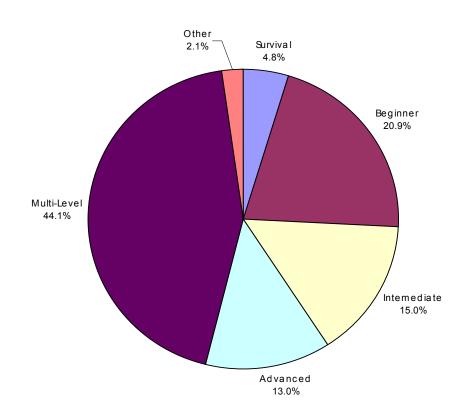
* 538 cases represent missing data

Instructional Level

Through an initial appraisal process learners were placed in classes taught at various instructional levels. Data representing 27,171 learners in 1996-97 and 33,665 learners in 1997-98 provide insight into the proportion of those placed in classes at various levels of instruction. Figures 2.3 and 2.4 present instructional level data for learners across all program types during the 1996-97 and 1997-98 learning periods, respectively. Instructional level is defined as the level at which a class was taught.

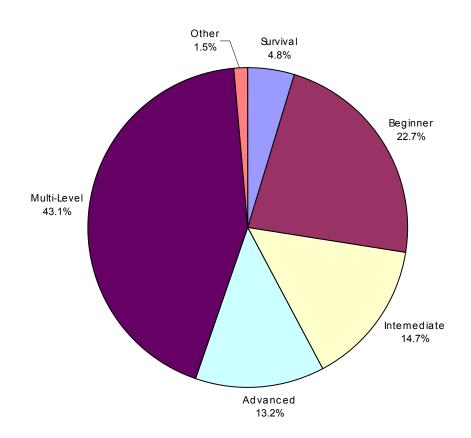
1996-97: The data indicate that a majority of learners attended classes taught at multiple levels (44.1%), followed by beginning levels (20.9%), intermediate (15.0%), advanced (13.0%), and survival (4.8%) levels. The remaining 2.1% of learners were instructed at levels characterized as bilingual, Spanish only and prevocational (see Figure 2.3).





1997-98: The data indicate that a majority of learners attended classes taught at multiple levels (43.1%), followed by beginning levels (22.7%), intermediate (14.7%), advanced (13.2%), and survival (4.8%) levels. The remaining 1.5% of learners were instructed in classes characterized as Spanish only (see Figure 2.4).

Figure 2.4 – Percentage of Learners Experiencing Each Class Environment 1997-98 (<u>N</u> = 33,665)



A comparative analysis of the two years suggests very little fluctuation in classroom instructional level across the two years. The only notable difference is evidenced among those taught at the beginning level with a 1.8% increase during the 1997-98 instructional period. All other instructional level comparisons did not present differences of more than 1.0% (see Table 2.2).

| | 1990 | 6-97 | 1997-98 | | |
|---------------------|----------|------|---------|------|--|
| Instructional Level | <u>N</u> | % | N | % | |
| Survival | 1,316 | 5.0 | 1,613 | 4.8 | |
| Beginning | 5,687 | 20.9 | 7,646 | 22.7 | |
| Intermediate | 4,088 | 15.0 | 4,948 | 14.7 | |
| Advanced | 3,523 | 13.0 | 4,449 | 13.2 | |
| Multi-Level | 11,975 | 44.1 | 14,497 | 43.1 | |
| Other | 582 | 2.1 | 512 | 1.5 | |
| Total | 27,171 | 100 | 33,665 | 100 | |

Table 2.2 - Percentage of Learners Experiencing Each Class Environment (1996-97: <u>N</u> = 27,171; 1997-98: <u>N</u> = 33,665)

Learner Information

Learner information was provided by instructors and learners using the Student Entry Record form. Information detailed in this summary includes gender, age, ethnic background, high school diploma attainment, and last educational grade completed.

Gender

In both the 1996-97 and 1997-98 academic years Connecticut's adult education programs served more female than male learners (57.4% in 1996-97; 56.2% in 1997-98). The gender distribution of the population varied by program type but not across instructional years. As seen in Table 2.3, all programs in 1996-97 with the exception of ABE demonstrate gender differences exceeding 10%. In 1997-98, all programs except ABE and Adult High School credit demonstrated gender differences exceeding 10% (see Table 2.3).

| Table 2.3 – Percentage of Learners Within Each Instructional Program Categorized by |
|---|
| Gender |
| 1996-97 and 1997-98 |

| | | 1996-97 | | 1997-98 | | | |
|-------------|-----------|----------|----------------|---------|----------|----------------|--|
| Program | Male % | Female % | Sample Size | Male % | Female % | Sample Size | |
| Citizenship | 39.1 | 60.9 | 611 | 36.7 | 63.3 | 730 | |
| ESL/LEP | 40.1 | 59.9 | 10,555 | 40.7 | 59.3 | 12,176 | |
| ABE | 48.7 | 51.3 | 4,846 | 49.7 | 50.3 | 6,184 | |
| GED | 42.9 | 57.1 | 4,925 | 43.7 | 56.3 | 6,507 | |
| Adult HS | 44.4 | 55.6 | 5,696 | 47.4 | 52.6 | 6,408 | |
| Other | 19.9 | 80.1 | 538 | 30.0 | 70.0 | 1,087 | |
| Total | 42.6 | 57.4 | 27,171 | 43.8 | 56.2 | 33,092 | |

Age

Total

In both instructional years, more than one-half (1996-97: 52.8%; 1997-98: 53.6%) of Connecticut adult learners were between 18 and 30 years old. Less than 9 percent of learners enrolled during either instructional year were between 16 and 18. The proportion of learners over the age of 51 was nearly identical for both instructional periods: 8.8% in 1996-97 and 8.6% in 1997-98. Learners between the ages of 21 and 30 were most highly represented for both instructional years; 30.1% (1996-97) and 30.3% (1997-98).

Age comparisons across programs indicated that Adult High School credit programs served the highest proportion of younger learners, i.e., those under 21 years of age, with 61.5% in 1996-97 and 63.8% in 1997-98 falling into this category. See Table 2.4 for all other age comparisons.

| | | Age Group | | | | | | | | | | | | | | |
|-------------|-----|-----------|------|------|------|------|------|------|------|------|------|------|------|------|--------|--------|
| Program | 16- | 18 | 18 | -20 | 21 | -30 | 31- | 40 | 41 | -50 | 51- | ·60 | > 6 | 0 | Sampl | e Size |
| Citizenship | 0.3 | 0.0 | 2.5 | 1.2 | 15.4 | 11.9 | 22.6 | 27.3 | 22.3 | 28.5 | 19.7 | 16.8 | 17.2 | 14.2 | 610 | 730 |
| ESL/LEP | 0.8 | 0.6 | 5.7 | 5.7 | 33.0 | 33.6 | 28.8 | 28.4 | 17.5 | 17.5 | 7.7 | 7.8 | 6.5 | 6.4 | 10,544 | 12,176 |
| ABE | 3.0 | 3.9 | 21.2 | 22.8 | 30.8 | 29.9 | 23.8 | 22.4 | 13.8 | 13.2 | 5.3 | 5.8 | 2.1 | 2.0 | 4,843 | 6,184 |
| GED | 3.4 | 3.8 | 29.7 | 31.0 | 34.2 | 33.9 | 20.7 | 19.6 | 8.5 | 8.5 | 2.9 | 2.7 | 0.7 | 0.6 | 4,922 | 6,507 |
| Adult HS | 9.3 | 9.9 | 52.2 | 53.9 | 22.6 | 22.4 | 9.4 | 7.9 | 4.8 | 4.3 | 1.4 | 1.3 | 0.3 | 0.2 | 5,691 | 6,408 |
| Other | 3.5 | 2.1 | 15.6 | 10.8 | 27.3 | 32.2 | 28.8 | 27.7 | 17.7 | 16.7 | 5.4 | 6.7 | 1.7 | 3.8 | 538 | 1,087 |

12.6

12.6

5.3

5.3

3.5

3.3

27,148

33.092

 Table 2.4 – Percentage of Learners Within Each Instructional Program Categorized by Age (1996-97:<u>N</u> = 27,111; 1997-98: <u>N</u> = 33,092)

Note: Entries in bold represent 1997-98 learners.

23.3 30.1

As previously noted, the highest percentage of young adults under the age of 21 years (more than 60% in both instructional years) is enrolled in Adult High School credit programs followed by enrollments in GED preparation programs (33.1% in 1996-97; 34.8% in 1997-98). This may reflect a current trend where learners who are performing at borderline levels in public high schools are transferring or being transferred to adult school or GED preparation programs to complete their secondary education.

21.5

22.2

30.3

Ethnic Background

3.5

3.7 22.7

The highest percentage of learners enrolled in adult education programs during the 1996-97 instructional year were Hispanic (36.9%). Caucasian (36.1%) and Black (20.0%) learners were also highly represented with the remaining indicating Asian-Pacific Islander (5.9%) or American Indian-Alaska Native (1.0%) as their ethnicity.

Learners enrolled during the 1997-98 academic year represented a very similar pattern of ethnic affiliation: Caucasian (36.8%), Hispanic (34.6%), Black (20.8%), Asian-Pacific Islander (6.7%), and American Indian-Alaska Native (1.0%). See Table 2.5 for comparisons across 1996-97 and 1997-98 instructional periods.

| | 199 | 6-97 | 1997-98 | | |
|--------------------------|----------|------|----------|------|--|
| Ethnicity | <u>N</u> | % | <u>N</u> | % | |
| Hispanic | 10,028 | 36.9 | 11,648 | 34.6 | |
| Caucasian | 9,813 | 36.1 | 12,401 | 36.8 | |
| Black | 5,445 | 20.0 | 7,014 | 20.8 | |
| Asian-Pacific Islander | 1,602 | 5.9 | 2,253 | 6.7 | |
| Am. Indian-Alaska Native | 283 | 1.0 | 349 | 1.0 | |

Table 2.5 – Percentage of Learners Categorized by Ethnicity (1996-97:<u>N</u> = 27,171; 1997-98: <u>N</u> = 33,665)

Educational Achievement

Educational achievement was assessed using two different indicators, namely, high school diploma acquisition and last grade completed.

Adult learners enrolled in programs during the 1996-97 and 1997-98 instructional years were asked to indicate whether or not they had earned a high school diploma. Among those enrolled during 1996-97, 69.1% of learners indicated they had not received a high school diploma. Seventy percent of learners enrolled during 1997-98 indicated they had not received a high school diploma.

