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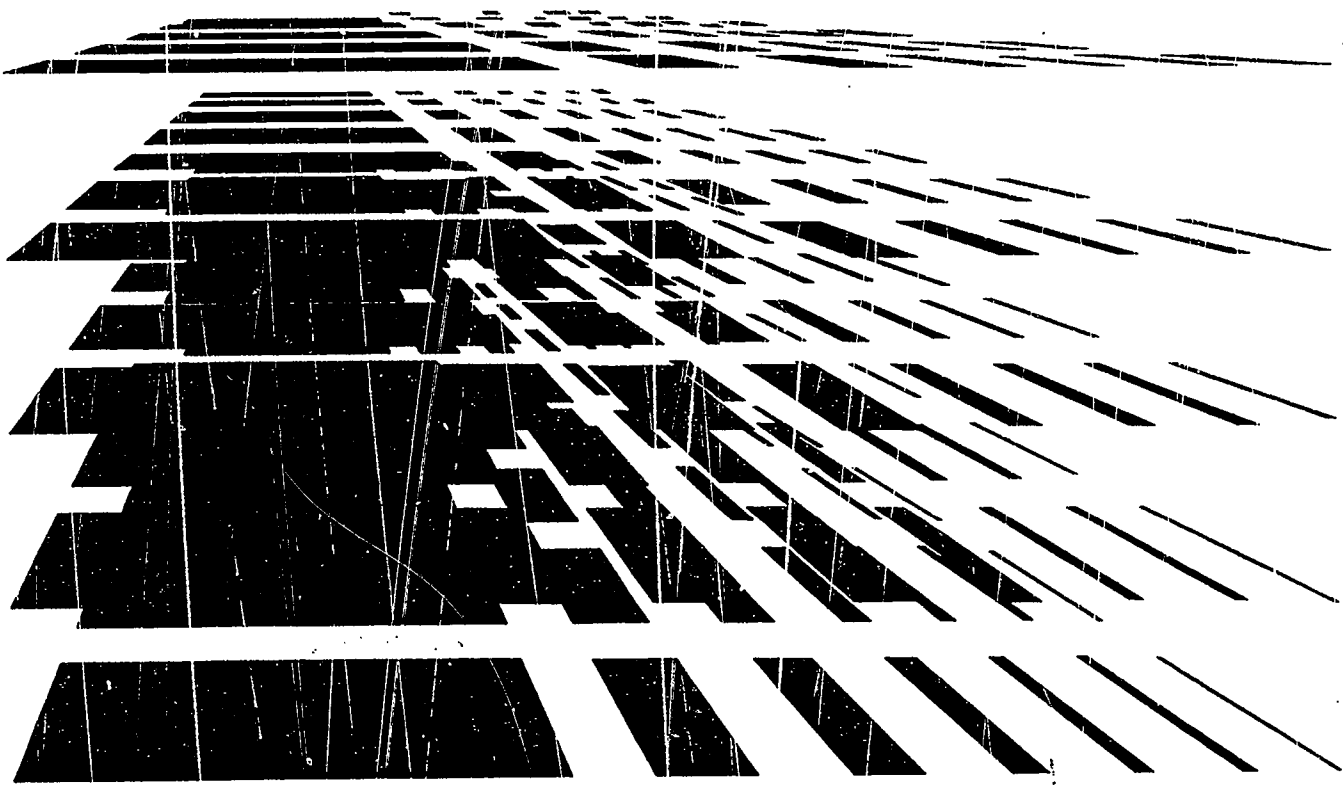   *Iowa

ABSTRACT
          This report is a comprehensive needs assessment study
that provides the foundation for a statewide adult basic education
(ABE) accountability system in Iowa. Data from this study, conducted
in 1993-94 by the Iowa Department of Education, were collected
through a survey mailed to a total of 9,700 ABE program staff,
community agency contact persons, Private Industry Council, business
and industry, and other literacy partners. Analysis of the total
usable return of 3,483 surveys (36 percent) provided priority ratings
for competency areas and comparisons of the rankings by business and
industry and by literacy providers. Basic communication was rated as
the highest competency, followed by learning to learn, employment,
and health. Success in job search and on-the-job skills were
considered to be important by all survey respondents. Critical
thinking and problem-solving skills were also rated very highly,
whereas consumer and legal skills were less highly-rated, especially
by business and industry. Results of the survey can be used to design
a research-based, customized curriculum and assessment system that
will improve Iowa's adult basic education program effectiveness. This
is a first step in establishing a statewide accountability system.
The survey instrument and data tables are appended. (KC)

CE

The Iowa Adult
Basic Skills Survey

Final Report

Prepared for the
Iowa Department of Education
Division of Community Colleges

by **CASAS** Comprehensive Adult Student
Assessment System

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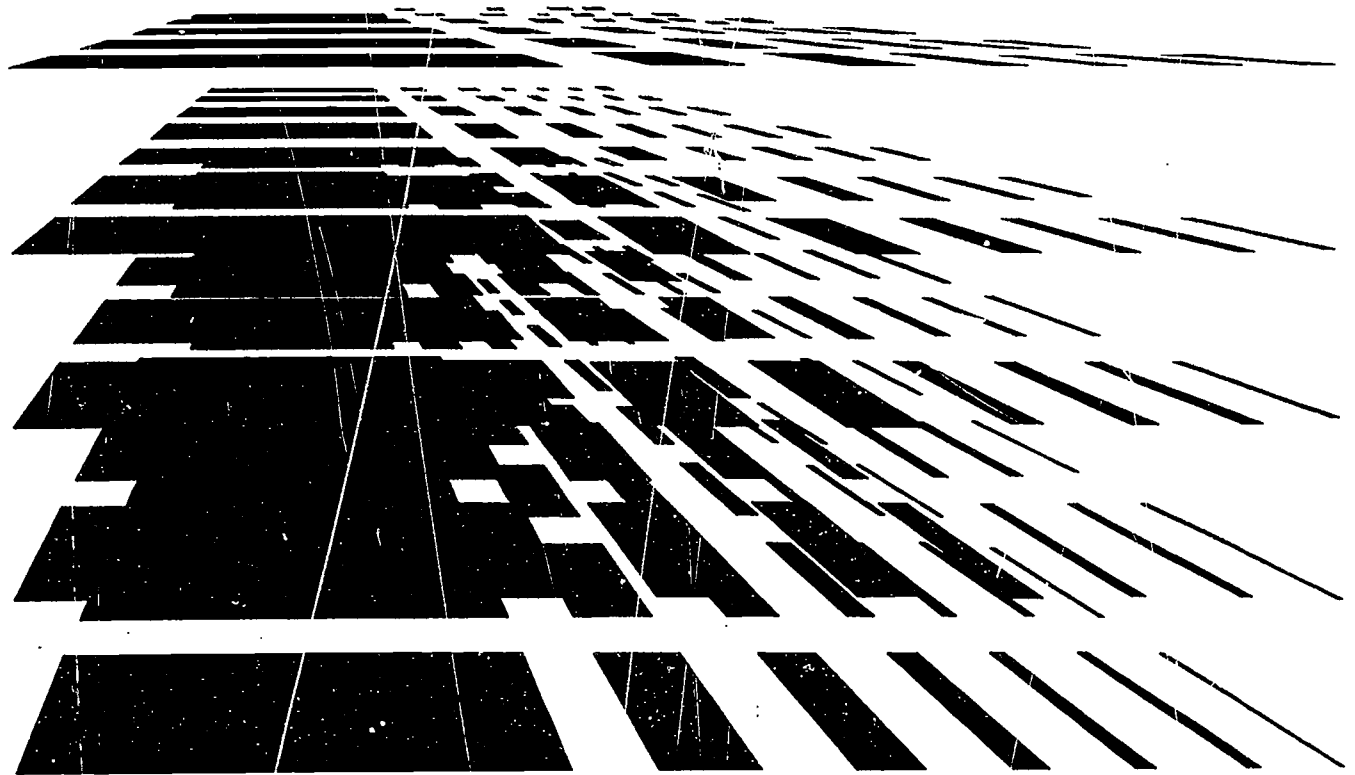
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Foreword

Adult basic education programs are facing significant challenges in meeting the diverse needs of today's and tomorrow's workforce. They must respond to increasing pressures to serve more learners, and to educate them at much higher levels with limited resources. They are also asked to meet an increasing demand to provide solid accountability based on clear learning outcomes for all learners who participate in educational programs.

In order to respond effectively to these challenges, all stakeholders must agree on the competencies that adults need to know to be able to function effectively as family members, in the workforce, and in the community. Clear standards of educational attainment need to be identified for these competencies, and valid and reliable assessments must be put in place to document progress toward and attainment of the competencies.

This study provides a solid basis for identifying priority competencies for all learners in Iowa's adult basic education programs. It is significant and unique because it reflects the perspectives of business and industry and employment training programs, as well as a broad spectrum of adult basic education instruction providers and learners. It also addresses the need to collaborate with other agencies and institutions serving adults and to address societal needs, including parenting, civic responsibilities, and employment participation. The competencies identified in this study provide the necessary baseline data to develop relevant curriculum and instruction to meet these new and emerging needs.

To identify the changing basic skill needs of the adults in Iowa, the Iowa State Department of Education has commissioned this study. The study results will be used to determine how the state may best provide quality adult basic education programs needed to move forward into the twenty-first century.

Patricia Rickard
Executive Director, CASAS

Preface

The Iowa Adult Basic Skills Survey (IABSS) was conducted in order to: (1) provide baseline data and recommendations regarding the implementation of competency-based education in Iowa's community college adult basic education programs; (2) determine the priority competency areas for basic skill development and assessment in the workplace and in daily life as perceived by a variety of agencies and organizations; and (3) provide a baseline document to determine future directions for developing a competency-based approach to Iowa's adult basic education community college-based programs.

The IABSS study delineates which basic skills are considered to be essential for adults to effectively function in the workplace and in daily life. The need for this study was documented by the Iowa State Adult Literacy Survey (IASALS) which indicated that:

> it is impossible to say precisely what literacy skills are essential for individuals to succeed in this or any other society. The results of the State and National Adult Literacy Surveys provide no firm answers to such questions (Jenkins & Kirsch 1994).

This survey is the first known survey of its kind relative to its comprehensiveness and the number of agencies, organizations, and businesses and industries involved. If the state of Iowa is going to continue to provide quality basic education to the adult population, it is imperative that educational planners and policy makers have an awareness of the priority areas for basic skill development. The Iowa Adult Basic Skills Survey provides the type of information that is needed to continue to provide quality basic skills education into the twenty-first century and beyond.

John Hartwig
IABSS Project Director

Iowa Adult Basic Skills Survey Executive Summary

INTRODUCTION

The long range goals for Iowa's adult basic education program are to meet the changing needs of its adult learners and to complement an existing community college adult basic education delivery system that is both professional and accountable to all stakeholder. To this end, the Iowa Department of Education has completed three major initiatives:

- a study measuring the literacy levels of a representative sample of all adults in Iowa, the Iowa State Adult Literacy Survey (IASALS);
- a secondary analysis of the IASALS data;
- the development of performance standards and indicators of program quality for Iowa's adult basic education programs.

The fourth initiative, the Iowa Adult Basic Skills Survey (IABSS), which is the subject of this report, is a comprehensive needs assessment study that provides the foundation for a statewide adult basic education accountability system. Data from this survey, conducted in 1993-94 by the Iowa Department of Education, provide clear guidance for development of a research-based, customized curriculum and assessment system that will improve program effectiveness and accountability for adult basic education programs in Iowa.

GOALS AND OBJECTIVES OF THE IABSS STUDY

In recognition of the need to align adult basic education curricula in Iowa with the needs of the community, the Iowa Department of Education initiated this statewide needs assessment, the Iowa Adult Basic Skills Survey (IABSS). The IABSS is the most extensive adult basic skills survey conducted in Iowa to date. The main purpose of the Iowa Adult Basic Skills Survey was to determine the priority competency areas for basic life skills and employability skills needed by adults in the state of Iowa.

The main purpose of the survey was to determine the priority competency areas for basic life skills and employability skills for Iowa's adults.

The goals of the study were to:

- determine priority life skills and employment-related competencies for the state of Iowa;
- gather input from a cross-section of Iowa's business and industry, educational programs, and cooperating literacy partners;

- provide for the development of a more responsive outcome-based curriculum and assessment system in statewide literacy programs; and
- facilitate cooperation between adult basic education agencies and employers in planning appropriate curriculum and assessment.

In order to build statewide consensus regarding adult basic education needs and goals, survey responses were solicited from the complete spectrum of agencies and stakeholders involved with or directly affected by adult basic education services in Iowa. *(See Appendix A.)* This survey collected information from 25 different types of respondents and agencies categorized into five major respondent groups:

- Business & Industry
- Employment Service Providers
- Instruction Providers
- Learners
- Others: Community-based Agencies, Referral Agencies and Other Agencies

Information gathered from the survey answers the following key questions:

- Which competencies were rated by all respondents as most important for adult learners to acquire?
- Which competencies were rated as least important?
- Do community colleges, job training facilities, employers, and adult learners agree on education priorities?
- Do employers agree with employment service providers about basic skills priorities?
- Do adult learners agree with education providers about basic skills priorities?

The survey results will enable adult basic education program providers to examine how closely their current curricula match the needs expressed by learners and other adult basic education stakeholders.

The survey results will enable adult basic education program providers to examine how closely their current curricula match the needs expressed by learners and other adult basic education stakeholders. In addition, the survey results will facilitate the identification of needed curriculum changes. Individual program staff can compare their own priorities with the priorities of their peers, adult learners, and community agencies and businesses who also serve or employ their clients. This major research effort will provide future direction to all of Iowa's adult basic education providers as they seek to meet more accurately and efficiently the needs of all adults with limited literacy skills.

ADULT LITERACY INITIATIVES AT THE NATIONAL LEVEL

During the past decade the issue of adult literacy has become a growing national concern. By all indications, there is an increasing gap between the level of literacy of American adults and the level of literacy required in the workforce and in everyday life situations. As business and industry adapt to emerging technologies, work methods and markets, adult workers require retraining to perform at higher literacy levels. Goal number six of America 2000's *National Education Goals* states:

By the year 2000, every adult will be literate and have the skills necessary to compete in the global economy and participate in American democracy.

The U.S. Department of Labor, also concerned about the state of worker illiteracy, funded the SCANS (Secretary's Commission on Achieving Necessary Skills) Survey. This survey collected information from employers to identify specific skill areas and competencies that need to be targeted if this country is expected to compete in a global economy.

Published results from several recent national surveys of adults in the U.S. confirm that the American workforce, on average, lacks the literacy, computational, and other workplace skills needed to compete in a global economy. In 1993, the U.S. Department of Education funded the National Adult Literacy Survey (NALS), a household survey that measured the literacy skills of a nationally representative sample of adults. The results of the National Adult Literacy Survey raise a number of concerns. While the majority of adults nationwide who performed at the lowest levels of literacy said that they were able to meet most of the literacy demands they encountered, it is generally believed that these adults are condemned to low earnings and limited choices (Carnevale et al. 1990).

Published results from recent national surveys confirm that the American workforce, on average, lacks the literacy, computational, and other workplace skills needed to compete in a global economy.

THE ADULT BASIC EDUCATION CHALLENGE IN IOWA

State Survey of Adult Literacy

Iowa's concern for its own population and its adult basic education programs led to special funding for the Iowa State Adult Literacy Survey (IASALS), a replication of the NALS at the state level. This study of 1,264 adults indicated that adults in Iowa have higher levels of literacy, on average, than adults nationwide, though the levels are similar to those of adults in other Midwestern states. For more information about adult literacy rates in Iowa, see the report entitled *Adult Literacy in Iowa: Results of the State Adult Literacy Survey* (Jenkins & Kirsch 1994).

State Performance Standards

The National Literacy Act of 1991 requires states to establish program quality indicators to determine whether adult education programs are effectively recruiting, retaining, and improving the literacy skills of the individuals enrolled. To guide the development of Iowa's performance indicators, the Iowa standards committee reviewed the U.S. Department of Education's model framework and made modifications to reflect the reality of program practices in Iowa's adult basic education programs. Iowa's performance standards have been developed with a goal of program improvement and accountability (Iowa Department of Education 1993).

SURVEY DESIGN

The Comprehensive Adult Student Assessment System (CASAS) was contracted to design and conduct the IABSS. CASAS has a 15-year history of successfully assessing the basic skills of adults within a functional context and is used

extensively throughout the United States in adult basic education, employment training, welfare reform, and workplace literacy programs. *(See Appendix B.)* The CASAS system has been validated and approved for national dissemination by the U.S. Department of Education's National Diffusion Network in the area of adult literacy. CASAS has also contributed its expertise to major state and national research projects as both a validated assessment system and an educational data collection and research organization. These projects include the National Evaluation of Adult Education Programs (1992-1994) and the California Department of Education's Student Progress and Goal Attainment in Federally Funded Programs (1986-present).

In 1993, seven Iowa community colleges conducted a pilot implementation of CASAS in adult basic education and employability services programs and found that the system was well suited to their needs. A task force, consisting primarily of representatives from community college programs throughout the state that had gained experience using the CASAS system, provided guidance in the formative stages of the study.

The CASAS Competency List was selected as the basis for the IABSS because it is the most comprehensive list of competencies that has been validated for adults.

The *CASAS Competency List* was selected as the basis for the IABSS because it is the most comprehensive list of competencies that has been validated for adults. The list contains more than 300 discrete competency statements in nine content areas: *Basic Communication, Consumer Economics, Community Resources, Health, Employment, Government & Law, Computation, Learning to Learn,* and *Domestic Skills. (See Appendix C.)* The *CASAS Competency List* is correlated to the Department of Labor's SCANS competencies, and also includes other nationally validated critical life skill competencies. The CASAS list is revalidated annually by the CASAS National Consortium. Another important factor in the selection of the *CASAS Competency List* is the link to the CASAS assessment system. The system can measure learners' progress in achieving the competencies identified by Iowa as priorities.