Learners enrolled in 1997-98 evidenced slightly higher levels of education with an average of 9.8 years completed at time of program entry versus 9.6 years among 1996-97 learners. Overall, more than 70% of learners in 1996-97 and 69.6% of learners in 1997-98 reported having completed 11 years of education or less. These percentages are consistent with those previously mentioned regarding those who had earned a high school diploma. Twenty-one percent of learners in 1996-97 reported completing only 12 years of education as compared with 22.8% of learners in 1997-98.

On average, learners enrolled during the 1997-98 instructional period reported the same or higher levels of formal education across all program types. As seen in Table 2.6, the largest difference occurred between Citizenship learners: 1996-97 - 10.3 years of schooling on average; 1997-98 - 11.1 years of schooling on average. No other program comparison differed by more than 0.6% from 1996-97 to 1997-98. See Table 2.6 for educational attainment comparisons across instructional year and program type.

| | 1996 | 6-97 | 1997-98 | | | |
|-------------|---------------------------|-------------|---------------------------|-------------|--|--|
| Program | Mean Yrs. Of Education | Sample Size | Mean Yrs. Of Education | Sample Size | | |
| Citizenship | 10.3 | 611 | 11.1 | 730 | | |
| ESL/LEP | 10.2 | 10,555 | 10.3 | 12,176 | | |
| ABE | 7.9 | 4,846 | 8.2 | 6,184 | | |
| GED | 9.6 | 4,925 | 9.6 | 6,507 | | |
| Adult HS | 9.7 | 5,696 | 10.0 | 6,408 | | |
| Other | 10.6 | 538 | 11.2 | 1,087 | | |
| Total | 9.6 | 27,171 | 9.8 | 33,092 | | |

Table 2.6 – Mean Years of Education Among Learners In Each Instructional Program(1996-97:<u>N</u> = 27,171; 1997-98: <u>N</u> = 33,092)

In summary, Connecticut's adult education programs serve individuals with little prior education in comparison to the general population. These data support the notion that Connecticut's adult education programs are serving appropriate populations, namely, those not currently having a high school diploma and a significant number not completing as much as 11 years of formal education. Data indicate that no more than 30% of learners in either year earned a diploma from high school and more than 70% overall have not completed more than 11 years of education.

Chapter 3 - Learner Information Regarding Reasons for Enrollment and Program Entry Performance Levels: Why Are Learners Enrolling and What Levels of Ability Do They Bring to the Learning Experience?

Chapter Three provides information regarding the reasons learners enrolled in adult education classes and their entry-level appraisal performances. In addition, information regarding the achievement outcomes that learners experienced during the 1996-97 and 1997-98 instructional years will be presented. This chapter represents data from learners in all adult education programs and includes multiple records and responses for individuals across both program years. Sample sizes will differ in some instances from the previous chapter, as demographic information represent unduplicated responses and/or enrollments whereas data included herein may represent the same individual over multiple testing occasions.

Data Highlights

- Overall, the most frequently cited reason for enrollment among adult education learners in both instructional years was for personal enhancement.
- 1996-97: Reading appraisal scores among non-native speakers of English produced an overall mean score of 212.2, which falls within the high intermediate range on the CASAS National Scale.
- 1997-98: The overall mean listening appraisal score for non-native English speakers was 204.9 which falls within the low intermediate range on the CASAS National Scale.
- 1996-97: Reading appraisal scores among ABE learners produced an overall mean score of 223.5, which falls within the advanced range on the CASAS National Scale.
- 1997-98: The overall mean math appraisal score for ABE learners was 212.3 which falls within the high intermediate range on the CASAS National Scale.
- On average, ABE learners scored at least 12 points higher on reading appraisals than on math. This difference was even greater among GED and AHS learners.
- 1996-97: Reading appraisal scores among GED learners produced an overall mean score of 235.4, which falls just above the advanced ABE range on the CASAS National Scale.
- 1997-98: The overall mean math appraisal score for GED learners was 220.4 which falls just above the high intermediate ABE range on the CASAS National Scale.
- 1996-97: Reading appraisal scores among adult high school (AHS) learners produced an overall mean score of 233.2 which falls within the advanced ABE range on the CASAS National Scale.
- 1997-98: The overall mean math appraisal score for AHS learners during 1997-98 was 219.5 which falls within the high intermediate ABE range on the CASAS National Scale.
- Overwhelmingly, learners in both instructional years endorsed "Met personal goal" as the most commonly experienced outcome.
- Learner outcomes were consistent with the expectations for each instructional program.

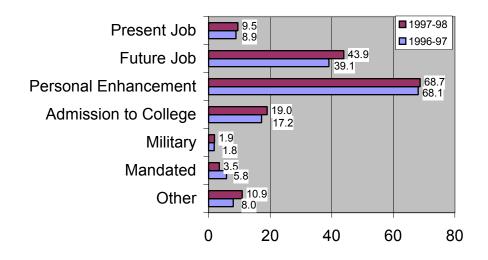
Reasons for Enrollment

Data were collected regarding the reasons learners had for enrolling in one of the many adult education programs offered in Connecticut. Data presented in this section represent all learners enrolled in any adult education program during the 1996-97 or 1997-98 instructional periods.

1996-97: Overall, the most frequently cited reason for enrollment among adult education learners was for personal enhancement (68.1%). Thirty-nine percent indicated their reason for enrollment was to acquire a job in the future. Other reasons included admission to college (17.2%), improve present job (8.9%), and mandated attendance (5.8%). Figure 3.1 presents percentages across all indicated reasons for enrollment.

1997-98: Overall, the pattern for most frequently cited reasons for enrollment was identical to the respondents in the 1996-97 data collection year. The most frequently indicated reason for enrollment was personal enhancement (68.7%). Nearly 44% indicated their reason for enrollment was to acquire a job in the future. Other reasons included admission to college (19.0%), improve present job (9.5%), and mandated attendance (3.5%). Figure 3.1 presents percentages across all indicated reasons for enrollment.

Figure 3.1 – Percentage of Learners Endorsing Various Reasons for Enrollment in Adult Education Programs 1996-97 / 1997-98



Overall Appraisal Performance of Learners in Connecticut's Four Largest Adult Education Programs: ESL, ABE, GED Preparation, and Adult High School Credit (AHS).

This next section describes appraisal test data collected in ESL, ABE, GED preparation, Adult High School credit, and Citizenship classes. Appraisal test scores are separated by test type to provide insight into the specific levels of functioning of learners prior to instruction. In addition, scores are presented according to learners' overall functional level (a subjective rating often reflecting the level at which a particular class is taught) and learners' actual functional level as indicated by the appraisal test score. By presenting the data in this fashion program administrators, teachers, and learners can be informed as to the specific functional level of learners in different modalities (i.e., reading, listening or math) as well as their overall functioning level. Comparisons of appraisal scores across instructional years within each program type are also presented.

English as a Second Language (ESL) Classes – Appraisal Scores - Reading

1996-97: Regarding reading appraisal scores among non-native speakers of English, the overall mean score was 212.2 which falls within the high intermediate range on the CASAS National Scale. A breakdown of mean scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.1.

The same distribution of scores was assessed using the CASAS National Level Descriptors framework. The CASAS level descriptors can be used to indicate the level at which learners are performing as well as the potential for learners to perform certain tasks. In essence, CASAS appraisal scores indicate the level of functional literacy at program entry, and the level descriptors provide a framework for interpreting these scores. As seen in Table 3.1, 63.9% of non-native English speakers scored at the intermediate (42.6%) or beginning (21.3%) levels. A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.1.

1997-98: ESL learners in 1997-98 experienced very similar reading appraisal scores as did those in 1996-97. The overall mean reading appraisal score for non-native English speakers was 212.1, which represents a one-tenth of one point difference from the previous year. A breakdown of reading appraisal mean scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.1.

The distribution of 1997-98 ESL reading appraisal scores also was broken down using the CASAS National Level Descriptors and is displayed in Table 3.1. As seen in the table, 66.4% of non-native English speakers entered ESL programs at the intermediate (46.1%) or beginning (20.3%) levels.

Table 3.1 – Two-Year Comparison of Mean Reading Appraisal Scores Among ESLLearners Across Reported Instructional Level and the CASAS National Level Descriptors

| | 1996- (N =3,5 | | 1997- (N =4, | | |
|---|------------------|------|-----------------|------|--|
| Reported Program Instructional Level | Mean | % | Mean | % | |
| Survival | 196.1 | 10.1 | 203.4 | 6.1 | |
| Beginner | 203.9 | 19.6 | 203.9 | 30.4 | |
| Intermediate | 214.5 | 25.6 | 214.5 | 31.2 | |
| Advanced | 222.7 | 21.4 | 222.4 | 11.5 | |
| Multi-Level | 214.1 | 23.3 | 217.6 | 20.7 | |
| Total | 212.2 | 100 | 212.1 | 100 | |
| CASAS National Descriptor Level | Mean | % | Mean | % | |
| Beginning: <201 | 189.8 | 21.3 | 191.3 | 20.3 | |
| Low Intermediate: 201-210 | 206.5 | 19.9 | 206.5 | 23.2 | |
| High Intermediate: 211-220 | 216.2 | 22.7 | 215.9 | 22.9 | |
| Advanced: 221-235 | 225.5 | 34.4 | 225.3 | 32.0 | |
| Adult Secondary: 236-245 | 238.0 | 1.2 | 238.7 | 1.0 | |
| Proficient Skills: >245 | 248.4 | 0.5 | 249.2 | 0.6 | |
| Total | 212.2 | 100 | 212.1 | 100 | |

English as a Second Language (ESL) Classes – Appraisal Scores - Listening

1996-97: Regarding listening appraisal scores among non-native speakers of English, the overall mean score was 205.3 which falls within the low intermediate range on the CASAS National Scale. A breakdown of mean listening scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.3.

The same distribution of scores was assessed using the CASAS National Level Descriptors framework. As seen in Table 3.3, 90.5% of non-native English speakers scored at the intermediate (58.8%) or beginning (31.7%) levels. A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.3.

1997-98: ESL learners in 1997-98 experienced very similar listening appraisal scores as did those in 1996-97. The overall mean listening appraisal score for non-native English speakers was 204.9, which represents less than a half-point difference from the previous year. A breakdown of listening appraisal mean scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.3.

The distribution of 1997-98 ESL listening appraisal scores was also broken down using the CASAS National Level Descriptors and is displayed in Table 3.3. As seen in the table, 90.8% of non-native English speakers entered ESL listening programs at the intermediate (58.6%) or beginning (32.2%) levels.

| | 1996-1 (N =7,5 | | 1997-98 (N =7,906) | |
|--------------------------------------|-------------------|------|-----------------------|------|
| Reported Program Instructional Level | Mean | % | Mean | % |
| Survival | 191.7 | 5.9 | 195.5 | 4.6 |
| Beginner | 198.4 | 33.4 | 198.0 | 38.7 |
| Intermediate | 208.1 | 26.8 | 207.6 | 28.7 |
| Advanced | 217.1 | 16.9 | 217.4 | 13.5 |
| Multi-Level | 207.5 | 17.0 | 209.4 | 14.5 |
| Total | 205.3 | 100 | 204.9 | 100 |
| CASAS National Descriptor Level | Mean | % | Mean | % |
| Beginning: <201 | 191.0 | 31.7 | 190.5 | 32.2 |
| Low Intermediate: 201-210 | 205.0 | 31.0 | 205.0 | 32.5 |
| High Intermediate: 211-220 | 215.3 | 27.8 | 215.4 | 26.1 |
| Advanced: 221-235 | 225.1 | 9.5 | 225.3 | 9.2 |
| Adult Secondary: 236-245 | N/A | N/A | N/A | N/A |
| Proficient Skills: >245 | N/A | N/A | N/A | N/A |
| Total | 205.3 | 100 | 204.9 | 100 |

Table 3.3 – Two-Year Comparison of Mean Listening Appraisal Scores Among ESL Learners Across Reported Instructional Level and the CASAS National Level Descriptors

Adult Basic Education (ABE) Classes – Appraisal Scores - Reading

1996-97: Regarding reading appraisal scores among ABE learners, the overall mean score was 223.5 which falls within the advanced range on the CASAS National Scale. A breakdown of mean scores within the reported program instructional level framework used in Connecticut adult education programs can be seen in Table 3.4.

As was done with the ESL appraisal score distributions, scores also were assessed using the CASAS National Level Descriptors framework. ABE learners tended to score higher upon program entry than did ESL learners. Less than 35% of learners entered ABE programs at the intermediate (29.5%) or beginning (5.3%) levels on reading appraisals compared to 63.9% of ESL learners (see Table 3.1). A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.4.

1997-98: ABE learners in 1997-98 experienced very similar reading appraisal scores as did those in 1996-97. The overall mean reading appraisal score for ABE learners was 224.9, which represents nearly a one and one-half point increase in learner performance at program entry from the previous year. A breakdown of mean reading appraisal scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.4.

| | 1996-9 | | 1997-98 | |
|---|---------|------|---------|------|
| | (N =4,1 | 89) | (N =6,' | 714) |
| Reported Program Instructional Level | Mean | % | Mean | % |
| Survival | 210.2 | 0.2 | 215.9 | 0.5 |
| Beginner | 220.1 | 11.0 | 219.2 | 7.4 |
| Intermediate | 224.3 | 22.5 | 224.8 | 36.0 |
| Advanced | 230.7 | 9.2 | 229.0 | 8.9 |
| Multi-Level | 222.8 | 57.0 | 225.2 | 47.2 |
| Total | 223.5 | 100 | 224.9 | 100 |
| CASAS National Descriptor Level | Mean | % | Mean | % |
| Beginning: <201 | 192.2 | 5.3 | 193.7 | 2.9 |
| Low Intermediate: 201-210 | 206.1 | 8.5 | 206.7 | 6.2 |
| High Intermediate: 211-220 | 216.1 | 21.0 | 215.9 | 20.7 |
| Advanced: 221-235 | 226.2 | 45.2 | 226.4 | 50.5 |
| Adult Secondary: 236-245 | 238.3 | 14.7 | 238.3 | 14.3 |
| Proficient Skills: >245 | 249.4 | 5.3 | 249.2 | 5.4 |
| Total | 223.5 | 100 | 224.9 | 100 |

Table 3.4 – Two-Year Comparison of Mean Reading Appraisal Scores Among ABE Learners Across Reported Instructional Level and the CASAS National Level Descriptors

Adult Basic Education (ABE) Classes – Appraisal Scores - Math

1996-97: Regarding math appraisal scores among ABE learners, the overall mean score was 211.5 which falls within the high intermediate range on the CASAS National Scale. A breakdown of mean scores within the reported program instructional level framework used in Connecticut adult education programs can be seen in Table 3.5.

Scores were also assessed using the CASAS National Level Descriptors framework. Approximately 84% of learners entered ABE programs at the intermediate (72.9%) or beginning levels (11.2%). A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.5.

1997-98: ABE learners in 1997-98 experienced very similar math appraisal scores as did those in 1996-97. The overall mean math appraisal score for ABE learners was 212.3, which represents nearly a one point increase in learner performance at program entry from the previous year. A breakdown of mean math appraisal scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.5.

| | 1996- (N =4,0 | | 1997- (N =6,4 | |
|--------------------------------------|------------------|----------|------------------|------|
| Reported Program Instructional Level | Mean | <u>%</u> | Mean | % |
| Survival | 201.9 | 0.2 | 202.3 | 0.4 |
| Beginner | 208.7 | 11.0 | 206.1 | 7.0 |
| Intermediate | 210.9 | 22.7 | 212.1 | 36.8 |
| Advanced | 215.5 | 9.5 | 215.6 | 9.0 |
| Multi-Level | 211.7 | 56.6 | 212.8 | 46.8 |
| Total | 211.5 | 100 | 212.3 | 100 |
| CASAS National Descriptor Level | Mean | % | Mean | % |
| Beginning: <201 | 192.6 | 11.2 | 193.4 | 10.7 |
| Low Intermediate: 201-210 | 206.2 | 36.4 | 206.5 | 34.6 |
| High Intermediate: 211-220 | 215.6 | 36.5 | 215.5 | 37.4 |
| Advanced: 221-235 | 225.7 | 14.1 | 225.9 | 14.4 |
| Adult Secondary: 236-245 | 239.7 | 1.4 | 239.3 | 2.5 |
| Proficient Skills: >245 | 254.9 | 0.5 | 253.4 | 0.4 |
| Total | 211.5 | 100 | 212.3 | 100 |

Table 3.5 – Two-Year Comparison of Mean Math Appraisal Scores Among ABE Learners Across Reported Instructional Level and the CASAS National Level Descriptors

General Education Preparation (GED) Classes - Appraisal Scores - Reading

1996-97: Regarding reading appraisal scores among learners enrolled in GED preparation classes, the overall mean score was 235.4 which falls just above the advanced ABE range on the CASAS National Scale. A breakdown of mean scores within the reported program instructional level framework used in Connecticut adult education programs can be seen in Table 3.7.

Scores were also assessed using the CASAS National Level Descriptors framework. GED learners tended to score higher upon program entry than did non-native English speakers and ABE learners. Less than nine percent of learners entered GED preparation programs at the intermediate (8.2%) or beginning (0.7%) ABE levels on reading appraisals compared to 63.9% of ESL learners and 34.8% of ABE learners (see Table 3.1 and Table 3.4). A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.7.

1997-98: Learners enrolled in GED preparation classes during 1997-98 experienced somewhat higher reading appraisal scores than those in 1996-97. The overall mean appraisal score for GED learners during 1997-98 was 236.4, a modest increase from the previous year. A breakdown of reading appraisal mean scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.7.

| | 1996- (N =4,3 | | 1997- (N =6,5 | |
|--------------------------------------|------------------|------|------------------|------|
| Reported Program Instructional Level | Mean | % | Mean | % |
| Survival | N/A | 0.0 | N/A | 0.0 |
| Beginner | 229.5 | 11.0 | 230.0 | 9.4 |
| Intermediate | 233.8 | 9.1 | 231.8 | 8.5 |
| Advanced | 236.1 | 20.8 | 237.4 | 27.6 |
| Multi-Level | 236.6 | 59.1 | 237.7 | 54.5 |
| Total | 235.4 | 100 | 236.4 | 100 |
| CASAS National Descriptor Level | Mean | % | Mean | % |
| Beginning: <201 | 192.0 | 0.7 | 195.4 | 0.5 |
| Low Intermediate: 201-210 | 207.0 | 2.0 | 207.0 | 1.0 |
| High Intermediate: 211-220 | 216.5 | 6.2 | 216.2 | 4.3 |
| Advanced: 221-235 | 228.2 | 32.8 | 228.7 | 35.0 |
| Adult Secondary: 236-245 | 238.8 | 36.3 | 238.8 | 35.2 |
| Proficient Skills: >245 | 249.8 | 22.1 | 249.6 | 24.1 |
| Total | 235.4 | 100 | 236.4 | 100 |

Table 3.7 – Two-Year Comparison of Mean Reading Appraisal Scores Among GED Learners Across Reported Instructional Level and the CASAS National Level Descriptors

General Education Preparation (GED) Classes – Appraisal Scores - Math

1996-97: Regarding math appraisal scores among learners enrolled in GED preparation classes, the overall mean score was 220.2 which falls just above the high intermediate ABE range on the CASAS National Scale. A breakdown of mean scores within the reported program instructional level framework used in Connecticut adult education programs can be seen in Table 3.8.

Scores were also assessed using the CASAS National Level Descriptors framework. As with reading appraisals, GED learners tended to score higher on math appraisal tests than did ABE learners. Less than 56 percent of learners entered GED preparation programs at the intermediate (53.6%) or beginning (2.3%) ABE levels on math appraisals compared to 73.7% of ESL learners and 84.1% of ABE learners (see Table 3.2 and Table 3.5). A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.8.