SURVEY METHODOLOGY

Survey Distribution

The Iowa Department of Education coordinated distribution of the IABSS. Community colleges, the primary providers of adult basic education services in the state, were the principal facilitators at the local level. The Iowa Department of Education sent survey instructions to adult basic education coordinators in all 15 community college districts. The coordinators were asked to distribute the survey to all groups and individuals in their local literacy networks, specifically:

- All ABE/ESL/GED instructional staff
- All community agency contact persons
- Private Industry Councils (PICs)
- Participatory planning committees
- Business and industry
- Other literacy partners
- Other interested parties

A 15 percent random sample of Adult Basic Education (ABE), English as a Second Language (ESL), and General Educational Development (GED) students was recommended, excluding institutionalized learners but including those in correctional education programs. Coordinators were instructed to ask faculty to administer the survey to students in the classroom setting.

The Iowa Department of Education identified other state agencies involved with adult basic education programs in the state. Contact persons in these agencies were asked to send the survey to their staff members throughout the state. Individuals who received multiple surveys were instructed to submit only one.

To survey business and industry, the Iowa Department of Employment Services Research and Development Section was asked to compile a random sample of 2,000 employers of all types from throughout the state. *(See Appendix D.)*

Survey Response

A total of 9,700 survey forms were distributed during the fall of 1993. Responses were collected during the months of December 1993 and January 1994. A total of 3,530 survey forms were completed and returned. This represented an unadjusted response rate of 36 percent. Forty-seven cases were removed from the analysis due to lack of response variation, leaving the adjusted response rate at 36 percent. A total of 3,483 cases were used for data analysis.

A total of 9,700 survey forms were distributed throughout Iowa during the fall of 1993.

Competency Rating System

The survey called for respondents to rate the importance of 55 competencies. To analyze and report survey responses, each of the four descriptive rating categories was assigned a numeric value from 1 to 4, with 4 indicating a rating of *very important* and 1, *not important*. (See below.)

Competency Rating Scale

Rating	Degree of Importance
4	Very important
3	Important
2	Somewhat important
1	Not important

CASAS, 1995

The numeric values were used to calculate mean ratings for individual competencies and competency areas, and to rank competencies. This average then served as the primary approach to reporting perceived importance. The mean rating is used in data displays and discussions throughout this report to show ranking of competencies in terms of importance.

In addition to the mean ratings, another approach to gauging the importance of competencies was employed in order to discuss the relative importance of the

competencies and to provide an additional measure of validity to the analysis. This approach produced Priority Level Rankings, which took into account the distribution of responses on the rating scale, as opposed to the average response to all four categories on the scale. Priority Level Rankings were determined by calculating the percentage of respondents who rated a particular competency as *very important* or *important*. On review of the data, the Priority Level Rankings were categorized into four levels, delineated below. (*See Appendix E.*)

Priority Level Rankings

Priority Level	Percentage of Respondents Rating a Competency as *very important* or *important*
Top	85% or more
High	70% to 84%
Mid	50% to 69%
Low	Fewer than 50%

CASAS, 1995

IABSS SURVEY FINDINGS

Aggregate Findings

Basic Communication was rated as the highest competency area by all survey respondents, followed by *Learning to Learn*, *Employment*, and *Health*. *Learning to Learn* competencies relate to employment contexts as well as to adults' lifelong learning objectives.

Computation ranked seventh according to the aggregate ratings, although Business & Industry respondents rated this area much higher (fourth in order of importance) than other respondent groups.

Consumer Economics and *Community Resources* were considered somewhat important by all survey respondents.

Of the eight competency areas, *Government & Law* was ranked last.

Table 3.2 on page 16 in the full report compares competency area rankings for the five respondent groups: Business & Industry, Employment Service Providers, Instruction Providers, Learners, and Others. Aggregate rankings appear in the "Total" column. As this table shows, the five groups were similar in their rankings of the competency areas.

There were statistically significant differences ($p<.05$) in ratings of the remaining competency areas by the five respondent groups:

- Business & Industry and Employment Service Providers ranked *Employment* second, while other groups ranked it third or fourth.
- Business & Industry respondents ranked *Computation* higher (fourth in order of importance) than did all other groups, who ranked it seventh.
- *Health* was of great importance to Learners and Instruction Providers, who ranked this area second and third, respectively.
- *Community Resources* was ranked slightly higher by Employment Service Providers and Other respondents (fifth) than other respondent groups.
- The "Other" group represented a wide range of different types of community agencies. Their ratings were similar to the aggregate population.

The 11 competencies that the entire IABSS sample rated at the Top Priority Level are shown in Table 3.3. Individual competencies are ranked in order of importance according to the mean rating, indicated to the left of each competency. A black dot to the right of each competency indicates the general competency area for each competency.

The first place ratings of *Basic Communication* send a strong message that it is crucial to address the development of personal communication skills in Iowa's adult basic education programs.

The next most highly rated competencies were directly related to employment: the ability to work effectively with others, understand aspects of employment and job performance, and secure employment using effective job search skills. These ratings demonstrate that success in job search and on-the-job skills were considered to be important by all survey respondents, not only those who responded from Business & Industry and Employment Service Providers.

Success in job search and on-the-job skills were considered to be important by all survey respondents.

Critical thinking and problem solving skills from the *Learning to Learn* competency area were also rated very highly. These skills are useful in employment situations, as well as in everyday life situations. Ranked ninth was the *Computation* competency, *Compute using whole numbers*. This high rating of a math competency is a reminder of the importance of focusing on basic math in the adult basic education curriculum.

Critical thinking and problem solving skills were also rated very highly.

A curriculum relevant to the needs of learners who have both employability and life skill goals should address the 11 competencies at the Top Priority Level. Programs should also consider the competencies rated at the High Priority Level (ranked 12 - 30) for inclusion and emphasis in their curriculum, based on local needs and interests. (See Table 3.3.)

Most of the competencies ranked from 12 through 23 are skills that were considered useful in the workplace. Some of these competencies also have non-work related applications. Competencies ranked 24 through 30 cover a wide range of competency areas. It should be noted that all 55 competencies listed on the survey have been previously validated as important; therefore, even competencies at the Low Priority Level may be quite important to some learners.

BUSINESS & INDUSTRY FINDINGS

Iowa's Business & Industry respondents ranked the competency areas of *Basic Communication, Employment,* and *Learning to Learn* as their top three priorities. In general, Business & Industry respondents rated competencies that have specific application to the workplace as their highest priorities. This is illustrated by the fact that the 27 highest priority competencies were skills directly applicable in the workplace.

Business & Industry respondents rated Computation competencies much higher than did other groups.

Business & Industry respondents ranked *Computation* competencies much higher than did any other respondent group. While Business & Industry rated six *Computation* competencies at the Top and High Priority Levels, *Compute using whole numbers* was the only *Computation* competency considered to be a high priority by other respondent groups. These findings have implications for program planning and curriculum design in Iowa's adult basic education programs in order to prepare a more competitive, employable workforce.

One competency that was not rated as highly by Business & Industry compared to other groups was *Understand basic principles of getting a job,* a skill that is crucial for those seeking employment but not for employers. Consumer skills such as shopping, banking, and accessing community resources were not a high priority. Business & Industry respondents, overall, assigned a low level of importance to a larger number of competencies than did any other respondent group. Competencies that received Business & Industry's lowest ratings were generally in the areas of *Community Resources* and *Government & Law.* These results further support the claim that Business & Industry's principle focus is on competencies which have a direct impact on improving employees' workplace skills.

Consumer skills related to shopping, banking, and accessing community services were not a high priority for Business & Industry respondents.

One of the most unique and enlightening features of this survey is that significant numbers of responses from Business & Industry were included. The results can be used to set a clear direction for curriculum development and instructional priorities in Iowa's workplace literacy programs, as well as targeting instruction for learners with employability needs.

Ratings of SCANS-related Competencies

A review of the SCANS competencies is important to provide an understanding of how IABSS responses in Iowa, particularly from Business & Industry, relate to national level workplace priorities. Table 4.3 shows the SCANS-related CASAS competency statements and reports how the five respondent groups rated each competency.

The SCANS competencies relate to five of the nine CASAS *Employment* competencies and four of the five CASAS *Learning to Learn* competencies. Iowa Business & Industry and Employment Service Providers gave higher ratings to all of the SCANS-related *Employment* competencies than did the other respondent groups. The total survey population, as well as each survey group, rated two *Employment* competencies at the Top Priority Level: *Communicate effectively in the workplace* and

Demonstrate effectiveness in working with other people. This clearly demonstrates the perceived importance of communication in the workplace by all Iowa survey respondents.

FINDINGS FROM EMPLOYMENT SERVICE PROVIDERS COMPARED WITH BUSINESS & INDUSTRY

The 553 respondents that comprise the Employment Service Provider group were administrators and instructors in Iowa's adult employment preparation and training programs. Responses from Employment Service Providers are compared with those of Business & Industry respondents to determine points of agreement and disagreement regarding priority competency needs. (Employability respondents refers to both Business & Industry and Employment Service Provider groups.)

Figure 5.1 compares Employment Service Providers' and Business & Industry respondents' mean competency area ratings. Employment Service Providers rated five of the eight competency areas significantly higher than did Business & Industry respondents.

Employment Service Providers and Business & Industry respondents were in agreement about the three most important competency areas: *Basic Communication, Employment,* and *Learning to Learn.* Both groups also ranked *Government & Law* as the least important area.

Employment Service Providers' and Business & Industry's rankings of *Employment* competencies were in agreement for all but two competencies. (See Figure 5.3.) *Understand basic principles of getting a job* was rated highest by Employment Service Providers, indicating their strong commitment to assisting learners in mastering job search skills. Employment Service Providers considered *Understand basic principles of getting a job* and *Understand wages, benefits, and employment concepts* to be more important than did Business & Industry. Both groups conveyed the importance of interpersonal relationships in the workplace by giving *Communicate in the workplace* and *Work effectively with others* very high ratings.

Understand basic principles of getting a job was rated highest by Employment Service Providers, indicating their strong commitment to assisting learners with job search skills.

As might be expected, the competencies in the area of *Employment* were all given high mean ratings by Iowa's employment community. The ability to manage workplace resources was rated slightly higher by Business & Industry than by Employment Service Providers, while Employment Service Providers rated *Communicate effectively in the workplace* slightly higher than did Business & Industry. *Understand social, organizational, and technological systems* was ranked lowest by both groups (ninth). The other four competencies in this competency area were rated similarly by both respondent groups.

The most striking difference between the two groups was their prioritization of *Computation*: Business & Industry ranked *Computation* fourth out of the eight areas, while Employment Service Providers ranked it seventh. (See Figure 5.5.) Consistently higher *Computation* ratings by Business & Industry than any other group indicate the

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importance of basic math skills in the workplace. The following quotation expresses the concerns of many employers:

> Employers already are complaining of their workers' computational skill deficiencies, particularly those evidenced by miscalculations of decimals and fractions, resulting in expensive production errors (Henry and Raymond 1983).

These results clearly identify Computation as an important area for curriculum emphasis in employment training programs.

Moreover, Business & Industry respondents rated every *Computation* skill significantly higher than did Employment Service Providers. The groups agreed about the priority order for each of the *Computation* competencies. The six most important *Computation* competencies were, in order of priority: using whole numbers; using decimals; computing percents, rates, and proportions; using fractions; using estimation and mental arithmetic; and measuring area and volume. These results clearly identify *Computation* as an important area for curriculum emphasis in employment training programs.

INSTRUCTION PROVIDER AND LEARNER FINDINGS

This section focuses on the curriculum priorities identified on the IABSS by two of the major survey respondent groups: Instruction Providers and Learners. Combined responses from these two groups are referred to as Adult Basic Education Program responses. Providing input were 546 Learners and 683 Instruction Providers, including adult basic education program administrators and instructors, from all 15 community colleges and other adult basic education providers in Iowa.

The Iowa Adult Basic Education Program group rated the areas of *Health, Consumer Economics,* and *Government & Law* higher than did the Employability group. *Employment* was rated significantly higher by the two Employability groups.

Figure 6.1 compares mean competency area ratings by adult basic education program Instruction Providers and Learners. The four most highly rated competency areas by this group were *Basic Communication, Learning to Learn, Health,* and *Employment.* Overall, both groups rated all competency areas similarly. However, Learners placed greater emphasis on *Health, Government & Law, Computation,* and *Consumer Economics.* Instruction Providers gave higher ratings than Learners to *Basic Communication* and *Learning to Learn.*

Learners placed greater emphasis on Health, Government & Law, Computation, and Consumer Economics than did Instruction Providers.

Basic Communication competencies were rated highest overall by Instruction Providers and Learners, although Instruction Providers rated each individual competency significantly higher than did Learners. Two *Employment* competencies that relate to communication skills in a workplace setting were rated highly by both groups.

Understand basic principles of getting a job (mean combined rating of 3.51) was the most important *Employment* competency from the perspective of all Adult Basic Education Program respondents. Learners rated this competency significantly higher than did Instruction Providers, suggesting that some learners in programs that are not specifically focused on employability may be interested in improving their job search skills.

Utilize common workplace technology was rated at the Mid Priority Level by Adult Basic Education Program respondents. In contrast, Business & Industry and Employment Service Providers rated the use of workplace technology at the High Priority Level. (See Tables 4.2 and 5.2.) These findings point to statistically significant differences in perceptions of the importance of technology in the workplace (p<.05) which have implications for instructional programs.

Employability respondents rated technology in the workplace higher than did Adult Basic Education Program respondents.

Critical thinking skills were the highest rated competencies in the area of *Learning to Learn*. Organizational and time management skills were also considered important. In these two areas Instruction Providers rated competencies higher than did Learners.

The two *Health* competencies rated highest by both groups were *Understand basic health and safety procedures* and *Understand ailments and seek medical assistance*. Learners rated selecting and using medications and filling out health forms significantly higher than did Instruction Providers.

Adult Basic Education Program respondents gave high rankings to only two *Computation* competencies: using whole numbers and using decimals. In comparison, Employability respondents, particularly those from Business & Industry, rated four *Computation* competencies among the most essential. Instruction Providers rated the most basic math skill, *Compute using whole numbers*, significantly higher than did Learners. In contrast, Learners (as well as Business & Industry) rated the three most advanced *Computation* competencies as moderately important, while Instruction Providers and Employment Service Providers perceived them as low priorities.

Adult Basic Education Program respondents gave high rankings to only two Computation competencies: using whole numbers and using decimals.

All Adult Basic Education Program respondents felt it was very important for adults to accurately weigh, measure, count money, and make change. *Apply principles of budgeting* was also considered important, followed by competencies related to locating housing, shopping, and caring for personal possessions. Learners rated all but two of the nine *Consumer Economics* competencies significantly higher than did Instruction Providers. Budgeting, car maintenance and driving, and understanding consumer protection laws were the three areas with the greatest disparities in ratings between the two groups. These statistically significant differences suggest that Learners' needs in the area of *Consumer Economics* should be considered in developing curriculum and targeting instruction.

Three competencies were rated as essential in the area of *Community Resources: Use the telephone and telephone book; Understand concepts of time and weather; and Use community agencies and services.*

Adult Basic Education Program respondents considered most *Government & Law* competencies to be moderately important, with the exception of *Understand individual rights and responsibilities*. Learners and Instruction Providers rated this competency as a high priority. Learners gave higher ratings than Instructors for most of the competencies in this area.

USING SURVEY FINDINGS TO DEVELOP CURRICULUM IN IOWA'S ADULT BASIC EDUCATION PROGRAMS

Survey findings provide a solid foundation for building competency-based curriculum and customized assessment systems that will improve program effectiveness and accountability.

Survey findings provide a solid foundation for building competency-based curriculum and customized assessment systems that will improve program effectiveness and accountability.

Iowa Adult Basic Skills Survey data provide detailed guidance to define adult basic education curriculum objectives. In addition, the process of needs assessment and subsequent curriculum revision fulfills a number of program improvement and accountability requirements contained in Iowa's *Performance Indicators of Program Quality*.

Curriculum Development Using Survey Results

Using competencies rated by survey respondents, programs can develop a relevant curriculum based on clearly identified needs. Learners, in turn, will attain their goals more efficiently and quickly by focusing on skills that are essential for success in the job market, in academic programs, and in real life situations.

Adult basic education programs that serve learners with both employability and life skill goals may use the combined results from all IABSS respondents to guide curriculum planning. Some key findings for the total survey population were:

- All respondent groups ranked *Basic Communication* first. *Learning to Learn* and *Employment* were rated very similarly as the next most important areas, followed by *Health*.
- The competency areas of *Consumer Economics* and *Community Resources* were considered moderately important by all survey respondents.
- *Computation* ranked seventh according to the aggregate ratings, although Business & Industry respondents ranked this area much higher (fourth).
- *Government & Law* ranked last (eighth).

To make the curriculum most relevant to learners with either employability or life skill goals, programs should ensure that the 11 top priority competencies in Table 3.3 are included in their curriculum.. They should also consider the competencies rated as next most important (ranked 12 - 30) for inclusion and emphasis in their curriculum based on local needs and interests.

Another important consideration in revising curriculum based on survey results is to review the competencies rated as least essential. While the highest rated competencies indicate which skills to emphasize in instruction, knowing which competencies received lower ratings will also assist curriculum developers and instructors in making decisions about curriculum priorities. All 55 competencies listed on the survey have been previously validated as important; therefore, even competencies at the Low Priority Level may be quite important to some learners.

Developing Curriculum for Employability Programs

Programs serving learners with exclusively employment-related goals should give priority to Business & Industry and Employment Service Provider responses. Competencies rated at the Top Priority Level should be emphasized. Employability programs can also refer to the combined responses of Business & Industry and Employment Service Providers (See the full report). It is important to review responses from both groups in the curriculum development process since they approached the survey from different points of view: Employment Service Providers focus on preparing clients for obtaining a job, while Business & Industry respondents are more concerned with workers' ability to function on the job.

Employability curriculum developers and instructors can make use of the learners' perspective provided in these survey results, especially in areas such as *Basic Communication, Employment,* and *Learning to Learn.* Survey findings for all five respondent groups can also be compared, discussed, and prioritized, resulting in curriculum changes based on both survey results and active dialogue within and among local programs.

Programs serving learners with exclusively employment-related goals should give priority to Business & Industry and Employment Service Provider responses.

Developing Curriculum for Life Skills Programs

Programs serving learners with general life skills or academic goals (GED or High School diploma) can base curriculum prioritization decisions on the responses of the aggregate population, as well as on responses from Instruction Providers and Learners. The perspective of community-based and referral agencies ("Others") also contributes to the curriculum development process because these agencies frequently interact with adult learners in non-classroom situations. For segments of the life skills curriculum that relate to employment, the Business & Industry and Employment Service Provider responses offer additional valuable information.

Programs serving learners with general life skills or academic goals can base curriculum prioritization decisions on the responses of the aggregate population, as well as on responses from Instruction Providers and Learners.

TARGETING INSTRUCTION

Targeting curriculum, instruction, and assessment involves working with the discrete competency statements contained in the *CASAS Competency List.* For example, the discrete CASAS competency statements for the competency, *Communicate effectively in the workplace,* are:

4.6.1   *Follow, clarify, give, or provide feedback to instructions; give and respond appropriately to criticism.*

4.6.2   *Interpret and write work-related correspondence, including notes, memos, and letters.*

4.6.3   *Interpret written workplace announcements and notices.*

· 4.6.4   *Report progress on activities, status of assigned tasks, problems, and other situations affecting job completion.*

4.6.5   *Select and analyze work-related information for a given purpose and communicate it to others orally or in writing.*

Further assessment in the classroom or training program would determine specific learner needs for competency statements at different levels of ability; lessons could then be focused accordingly. Table 7.1 illustrates this for CASAS competency statement 4.6.2. Specification of basic skills objectives related to discrete competency statements at each level is also an important part of the curriculum development process.

USING SURVEY FINDINGS FOR PROGRAM PLANNING

Local programs can use IABSS results to supplement information from their own community's demographics and needs assessments. Together, these provide a focus for program planning, specifically to:

- create a curriculum continuum
- articulate learner attainment of competencies
- determine certification benchmarks
- identify curriculum priorities across levels and programs

These findings confirm the need for separate instructional strands within a program for learners with employment and general life skills goals.

IABSS results indicate a great deal of agreement among respondent groups and identify significant areas of disagreement with respect to priorities for instruction. For example, Business & Industry respondents rated *Computation* and many *Employment* and *Learning to Learn* competencies much higher than did other respondent groups. These findings confirm the need for separate instructional strands within a program for learners with employment and general life skills goals.

IMPLICATIONS FOR STAFF DEVELOPMENT

The curriculum development process described above cannot be effectively implemented without concurrent staff development. IABSS results provide the necessary information to develop a common strategy for curriculum development or revision, with active involvement by instructional staff. Instructors will need to become familiar with survey findings, through individual review of this report and discussion with others, to clarify interpretation of the data. The curriculum review process should include participation and systematic feedback from instructors and learners as well as curriculum development specialists. It should also take into account specific learner goals in local communities. This process involves not only agreeing on curriculum changes but also determining strategies for involving instructors in how to implement the changes effectively and to evaluate and share results and outcomes.

Although a great deal of time and effort is required, the process of curriculum development provides long-term, quality benefits. If the principles underlying the curriculum changes are well understood by all stakeholders and if there has been active participation at all levels at every stage, then changes are generally met with broader acceptance. In addition, assessment based on carefully implemented curriculum revision can be appropriate and more meaningful for the program, the instructor, and the learner.

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USING SURVEY FINDINGS TO DEVELOP COMMON ASSESSMENT INSTRUMENTS

By identifying critical competencies for adults in Iowa, customized assessment can be developed that can: establish learning plans or place learners into programs; monitor progress; and document outcomes for the benefit of learners, instructors, programs, state agencies, and other stakeholders. Competencies ranked at the Top and High Priority Levels can be used to determine the content of assessment instruments. Employability assessment instruments, based primarily on the combined results of Business & Industry and Employment Service Provider responses, can be developed. Similarly, the aggregate population's survey responses, as well as responses from Instruction Providers, Learners, and Others can be used to develop life skills assessment.

By identifying critical competencies, customized assessment can be developed to place learners, monitor progress, and document effectiveness.

Identifying critical competencies is an important step in the process of revising and developing curriculum and matching assessment to curriculum priorities. This survey provides the starting point for this process. CASAS assessment instruments are based on competencies that were used in the survey. Customized Iowa assessment instruments for placement, progress testing, and certification purposes can be developed using items drawn from the CASAS Item Bank or newly written items. Iowa's adult basic education providers will be asked to participate in the development and field testing of assessment instruments.

USING SURVEY FINDINGS TO PROMOTE COORDINATION AND COLLABORATION IN IOWA'S ADULT BASIC EDUCATION COMMUNITY

The results of the IABSS provide a solid foundation to continue building an integrated delivery system for all adult learners in Iowa and to promote coordination across agencies. Programs will benefit from:

- **Shared objectives.** In reviewing the survey findings regarding competency prioritization, adult basic education providers can reach statewide consensus regarding the most essential learner outcomes.
- **Shared curricula.** Adult basic education providers can work together to develop comprehensive curricula to meet the objectives identified by survey respondents.
- **Shared customized, statewide assessment.** After reaching a consensus regarding program objectives, a customized statewide assessment system can be developed to identify a learning plan, to place learners in programs, monitor their progress, and certify mastery of the targeted objectives.
- **Articulation among programs.** With common objectives and a common assessment system, instructional levels can be standardized, enabling articulation among levels and programs.

Programs will benefit from shared objectives, curricula, customized statewide assessment, and articulation among programs.

Business & Industry and Employment Service Providers are able to use survey results to focus their discussion and to make recommendations in the development of employability curricula. This process enables them to reach consensus regarding statewide objectives. Utilizing a common framework, employment service providers

and employability education providers are able to articulate learners' attainment of skills in language that is meaningful to business and industry.

IABSS results assist adult basic education instructors in reaching consensus regarding a statewide life skills curriculum. The curriculum priorities defined by learners who responded to the survey will provide valuable insight for curriculum development. Learners' perspectives about the importance of specific competencies were not available on such a large scale in the past.

SUMMARY

Iowa's adult basic education programs will benefit greatly from using results from the Iowa Adult Basic Skills Survey to develop shared objectives, curricula, and customized statewide assessments. Programs that serve learners with both employability and life skill goals may use the combined results from all IABSS respondents for curriculum planning. Programs planning a specifically employment-related curriculum can refer to the Business & Industry and Employment Service Provider results. Programs serving learners with general life skills or academic goals can base curriculum prioritization decisions on the responses of the aggregate population, as well as on responses from Instruction Providers, Learners, and Others.

The IABSS provides clear guidance for the development of a research-based, customized curriculum and assessment system that will improve Iowa's adult basic education program effectiveness.

Once critical learning objectives have been agreed upon using the IABSS results, they can be used to develop skill-based multi-level curricula. A well-defined curriculum assists instructors in targeting instruction, and learner progress can be monitored using a customized assessment system. To develop a multi-level curriculum, learning benchmarks can be defined for each learner level. To target instruction at the classroom level, learning benchmarks for lesson modules can be developed using the discrete competencies outlined in the *CASAS Competency List*. Customized assessments measure the attainment of priority competencies based on curriculum objectives. These assessments assist in developing learning plans, accurately place learners into programs, monitor progress, and document program effectiveness.

The IABSS study thus provides clear guidance for the development of a research-based, customized curriculum and assessment system that will improve Iowa's adult basic education program effectiveness. This is the final step in the process of establishing a statewide accountability system.

Chapter One:
Overview of the Iowa Adult Basic Skills Survey

The Iowa Adult Basic Skills Survey (IABSS) is a comprehensive needs assessment study which provides the foundation for a statewide adult basic education accountability system. This report presents findings from the survey which was conducted by the Iowa Department of Education in 1993-94.

INTRODUCTION

The long range goals for Iowa's adult basic education program are to meet the changing needs of its adult learners and to complement an existing community college adult basic education delivery system that is both professional and accountable to all stakeholders. To this end, the Iowa Department of Education has completed three major initiatives:

- a study measuring the literacy levels of a representative sample of all adults in Iowa, the Iowa State Adult Literacy Survey (IASALS);
- a secondary analysis of the IASALS data;
- the development of performance standards and indicators of program quality for Iowa's adult basic education programs.

The fourth initiative, the Iowa Adult Basic Skills Survey (IABSS), which is the subject of this report, is a comprehensive needs assessment study that provides the foundation for a statewide adult basic education accountability system. Data from this survey, conducted in 1993-94 by the Iowa Department of Education, provide clear guidance for development of a research-based, customized curriculum and assessment system that will improve program effectiveness and accountability for adult basic education programs in Iowa.

GOALS AND OBJECTIVES OF THE IABSS STUDY

In recognition of the need to align adult basic education curricula in Iowa with the needs of the community, the Iowa Department of Education initiated this statewide needs assessment, the Iowa Adult Basic Skills Survey (IABSS). The IABSS is the most extensive adult basic skills survey conducted in Iowa to date. The main purpose of the Iowa Adult Basic Skills Survey was to determine the priority

The IABSS is the most extensive adult basic skills survey conducted in Iowa to date.

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competency areas for basic life skills and employability skills needed by Iowa's adults. The goals of the study were to:

- determine priority life skills and employment-related competencies for the state of Iowa;
- gather input from a cross-section of Iowa's business and industry, educational programs, and cooperating literacy partners;
- provide for the development of a more responsive outcome-based curriculum and assessment system in statewide literacy programs;
- facilitate cooperation between adult basic education agencies and employers in planning appropriate curriculum and assessment.

In order to build statewide consensus regarding adult basic education needs and goals, survey responses were solicited from the complete spectrum of agencies and stakeholders involved with or directly affected by adult basic education services in Iowa. (See Table 2.1 and *Appendix A.*) This survey collected information from 25 different types of respondents and agencies categorized into five major respondent groups:

- Business & Industry
- Employment Service Providers
- Instruction Providers
- Learners
- Others: Community-based Agencies, Referral Agencies and Other Agencies

Information gathered from the survey answers the following key questions:

- Which competencies were rated by all respondents as most important for adult learners to acquire?
- Do community colleges, job training facilities, employers, and adult learners agree on education priorities?
- Do employers agree with employment service providers about basic skills priorities?
- Do adult learners agree with education providers about basic skills priorities?
- Which competencies were given lower priority?

The survey results will enable adult basic education program providers to examine how closely their current curricula match the needs expressed by learners and other adult basic education stakeholders. In addition, the survey results will facilitate the identification of needed curriculum changes. Individual program staff can compare their own priorities with the priorities of their peers, adult learners, and community agencies and businesses who also serve or employ their clients. This major research effort will provide future direction to all of Iowa's adult basic education providers as they seek to meet more accurately and efficiently the needs of all adults with limited literacy skills.

IOWA'S ADULT AND CONTINUING EDUCATION DELIVERY SYSTEM

A significant percentage of adult education services in Iowa are delivered through the community college adult and continuing education system. There are 15 community colleges that provide continuing education programs to approximately 400,000 adult students annually. Within the continuing education delivery system, approximately 38,000-42,000 Iowa adults are served in Adult Basic Education (ABE), English as a Second Language (ESL), General Educational Development (GED) preparation, and Adult High School Diploma classes. Coordination is provided through the Division of Community Colleges, Iowa Department of Education.

In delivering services, Iowa's community college adult basic education programs coordinate with literacy partners that include community-based organizations, prisons, public libraries and other agencies that offer courses for adult learners. A number of specialized employment training programs are funded through the Job Training Partnership Act (JTPA) and through Promise JOBS, Iowa's welfare reform program. These programs are coordinated by the Iowa Department of Employment Services and the Iowa Department of Human Services, respectively. Other state agencies and programs, including the Division of Vocational Rehabilitation, the Department of Elder Affairs, Public Libraries, Developmental Education programs, Homeless Education programs, and Community Education programs also are involved in providing adult education services or in making referrals to adult education programs.

One of the main reasons adults enroll in Iowa's community college adult and continuing education programs is to upgrade their vocational and job-related skills. Approximately 230,000 adults enroll in adult vocational training or retraining courses each year. These adults, in turn, significantly contribute to the economic development of their local communities. Raising their level of education also allows them to benefit more fully from the quality of life for which Iowa has established a national reputation.

ADULT LITERACY INITIATIVES AT THE NATIONAL LEVEL

During the past decade the issue of adult literacy has become a growing national concern. By all indications, there is an increasing gap between the level of literacy of American adults and the level of literacy required in the workforce and in everyday life situations. As business and industry adapt to emerging technologies, work methods and markets, adult workers require retraining to perform at higher literacy levels. Goal number six of America 2000's *National Education Goals* states:

> By the year 2000, every adult will be literate and have the skills necessary to compete in the global economy and participate in American democracy.

An objective cited by America 2000 to achieve this goal is, "Every major American business will be involved in strengthening the connection between education and work."

There is an increasing gap between the level of literacy of American adults and the level of literacy required in the workforce and in everyday life situations.

Published results from several recent national surveys of adults in the U.S. confirm that the American workforce, on average, lacks the literacy, computational, and other workplace skills needed to compete in a global economy. In 1993, the U.S. Department of Education funded the National Adult Literacy Survey (NALS), a household survey that measured the literacy skills of a nationally representative sample of adults. The survey found that:

- Between 21 and 23 percent of the respondents demonstrated skills at the lowest level (Level 1). Of those who performed at Level 1, 62 percent had terminated their education before completing high school and 35 percent had finished eight or fewer years of school. Thirty-three percent were 65 years of age or older. Twenty-five percent were born in outside of the United States.
- Between 25 and 28 percent demonstrated skills at Level 2 and had difficulty with many common literacy tasks.
- Between 31 and 32 percent demonstrated performance in Level 3.
- Between 18 and 21 percent performed in the highest levels, Levels 4 and 5 (Kirsch et al. 1993).

Adults with limited literacy skills have difficulty pursuing their goals, whether they involve job advancement, consumer decision-making, or citizenship.

The results of the National Adult Literacy Survey raise a number of concerns. While the majority of adults nationwide who performed at the lowest levels of literacy said that they were able to meet most of the literacy demands they encountered, it is generally believed that these adults are condemned to low earnings and limited choices (Carnevale et al. 1990). Literacy can be compared to currency in society. Just as adults with little money have difficulty meeting their basic needs, adults with limited literacy skills are more likely to be challenged in pursuing their goals, whether they involve job advancement, consumer decision-making, or citizenship. These adults are likely to be at-risk as the nation's economy and social fabric change.

A Workforce Unprepared

Recent reports have brought to the fore the pressing need to upgrade the skills of the American worker . The authors of *Workplace Basics: The Essential Skills Employers Want* found that:

> New technology, participative management, sophisticated quality controls, customer service, just-in-time production—the workplace is changing and so are the skills that employees must have in order to change with it. Many employees, however, do not have basics essential for a .quiring more sophisticated skills. While deficiencies in basic workplace skills are not a new problem, they are a growing one... The nation is facing a startling demographic reality that is not likely to go away. The group of 16 to 24-year-olds that is the traditional source of new workers is shrinking and employers will have to reach into the ranks of the less-qualified to get their entry-level work force (Carnevale et al. 1990).

After surveying more than 400 employers across the country, the American Society for Training and Development (ASTD) identified seven basic skill areas in which employers would like workers to be competent:

- Reading, writing, and computation
- Listening and oral communication
- Learning to learn

- Creative thinking and problem solving
- Self-esteem, personal, and career development
- Interpersonal negotiation and teamwork
- Organization, goal setting, and leadership

These skills, which were once identified with the "fast track," are now considered basic ingredients for any workforce preparation program.

An individually administered literacy assessment of 6,000 adults in JTPA and other employment service programs found that roughly 63 percent of the respondents believed they could get a better job if their reading or writing skills were improved through additional education or training. Roughly 75 percent believed they could get a better job if their math skills were improved (Kirsch et al. 1992).

The U.S. Department of Labor, also concerned about the state of worker illiteracy, funded the SCANS (Secretary's Commission on Achieving Necessary Skills) Survey. This survey collected information from employers to identify specific skill areas and competencies that need to be targeted if this country is expected to compete in a global economy. According to the 1992 SCANS Report, a high performance workplace requires workers who have a solid foundation in:

The SCANS Survey collected information from employers to identify specific skill areas that need to be targeted nationally.

- Basic literacy skills
- Thinking skills necessary to put knowledge to work
- Personal qualities that make workers dedicated and trustworthy
- The ability to manage resources
- The ability to work amicably and productively with others
- The ability to acquire and use information
- The ability to master complex systems
- The ability to work with a variety of technologies

The SCANS Commission made these recommendations for educational programs:

- Incorporate the SCANS foundation skills and workplace competencies as explicit objectives of instruction at all levels; and
- Implement an assessment system that will provide students and workers with a résumé documenting attainment of the SCANS competencies.