1997-98: Learners enrolled in GED preparation classes during 1997-98 experienced slightly higher math appraisal scores than those in 1996-97. The overall mean math appraisal score for GED learners during 1997-98 was 220.4; representing a slight increase from the previous year. A breakdown of appraisal mean scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.8.

| | 1996- | 97 | 1997-98 | | |
|--------------------------------------|---------|------|---------|------|--|
| | (N =4,1 | 49) | (N =6, | 358) | |
| Reported Program Instructional Level | Mean | % | Mean | % | |
| Survival | N/A | 0.0 | N/A | 0.0 | |
| Beginner | 215.0 | 11.1 | 214.7 | 8.9 | |
| Intermediate | 219.5 | 9.1 | 216.5 | 8.4 | |
| Advanced | 220.6 | 21.0 | 219.9 | 27.9 | |
| Multi-Level | 221.1 | 58.8 | 222.1 | 54.7 | |
| Total | 220.2 | 100 | 220.4 | 100 | |
| CASAS National Descriptor Level | Mean | % | Mean | % | |
| Beginning: <201 | 192.8 | 2.3 | 194.7 | 2.2 | |
| Low Intermediate: 201-210 | 206.9 | 16.5 | 207.1 | 16.0 | |
| High Intermediate: 211-220 | 216.3 | 37.1 | 216.1 | 36.9 | |
| Advanced: 221-235 | 226.9 | 34.9 | 226.7 | 35.7 | |
| Adult Secondary: 236-245 | 238.8 | 7.5 | 239.4 | 7.8 | |
| Proficient Skills: >245 | 253.8 | 1.7 | 253.6 | 1.5 | |
| Total | 220.2 | 100 | 220.4 | 100 | |

Table 3.8 – Two-Year Comparison of Mean Math Appraisal Scores Among GED Learners Across Reported Instructional Level and the CASAS National Level Descriptors

Adult High School (AHS) Credit Classes – Appraisal Scores - Reading

1996-97: Regarding reading appraisal scores among adult high school (AHS) learners, the overall mean score was 233.2 which falls within the Advanced ABE range on the CASAS National Scale. A breakdown of mean scores within the reported program instructional level framework used in Connecticut adult education programs can be seen in Table 3.10.

Scores were also assessed using the CASAS National Level Descriptors framework. Adult high school learners tended to score very similar to those enrolled in GED preparation classes on reading appraisals. Slightly more than 11 percent of learners entered AHS credit classes at the intermediate (10.4%) or beginning (0.8%) ABE levels compared to 8.9% of GED preparation learners (see Table 3.7). In most cases, learners entering AHS credit classes at these levels are not yet ready to benefit from this level of instruction. Functional skills at intermediate and beginning levels suggest that these learners may benefit more from ABE instruction than AHS program instruction. This again speaks to the need for more field training with respect to appraisal test interpretation and learner placement. A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.10.

1997-98: Adult high school learners in 1997-98 experienced slightly lower reading appraisal scores than did those in 1996-97. The overall mean appraisal score for AHS learners during 1997-98 was 232.3, a slight decrease from the previous year. A breakdown of appraisal mean scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.10.

Table 3.10 – Two-Year Comparison of Mean Reading Appraisal Scores Among Adult High School Learners Across Reported Instructional Level and the CASAS National Level Descriptors

| | 1996-9 | 97 | 1997-98 | | |
|---|----------|------|---------|-------|--|
| | (N =10,4 | 411) | (N =14, | ,025) | |
| Reported Program Instructional Level | Mean | % | Mean | % | |
| Survival | 230.8 | 0.5 | 224.0 | 1.1 | |
| Beginner | 236.3 | 6.4 | 235.8 | 7.2 | |
| Intermediate | 237.5 | 6.2 | 236.3 | 7.9 | |
| Advanced | 232.0 | 10.5 | 232.4 | 9.3 | |
| Multi-Level | 232.8 | 76.4 | 231.7 | 74.6 | |
| Total | 233.2 | 100 | 232.3 | 100 | |
| CASAS National Descriptor Level | Mean | % | Mean | % | |
| Beginning: <201 | 193.6 | 0.8 | 195.6 | 0.6 | |
| Low Intermediate: 201-210 | 206.8 | 2.3 | 207.0 | 2.7 | |
| High Intermediate: 211-220 | 216.3 | 8.1 | 216.1 | 9.4 | |
| Advanced: 221-235 | 227.5 | 40.6 | 227.7 | 44.1 | |
| Adult Secondary: 236-245 | 238.6 | 29.6 | 238.7 | 28.1 | |
| Proficient Skills: >245 | 249.6 | 18.6 | 249.7 | 15.2 | |
| Total | 233.2 | 100 | 232.3 | 100 | |

Adult High School (AHS) Credit Classes – Appraisal Scores - Math

1996-97: Regarding math appraisal scores among adult high school (AHS) learners, the overall mean score was 220.4 which falls just above the high intermediate ABE range on the CASAS National Scale. A breakdown of mean scores within the reported program instructional level framework used in Connecticut adult education programs can be seen in Table 3.11.

Scores also were assessed using the CASAS National Level Descriptors framework. Adult high school learners tended to score very similar to those enrolled in GED preparation classes on math appraisals. Slightly more than 53 percent of learners entered AHS credit classes with math scores at the intermediate (50.2%) or beginning (3.0%) ABE levels compared to 55.9% of GED preparation learners (see Table 3.8). A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.11.

1997-98: Adult high school learners in 1997-98 experienced slightly lower math appraisal scores than those in 1996-97. The overall mean appraisal score for AHS learners during 1997-98 was 219.5, a slight decrease from the previous year. A breakdown of appraisal mean scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.11.

| | 1996- | 97 | 1997-98 | | |
|---|---------|------|---------|-------|--|
| | (N =9,0 | 64) | (N =13 | ,756) | |
| Reported Program Instructional Level | Mean | % | Mean | % | |
| Survival | 212.8 | 0.6 | 212.2 | 1.0 | |
| Beginner | 221.2 | 6.7 | 220.8 | 7.1 | |
| Intermediate | 222.4 | 6.8 | 221.7 | 7.9 | |
| Advanced | 217.6 | 11.9 | 217.4 | 9.4 | |
| Multi-Level | 220.6 | 74.0 | 219.5 | 74.7 | |
| Total | 220.4 | 100 | 219.5 | 100 | |
| CASAS National Descriptor Level | Mean | % | Mean | % | |
| Beginning: <201 | 193.6 | 3.0 | 194.7 | 1.9 | |
| Low Intermediate: 201-210 | 206.9 | 13.8 | 207.0 | 21.2 | |
| High Intermediate: 211-220 | 216.3 | 36.4 | 215.9 | 36.1 | |
| Advanced: 221-235 | 226.4 | 38.8 | 227.0 | 31.1 | |
| Adult Secondary: 236-245 | 239.6 | 6.4 | 239.2 | 8.5 | |
| Proficient Skills: >245 | 252.2 | 1.7 | 254.3 | 1.3 | |
| Total | 220.4 | 100 | 219.5 | 100 | |

Table 3.11 – Two-Year Comparison of Mean Math Appraisal Scores Among Adult High School Learners Across Reported Instructional Level and the CASAS National Level Descriptors

Citizenship Classes – Appraisal Scores - Reading

1996-97: Regarding reading appraisal scores among Citizenship learners, the overall mean score was 223.2 which falls within the advanced range on the CASAS National Scale. A breakdown of mean scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.13.

The same distribution of scores was assessed using the CASAS National Level Descriptors framework. As can be seen in Table 3.13, 40.0% of citizenship learners scored at the intermediate (31.2%) or beginning (8.8%) levels. It should be noted that among learners scoring below the intermediate level very few will pass the citizenship exam. A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.13.

1997-98: Citizenship learners in 1997-98 experienced higher reading appraisal scores than those in 1996-97. The overall mean reading appraisal score for these learners was 226.6, which represents an increase of more than three points from the previous year. A breakdown of reading appraisal means within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.13.

The distribution of 1997-98 Citizenship reading appraisal scores also was broken down using the CASAS National Level Descriptors and is displayed in Table 3.13. As can be seen in the table, 29.4% of learners entered citizenship programs at the intermediate (23.8%) or beginning (5.6%) levels.

| | 1996- (N =33 | | 1997-98 (N =323) | |
|--------------------------------------|-----------------|------|---------------------|------|
| Reported Program Instructional Level | Mean | % | Mean | % |
| Survival | N/A | 0.0 | 225.5 | 0.6 |
| Beginner | 226.4 | 10.3 | 231.3 | 12.4 |
| Intermediate | 212.0 | 0.3 | 235.6 | 2.5 |
| Advanced | 209.6 | 8.8 | 222.8 | 10.5 |
| Multi-Level | 224.3 | 80.6 | 226.1 | 74.0 |
| Total | 223.2 | 100 | 226.6 | 100 |
| CASAS National Descriptor Level | Mean | % | Mean | % |
| Beginning: <201 | 192.4 | 8.8 | 191.6 | 5.6 |
| Low Intermediate: 201-210 | 206.0 | 13.9 | 206.6 | 9.6 |
| High Intermediate: 211-220 | 216.5 | 17.3 | 216.5 | 14.2 |
| Advanced: 221-235 | 226.0 | 36.7 | 225.8 | 41.5 |
| Adult Secondary: 236-245 | 238.1 | 8.8 | 238.7 | 12.1 |
| Proficient Skills: >245 | 250.3 | 14.5 | 251.2 | 17.0 |
| Total | 223.2 | 100 | 226.6 | 100 |

Table 3.13 – Two-Year Comparison of Mean Reading Appraisal Scores Among Citizenship Learners Across Reported Instructional Level and the CASAS National Level Descriptors

Citizenship Classes – Appraisal Scores - Listening

1996-97: Regarding listening appraisal scores among Citizenship learners, the overall mean score was 210.8 which falls just above the low intermediate range on the CASAS National Scale. A breakdown of mean scores within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.15.

The same distribution of scores was assessed using the CASAS National Level Descriptors framework. As seen in Table 3.15, 76.6% of citizenship learners scored at the intermediate (57.7%) or beginning (18.9%) levels. A breakdown of mean appraisal scores at all levels within the CASAS framework can be seen in Table 3.15.

1997-98: Citizenship learners in 1997-98 experienced higher listening appraisal scores than those in 1996-97. The overall mean listening appraisal score for these learners was 215.2, which represents an increase of more than four points from the previous year. Again, it is difficult to determine the significance of these findings due to the relatively low number of listening appraisals. A breakdown of listening appraisal means within the reported program instructional level framework used in Connecticut adult school programs can be seen in Table 3.15.