THE ADULT BASIC EDUCATION CHALLENGE IN IOWA

State Survey of Adult Literacy

Iowa's concern for its own population and its adult basic education programs led to special funding for the Iowa State Adult Literacy Survey (IASALS), a replication of the NALS at the state level. This study of 1,264 adults indicated that adults in Iowa have higher levels of literacy, on average, than adults nationwide, though the levels are similar to those of adults in other midwestern states. For more information about adult literacy rates in Iowa, see the report entitled *Adult Literacy in Iowa: Results of the State Adult Literacy Survey* (Jenkins & Kirsch 1994).

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State Performance Standards

Iowa's community college adult basic education programs have always strived to stay informed and focused with regard to performance standards and curriculum prioritie... The National Literacy Act of 1991 requires states to establish program quality indicators to determine whether adult education programs are effectively recruiting, retaining, and improving the literacy skills of the individuals enrolled. To guide the development of Iowa's performance indicators, the Iowa standards committee reviewed the U.S. Department of Education's model framework and made modifications to reflect the reality of program practices in Iowa's adult basic education programs.

Iowa's performance standards have been developed with a goal of program improvement and accountability (Iowa Department of Education 1993). They represent a starting point from which adult basic education programs can quantify or qualify what is to be considered acceptable performance in meeting the intent of National Education Goal Six. These standards thus have an important place in Iowa's provisions for attaining this goal.

CONTENTS OF THE REPORT

Chapter One provides background information and an initial overview of the study. Chapter Two describes the survey design and methodology, including assumptions and limitations of the survey, and gives a description of the respondent groups.

Chapters Three through Six contain survey findings, which consist primarily of presentation and discussion of the ratings given by various respondent groups as to the importance of particular competencies. In Chapter Three, aggregate results are reported for the entire survey population.

Subsequent chapters contain findings from four respondent groups: Business & Industry, Employment Service Providers, Instruction Providers, and Learners. Chapter Four looks at responses from Business & Industry. Chapter Five presents responses from Employment Service Providers and compares hem to responses from Business & Industry, since their "employability" perspectives will facilitate development of an employment-related curriculum and assessment system in Iowa. In Chapter Six, responses from adult basic education instruction providers and adult learners are examined, both separately and collectively, since their responses will be consulted in the development of curriculum and assessment that addresses priority competencies. Chapter Seven explores implications for curriculum development, assessment and program planning in Iowa's adult basic education programs.

The appendices contain additional background and technical information, the survey instrument, and tables of survey data including results for public library literacy programs, JTPA programs, community-based agencies, referral agencies, and all other survey respondents.

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Chapter Two:
Survey Design and Methodology

This chapter describes the design of the Iowa Adult Basic Skills Survey (IABSS) and the methodology used in compiling and interpreting results. Assumptions and limitations of the survey, as well as generalizability of survey results, are also included.

SURVEY DESIGN

A broad spectrum of respondents from the public and private sectors concerned with adult basic education was asked to rate 55 competencies as to their importance. Analysis of the ratings identifies priorities within and across respondent groups. *(See the survey instrument in Appendix A.)*

The Comprehensive Adult Student Assessment System (CASAS) was contracted to design and conduct the IABSS. CASAS has a 15-year history of successfully assessing the basic skills of adults within a functional context and is used extensively throughout the United States in adult basic education, employment training, welfare reform, and workplace literacy programs. The CASAS system has been validated and approved for national dissemination by the U.S. Department of Education's National Diffusion Network in the area of adult literacy. CASAS has also contributed its expertise to major state and national research projects as both a validated assessment system and an educational data collection and research organization. These projects include the National Evaluation of Adult Education Programs (1994) and the California Department of Education's Student Progress and Goal Attainment in Federally Funded Programs (1986-present). *(See Appendix B for an overview of CASAS.)*

In 1993, seven Iowa community colleges conducted a pilot implementation of CASAS in adult basic education and employability services programs and found that the system was well suited to their needs. A task force, consisting primarily of representatives from community college programs throughout the state that had gained experience using the CASAS system, provided guidance in the formative stages of the study.

The *CASAS Competency List* was selected as the basis for the IABSS because it is the most comprehensive list of competencies that has been validated for adults. The list contains more than 300 discrete competency statements in nine content areas: *Basic Communication, Consumer Economics, Community Resources, Health, Employment, Government & Law, Computation, Learning to Learn,* and *Domestic Skills.* The area of *Domestic Skills* was not used on the survey. *(See Appendix C.)* The *CASAS Competency*

The CASAS Competency List was selected as the basis for the IABSS because it is the most comprehensive list of competencies that has been validated for adults.

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List is correlated to the Department of Labor's SCANS competencies, and also includes other nationally validated critical life skill competencies. *(See also Appendix C for a correlation of SCANS competencies to CASAS competencies.)* The CASAS list is revalidated annually by the CASAS National Consortium.

Another important factor in the selection of the *CASAS Competency List* is the link to the CASAS assessment system. The system can measure learners' progress in achieving the competencies identified by Iowa as priorities.

To keep the survey brief (two pages), it was decided not to use the complete list of more than 300 discrete CASAS competency statements, but rather the 55 broader competency areas under which they are categorized. It was felt that this provided an adequate degree of detail for the purposes of the survey. In addition to the 55 competency areas (termed "competency statements" on the survey), an "Other" category was provided within each content area to allow respondents to write in additional competencies they felt were important. *(See Appendix D regarding treatment of "Other" competency statement responses.)*

In Section I of the IABSS Survey instrument, respondents were instructed to:

> Decide how important each statement is to adult learners in your program, agency, or institution regarding basic life and employability skills necessary to function in today's society and workforce.

The competency rating system consisted of a four-part scale: *very important, important, somewhat important,* and *not important.* Ratings were indicated by marking the response on a machine-scannable form.

The second part of the survey (Section II) asked for respondents to select the top four of the eight content areas (referred to as "competency areas" on the survey form) in terms of their priority for adult learners in their program, agency or institution. Analysis of results indicated that Section II mean rankings matched Section I mean rankings for all eight competency areas. Consequently, Section II results were used as one measure of the reliability of Section I results. *(See Appendix D.)*

SURVEY METHODOLOGY

Survey Distribution

The Iowa Department of Education coordinated distribution of the IABSS. Community colleges, the primary providers of adult basic education services in the state, were the principal facilitators at the local level. The Iowa Department of Education sent survey instructions to adult basic education coordinators in all 15 community college districts. The coordinators were asked to distribute the survey to all groups and individuals in their local literacy networks, specifically:

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- All ABE/ESL/GED instructional staff
- All community agency contact persons
- Private Industry Councils (PICs)
- Participatory planning committees
- Other literacy partners
- Other interested parties

A 15 percent random sample of ABE/ESL/GED students was recommended, excluding institutionalized learners but including those in correctional education programs. Coordinators were instructed to ask faculty to administer the survey to students in the classroom setting.

The Iowa Department of Education identified other state agencies involved with ad.ilt basic education programs in the state. Contact persons in these agencies were asked to send the survey to their staff members throughout the state. Individuals who received multiple surveys were instructed to submit only one.

To survey business and industry, the Iowa Department of Employment Services Research and Development Section was asked to compile a random sample of 2,000 employers of all types from throughout the state.

Survey Response

A total of 9,700 survey forms were distributed during the fall of 1993. Responses were collected during the months of December 1993 and January 1994. A total of 3,530 survey forms were completed and returned. This represented an unadjusted response rate of 36 percent. Forty-seven cases were removed from the analysis due to lack of response variation, leaving the adjusted response rate at 36 percent. A total of 3,483 cases were used for data analysis.

A total of 9,700 survey forms were distributed throughout Iowa during the fall of 1993.

Respondent Groups

Respondents were asked to identify on the survey form the type of program, agency, or institution they represented. (See survey instrument, Appendix A.) They could mark as many categories as they felt applied to their situation. For purposes of analysis and reporting results, program types were categorized into five main groups:

1. **Business & Industry**

2. **Employment Service Providers**
   JTPA SDA / PIC
   Department of Employment Services
   Promise JOBS
   JTPA

3. **ABE, ESL, GED Learners**

4. **Instruction Providers**
   Community College
   Adult Basic Education (ABE)
   English as a Second Language (ESL)

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GED
Alternative High School Program
Adult High School Diploma
Developmental Education
Correctional Institution
Post-secondary School*

5. Community-based Agencies, Referral Agencies, and Other Agencies
(Others)
Department of Human Services
Department of Education
Division of Vocational Rehabilitation
Department of Elder Affairs
Public Library
Area Education Agency
Local School District
Community Education
Adult Advisory Council
Health Care Providers*
Other Social Service Providers*

Results in this study were compiled and reported according to these five main groups. Though approximately one-fourth of the respondents identified themselves by marking more than one program type, each respondent was counted only once. *(See Appendix D for a summary of the number and distribution of program type responses, including multiple marks.)* Respondents who identified themselves as representing one or more programs within any one group (e.g., "Community College" and "GED," both subgroups of the Instruction Provider group) were included in that group. Respondents who marked programs that fell into more than one group (approximately four percent of the total) were assigned to one of the groups based on what appeared to be the principle focus of the various program types identified. Table 2.1 shows the number and percentages of respondents in each of the five main groups that were used in the analyses in this study.

Table 2.1
Number of Respondents per Group

Respondent Group	Total N	% of Total
Business & Industry	850	74
Employment Service Providers	553	16
Instruction Providers	683	20
Learners	507	14
Community-based Agencies, Referral Agencies, Other Agencies	862	25
Program Type Not Indicated .	28	< 1
Total	3,483	100%

CASAS, 1995

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*These program types did not appear on the survey, but were subsequently added based on the compilation of write-ins from the "Other" category.

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Competency Rating System

The survey called for respondents to rate the importance of 55 competencies. To analyze and report survey responses, each of the four descriptive rating categories was assigned a numeric value from 1 to 4, with 4 indicating a rating of *very important* and 1, *not important*. (See Table 2.2.)

Table 2.2 - Competency Rating Scale

Rating	Degree of Importance
4	Very important
3	Important
2	Somewhat important
1	Not important

CASAS, 1995

The numeric values were used to calculate mean ratings for individual competencies and competency areas, and to rank competencies. This average then served as the primary approach to reporting perceived importance. The mean rating is used in data displays and discussions throughout this report to show ranking of competencies in terms of importance.

In addition to the mean ratings, another approach to gauging the importance of competencies was employed in order to discuss the relative importance of the competencies and to provide an additional measure of validity to the analysis. This approach produced Priority Level Rankings, which took into account the distribution of responses on the rating scale, as opposed to the average response to all four categories on the scale. Priority Level Rankings were determined by calculating the percentage of respondents who rated a particular competency as *very important* or *important*. On review of the data, the Priority Level Rankings were categorized into four levels, delineated in Table 2.3.

Table 2.3 - Priority Level Rankings

Priority Level	Percentage of Respondents Rating a Competency as *very important* or *important*
Top	85% or more
High	70% to 84%
Mid	50% to 69%
Low	Fewer than 50%

CASAS, 1995

This system is reflected in the tables of this report in which competency results are shown. *(The Priority Level Rankings appear in the data tables in Appendix E.)*

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Assumptions

The IABSS study is based on three underlying assumptions. First, it assumes that the *CASAS Competency List* represents a comprehensive list of basic skill competencies needed by adults in Iowa to function effectively in the community and the workplace. As previously described, the *CASAS Competency List* was selected because it is the most comprehensive national adult basic education competency list that has undergone systematic annual revalidation by representatives from programs throughout the country.

A second underlying assumption is that survey respondents had experience with adults with limited basic skills through interactions with this population as employers, service providers, or referral agency personnel, and that this experience qualifies them to identify priority competencies. As discussed earlier in this chapter, the response rate was high and the survey distribution included respondents from a wide range of agency types and from personnel within those agencies with varied responsibilities. These factors contribute to the relevance and validity of their responses.

A third underlying assumption is that the results of the study can be used to guide curriculum, assessment, and accountability in a variety of adult basic education contexts, including the workplace, employment training programs, community college adult basic education programs, and library literacy programs, as well as similar programs in other settings.

Limitations

The focus of this survey was to determine basic skills competency priorities in Iowa. The sample was drawn exclusively from Iowa respondents. As a result, a limitation of the survey is that results represent basic skills priorities specific to Iowa but not to other states or areas.

Some sampling error could have occurred since, with the exception of Business & Industry respondents, the sample was not drawn in a completely random fashion. However, due to the thoroughness of the survey distribution process to all community colleges and other networks of agencies, instructors, and learners, and to the high response rates from all these major respondent groups, it was decided that it was not necessary to weight responses from the five groups.

Generalizability

Based on the high overall response rate and the high response rates from Business & Industry and Learners, in particular, the groups are sufficiently representative of the target population to generalize results to the larger population in the state of Iowa. The large numbers of respondents, overall and in each group, also add confidence to the generalizability of the results.

Project researchers have selected data analysis techniques and reported results with an awareness and sensitivity to the limitations and assumptions described in this section. Analysis and interpretation of survey results are presented with the

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confidence that they are warranted and supported by the quality of the survey methodology. *(Additional information regarding technical aspects of analysis and interpretation of the survey data is contained in Appendix D.)*

Approach to Figures and Tables

The following information is provided to facilitate interpretation of the figures and tables presented throughout the report.

- Findings and data comparisons that are statistically significant are noted on each display (p<.05).
- The number of respondents used for aggregate analyses is 3,483. In analyses of survey groups, however, the total number of respondents is 3,455 because 28 respondents did not mark a program type.
- The number of respondents for each group sometimes differed due to omitted ratings for certain competencies. As a result, the Ns reflect the total N for each survey group, as reported in Table 2.1. *(A complete listing of response data can be found in Appendix E.)*
- The figures in Chapters Four, Five, and Six list competency areas and statements in the same order of importance as results from the aggregate population.
- Competencies in each table were ranked based on the mean rating calculated to four decimal points.
- Tables 3.3, 4.2, 5.2, and 6.2 present "Most Essential Skills" which are competencies ranked "Top" and "High" in terms of their Priority Level Rankings.

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Chapter Three:
Aggregate Results

This chapter introduces findings from the total population of Iowa Adult Basic Skills Survey (IABSS) respondents. Overall ratings for 55 basic skills competencies in eight competency areas are presented from a sample of 3,483 respondents.

SURVEY RESULTS BY COMPETENCY AREA

Competency Area Rankings: Aggregate IABSS Respondents

Survey respondents rated the importance of 55 competencies classified into eight content areas (termed "competency areas" on the survey form). The values for each rating were assigned (*very important* - 4; *important* - 3; *somewhat important* - 2; *not important* - 1) and a mean rating was calculated for each of the eight competency areas. According to these ratings, the rank order of the competency areas for the aggregate population was as follows:

Table 3.1 - Competency Areas Ranked In Order of Importance by IABSS Respondents

Rank	Competency Area
1	Basic Communication
2	Learning to Learn
3	Employment
4	Health
5	Consumer Economics
6	Community Resources
7	Computation
8	Government & Law

N = 3,483

Note: All means were significantly different (p<.05) except *Learning to Learn/Employment* and *Community Resources/Computation*. (See Endnotes.)

CASAS, 1995

Basic Communication was rated highest, followed by Learning to Learn, Employment, and Health.

Figure 3.1 shows the mean ratings for the eight areas. *Basic Communication* ranked first with a mean rating of 3.52 out of 4.0. *Learning to Learn* (3.26) and *Employment* (3.25) were similarly rated, followed by *Health* at 3.05.

Figure 3.1 - Mean Competency Area Ratings: Aggregate IABSS Respondents
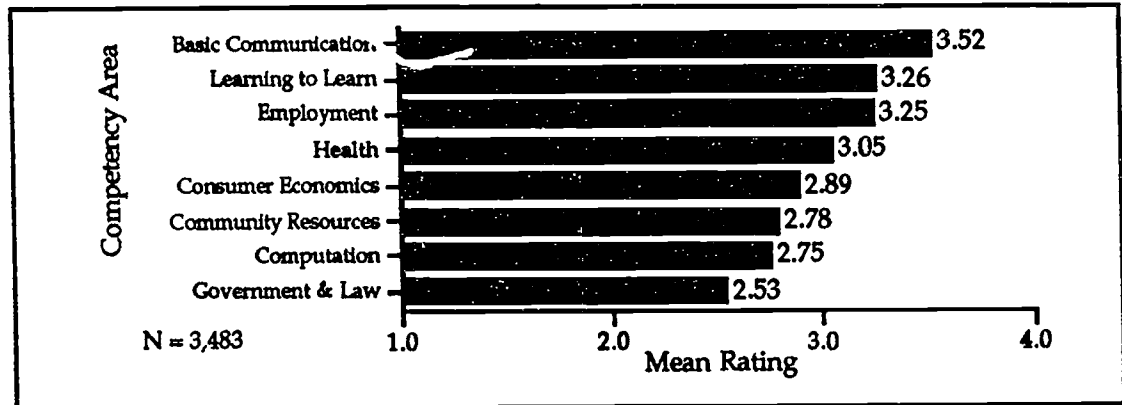
Note: All means were significantly different (p <.05) except *Learning to Learn/Employment* and *Community Resources/Computation*. (See Endnotes.)

CASAS, 1995

The remaining competency areas were seen by the total population to be of relatively low importance: *Consumer Economics* (2.89) ranked fifth, followed by *Community Resources* (2.78) and *Computation* (2.75) which received similar ratings. *Government & Law* was rated least important, with a mean rating of 2.52.

Competency Area Rankings: Five Respondent Groups

Table 3.2 compares competency area rankings for the five respondent groups: Business & Industry, Employment Service Providers, Instruction Providers, Learners, and Others. Aggregate rankings appear in the "Total" column. As this table shows, the five groups were similar in their rankings of the competency areas.

The five groups were similar in their rankings of the competency areas.

Table 3.2 - Competency Area Rankings: Five Respondent Groups

Competency Area	Total	Business & Industry	Empl. Service Providers	Instr. Providers	Learners	Others
Basic Communication	1	1	1	1	1	1
Learning to Learn	2	3	3	2	3	2
Employment	3	2	2	4	4	3
Health	4	5	4	3	2	4
Consumer Economics	5	6	6	5	5	6
Community Resources	6	7	5	6	6	5
Computation	7	4	7	7	7	7
Government & Law	8	8	8	8	8	8
N=	3,483*	850	553	683	507	862

*Total includes 28 respondents who did not mark a program type.

All correlations between group ranks > .7 (p<.05).

CASAS, 1995

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All groups rated *Basic Communication* first and *Government & Law* last (eighth in order of importance). *Learning to Learn* was also important for all groups, who ranked it either second or third. *Consumer Economics* was rated similarly by all groups, ranking either fifth or sixth.

There were statistically significant differences (p<.05) in ratings of the remaining competency areas by the five respondent groups:

- Business & Industry and Employment Service Providers ranked *Employment* second, while other groups ranked it third or fourth.
- Business & Industry respondents ranked *Computation* higher (fourth) than did all other groups, who ranked it seventh.
- *Health* was of great importance to Learners and Instruction Providers, who ranked this area second and third, respectively.
- *Community Resources* was ranked slightly higher by Employment Service Providers and Other respondents (fifth) than other respondent groups.
- The "Other" group represented a wide range of different types of community agencies. Their ratings were similar to the aggregate population.

SKILLS PRIORITIZED BY AGGREGATE IABSS RESPONDENTS

In this section, mean ratings for all 55 competencies evaluated by the total population of IABSS respondents are presented. In each table, individual competencies are ranked in order of importance according to the mean rating, indicated to the left of each competency. A black dot to the right of each competency indicates the general competency area for each competency. *(For additional statistical information about these responses, see Appendix E.)*

Most Essential Skills: Aggregate IABSS Respondent Ratings

Table 3.3 shows the competencies at the Top and High Priority Levels ranked in order of their mean rating. The Priority Level analysis, as explained in Chapter Two, reports the percentage of respondents who rated a particular competency as *important* or *very important*. The Top Priority Level competencies are those which were rated *important* or *very important* by 85 percent or more of respondents. High Priority Level competencies are those rated *important* or *very important* by 70 to 84 percent of respondents.

Eleven competencies are shown in Table 3.3 to be at the Top Priority Level. These competencies have mean ratings, on a scale of 1.0 to 4.0, ranging from 3.31 to 3.66. All of these competencies involve skills that are required to communicate effectively and to succeed in the workplace.

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CASAS Competency Area

Table 3.3
Most Essential Skills: Aggregate IABSS
Respondent Ratings (Top & High Priority Levels)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
		Top Priority Level								
1.	3.66	Communicate in general interpersonal interactions	●							
2.	3.55	Communicate effectively in the workplace			●					
3.	3.50	Communicate regarding personal information	●							
4.	3.49	Demonstrate effectiveness in working with people			●					
5.	3.47	Demonstrate ability to use thinking skills		●						
6.	3.44	Understand basic principles of getting a job			●					
7.	3.44	Use problem solving skills		●						
8.	3.40	Use language of clarification	●							
9.	3.38	Compute using whole numbers							●	
10.	3.36	Understand job performance concepts & materials			●					
11.	3.31	Practice organizational & time management skills		●						
		High Priority Level								
12.	3.30	Use the telephone and telephone book						●		
13.	3.27	Understand (workplace) safety procedures			●					
14.	3.27	Understand basic health and safety procedures				●				
15.	3.25	Use weights, measurement scales, and money					●			
16.	3.19	Understand wages, benefits, and employ. concepts			●					
17.	3.16	Apply principles of budgeting					●			
18.	3.13	Understand ailments and seek medical assistance				●				
19.	3.10	Understand principles of health maintenance				●				
20.	3.10	Understand aspects of personal management		●						
21.	3.05	Utilize common workplace technology			●					
22.	3.04	Effectively manage workplace resources			●					
23.	3.03	Compute using decimals							●	
24.	3.01	Understand how to select and use medications				●				
25.	2.98	Demonstrate study skills		●						
26.	2.96	Understand individual rights and responsibilities								●
27.	2.94	Understand concepts of time and weather						●		
28.	2.93	Understand procedures to purchase goods					●			
29.	2.93	Use community agencies and services						●		
30.	2.89	Use banking and financial services					●			

N= 3,483

CASAS, 1995

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Out of 55 competencies, IABSS respondents rated communication-related competencies the highest. All three of the *Basic Communication* competencies were given high ratings by all respondents: the ability to communicate in general interpersonal interactions (i.e., in social and work situations), to communicate personal information, and to clarify when necessary.

In addition, an *Employment* competency that focuses on basic communication skills, *Communicate effectively in the workplace*, was rated second by the total population. These high ratings send a strong message that it is crucial to address the development of personal communication skills in Iowa's adult basic education programs.

The next top rated competencies were directly related to employment: the ability to work effectively with others, understand aspects of employment and job performance, and secure employment using effective job search skills. These ratings demonstrate that success in job search and on-the-job skills were considered to be important by all survey respondents, not only those who responded from Business & Industry and Employment Service Providers.

Critical thinking and problem solving skills from the *Learning to Learn* competency area were also rated very highly. These skills are useful in employment situations, as well as in everyday life situations. Ranked ninth was the *Computation* competency, *Compute using whole numbers*. This high rating of a math competency is a reminder of the importance of focusing on basic math in the adult basic education curriculum.

The next 19 competencies, listed in Table 3.3, were at the High Priority Level and had mean ratings ranging from 2.89 to 3.30. Most of the competencies ranked from 12 through 23 are skills that were considered useful in the workplace. Most of these competencies also are important for functioning in daily life: understanding the basics of health and safety, measurement, money, budgeting, wages, and employee benefits; using the telephone and telephone book; effectively utilizing workplace technology and resources; and computing using decimals.

Competencies ranked 24 through 30 cover a wide range of competency areas:

- *Understand how to select and use medications.*
- *Demonstrate study skills.*
- *Understand individual rights and responsibilities.*
- *Understand concepts of time and weather.*
- *Understand procedures to purchase goods.*
- *Use community agencies and services.*
- *Use banking and financial services.*

High Basic Communication ratings send a strong message to address the development of personal communication skills in Iowa's adult basic education programs.

Somewhat Important Skills: Aggregate IABSS Respondent Ratings

Competencies at the Mid Priority Level (those which were rated as *very important* or *important* by 50 to 69% of respondents) are presented in Table 3.4. Their mean ratings range from 2.51 to 2.89. Most of these competencies were in the areas of

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Consumer Economics (five competencies), Computation (four), Community Resources (two), and Government & Law (three).

CASAS Competency Area

Table 3.4
Somewhat Important Skills: Aggregate IABSS Respondent Ratings (Mid Priority Level)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
31.	2.89	Compute with percents, rate, ratio, and proportion							•	
32.	2.86	Compute using fractions							•	
33.	2.85	Understand social, org., and technological systems		•						
34.	2.85	Use estimation and mental arithmetic							•	
35.	2.83	Apply principles of comparison shopping					•			
36.	2.82	Understand how to care for personal possessions					•			
37.	2.80	Understand how to obtain housing and services					•			
38.	2.75	Locate and use transportation and travel info.						•		
39.	2.73	Measure area, volume & linear dimensions							•	
40.	2.72	Understand voting and the political process								•
41.	2.70	Understand medical and dental forms				•				
42.	2.69	Understand procedures for auto maint./driving					•			
43.	2.66	Use services provided by the post office						•		
44.	2.60	Understand consumer protection laws					•			
45.	2.52	Understand principles of taxation								•
46.	2.51	Understand civic responsibilities								•

N= 3,483
CASAS, 1995

Least Essential Skills: Aggregate IABSS Respondent Ratings

Table 3.5 contains the ten competencies identified as least essential by the total population of IABSS respondents (at the Low Priority Level, rated *very important* or *important* by less than 50% of respondents). The competencies identified as least essential fell into one of the following three areas: *Government & Law, Computation,* and *Community Resources.* They included subjects such as art, government, history, geography, and economics and had mean ratings ranging from 2.15 to 2.50. Higher level mathematics competencies, such as interpreting graphs, computing averages, and using equations, statistics, and probability also ranked among the ten least essential skills. It should be noted that all 55 competencies listed on the survey have been previously validated as important; therefore, even competencies at the Low Priority Level may be quite important to some learners.

CASAS Competency Area

Table 3.5
Least Essential Skills: Aggregate
IABSS Respondent Ratings (Low Priority Level)

|	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
47.	2.50	Understand aspects of society and culture					•			
48.	2.49	Interpret data from graphs and compute averages							•	
49.	2.43	Understand governmental activities								•
50.	2.37	Understand economics and economic systems								•
51.	2.37	Understand environmental and science issues								•
52.	2.34	Use expressions, equations, or formulas							•	
53.	2.34	Use leisure time resources and facilities						•		
54.	2.31	Understand historical and geographical info.								•
55.	2.15	Use statistics and probability							•	

N= 3,483

CASAS, 1995

SUMMARY

Basic Communication and work-related communication competencies were considered to be most important by all survey respondents. All respondent groups ranked *Basic Communication* first and *Government & Law* last.

Learning to Learn and *Employment* were the next most important areas, followed by *Health*. *Learning to Learn* competencies relate to employment contexts as well as to adults' lifelong learning objectives.

Computation ranked seventh according to the aggregate ratings, although Business & Industry respondents rated this area much higher (fourth). *Consumer Economics* and *Community Resources* were considered somewhat important by all survey respondents.

In general, competencies rated as less important by the total population were in the areas of *Government & Law, Computation, Community Resources,* and *Consumer Economics*.

Endnotes

1. Table 3.1 and Figure 3.1. No significant difference was found between *Learning to Learn* and *Employment* competency areas ($p<.05$). However, the means for *Employment* were distributed more uniformly around the mean (standard deviation = .588) than was the case for *Learning to Learn* (standard deviation = .635). No significant difference was found between *Community Resources* and *Computation* ($p<.05$). However, the means for *Community Resources* were distributed more uniformly around the mean (standard deviation = .609) than for *Computation* (standard deviation = .635).

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Chapter Four:
Business & Industry Results

This chapter focuses on the curriculum priorities identified by 850 Business & Industry respondents. Comparisons of ratings by other groups are also included.

SURVEY RESULTS BY COMPETENCY AREA

The inclusion of significant numbers of responses from Business & Industry is one of the most unique and enlightening features of this survey. The results can be used to set a clear direction for curriculum development and instructional priorities in Iowa's workplace literacy programs, as well as for targeting instruction for learners with employability needs.

Iowa's business and industry community ranked *Basic Communication, Employment,* and *Learning to Learn* highest, as shown in Table 4.1. Business & Industry ranked *Computation* much higher (fourth) than did the aggregate population (seventh).

Iowa's business and industry community ranked Basic Communication, Employment, and Learning to Learn highest.

Table 4.1 - Competency Areas Ranked in Order of Importance by Business & Industry Respondents

Rank	Competency Area
1	Basic Communication
2	Employment
3	Learning to Learn
4	Computation
5	Health
6	Consumer Economics
7	Community Resources
8	Government & Law

N = 850

CASAS, 1995

Figure 4.1 provides additional information about Business & Industry respondents' ranking of the eight broad competency areas. The three highest ranked areas, *Basic Communication, Employment,* and *Learning to Learn* had mean ratings that were substantially higher than all other areas. Conversely, the mean ratings for *Community Resources* and *Government & Law* were markedly lower than for all other areas. In general, Business & Industry tended to give lower ratings than other groups to competencies that they considered less important. For example, *Community Resources*

was ranked seventh by Business & Industry and sixth by the total population, but Business & Industry gave a lower mean rating (2.49) than did the total population (2.78). (See Chapter Three.)

Figure 4.1† - Mean Competency Area Ratings: Business & Industry Respondents
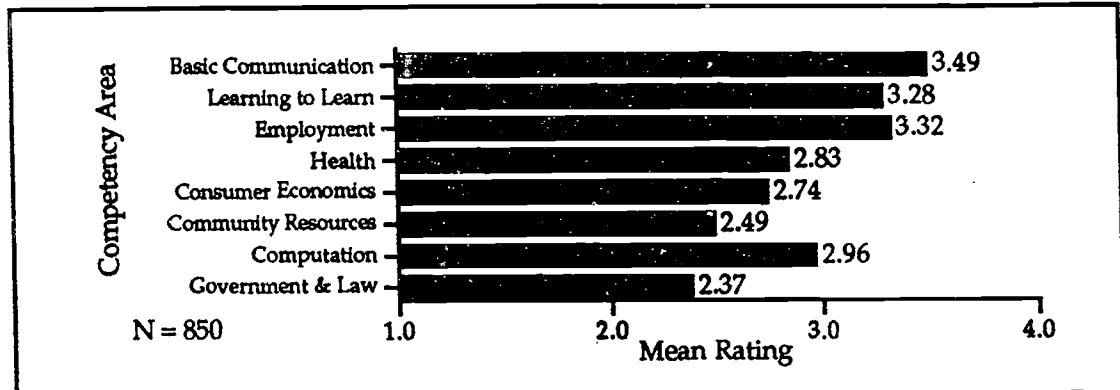
Note: All means significantly different (p<.05).

CASAS, 1995

SKILLS PRIORITIZED BY BUSINESS & INDUSTRY RESPONDENTS

Most Essential Skills: Business & Industry Respondent Ratings

Business & Industry's highest rated competencies, those at the Top and High Priority Levels (rated as *very important* or *important* by 70% or more of respondents), are presented in Table 4.2. The 12 Top Priority competencies, rated *very important* or *important* by 85 percent or more of the respondents, had mean ratings ranging from 3.35 to 3.68. They represent skills that are essential in the workplace as well as in many situations in daily life.

Communication was particularly emphasized by Business & Industry respondents. Note that the three most highly rated competencies deal with general communication, working with people, and communicating in the workplace. Clarifying and communicating with regard to personal information were among the top 12 as well.

Also seen as very essential were basic computation skills, particularly computation using whole numbers, and thinking and problem solving skills. Other competencies rated at the Top Priority Level were:

- *Understand job performance concepts and materials.*
- *Understand weights, measurement scales, and money.*
- *Understand safety standards and procedures.*
- *Practice organization and time management skills.*

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†The figures in this chapter present competencies or competency areas ranked in the same order of importance as the total survey population.

CASAS Competency Area

Table 4.2
Most Essential Skills:
Business & Industry Respondent
Ratings (Top & High Priority Levels)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
		Top Priority Level								
1.	3.68	Communicate in general interpersonal interactions	•							
2.	3.64	Demonstrate effectiveness in working with people			•					
3.	3.63	Communicate effectively in the workplace			•					
4.	3.56	Compute using whole numbers							•	
5.	3.53	Use problem solving skills		•						
6.	3.53	Demonstrate ability to use thinking skills		•						
7.	3.50	Understand job performance concepts/materials			•					
8.	3.48	Use weights, measurement scales, and money					•			
9.	3.46	Use language of clarification	•							
10.	3.43	Understand (workplace) safety procedures			•					
11.	3.41	Practice organizational/time management skills		•						
12.	3.35	Communicate regarding personal information	•							
		High Priority Level								
13.	3.31	Compute using decimal fractions							•	
14.	3.24	Utilize common workplace technology			•					
15.	3.23	Effectively manage workplace resources			•					
16.	3.21	Understand health and safety procedures				•				
17.	3.20	Use the telephone and telephone book						•		
18.	3.19	Compute with percents, rates, or proportions							•	
19.	3.17	Understand basic principles of getting a job			•					
20.	3.17	Understand wages, benefits, & employ. concepts			•					
21.	3.13	Understand aspects of personal management		•						
22.	3.09	Compute using fractions							•	
23.	3.05	Use estimation and mental arithmetic							•	
24.	2.98	Measure area, volume. & linear dimensions							•	
25.	2.98	Apply principles of budgeting					•			
26.	2.98	Understand principles of health maintenance				•				
27.	2.92	Understand social, org., and technological systems			•					

N = 850
CASAS, 1995

Competencies ranked 13 through 27, at the High Priority Level, had mean ratings ranging from 2.92 to 3.31. As would be expected, these competencies also represent skills that are directly applicable in the workplace:

- Computation using decimals, fractions, percents, and ratios

- Use of workplace technology, resources, and systems
- Health and safety procedures
- Telephone skills
- Job search techniques and principles of employment
- Personal management
- Money and budgeting
- Measurement

Ratings of SCANS-related Competencies

The SCANS Commission was a U.S. Department of Labor task force that collected information from employers to identify specific skill areas and competencies that need to be targeted if this country is to compete in a global economy. (See Chapter One.) The 1992 SCANS Report contained recommended foundation skills and workplace competencies. The SCANS competencies have been correlated to the *CASAS Competency List* and all SCANS competencies are reflected in the *CASAS Competency List*. (See Appendix C.) Review of the SCANS competencies is important to provide an understanding of how IABSS Survey responses in Iowa, particularly from Business & Industry, relate to national level workplace priorities.

Table 4.3 shows the SCANS-related CASAS competency statements and reports how the five respondent groups rated each competency. The SCANS competencies relate to five of the nine CASAS *Employment* competencies and four of the five CASAS *Learning to Learn* competencies.