The distribution of 1997-98 citizenship listening appraisal scores was also broken down using the CASAS National Level Descriptors and is displayed in Table 3.15. As can be seen in the table, 66.0% of learners entered citizenship programs at the intermediate (57.2%) or beginning (8.8%) levels.

| | 1996- (N =2) | | 1997- (N =1 | |
|--------------------------------------|-----------------|------|----------------|------|
| Reported Program Instructional Level | Mean | % | Mean | % |
| Survival | N/A | 0.0 | N/A | 0.0 |
| Beginner | 219.5 | 11.9 | 209.3 | 6.0 |
| Intermediate | 217.7 | 1.3 | 221.7 | 1.6 |
| Advanced | 205.3 | 24.7 | 219.5 | 26.4 |
| Multi-Level | 211.2 | 62.1 | 213.8 | 65.9 |
| Total | 210.8 | 100 | 215.2 | 100 |
| CASAS National Descriptor Level | Mean | % | Mean | % |
| Beginning: <201 | 192.3 | 18.9 | 192.7 | 8.8 |
| Low Intermediate: 201-210 | 205.5 | 29.1 | 205.4 | 20.9 |
| High Intermediate: 211-220 | 215.9 | 28.6 | 216.3 | 36.3 |
| Advanced: 221-235 | 226.2 | 23.3 | 225.8 | 34.1 |
| Adult Secondary: 236-245 | N/A | N/A | N/A | N/A |
| Proficient Skills: >245 | N/A | N/A | N/A | N/A |
| Total | 210.8 | 100 | 215.2 | 100 |

Table 3.15 – Two-Year Comparison of Mean Listening Appraisal Scores Among Citizenship Learners Across Reported Instructional Level and the CASAS National Level Descriptors

Outcome Achievements

Adult education program staff were asked to document any achievements learners experienced during the instructional period. Programs in both instructional years provided data on 19 different achievements. For this analysis, learners enrolled in Citizenship, ESL, ABE, GED preparation, and Adult High School credit classes were included. Due to the low number and diversity of learners enrolled in the other programs, they were not included in this analysis.

Overwhelmingly, learners in both instructional years endorsed "Met personal goal" as the most commonly experienced outcome. In addition, learner outcomes were consistent with the expectations for each instructional program. For example, more learners enrolled in Citizenship programs reported acquiring citizenship than learners in other programs in both instructional years. See Table 3.16 for all other percentages.

1996-97: As previously indicated, learners in each instructional program overwhelmingly endorsed "Met personal goal" as an experienced achievement. In addition, learner outcomes were consistent with the expectations for each instructional program. Citizenship learners reported acquiring citizenship more frequently (9.6%) than learners in other classes (other percentages range from 0.0% to 0.2%). Similarly, adult high school learners reported higher percentages (11.7%) of those getting a diploma while those in GED preparation classes reported higher percentages (18.4%) passing the GED exam. See Table 3.16 for all other percentages and comparisons.

1997-98: As previously indicated, learners in each instructional program overwhelmingly endorsed "Met personal goal" as an experienced achievement. In addition, learner outcomes were consistent with the expectations for each instructional program. Citizenship learners reported acquiring citizenship more frequently (14.0%) than learners in other classes (other percentages range from 0.0% to 0.2%). Similarly, adult high school learners reported higher percentages (12.0%) of those getting a diploma while those in GED preparation classes reported higher percentages (12.2%) passing the GED exam. See Table 3.16 for all other percentages and comparisons.

It is the general feeling that learners are experiencing achievements above and beyond those represented in these data. As seen in Table 3.16, very few learner achievements are documented across program type. These findings speak to the inherent difficulties in ascertaining achievement information among the adult learner population. Overall, more student tracking and follow-up will be required to capture adequately the full extent of learner growth and success. This increased effort will ultimately aid in the further promotion and development of adult education programs by more clearly illustrating the types of achievements that learners experience.

| Program Achievement | Citize | enship | ESL/LEP | | ABE GED | | GED | | Adult HS | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| | 1996-97 | 1997-98 | 1996-97 | 1997-98 | 1996-97 | 1997-98 | 1996-97 | 1997-98 | 1996-97 | 1997-98 |
| Entered College | 0.0 | 0.5 | 0.8 | 0.7 | 0.3 | 0.6 | 1.0 | 0.4 | 1.2 | 0.7 |
| Entered other Ed. Program | 0.0 | 3.2 | 3.1 | 3.2 | 5.0 | 4.7 | 1.7 | 1.9 | 1.3 | 0.9 |
| Got a Job | 0.7 | 2.1 | 3.9 | 4.2 | 3.6 | 3.7 | 3.3 | 2.7 | 1.5 | 1.4 |
| Entered Military | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.2 | 0.1 |
| Retained or Advanced in Job | 1.9 | 7.4 | 9.1 | 10.5 | 6.0 | 7.1 | 4.8 | 7.9 | 3.9 | 3.6 |
| Met Personal Goal | 64.9 | 57.4 | 61.3 | 59.2 | 65.6 | 64.0 | 58.5 | 51.3 | 66.6 | 39.5 |
| Passed GED | 0.2 | 0.0 | 0.4 | 0.4 | 2.3 | 1.4 | 18.4 | 12.2 | 0.2 | 0.1 |
| Got U.S. Citizenship | 9.6 | 14.0 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Removed from Public Assistance | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.3 | 0.4 | 0.3 | 0.1 | 0.0 |
| Got Diploma (CDP) | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.1 | 0.4 | 0.3 | 11.7 | 12.0 |
| Read More to Children | 1.9 | 0.0 | 1.7 | 2.5 | 2.4 | 3.0 | 1.6 | 2.6 | 1.7 | 0.4 |
| Greater Involvement in Child's School | 0.2 | 0.3 | 1.6 | 2.2 | 1.7 | 2.6 | 1.7 | 2.0 | 0.4 | 0.2 |
| Returned to FT School | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.0 |
| Met PIC or CETO Competencies | 0.0 | 0.0 | 1.5 | 2.3 | 3.5 | 1.8 | 0.7 | 0.5 | 0.0 | 0.1 |
| Met CETO Program Objectives | 0.0 | 0.0 | 3.6 | 3.3 | 6.7 | 4.8 | 1.6 | 1.9 | 0.1 | 0.2 |
| Entered Other CETO Program | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 1.1 | 0.3 | 0.4 | 0.0 | 0.0 |
| Entered Other Training Program | 0.2 | 0.3 | 0.6 | 0.9 | 1.3 | 0.9 | 0.9 | 0.5 | 0.3 | 0.4 |
| Registered to Vote | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| Got Diploma (EDP) | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 |
| Total Sample Size | 416 | 378 | 7,857 | 8,031 | 4,300 | 6,569 | 4,581 | 6,603 | 10,403 | 13,904 |

Table 3.16 – Percentages of Learners Endorsing Each Achievement Outcome Across Program and Instructional Year

Chapter 4 – Program Status, Pretest Performance, Learner Gains, and Student Progress: What Percentage of Learners Remained in Their Instructional Programs and How Well Did They Perform?

Chapter Four provides information about learner program status, pretest scores, learner gains, and proportions of individuals demonstrating post-test score movement across CASAS competency levels. Program status of learners, either retained or not, will be presented for Citizenship, ESL/LEP, ABE, GED preparation, and Adult High School credit programs. Pretest scores, learner gains, and post-test analyses will be presented for ABE and ESL/LEP programs <u>only</u> as these programs were mandated to provide pre- and post-test data using the Comprehensive Student Assessment Program.

Data Highlights

- Overall program retention rates were higher during the 1996-97 instructional period (66.4%) than during the 1997-98 instructional period (59.9%).
- ESL/LEP programs demonstrated the highest level of retention in both instructional years (1996-97: 72.7%; 1997-98: 68.1%).
- Average pretest listening scores among ESL learners in both instructional years were in the low intermediate range on the CASAS National Level Descriptor Scale.
- Average pretest reading scores among ESL learners in both instructional years were in the advanced range on the CASAS National Level Descriptor Scale.
- Average pretest reading scores among ABE learners in both instructional years were in the advanced range on the CASAS National Level Descriptor Scale.
- Average pretest math scores among ABE learners in both instructional years were in the intermediate range on the CASAS National Level Descriptor Scale.
- ESL and ABE learners enrolled during the 1997-98 instructional period demonstrated slightly reading learning gains on average than learners enrolled during the 1996-97 instructional year.
- ABE learners enrolled during the 1996-97 instructional period demonstrated slightly higher average gains in math than those enrolled during 1997-98.

Program Status of Learners

Information regarding learner status was obtained to indicate the retention rate of learners during the instructional period. Sample sizes and percentages reflect a duplicated count as some learners enrolled in multiple classes or programs during both instructional years. Information was gathered for the 1996-97 and 1997-98 instructional years.

Overall, a higher percentage of learners enrolled during the 1996-97 instructional year remained (66.4%; $\underline{N} = 51,249$) in their instructional program than learners enrolled during the 1997-98 instructional year (59.9%; $\underline{N} = 66,208$).

1996-97: Retention rates varied across program type with ESL/LEP classes demonstrating the highest proportion of learners remaining in their program (72.7%). Adult high school credit classes demonstrated the second highest retention rate (66.7%) followed by ABE classes (61.7%). See Table 4.1 for all other comparisons.

| | 1996-9 | 7 | 1997-98 | | |
|-------------|--------------------------|----------------|--------------------------|-------------|--|
| Program | % Retained in Program | Sample Size | % Retained in Program | Sample Size | |
| Citizenship | 58.2 | 816 | 49.1 | 1,073 | |
| ESL/LEP | 72.7 | 15,772 | 68.1 | 18,130 | |
| ABE | 61.7 | 7,496 | 62.3 | 11,076 | |
| GED | 57.6 | 7,370 | 51.3 | 11,247 | |
| Adult HS | 66.7 | 19,795 | 57.2 | 24,682 | |
| Overall | 66.4 | 51,249 | 59.9 | 66,208 | |

Table 4.1 – Percentage of Learners Remaining in Their Instructional Program During the1996-97 and 1997-98 Instructional Years

1997-98: Retention rates in 1997-98 also varied across program type with ESL/LEP programs presenting the highest proportion of learners remaining in their program (68.1%). Unlike the previous year, ABE programs demonstrated the second highest retention rate (62.3%) followed by adult high school credit programs (57.2%). See Table 4.1 for all other comparisons.

One possible explanation for the decrease in retention among Citizenship, GED, and Adult High School learners may speak to the economic prosperity evidenced in the state of Connecticut [•]. Learners in each of these three programs produced the highest overall mean appraisal scores in 1997-98. In fact, all three programs evidenced mean appraisal scores in the advanced range on the CASAS scale at the beginning of the 1997-98 instructional year. This might suggest that these learners were coming to the learning experience at a functional level that would afford them opportunities for entry-level employment or employment advancement. These opportunities could, in turn, have an impact on program attrition rates.