Table 4.3 - Mean Ratings of SCANS-related CASAS Competencies by Respondent Group

Survey Competency Statement	Total	Business & Industry	Empl. Service Providers	Instr. Providers	Learners	Others
Utilize common workplace technology	3.05	3.24	3.22	2.86	2.96	2.98
Communicate effectively in the workplace	3.55	3.63	3.71	3.54	3.40	3.46
Effectively manage workplace resources	3.04	3.23	3.13	2.87	2.99	2.98
Demonstrate effectiveness in working with people	3.49	3.64	3.60	3.43	3.32	3.42
Understand social, org., and technological systems	2.85	2.92	3.01	2.72	2.85	2.79
Practice organizational & time management skills	3.31	3.41	3.38	3.32	3.22	3.23
Demonstrate ability to use thinking skills	3.47	3.53	3.50	3.51	3.37	3.42
Use problem solving skills	3.44	3.53	3.45	3.47	3.34	3.37
Demonstrate study skills	2.98	2.81	3.07	3.15	3.15	2.87

CASAS, 1995

Iowa Business & Industry and Employment Service Providers gave higher ratings to all of the SCANS-related *Employment* competencies than did the other respondent groups. The total survey population, as well as each survey group, rated two *Employment* competencies at the Top Priority Level: *Communicate effectively in the workplace* and *Demonstrate effectiveness in working with other people*. (See *Employment sections in Appendix E*.) This clearly demonstrates the perceived importance of communication in the workplace by all Iowa survey respondents. Two of the other three SCANS-related *Employment* competencies, *Utilize common workplace technology* and *Effectively manage workplace resources*, were rated at the High Priority Level by the total population, while *Understand social, organizational, and technological systems* was rated at the Mid Priority Level.

Of the SCANS-related *Learning to Learn* competencies, organizational and time management skills, thinking skills, and problem solving skills were rated uniformly by the aggregate of IABSS respondents at the Top Priority Level. *Demonstrate study skills* was rated nearly 3.0 by the total population, placing it at the High Priority Level. It was rated at the Mid Priority Level, however, by Business & Industry.

Comparing Business & Industry's Prioritization of Selected Competencies

Business & Industry respondents differed somewhat from other groups in their prioritization of certain competencies. In general, Business & Industry rated competencies that have specific application to the workplace as their highest priorities. Other competencies that have little impact or relevance to improved work performance were given low priority. For example, *Communicate regarding personal information* was ranked significantly lower by Business & Industry than by all other groups surveyed except Learners. Business & Industry also ranked *Understand principles of getting a job* significantly lower than did all other groups (in fact, job search skills were ranked first by both Learners and Employment Service Providers). These two competencies are skills that are most essential for adults seeking employment but have little or no application in the workplace. The on-the-job skill, *Understand job performance concepts and materials*, was ranked higher by both Business & Industry and Employment Service Providers than by other groups. (See Table 4.4.)

Table 4.4 - Selected *Basic Communication* and *Employment* Competency Rankings: Business & Industry and Other Groups

Competency	Business & Industry	Empl. Service Providers	Instr. Providers	Learners	Others
Communicate regarding personal info. [1]	12	4	2	8	2
Understand principles of getting a job [2]	19	1	7	1	8
Understand job perf. concepts & materials [3]	7	6	15	10	15
N=	850	553	683	507	862

1 All ranks significantly different (p<.05) except for Learners/B&I and Instruction Providers/Others and ESP
2. All ranks significantly different (p<.05).
3. All ranks significantly different (p<.05) except for ESP/B&I and Instruction Providers/Learners.

CASAS, 1995

In general, Business & Industry respondents rated *Computation* competencies much higher than did other groups. Table 4.5 lists six *Computation* competencies that were ranked at the Top or High Priority Levels by Business & Industry and compares their rankings with four other respondent groups: Employment Service Providers (Empl. Service Providers), Instruction Providers (Instr. Providers), Learners, and Others.

**Table 4.5 - Selected *Computation* Competency Rankings:
Business & Industry and Other Groups**

Competency	Business & Industry	Empl. Service Providers	Instr. Providers	Learners	Others
Compute using whole numbers[1]	4	14	5	17	12
Compute using decimals[2]	13	31	23	29	34
Compute w/ percent, ratio & proportion[3]	18	33	33	41	40
Compute using fractions[4]	22	34	32	37	44
Use estimation and mental arithmetic[5]	23	36	37	40	38
Measure area, vol., & linear dimensions	24	42	39	43	47
N=	850	553	683	507	862

[1]All ranks significantly different (p<.05) except for Learners/Others and ESP/Learners.
[2]All ranks significantly different (p<.05) except for ESP/Others and Instructors/Learners.
[3]All ranks significantly different (p<.05) except for Learners/Instructors.
[4]All ranks significantly different (p<.05) except for Learners/Instructors.
[5]All ranks significantly different (p<.05) except for ESP/Others and B&I/Learners.
[6]All ranks significantly different (p<.05) except for Learners/Instructors.

CASAS, 1995

While Business & Industry rated six *Computation* competencies at the Top and High Priority Levels, *Compute using whole numbers* was the only *Computation* competency considered to be a top or high priority by all respondent groups. It is interesting to note that Instruction Providers agreed with Business & Industry in their high ranking of *Compute using whole numbers*, while Learners, Employment Service Providers and Others ranked this much lower (17th, 14th, and 12th, respectively). Business & Industry ratings clearly indicate that *Computation* is a vital workplace skill.

Learners and Instruction Providers ranked most *Computation* competencies similarly. There was no significant statistical difference between their rankings for four out of these six *Computation* skills.

Business & Industry ranked *Compute using decimals* considerably higher than did other groups. Increasing demand for accuracy in many businesses may be driving Business & Industry's high rating of this competency.

Somewhat Important Skills: Business & Industry Respondent Ratings

Table 4.6 presents competencies rated by Business & Industry respondents at the Mid Priority Level (rated *very important* or *important* by 50 to 69% of respondents). The mean ratings for these competencies ranged from 2.50 to 2.84.

CASAS Competency Area

Table 4.6
Somewhat Important Skills:
Business & Industry Respondent
Ratings (Mid Priority Level)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
28.	2.84	Understand ailments and seek medical assistance				•				
29.	2.84	Understand concepts of time and weather						•		
30.	2.83	Understand procedures to purchase goods					•			
31.	2.81	Demonstrate study skills		•						
32.	2.78	Use banking and financial services					•			
33.	2.71	Apply principles of comparison shopping					•			
34.	2.70	Understand how to care for personal possessions					•			
35.	2.63	Understand how to select and use medications				•				
36.	2.61	Interpret data from graphs or compute averages							•	
37.	2.55	Understand individual rights and responsibilities								•
38.	2.54	Use expressions, equations, or formulas							•	
39.	2.50	Understand medical and dental forms				•				
40.	2.50	Understand procedures for auto maint./driving					•			

N= 850

CASAS, 1995

Most competencies in this range were in the areas of *Consumer Economics* (five competencies), *Health* (three), *Computation* (two), and *Community Resources* (one). Consumer skills related to shopping, banking, and accessing community services, skills which have little importance in the workplace setting, were not a high priority for Business & Industry respondents.

Consumer skills related to shopping, banking, and accessing community services were not a high priority for Business & Industry respondents.

Least Essential Skills: Business & Industry Respondent Ratings

Business & Industry respondents gave low ratings to more competencies than did any other group. (See Table 4.7.) Fifteen competencies fell into the Low Priority Level (rated as *very important* or *important* by fewer than 50% of respondents) and had an average rating of 2.47 or less. This compares to 11 Low Priority Level competencies for Employment Service Providers, five for Adult Basic Education Program respondents, and nine for Other respondents.

Business & Industry respondents gave low ratings to more competencies than did any other group.

Most of Business & Industry's 15 least essential competencies were in the areas of *Community Resources* and *Government & Law*. All but one of the *Government & Law* competencies were rated within this range. The least essential competencies deal with such topics as community resources, leisure time activities, obtaining housing, history, government, geography, science, statistics, and probability, and understanding aspects of society and culture.

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CASAS Competency Area

Table 4.7
Least Essential Skills:
Business & Industry Respondent
Ratings (Low Priority Level)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
41.	2.47	Use services provided by the post office						•		
42.	2.46	Understand principles of taxation								•
43.	2.42	Understand consumer protection laws					•			
44.	2.41	Understand voting and the political process								•
45.	2.41	Understand economics and economic systems								•
46.	2.38	Locate and use transportation and travel info.						•		
47.	2.34	Understand environmental and science issues								•
48.	2.33	Understand civic responsibilities								•
49.	2.31	Understand aspects of society and culture						•		
50.	2.31	Use community agencies and services						•		
51.	2.31	Understand governmental activities								•
52.	2.29	Use statistics and probability							•	
53.	2.27	Understand how to obtain housing and services					•			
54.	2.11	Understand historical and geographical info.								•
55.	1.93	Use leisure time resources and facilities						•		

N = 850

CASAS, 1995

SUMMARY

Iowa's Business & Industry respondents ranked the competency areas of *Basic Communication*, *Employment*, and *Learning to Learn* as their top three priorities. In general, Business & Industry respondents rated competencies that have specific application to the workplace as their highest priorities. This is illustrated by the fact that the 27 highest priority competencies were skills directly applicable in the workplace.

These findings suggest placing greater emphasis on computation in Iowa's adult basic education programs to prepare a more competitive, employable workforce.

Business & Industry respondents ranked *Computation* competencies much higher than did any other respondent group. While all other groups identified only one *Computation* competency as a top or high priority, Business & Industry selected six *Computation* competencies as important. These findings have implications for program planning and curriculum design in Iowa's adult basic education programs in order to prepare a more competitive, employable workforce.

One competency that was not rated as highly by Business & Industry compared to other groups was *Understand principles of getting a job*, a skill that is crucial for those seeking employment but not for employers. Consumer skills such as shopping, banking, and accessing community resources were not a high priority. Business &

Industry respondents, overall, assigned a low level of importance to a larger number of competencies than did any other respondent group. Competencies that received Business & Industry's lowest ratings were generally in the areas of *Community Resources* and *Government & Law*. These results further support the claim that Business & Industry's principle focus is on competencies which have a direct impact on improving employee's workplace skills.

One of the most unique and enlightening features of this survey is that significant numbers of responses from Business & Industry were included. The results can be used to set a clear direction for curriculum development and instructional priorities in Iowa's workplace literacy programs, as well as targeting instruction for Iowa's current and future workforce.

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Chapter Five:
Employment Service Provider Results

This chapter focuses on the curriculum priorities identified by IABSS Employment Service Provider respondents. The 553 respondents that comprise this group were administrators and instructors in Iowa's adult employment preparation and training programs. Responses from Employment Service Providers are also compared with those of Business & Industry respondents. These two groups are jointly referred to as Employability respondents.

SURVEY RESULTS BY COMPETENCY AREA

Employment Service Providers' and Business & Industry respondents' competency area rankings are compared in Table 5.1. The comparison shows points of agreement and disagreement regarding priority competency needs.

Both groups ranked *Basic Communication, Employment,* and *Learning to Learn* as the three most important areas in the same order of priority. Both groups also agreed in their ranking of *Government & Law* as the least important area (eighth). The most striking difference between the two groups was their prioritization of *Computation*: Business & Industry rated *Computation* fourth, while Employment Service Providers ranked it seventh. There was also a difference between the two groups in their ranking of *Community Resources*, which was a higher priority for Employment Service Providers.

Table 5.1 - Competency Area Ranked in Order of Importance by Employment Service Providers l and Business & Industry Respondents

Rank	Employment Service Providers	Rank	Business & Industry
1	Basic Communication	1	Basic Communication
2	Employment	2	Employment
3	Learning to Learn	3	Learning to Learn
4	Health	4	Computation
5	Community Resources	5	Health
6	Consumer Economics	6	Consumer Economics
7	Computation	7	Community Resources
8	Government & Law	8	Government & Law
	N = 553		N= 850

CASAS, 1995

Business & Industry ranked Computation fourth, while Employment Service Providers ranked it seventh.

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Figure 5.1 compares Employment Service Providers' and Business & Industry respondents' mean competency area ratings. Although the two groups *ranked* most competency areas similarly, a comparison of the mean *ratings* indicates that Employment Service Providers rated five of the eight competency areas significantly higher than did Business & Industry respondents. *Computation* competencies were rated much lower by Employment Service Providers (2.63) than by Business & Industry respondents (2.96). This disparity between the two groups suggests that *Computation* is a potentially important area for curriculum review in employment training programs.

Figure 5.1† - Mean Competency Area Ratings:
Employability Respondent Ratings
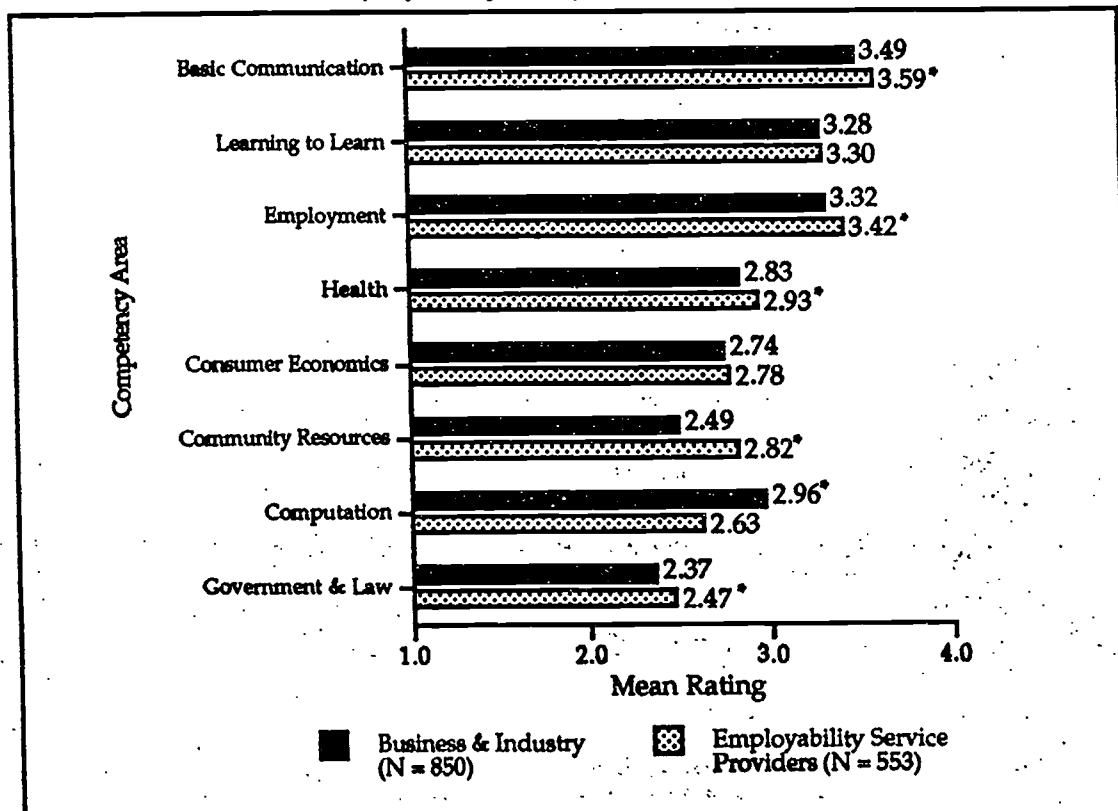
Community Resources was a higher priority for Employment Service Providers than for Business & Industry.

* Difference in means between Business & Industry and Employment Service Providers significant at p<.05.

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SKILLS PRIORITIZED BY EMPLOYMENT SERVICE PROVIDERS

Most Essential Skills: Employment Service Provider Ratings

The 30 competencies rated at the Top and High Priority Levels by Employment Service Providers (rated *very important* or *important* by 70% or more of the respondents) are presented in Table 5.2.

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†The figures in this chapter present competencies or competency areas ranked in the same order of importance as the total survey population.

CASAS Competency Area

Table 5.2
Most Essential Skills:
Employment Service Provider Ratings
(Top & High Priority Levels)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
		Top Priority Level								
1.	3.81	Understand basic principles of getting a job			•					
2.	3.71	Communicate effectively in the workplace			•					
3.	3.71	Communicate in general interpersonal interactions	•							
4.	3.66	Communicate regarding personal information	•							
5.	3.60	Demonstrate effectiveness in working with people			•					
6.	3.52	Understand job performance concepts & materials			•					
7.	3.50	Demonstrate ability to use thinking skills		•						
8.	3.45	Use problem solving skills		•						
9.	3.41	Use language of clarification	•							
10.	3.41	Use the telephone and telephone book						•		
11.	3.39	Understand wages, benefits, & employ. concepts			•					
12.	3.38	Practice organizational & time management skills		•						
13.	3.38	Understand (workplace) safety procedures			•					
14.	3.35	Compute using whole numbers							•	
15.	3.23	Use community agencies and services						•		
		High Priority Level								
16.	3.22	Utilize common workplace technology			•					
17.	3.13	Understand basic health and safety procedures				•				
18.	3.13	Effectively manage workplace resources			•					
19.	3.11	Understand approaches to personal management		•						
20.	3.08	Apply principles of budgeting					•			
21.	3.07	Demonstrate study skills		•						
22.	3.02	Use weights, measurement scales, and money					•			
23.	3.01	Understand social, org., and technological systems		•						
24.	3.00	Understand individual rights and responsibilities								•
25.	2.99	Understand ailments and seek medical assistance				•				
26.	2.96	Understand how to select and use medications				•				
27.	2.96	Understand principles of health maintenance				•				
28.	2.95	Locate and use transportation and travel info.						•		
29.	2.93	Understand concepts of time and weather						•		
30.	2.91	Understand how to obtain housing and services					•			

N=553

CASAS, 1995

Understand basic principles of getting a job *was rated highest, indicating Employment Service Providers' strong commitment to assisting learners in mastering job search skills.*

The first 12 competencies at the Top Priority Level (rated *very important* or *important* by 85% or more of the respondents) had mean ratings ranging from 3.23 to 3.81. They were mainly in three competency areas: *Employment, Basic Communication,* and *Learning to Learn.* The competency, *Understand basic principles of getting a job,* was rated highest, indicating the strong commitment on the part of Employment Service Providers to assist learners in mastering job search skills.

On-the-job and personal communication skills were ranked second through fourth. Employment Service Providers awarded very high ratings to two workplace competencies: *Demonstrate effectiveness working with people* and *Understand job performance concepts and materials,* ranking them fifth and sixth, respectively. Two critical thinking competencies ranked next in importance (seventh and eighth). The seven remaining competencies in the Top Priority Level category were from various competency areas:

- *Use language of clarification (Basic Communication)*
- *Use the telephone and telephone book (Community Resources)*
- *Understand wages, benefits, and concepts of employment (Employment)*
- *Practice effective organization and time management skills (Learning to Learn)*
- *Understand (workplace) safety standards and procedures (Employment)*
- *Compute using whole numbers (Computation)*
- *Use community agencies and services (Community Resources)*

There were 15 competencies at the High Priority Level (rated *very important* or *important* by 70 to 84% of the respondents). Ranked 16 through 30, with mean ratings ranging from 2.91 to 3.22, these competencies were distributed among several competency areas. From the perspective of Iowa's Employment Service Providers, it is important for adults to understand:

- Common workplace technology, resources, and systems (*Employment*)
- Health, safety, and medication selection (*Health*)
- Measurement, money, budgeting, and housing selection (*Consumer Economics*)
- Time, weather, travel, and transportation (*Community Resources*)
- Personal management and study skills (*Learning to Learn*)
- Legal rights and responsibilities of individuals (*Government & Law*)

Somewhat Important Skills: Employment Service Provider Ratings

Competencies rated at the Mid Priority Level by Employment Service Providers (*very important* or *important* by 50 to 69%) are presented in Table 5.3. Most of these competencies occur in two areas: *Consumer Economics* (six competencies) and *Computation* (five competencies). According to Iowa's Employment Service Providers, it is somewhat important for adult learners to:

- Use banking and financial services, be discerning consumers, care for personal possessions, and purchase and operate an automobile (*Consumer Economics*)

- Compute using decimals, fractions, percents, rates, and proportions (*Computation*)
- Use estimation, mental arithmetic, and measure area and volume (*Computation*)
- Understand voting and the political process (*Government & Law*)
- Use the post office (*Community Resources*)
- Fill out medical and dental forms (*Health*)

CASAS Competency Area

Table 5.3
Somewhat Important Skills:
Employment Service Provider Ratings
(Mid Priority Level)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
31.	2.89	Compute using decimal fractions							•	
32.	2.82	Use banking and financial services					•			
33.	2.77	Compute with percents, rates, and proportions							•	
34.	2.76	Compute using fractions							•	
35.	2.75	Understand procedures to purchase goods					•			
36.	2.73	Use estimation and mental arithmetic							•	
37.	2.71	Understand voting and the political process								•
38.	2.67	Apply principles of comparison shopping					•			
39.	2.65	Understand how to care for personal possessions					•			
40.	2.64	Understand procedures for auto maint./driving					•			
41.	2.60	Use services provided by the post office						•		
42.	2.56	Measure area, volume, & linear dimensions							•	
43.	2.55	Understand medical and dental forms				•				
44.	2.52	Understand consumer protection laws					•			

N=553

CASAS, 1995

Least Essential Skills: Employment Service Provider Ratings

Table 5.4 contains competencies identified as the lowest priorities by Employment Service Providers, with mean ratings ranging from 2.05 to 2.48. These lowest ranking competencies can be grouped into three categories:

- understanding aspects of civics, such as taxation, voting, culture, and leisure time resources;
- understanding social studies and science, such as economics, history, government, geography, and the environment;
- understanding higher order mathematics, such as formulas, equations, statistics, and probability.

The competencies ranked lowest by Employment Service Providers can be grouped into three categories: civics, social studies, and higher order mathematics.

CASAS Competency Area

Table 5.4
Least Essential Skills:
Employment Service Provider Ratings
(Low Priority Level)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Govt & Law
45.	2.48	Understand civic responsibilities								•
46.	2.43	Understand governmental activities								•
47.	2.41	Understand aspects of society and culture						•		
48.	2.41	Understand principles of taxation								•
49.	2.36	Interpret data from graphs and compute averages							•	
50.	2.32	Understand economics and economic systems								•
51.	2.21	Understand historical and geographical info.								•
52.	2.20	Understand environmental and science issues								•
53.	2.19	Use expressions, equations, or formulas							•	
54.	2.18	Use leisure time resources and facilities						•		
55.	2.05	Use statistics and probability							•	

N=553
CASAS, 1995

INDIVIDUAL COMPETENCY RATINGS BY COMPETENCY AREA: EMPLOYABILITY RESPONDENTS

Employability respondents refers to both Business & Industry and Employment Service Provider groups. Figures 5.2 through 5.9 illustrate the mean ratings for individual competencies within each competency area.

Basic Communication Competency Ratings: Employability Respondents

For many employers, the ability to communicate effectively is essential in maintaining a competitive edge.

> Communication is central to the smooth operation of a competitive venture.
> Communication skills are at the heart of getting and keeping customers.
> Pitching innovation, contributing to quality circles, resolving conflict, and providing meaningful feedback all hinge on effective communication skills.
> Without communication, an organization cannot function. Ironically, American schools offer scant instruction in oral communication and virtually none in listening. (Carnevale et al. 174).

Figure 5.2 compares *Basic Communication* competency ratings by Business & Industry and Employment Service Providers. The competency, *Communicate in general*

interpersonal interactions (i.e., in social and work situations), was rated highest overall and was rated similarly by both respondent groups.

The competency, *Communicate regarding personal information (e.g., name, address education, occupation)*, was rated lower by Business & Industry respondents (3.35) than by Employment Service Providers (3.66). The reason for this difference may be that this competency is more important for getting a job than keeping a job. Employment Service Providers prepare learners to get jobs, while Business & Industry is understandably more concerned with on-the-job communication. *Use language of clarification* was rated similarly by both groups.

Communicate regarding personal information was rated lower by Business & Industry respondents than by Employment Service Providers.

Figure 5.2 - *Basic Communication* Competency Ratings: Employability Respondents
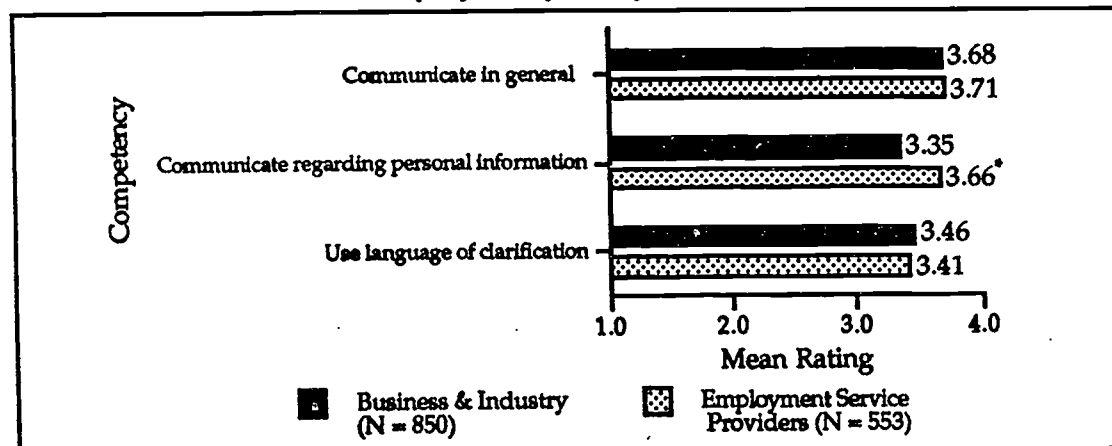
*Difference in means between Business & Industry and Employment Service Providers significant at p<.05.
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Employment Competency Ratings: Employability Respondents

Table 5.5 compares *Employment* competency rankings for Business & Industry and Employment Service Providers. Rankings for the two groups were similar for all but

Employment Service Providers rated Understand basic principles of getting a job much higher than did Business & Industry respondents.

Table 5.5 - Competency Rankings within the Area of *Employment*: Employability Respondents

Employment Competency	Employment Service Providers	Business & Industry
Understand basic principles of getting a job	1	7
Communicate in the workplace	2	2
Demonstrate effectiveness in working with others	3	1
Understand job performance concepts and materials	4	3
Understand wages, benefits, and employment concepts	5	8
Understand (workplace) safety procedures	6	4
Utilize workplace technology	7	5
Manage workplace resources	8	6
Understand social, organizational, & technological systems.	9	9
N =	553	850

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CASAS, 1995

two competencies. Employment Service Providers considered *Understand basic principles of getting a job* and *Understand wages, benefits and employment concepts* to be significantly more important than did Business & Industry.

As might be expected, the competencies in the area of *Employment* were all given high mean ratings by Iowa's employment community. (See Figure 5.3.) The ability to manage workplace resources was rated slightly higher by Business & Industry than by Employment Service Providers, while Employment Service Providers rated *Communicate effectively in the workplace* slightly higher than did Business & Industry. *Understand social, organizational, and technological systems* was ranked lowest by both groups (ninth). The other four competencies in this competency area were rated similarly by both respondent groups.

Understand wages, benefits, and employment concepts was rated significantly higher by Employment Service Providers than by Business & Industry.

Figure 5.3 - *Employment* Competency Ratings: Employability Respondents
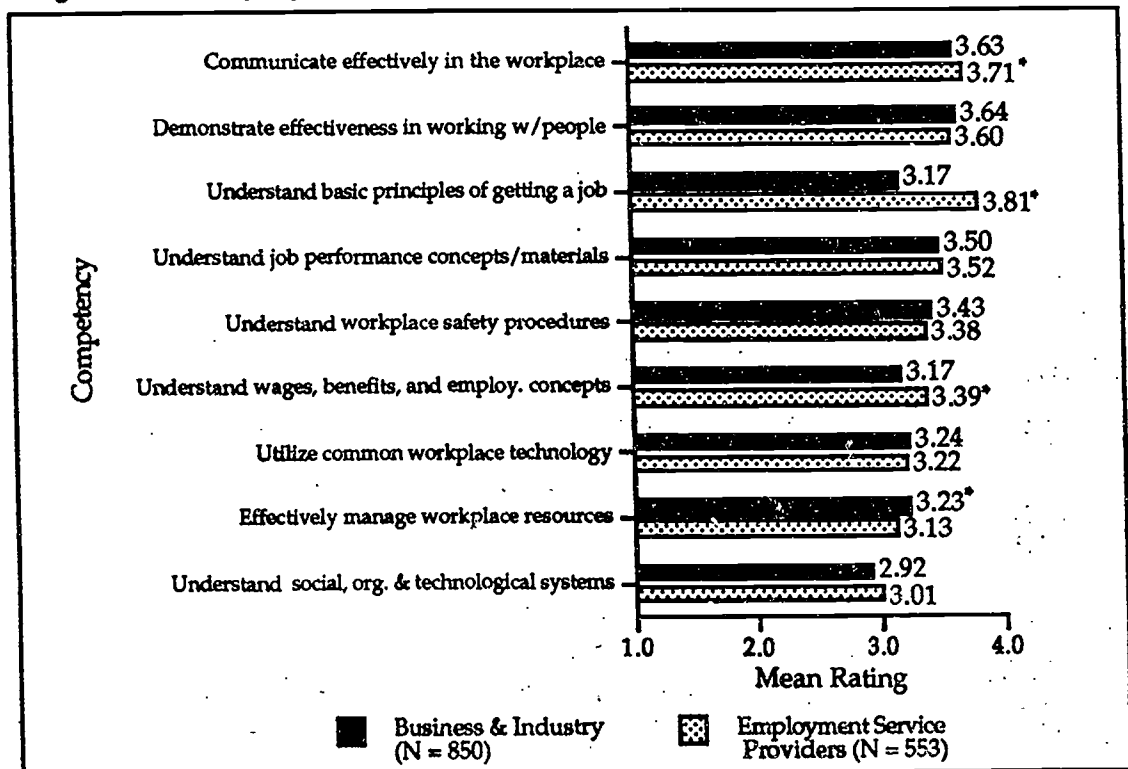
*Difference in means between Business & Industry and Employment Service Providers significant at p<.05.

CASAS, 1995

Learning to Learn Competency Ratings: Employability Respondents

Both groups rated two critical thinking skills as the most important Learning to Learn competencies.

In the workplace, employers throughout the nation are placing an increasing emphasis on *Learning to Learn* skills.

In today's workplace, learning is an integral part of everyday life. The skill of knowing how to learn, or learning to learn, is a must for every worker. The skill of learning to learn is the key to acquiring new skills and sharpening the ability to think through problems and to surmount challenges in the office, ship, laboratory or sales area. It opens the door to all other learning and facilitates the acquisition of other skills from literacy to leadership (Carnevale et al. 17).

Two critical thinking competencies, *Demonstrate the ability to use thinking skills* and *Use problem solving skills,* were rated as the most important *Learning to Learn* competencies by both Employment Service Providers and Business & Industry respondents. (See Figure 5.4.)

Three of the five *Learning to Learn* competencies were rated similarly by both respondent groups. One of the two remaining competencies, *Use problem solving skills,* was rated higher by Business & Industry.

Demonstrate study skills was rated significantly higher by Employment Service Providers (3.07) than by Business & Industry (2.81). This difference is not surprising since learners in employment education and training programs clearly have a need for study skills. This competency may be less relevant in workplace settings with fewer training opportunities, or where training is primarily conducted through demonstration rather than a course of study. As business and industry becomes increasingly dependent on re-training and cross-training for a more flexible and technically able workforce, business and industry may rate this competency more highly.

Figure 5.4 - *Learning to Learn* Competency Ratings: Employability Respondents
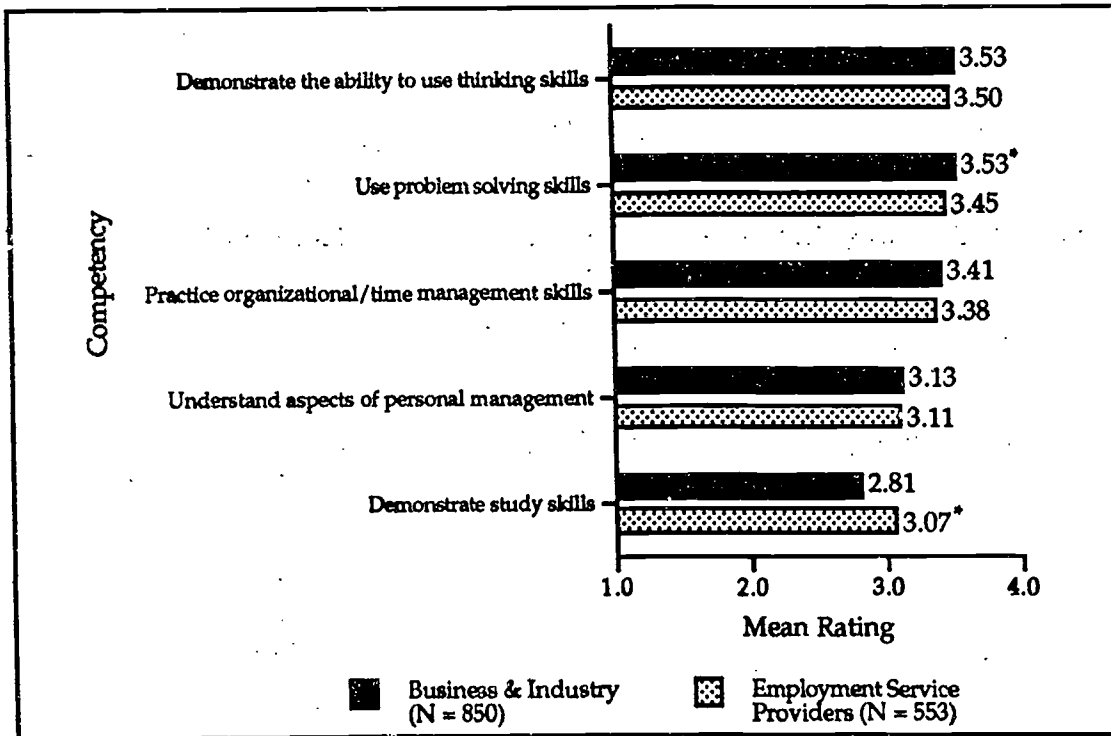
Demonstrate study skills was rated significantly higher by Employment Service Providers than by Business & Industry.

*Difference in means between Business & Industry and Employment Service Providers significant at p<.05.

CASAS, 1995

Computation Competency Ratings: Employability Respondents

Figure 5.5 compares *Computation* competency ratings for Business & Industry and Employment Service Providers. Overall, Business & Industry respondents rated every *Computation* skill significantly higher than did Employment Service Providers. Employment Service Providers' rankings were in the same priority order as Business & Industry's rankings. The six *Computation* competencies identified as most important were: using whole numbers; using decimals; computing percents, rates, and proportions; using fractions; using estimation and mental arithmetic; and measuring area and volume. The remaining three competencies, which require more abstract or higher level math skills, were generally rated lower by both groups.

Consistently higher *Computation* ratings by Business & Industry than any other group indicate the importance of basic math skills in the workplace. The following quotation expresses the concerns of many employers:

> Employers already are complaining of their workers' computational skill deficiencies, particularly those evidenced by miscalculations of decimals and fractions, resulting in expensive production errors (Henry and Raymond 1983).