Further support for this hypothesis is indicated in Table 3.25, which summarizes the various outcomes that learners experienced during both instructional years. It can be seen that the percentages of endorsement by all learners for "Got a job" and "Retained or advanced in job" remained consistent or increased in 1997-98 from the previous year with one program exception

[•] Reported levels of unemployment in Connecticut for the month of September 1996: 5.7%; 1997: 4.9%:1998: 3.9% (Department of Economic and Community Development, 1998).

(ESL/LEP). Given that Citizenship, GED, and adult high school learners indicated the highest functional levels at program entry, one possible explanation is that these same individuals were more prepared to take advantage of opportunities outside the educational arena.

Pretest Performance of Learners in ESL and ABE Classes

Learners were tested primarily on listening and reading skills in ESL classes. Learners in ABE classes were tested primarily on math and reading skills. This section describes pretest data collected in ESL and ABE adult education programs. Pretest scores are presented across program and test type.

English as a Second Language (ESL) Classes – Pretest Scores

1996-97: Of the 10,559 pretest scores produced by ESL learners, 81.6% represented listening tests, 17.0% represented reading tests, and 1.3% represented math tests. Current Education Department policy does not require administration of a reading test to ESL learners, hence, the significantly lower percentage of administered tests. It does, however, encourage the use of reading tests in lieu of the listening test as learner proficiency increases.

The overall mean listening pretest score was 203.7 which falls within the low intermediate range on the CASAS scale. The largest percentage (33.6%) of learners scored in the low intermediate range (201-210), followed by the high beginning level (22.6%), and the high intermediate level (20.8%) on the listening pretest. See Table 4.2 for all other mean listening pretest scores.

The overall mean reading pretest score was 224.2 which falls within the advanced range on the CASAS scale. The largest percentage (46.8%) scored in the advanced range, followed by learners scoring at the high intermediate level (22.3%) on the reading pretest. See Table 4.2 for all other mean reading pretest scores.

Math pretest scores represented only 1.3% of all pretest data among ESL learners during the 1996-97 instructional period. Due to the low number of test scores these data represent ($\underline{N} = 142$) they are not presented as interpretation and use of these scores would be inappropriate in this context.

| | Listening (<u>N</u> = 8 | | Reading Pretest (<u>N</u> = 1,799) | | |
|------------------------------------|-----------------------------|------|--|------|--|
| CASAS National Descriptor Level | Mean | % | Mean | % | |
| Pre Beginning < 181 | 174.1 | 5.6 | 176.3 | 0.4 | |
| Low Beginning: 181-190 | 186.6 | 8.7 | 186.6 | 1.0 | |
| High Beginning: 191-200 | 195.7 | 22.6 | 196.5 | 3.1 | |
| Low Intermediate: 201-210 | 205.7 | 33.6 | 205.5 | 8.3 | |
| High Intermediate: 211-220 | 215.2 | 20.8 | 216.4 | 22.3 | |
| Advanced: 221-235 | 225.3 | 8.5 | 227.3 | 46.8 | |
| Adult Secondary Ed: > 235 | 238.6 | 0.2 | 242.3 | 18.1 | |
| Overall | 203.7 | 100 | 224.2 | 100 | |

Table 4.2 – Mean Listening and Reading Pretest Scores Across CASAS National Level Descriptors for ESL Learners 1996-97

1997-98: Of the 10,838 pretest scores produced by ESL learners, 81.7% represented listening tests, 17.5% represented reading tests, and .8% represented math tests. The overall mean listening pretest score was 204.5 which falls within the low intermediate range on the CASAS scale. The largest percentage (32.8%) of learners scored in the low intermediate range (201-210), followed by learners scoring at the high intermediate level (21.8%), and the high beginning level (21.5%) on the listening pretest. See Table 4.3 for all other mean listening pretest scores.

The overall mean reading pretest score was 224.0 which falls within the advanced range on the CASAS scale. The largest percentage (42.6%) scored in the advanced range followed by learners scoring at the high intermediate level (21.9%) on the reading pretest. See Table 4.3 for all other mean reading pretest scores.

Math pretest scores represented only .8% of all pretest data among ESL learners during the 1997-98 instructional period. Due to the low number of test scores these data represent ($\underline{N} = 86$), they were not used for analysis purposes.

| | Listening (<u>N</u> = 8 | | Reading Pretest (<u>N</u> = 1,902) | | |
|------------------------------------|-----------------------------|------|--|------|--|
| CASAS National Descriptor Level | Mean | % | Mean | % | |
| Pre Beginning < 181 | 174.7 | 4.6 | 176.1 | 0.4 | |
| Low Beginning: 181-190 | 186.3 | 8.9 | 187.8 | 1.3 | |
| High Beginning: 191-200 | 195.9 | 21.5 | 196.9 | 3.6 | |
| Low Intermediate: 201-210 | 205.4 | 32.8 | 205.9 | 11.4 | |
| High Intermediate: 211-220 | 215.0 | 21.8 | 216.3 | 21.9 | |
| Advanced: 221-235 | 225.4 | 10.0 | 228.0 | 42.6 | |
| Adult Secondary Ed: > 235 | 238.3 | 0.4 | 243.3 | 18.9 | |
| Overall | 204.5 | 100 | 224.0 | 100 | |

Table 4.3 - Mean Listening and Reading Pretest Scores Across CASAS National LevelDescriptors for ESL Learners1997-98

Adult Basic Education (ABE) Classes – Pretest Scores

1996-97: Of the 7,601 pretest scores produced by ABE learners, 50.7 % represented reading tests, 49.0% represented math tests, and .3% represented listening tests. The overall mean reading pretest score was 222.7 which falls within the advanced range on the CASAS scale. The largest percentage (51.4%) of learners scored in the advanced range (221-235), followed by learners scoring at the intermediate level (20.2%) on the reading pretest. See Table 4.4 for all other mean reading pretest scores.

The overall mean math pretest score was 215.3 which falls within the intermediate range on the CASAS scale. The largest percentage (31.3%) scored in the intermediate range followed by learners scoring at the advanced level (30.1%) on the math pretest. See Table 4.4 for all other mean math pretest scores.

Listening pretest scores represented only .3% of all pretest data among ABE learners during the 1996-97 instructional period. Due to the low number of test scores these data represent ($\underline{N} = 21$), they were not used in this analysis.

| | Reading I (<u>N</u> = 3, | | Math Pretest (<u>N</u> = 3,723) | | |
|---------------------------------|------------------------------|------|-------------------------------------|------|--|
| CASAS National Descriptor Level | Mean | % | Mean | % | |
| Pre Beginning < 201 | 188.6 | 5.8 | 192.1 | 10.4 | |
| Beginning: 201-210 | 205.5 | 9.4 | 206.6 | 24.0 | |
| Intermediate: 211-220 | 216.6 | 20.2 | 215.8 | 31.3 | |
| Advanced: 221-235 | 227.7 | 51.4 | 226.5 | 30.1 | |
| Adult Secondary: 236 + | 239.6 | 13.1 | 238.7 | 4.3 | |
| Overall | 222.7 | 100 | 215.3 | 100 | |

Table 4.4 – Mean Reading and Math Pretest Scores Across CASAS National Level Descriptors for ABE Learners 1996-97

1997-98: Of the 8,309 pretest scores produced by ABE learners, 49.6 % represented reading tests, 50.1% represented math tests, and .3% represented listening tests. The overall mean reading pretest score was 223.7 which falls within the advanced range on the CASAS scale. The largest percentage (52.1%) of learners scored in the advanced range (221-235) followed by learners scoring at the intermediate level (18.6%) on the reading pretest. See Table 4.5 for all other mean reading pretest scores.

The overall mean math pretest score was 215.6 which falls within the intermediate range on the CASAS scale. The largest percentage (31.6%) scored in the intermediate range followed by learners scoring at the advanced level (30.6%) on the math pretest. See Table 4.5 for all other mean math pretest scores.

Listening pretest scores represented only .3% of all pretest data among ABE learners during the 1996-97 instructional period. Due to the low number of test scores these data represent ($\underline{N} = 26$), they were not included in the analysis.

| | Reading (<u>N</u> = 4 | | Math Pretest (<u>N</u> = 4,159) | | |
|---------------------------------|---------------------------|------|-------------------------------------|------|--|
| CASAS National Descriptor Level | Mean | % | Mean | % | |
| Pre Beginning < 201 | 190.9 | 5.5 | 193.2 | 9.6 | |
| Beginning: 201-210 | 206.5 | 8.5 | 206.6 | 24.0 | |
| Intermediate: 211-220 | 216.5 | 18.6 | 215.9 | 31.6 | |
| Advanced: 221-235 | 227.9 | 52.1 | 226.3 | 30.6 | |
| Adult Secondary: 236 + | 239.9 | 15.3 | 239.2 | 4.2 | |
| Overall | 223.7 | 100 | 215.6 | 100 | |

Table 4.5 – Mean Reading and Math Pretest Scores Across CASAS National Level Descriptors for ABE Learners 1997-98

Learning Gains

Learning gains are operationalized as the difference between post-test and pretest scores. Learners who were administered a pretest at program entry <u>and</u> also were administered a post-test at the end of instruction were included in the analysis of learning gains. The following data are presented by program type. Data presented for each instructional period are first summarized in terms of the number of matched pre- and post-tests. Data are then discussed in terms of average learning gain across program type, content area, and instructional period.

English as a Second Language Programs

1996-97: Overall, ESL learners took 10,559 pretests during the 1996-97 instructional period. Of these, a total of 6,874 (65.1%) post-tests were matched with pretests to obtain learning gain information. Listening tests were the most frequently administered tests (N = 8,618) among ESL learners of which, 65.5% were matched and used in the learning gains analyses. Reading tests were also frequently administered (N = 1,799) and 68.3% of these were matched and used in the learning gains analyses. Lastly, a small number of math tests were administered (N = 142), and due to their low frequency were not included in learning gains analyses.

As seen in Table 4.6, ESL learners experienced an average increase of 4.38 points in reading scores from pretest to post-test during 1996-97. Listening gains were slightly higher with an average increase of 5.12 points during the instructional period. See Table 4.6 for comparisons across programs and instructional years.

| | | 1996-97 | | 1997-98 | | |
|-----|-----------------|---------|-------|---------|-------|--|
| ESL | | Mean | Ν | Mean | Ν | |
| | Reading Gains | 4.38 | 1,228 | 4.43 | 1,249 | |
| | Listening Gains | 5.12 | 5,646 | 4.92 | 5,310 | |
| ABE | | | | | | |
| | Reading Gains | 4.27 | 2,212 | 4.43 | 2,092 | |
| | Math Gains | 4.99 | 2,048 | 4.88 | 1,959 | |

Table 4.6 – Mean Learning Gains Among ESL and ABE Learners for 1996-97 and 1997-98 Instructional Years

Note: Sample sizes reflect matched pairs.

1997-98: Overall, 10,838 pretests were taken by ESL learners during the 1997-98 instructional period. Of these, a total of 6,559 (60.5%) post-tests were matched with pretests to obtain learning gain information. Listening tests were the most frequently administered tests (N = 8,850) among ESL learners of which, 60.0% were used in the learning gains analyses. Reading tests were also frequently administered (N = 1,902), and 65.7% of these were matched and used in the learning gains analyses. Lastly, a small number of math tests were administered (N = 86), and due to their low frequency were not included in learning gains analyses.

As seen in Table 4.6, ESL learners experienced an average increase of 4.43 points in reading scores from pretest to post-test during 1997-98. Listening gains were almost one-half point higher with an average increase of 4.92 points during the instructional period. See Table 4.6 for comparisons across programs and instructional years.

Adult Basic Education Programs

1996-97: Overall, 7,601 pretests were taken by ABE learners during the 1996-97 instructional period. Of these, a total of 4,260 (56.0%) post-tests were matched with pretests to obtain learning gain information. Reading tests were the most frequently administered tests (<u>N</u> 3,857) among ABE learners of which, 57.4% were used in the learning gains analyses. Math tests were also frequently administered (<u>N</u> = 3,723) and 55.0% of these were matched and used in the learning gains analyses. Lastly, a small number of listening tests were administered (<u>N</u> = 21) and due to their low frequency were not included in learning gains analyses.

As seen in Table 4.6, ABE learners experienced an average increase of 4.27 points in reading scores from pretest to post-test during 1996-97. Math learning gains were slightly higher with an average increase of 4.99 points during the instructional period. See Table 4.6 for comparisons across programs and instructional years.

1997-98: Overall, ABE learners took 8,309 pretests during the 1997-98 instructional period. Of these, a total of 4,051 (48.8%) post-tests were matched with pretests to obtain learning gain information. Reading tests were the most frequently administered tests ($\underline{N} = 4,124$) among ABE learners of which, 50.7% were matched and used in the learning gains analyses. Math tests were also frequently administered ($\underline{N} = 4,159$) and 47.1% of these were matched and used in the

learning gains analyses. Lastly, a small number of math tests were administered ($\underline{N} = 26$), and due to their low frequency were not included in learning gains analyses.

As can be seen in Table 4.6, ABE learners experienced an average increase of 4.43 points in reading scores from pretest to post-test during 1997-98. Math learning gains were slightly higher with an average increase of 4.88 points over the instructional period. See Table 4.6 for comparisons across programs and instructional years.

Learner Progress

This section provides information regarding learner progress in ESL and ABE programs for the 1996-97 and 1997-98 instructional years. Learner progress is indicated by advancement to a higher level according to the CASAS National Descriptor Scale based on post-test scores. Post-test scores are used to indicate the functional level of the learner at the end of instruction. Learners who scored above 245 on the pretest are omitted from these analyses as scores in this range indicate the highest functioning level as identified using the CASAS National Level Descriptors. See Table 4.7 for all comparisons of learner progress across program type and instructional year.

Progress data is presented in the context of the CASAS National Descriptor Scale for the 1996-97 instructional period. Data representing 1997-98 learner progress will be presented immediately after the 1996-97 data for each instructional program. However, in an effort to minimize redundancy, the descriptive characteristics of learners at each instructional level will not be presented a second time.

English as a Second Language Programs Reading and Listening Progress – 1996-97

A total of 6,834 learners scoring below 245 on the *reading* or *listening* pretest <u>and</u> having a matching *reading* or *listening* post-test were included in the analysis.

Among ESL learners who took a reading or listening pretest, 281 scored at the pre-beginning literacy level on the CASAS National Descriptor Scale. Learners functioning at this level score at or below 180 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can function minimally, if at all, in English
- Can communicate only through gestures and a few isolated words

Using pre- and post-test reading and listening scores as indicators of learning progress, 76.9% of learners entering at the beginning literacy level scored at higher levels on the CASAS scale at post-test. A total of 216 learners who entered their program with extremely limited listening and speaking skills were now able to function in a very limited way in situations related to immediate needs and able to ask and respond to basic learned phrases spoken slowly and repeated often.

Five hundred fifty-three ESL learners who took a reading or listening pretest scored at the low beginning level on the CASAS National Descriptor Scale. Learners functioning at this level score between 181 and 190 on the CASAS scale and are characterized using these and other CASAS Descriptors:

• Can function in a very limited way in situations related to immediate needs

• Can ask and respond to basic learned phrases spoken slowly and repeated often

With pre- and post-test reading and listening scores as indicators of learning progress, 73.1% of learners entering at the low beginning level scored at higher levels on the CASAS scale at post-test. A total of 404 learners who entered their program with minimal listening and speaking skills could now function with some difficulty in situations related to immediate needs and communicate using basic learned phrases and sentences.

Among ESL learners who took a reading or listening pretest, 1,323 scored at the high beginning level on the CASAS National Descriptor Scale. Learners functioning at this level score between 191 and 200 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can function with some difficulty in situations related to immediate needs
- Can communicate using basic learned phrases and sentences

With pre- and post-test reading and listening scores as indicators of learning progress, 59.6% of learners entering at the high beginning level scored at higher levels on the CASAS scale at post-test. A total of 789 learners who entered their program with limited listening and speaking skills could now satisfy basic survival needs and very routine social demands through verbal communication and understand simple phrases containing familiar vocabulary.

Of the 6,834 ESL learners included in this analysis, 2,046 pretested at the low intermediate level on the CASAS National Descriptor Scale. Learners functioning at this level score between 201 and 210 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can read and interpret simple material on familiar topics
- Can read and interpret simple maps, signs, and menus
- Can fill out forms requiring basic personal information and write simple notes and messages based on familiar information

Using pre- and post-test reading and listening scores as indicators of learning progress, 42.5% of learners entering at the low intermediate level scored at higher levels on the CASAS scale at post-test. A total of 869 learners who entered their program with very basic reading and listening skills were now able to read and interpret authentic material on familiar topics, follow oral directions in familiar contexts, write messages and notes related to basic needs, and complete basic medical forms and job applications.

Among non-native English speakers who took a reading or listening pretest, 1,427 scored at the high intermediate level on the CASAS National Descriptor Scale. Learners functioning at this level score between 211 and 220 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can demonstrate limited understanding of conversation using the telephone
- Can read and interpret some authentic material on familiar topics
- Can read and write messages related to basic needs
- Can fill out basic medical forms and job applications

Using pre- and post-test reading and listening scores as indicators of learning progress, 32.9% of learners entering at the high intermediate level scored at higher levels on the CASAS scale at

post-test. A total of 469 learners who entered their program with basic reading and listening skills could now read and interpret simplified and non-simplified materials on familiar topics, understand and communicate on the telephone on familiar topics, interpret simple charts, graphs, and labels, interpret a payroll stub, and write short personal notes and letters.

Of the 6,834 ESL learners included in the analysis, 1,019 scored at the advanced level on the CASAS National Descriptor Scale. Learners functioning at this level score between 221 and 235 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can participate in conversations on a variety of topics
- Can read and interpret simplified and non-simplified material on familiar topics
- Can write short personal notes and letters and make simple log entries
- Learners at the upper end of this score range are able to begin GED preparation

With pre- and post-test reading and listening scores as indicators of learning progress, 14.9% of learners entering at the advanced level scored at higher levels on the CASAS scale at post-test. A total of 152 learners who entered their program with functional reading, writing and listening skills could now function independently in social and work situations, read and interpret non-simplified materials on every day subjects, write an accident or incident report, and perform reading and writing tasks such as reports, logs and various forms.

One hundred eighty-five ESL learners pretested at the adult secondary level on the CASAS National Descriptor Scale. Learners functioning at this level score between 236 and 245 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can read and interpret non-simplified material on everyday subjects
- Can interpret routine charts, graphs, and labels
- Can write an accident or incident report

With pre- and post-test reading and listening scores as indicators of learning progress, 25.4% of learners entering at the adult secondary level scored at a higher level on the CASAS scale at post-test. A total of 47 learners who entered their program with functional reading, writing and listening skills could now handle most reading and writing tasks related to life roles, complete medical information forms and job applications, meet work demands with confidence, interact with the public, and follow written instructions in work manuals.

Reading and Listening Progress – 1997-98

A total of 6,255 learners scoring below 245 on the *reading* or *listening* pretest <u>and</u> having a matching *reading* or *listening* post-test were included in the analysis.

Among ESL learners who took a reading or listening pretest, 200 scored at the pre-beginning literacy level on the CASAS National Descriptor Scale. With pre- and post-test reading and listening scores as indicators of learning progress, 79% (<u>N</u>=158) of learners entering at the pre-beginning literacy level scored at higher levels on the CASAS scale at post-test.

Four hundred seventy ESL learners who took a reading or listening pretest scored at the low beginning level on the CASAS National Descriptor Scale. Three hundred thirteen (66.6%) learners entering at the low beginning level scored at higher levels on the CASAS scale at posttest.

Among ESL learners who took a listening pretest, 1,212 scored at the high beginning level on the CASAS National Descriptor Scale. Using pre- and post-test reading and listening scores as indicators of learning progress, 58% (\underline{N} =703) of learners entering at the high beginning level scored at higher levels on the CASAS scale at post-test.

Of the 6,255 ESL learners included in this analysis, 1,877 learners pretested at the low intermediate level on the CASAS National Descriptor Scale. Pre- and post-test scores indicated that 45.5% (\underline{N} =854) of learners entering at the low intermediate level scored at higher levels on the CASAS scale at post-test.

Among non-native English speakers who took a reading or listening pretest, 1,380 scored at the high intermediate level on the CASAS National Descriptor Scale. With pre- and post-test reading and listening scores as indicators of learning progress, 36.4% (<u>N</u>=503) of learners entering at the high intermediate level scored at higher levels on the CASAS scale at post-test.

Of the 6,255 ESL learners included in the analysis, 945 scored at the advanced level on the CASAS National Descriptor Scale. One hundred eighty-two (19.3%) learners entering at the advanced level scored at higher levels on the CASAS scale at post-test.

One hundred seventy-one ESL learners pretested at the adult secondary level on the CASAS National Descriptor Scale. With pre- and post-test reading and listening scores as indicators of learning progress, 30.4% (N=52) of learners entering at the adult secondary level scored at a higher level on the CASAS scale at post-test.

Adult Basic Education Programs Reading and Math Progress – 1996-97

A total of 4,188 ABE learners scoring below 245 on the *reading* or *math* pretest <u>and</u> having a matching *reading* or *math* post-test were included in the analysis. Adult basic education classes are not required to administer *listening* tests, consequently, progress data are presented for *reading* and *math* tests only. See Table 4.7 for all comparisons of learner progress across program type and instructional year.

Among ABE learners included in these analyses, 361 entered their program at the beginning literacy level. Learners function in g at this level score below 201 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Very limited ability to read or write
- Can provide very basic personal information such as address and phone number in written form
- Those at the upper end of the scale range can read and write letters, numbers, and simple words related to immediate needs

With pre- and post-test reading and math scores as indicators of learning progress, 55.4% of learners entering at the beginning literacy level scored at higher levels on the CASAS scale at post-test. A total of 200 learners who entered their program with very limited reading and writing skills could now fill out simple forms, write a simple phone message, calculate simple mathematical operations, and handle entry level jobs involving some simple written communication.

Seven hundred nineteen ABE learners pretested at the beginning level on the CASAS scale. Learners functioning at this level score between 201 and 210 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can fill out simple forms requiring basic personal information
- Can write a simple list or telephone message
- Can read and interpret simple sentences on familiar topics

With pre- and post-test reading and math scores as indicators of learning progress, 54.2% of learners entering at the beginning level scored at higher levels on the CASAS scale at post-test. A total of 390 learners who entered their program with limited reading, writing, and math skills could now perform basic reading, writing, and computational tasks, interpret charts, graphs, labels and payroll stubs, and handle jobs and/or job training that involve following basic oral or written instructions.

Nearly 26% of ABE learners entered their program at the intermediate level. Learners functioning at this level score between 211 and 220 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can perform basic reading, writing, and computational tasks
- Can interpret simple charts and graphs
- Can complete simple order forms and do calculations

With pre- and post-test reading and math scores as indicators of learning progress, 53.1% of learners entering at the intermediate level scored at higher levels on the CASAS scale at post-test. A total of 575 learners who entered their program with basic literacy skills were now able to perform routine reading, writing, and computational tasks, complete medical forms and job applications, reconcile bank statements, and follow multi-step diagrams and written instructions.

Among ABE learners included in these analyses, 1,700 entered their program at the advanced level. Learners functioning at this level score between 221 and 235 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can perform most routine reading, writing, and computational tasks related to their life roles
- Can interpret charts, graphs, and simple employee handbooks
- Can follow multi-step diagrams and written instructions
- Can maintain a family budget

With pre- and post-test reading and math scores as indicators of learning progress, 23.6% of learners entering at the advanced level scored at higher levels on the CASAS scale at post-test. A total of 402 learners who entered their program with functional literacy skills were now able to read and interpret legal forms and manuals, use math for business calculations like discounts and sale prices, integrate information from multiple texts, and evaluate and organize information.

Three hundred twenty-five ABE learners entered their program at the adult secondary education level. Learners functioning at this level score between 236 and 245 on the CASAS scale and are characterized using these and other CASAS Descriptors:

- Can read and follow multi-step directions
- Can read and interpret common legal forms and manuals
- Can use math in a business context, such as calculating discounts and making change

With pre- and post-test reading and math scores as indicators of learning progress, 20.9% of learners entering at the adult secondary education level scored at higher levels on the CASAS scale at post-test. A total of 68 learners who entered their program with functional literacy skills were now able to interpret technical material with some assistance, interpret complex manuals, and comprehend some college textbooks and apprenticeship manuals.

Reading and Math Progress – 1997-98

A total of 2,519 ABE learners scoring below 245 on the *reading* or *math* pretest <u>and</u> having a matching *reading* or *math* post-test were included in the analysis.

Among ABE learners included in these analyses, 187 entered their program at the pre-beginning literacy level. With pre- and post-test reading and math scores as indicators of learning progress, 49.7% (\underline{N} =93) of learners entering at the beginning literacy level scored at higher levels on the CASAS scale at post-test.

Three hundred eight ABE learners pretested at the beginning level on the CASAS scale. With pre- and post-test reading and math scores as progress indicators, 52.3% (\underline{N} =161) of learners entering at the beginning level scored at higher levels on the CASAS scale at post-test. Nearly 22% of ABE program learners entered their program at the intermediate level. Pre- and post-test scores indicated that 57.3% (\underline{N} =309) of learners entering at the intermediate level scored at higher levels on the CASAS scale at post-test.

Among those included in these analyses, 1,175 ABE learners entered their program at the advanced level. With pre- and post-test reading and math scores as indicators of learning progress, 26.3% (\underline{N} =309) of learners entering at the advanced level scored at higher levels on the CASAS scale at post-test.

Three hundred ten ABE learners entered their program at the adult secondary education level. With pre- and post-test reading and math scores as indicators of learning progress, 32.3% (<u>N</u>=100) of learners entering at the adult secondary education level scored at higher levels on the CASAS scale at post-test.

As previously mentioned, one of the Core Indicators of Performance in the Workforce Investment Act requires that states establish what percentage of clients advance at least one instructional level. Data presented in Table 4.7 illustrates the number and percentage of ABE and ESL learners meeting this benchmark for the 1996-97 and 1997-98 instructional years.

| Table 4.7– Percentage of Learners Scoring at Least One Skill Level Higher at Post-test than |
|---|
| at Program Entry 1996-97 and 1997-98 |

| | 1996-97 | | | | | | |
|---------------------|---------|---|-----------|---|-----|--|--|
| Program Entry Level | | Reading | | Listening | | Math | |
| ESL | N | Percentage Scoring at Least One Level Higher (N) | Ν | Percentage Scoring at Least One Level Higher (N) | Ν | Percentage Scoring at Least One Level Higher (N) | |
| Beginning Literacy | 7 | 85.7 (6) | 274 | 76.6 (210) | - | - | |
| Low Beginning | 10 | 90.0 (9) | 543 | 72.7 (395) | - | - | |
| High Beginning | 36 | 63.9 (23) | 1287 | 59.5 (766) | - | - | |
| Low Intermediate | 103 | 67.0 (69) | 1943 | 41.2 (800) | - | - | |
| High Intermediate | 264 | 61.4 (162) | 1163 | 26.4 (307) | - | - | |
| Advanced | 595 | 21.5 (128) | 424 | 5.7 (24) | - | - | |
| Adult Sec. Ed. | 173 | 27.2 (47) | 12 | 0.0 (0)* | - | - | |
| ABE | | | | | | | |
| Beginning Literacy | 137 | 51.1 (70) | - | - | 224 | 58.0 (130) | |
| Beginning | 203 | 50.2 (102) | - | - | 516 | 55.8 (288) | |
| Intermediate | 437 | 58.6 (256) | - | - | 646 | 49.4 (319) | |
| Advanced | 1118 | 25.0 (279) | - | - | 582 | 21.1 (123) | |
| Adult Sec. Ed. | 258 | 18.6 (48) | - | - | 67 | 29.9 (20) | |
| | | | | 1997-98 | | | |
| Program Entry Level | | Reading | Listening | | | Math | |
| ESL | Ν | % | Ν | % | Ν | % | |
| Beginning Literacy | 3 | 0.0 (0) | 197 | 80.2 (158) | - | - | |
| Low Beginning | 4 | 75.0 (3) | 466 | 66.5 (310) | - | - | |
| High Beginning | 30 | 83.3 (25) | 1182 | 57.4 (678) | - | - | |
| Low Intermediate | 91 | 67.0 (61) | 1786 | 44.4 (793) | - | - | |
| High Intermediate | 243 | 52.7 (128) | 1137 | 33.0 (375) | - | - | |
| Advanced | 486 | 28.0 (136) | 459 | 10.0 (46) | - | - | |
| Adult Sec. Ed. | 151 | 34.4 (52) | 20 | 0.0 (0)* | - | - | |
| ABE | | | | | | | |
| Beginning Literacy | 111 | 50.5 (56) | - | - | 76 | 48.7 (37) | |
| Beginning | 162 | 51.9 (84) | - | - | 146 | 52.7 (77) | |
| Intermediate | 358 | 61.2 (219) | - | - | 181 | 49.7 (90) | |
| Advanced | 956 | 27.1 (259) | - | - | 219 | 22.8 (50) | |
| Adult Sec. Ed. | 269 | 33.5 (90) | - | - | 41 | 24.4 (10) | |

* Scaled scores for Listening tests do not exceed 245 which is the top end of the Adult Secondary Education category.

Summary and Conclusion

Adult education is a key ingredient to ensuring the continued success of our country's economy, our communities, and future generations. During the past two years, Connecticut's adult education programs served more than 55,000 learners across the state. Programs such as ESL/LEP, ABE, GED preparation, Adult High School credit, Citizenship, EDP, CETO, Career Counseling, Life Skills, and others continue to provide adult learners the education and skills needed for acquiring good paying jobs and self-sufficiency.

ESL/LEP programs continue to serve the highest proportion of adult learners (38.8% - 1996-97; 38.5%-1997-98) reflecting the cultural and ethnic diversity evidenced in the state. In fact, nearly two-thirds of all adult education enrollments represent ethnic groups other than Caucasian. Regarding gender differences, women continue to be more highly represented among adult school learners accounting for 56.6% of all enrollments during the last two years.

The demographic diversity evidenced among Connecticut's adult learners also is seen in the life experiences and educational history that learners brought to the learning experience. A major component of effective education is an understanding of the knowledge, skills, and competencies that individuals bring to the learning task. Furthermore, information regarding the goals and expectations that each learner sets for himself or herself aids in better understanding the reasons that learners have for enrolling. Comprehensive data collection efforts such as those described herein are critical for continuous program improvement and ensuring that learners seeking educational services are provided the highest levels of instruction.

The data in this report represent a two-year summary of the success of Connecticut's adult education programs. Findings from this effort can be used for program and student needs assessment, informing program improvement and policy decisions, and evidence of effective educational program implementation. This report supports the notion that Connecticut's adult education programs are continuing to meet the challenge of providing world-class educational opportunities to learners of all ages.