Business & Industry respondents rated every Computation skill significantly higher than did Employment Service Providers.

Figure 5.5 - *Computation* Competency Ratings: Employability Respondents
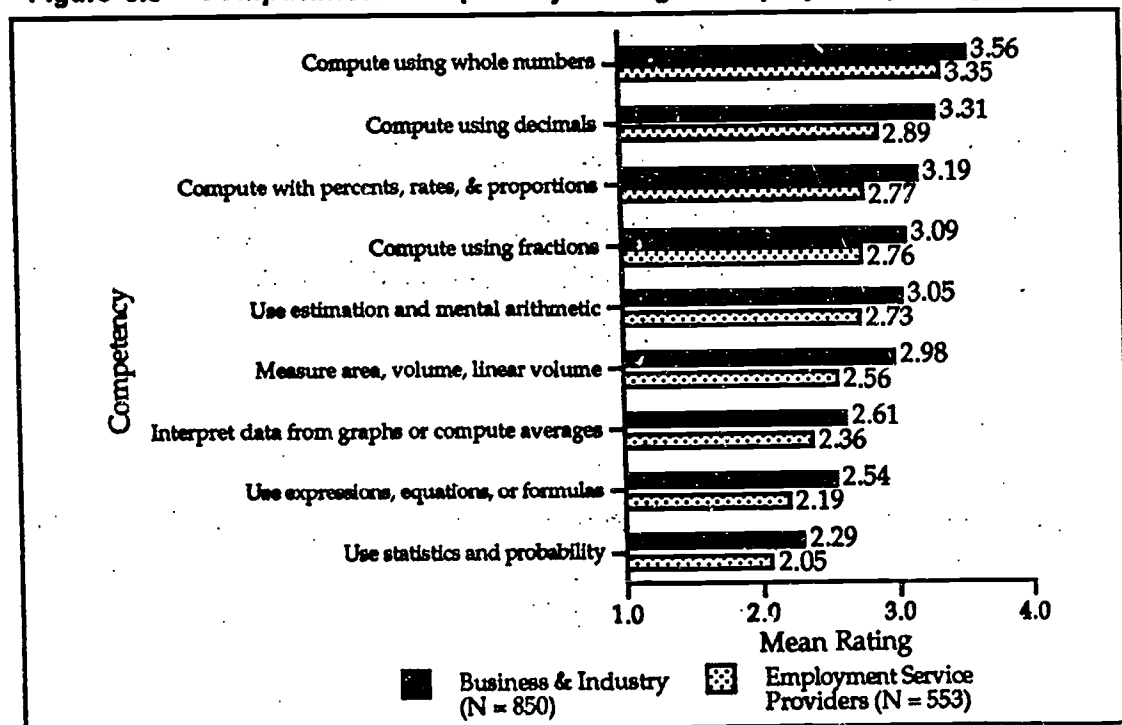
Note: All competency ratings between Business & Industry and Employment Service Providers were significantly different at p<.05.

CASAS, 1995

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Health Competency Ratings: Employability Respondents

Health competency ratings by Employment Service Providers and Business & Industry are presented in Figure 5.6.

The *Health* competency rated highest by both groups of employability respondents was *Understand basic health and safety procedures*. There is a similar health-related competency that is categorized under *Employment, Understand safety standards and procedures,* which also received high ratings from both groups. Ranked lowest by both groups was *Understand medical and dental forms.*

In comparing *Health* ratings by Business & Industry and Employment Service Providers, Employment Service Providers placed a greater emphasis on two competencies: *Understand ailments and seek medical assistance* and *Understand how to select medications.* Business & Industry and Employment Service Providers rated the remaining competency related to principles of health maintenance similarly.

Employment Service Providers placed a greater emphasis on two competencies: Understand ailments and seek medical assistance and Understand how to select and use medications.

Figure 5.6 - *Health* Competency Ratings: Employability Respondents
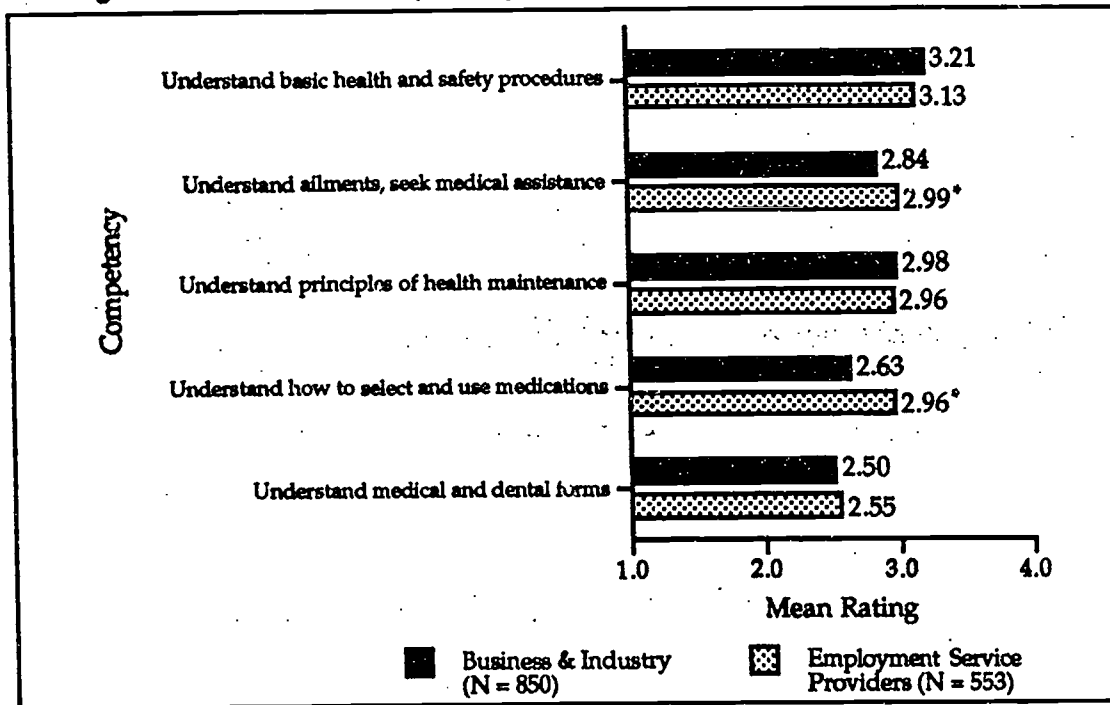
Competency	Business & Industry (N = 850)	Employment Service Providers (N = 553)
Understand basic health and safety procedures	3.21	3.13
Understand ailments, seek medical assistance	2.84	2.99*
Understand principles of health maintenance	2.98	2.96
Understand how to select and use medications	2.63	2.96*
Understand medical and dental forms	2.50	2.55

*Difference in means between Business & Industry and Employment Service Providers significant at p<.05.

CASAS, 1995

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Consumer Economics Competency Ratings:
Employability Respondents

Figure 5.7 presents comparative ratings for *Consumer Economics* competencies. *Use weights, measurement scales and money* and *Apply principles of budgeting* were the two most important skills in the *Consumer Economics* category according to both groups. Business & Industry rated *Use weights, measurement scales, and money* notably higher than any other competency in this area, possibly because they value the math skills involved. The rest of the competencies were seen to be of only moderate importance. *Understand how to obtain housing* was ranked considerably higher by Employment Service Providers (2.91) than by Business & Industry (2.27).

Understand how to obtain housing was ranked considerably higher by Employment Service Providers than by Business & Industry.

Figure 5.7 - *Consumer Economics* Competency Ratings: Employability Respondents
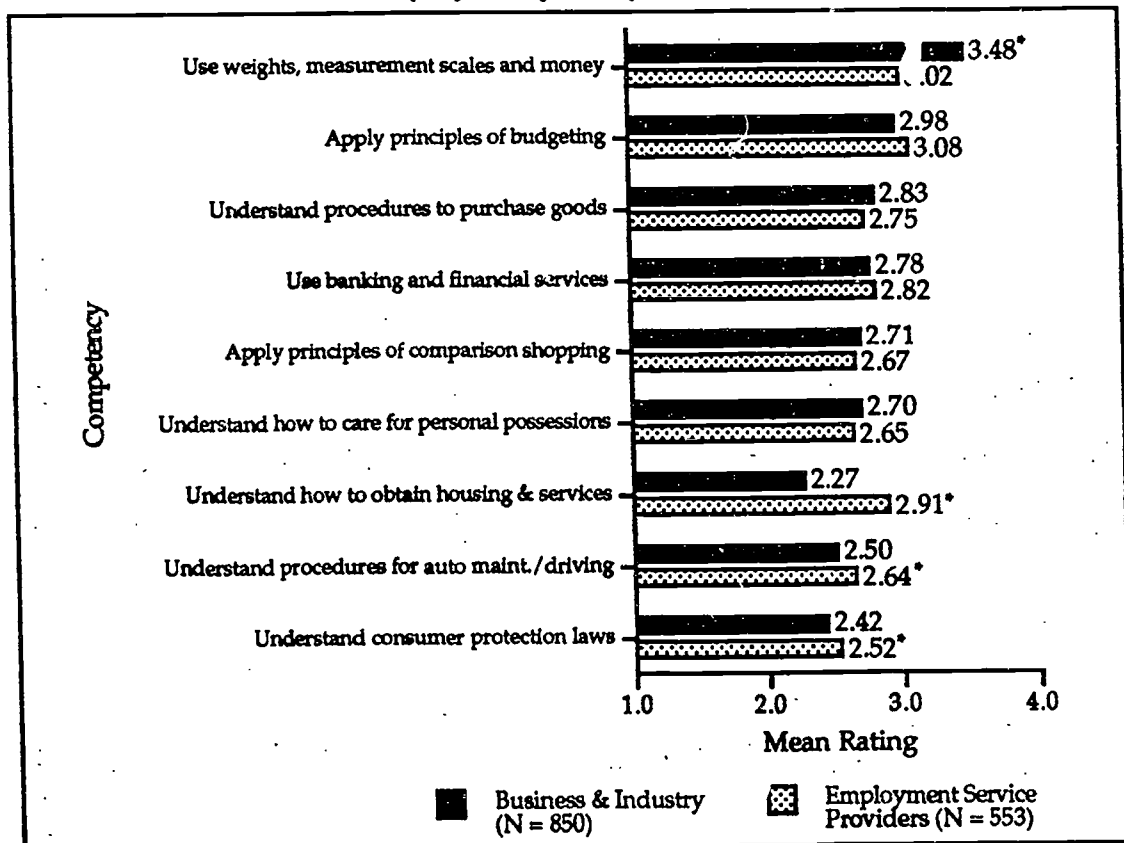
Competency	Business & Industry	Employment Service Providers
Use weights, measurement scales and money	3.48*	.02
Apply principles of budgeting	2.98	3.08
Understand procedures to purchase goods	2.83	2.75
Use banking and financial services	2.78	2.82
Apply principles of comparison shopping	2.71	2.67
Understand how to care for personal possessions	2.70	2.65
Understand how to obtain housing & services	2.27	2.91*
Understand procedures for auto maint./driving	2.50	2.64*
Understand consumer protection laws	2.42	2.52*

Mean Rating

■ Business & Industry (N = 850)   ▦ Employment Service Providers (N = 553)

*Difference in means between Business & Industry and Employment Service Providers significant at p<.05.
CASAS, 1995

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Community Resources Competency Ratings:
Employability Respondents

Community Resources competency ratings are presented in Figure 5.8. Employment Service Providers rated almost every *Community Resources* competency significantly higher than Business & Industry respondents did. The competency rated highest by both groups was *Use the telephone and telephone book*, although Business & Industry rated it significantly lower than did Employment Service Providers. *Understand concepts of time and weather* received relatively high ratings from both groups.

Figure 5.8 - *Community Resources* Competency Ratings: Employability Respondents

Competency	Business & Industry	Employment Service Providers
Use the telephone and telephone book	3.20	3.41*
Understand concepts of time and weather	2.84	2.93
Use community agencies and services	2.31	3.23*
Locate and use transportation & travel info.	2.38	2.95*
Use the services provided by the post office	2.47	2.60*
Understand aspects of society and culture	2.31	2.41*
Use leisure time resources and facilities	1.93	2.18*

Business & Industry (N = 850) Employment Service Providers (N = 553)

*Difference in means between Business & Industry and Employment Service Providers significant at p<.05.

CASAS, 1995

Competencies related to using community agencies and services and using transportation were rated dramatically higher by Employment Service Providers.

Two *Community Resources* competencies were rated dramatically higher by Employment Service Providers. First, the competency, *Use community agencies and services* had a mean rating of 3.23 from Employment Service Provider respondents compared to 2.31 from Business & Industry respondents. Second, Employment Service Providers rated *Locate and use transportation and travel information* 2.95, while Business & Industry respondents rated the same competency only 2.38.

Government & Law Competency Ratings:
Employability Respondents

Figure 5.9 shows comparative ratings for competencies in the area of *Government &
Law*. Both Business & Industry and Employment Service Providers generally rated
most competencies in this area at the Low Priority Level. The most highly rated
competency by both groups was *Understand individual rights and responsibilities*,
although Employment Service Providers rated it significantly higher than did
Business & Industry. *Understand voting and the political process* also received a
significantly higher rating from Employment Service Providers. In fact, Employment
Service Providers rated five of the eight *Government & Law* competencies significantly
higher than did Business & Industry respondents.

**Figure 5.9 - *Government & Law* Competency Ratings:
Employability Respondents**
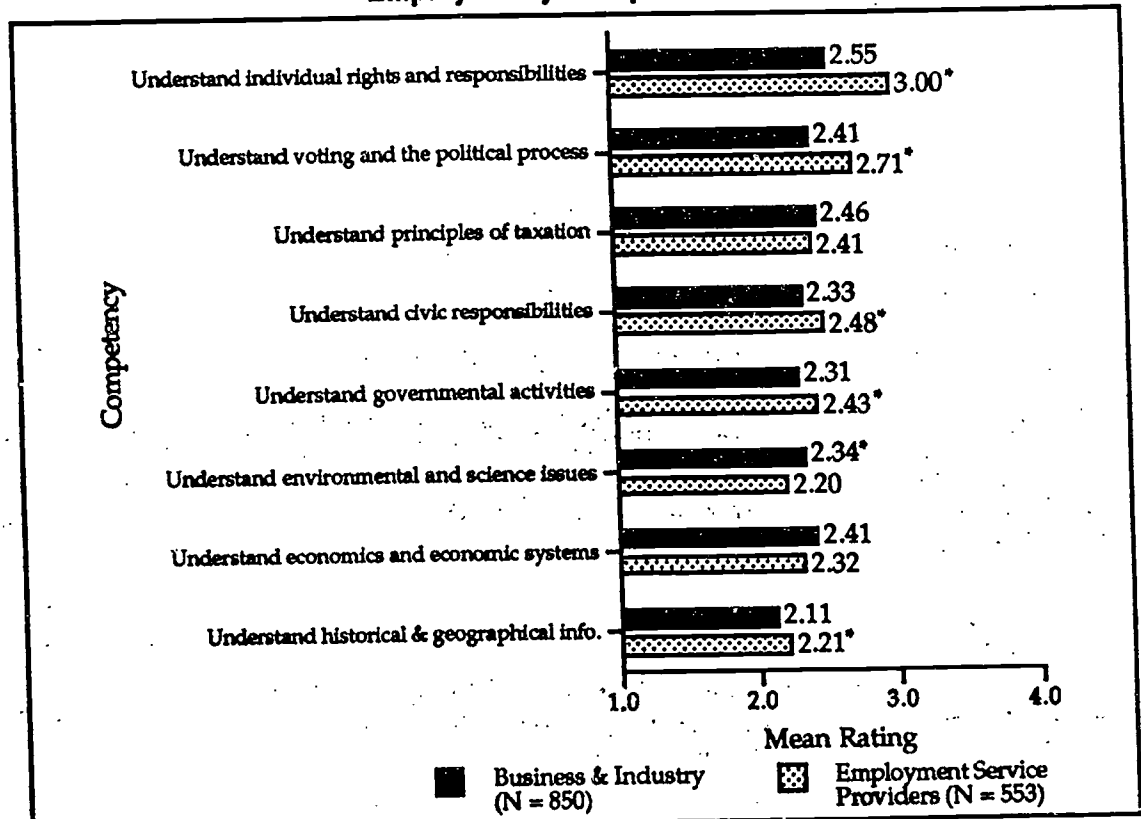
*Difference in means between Business & Industry and Employment Service Providers significant at p<.05.
CASAS, 1995

SUMMARY

Business & Industry respondents and Employment Service Providers were in agreement about the three most important competency areas: *Basic Communication, Employment,* and *Learning to Learn.* Both groups also ranked *Government & Law* as the least important area.

Employment Service Providers' and Business & Industry's rankings of *Employment* competencies were in agreement for all but two competencies. Employment Service Providers considered *Understand basic principles of getting a job* and *Understand wages, benefits, and employment concepts* to be more important than did Business & Industry. Both groups conveyed the importance of interpersonal relationships in the workplace by giving *Communicate in the workplace* and *Work effectively with others* very high ratings.

The most striking difference between the two groups was their prioritization of *Computation*: Business & Industry ranked *Computation* fourth out of the eight areas, while Employment Service Providers ranked it seventh. Moreover, Business & Industry respondents rated every *Computation* skill significantly higher than did Employment Service Providers. The groups agreed about the priority order for each of the *Computation* competencies. The six most important *Computation* competencies were, in order of priority: using whole numbers; using decimals; computing percents, rates, and proportions; using fractions; using estimation and mental arithmetic; and measuring area and volume. These results clearly identify *Computation* as an important area for curriculum emphasis in employment training programs.

Community Resources, on the other hand, was ranked higher by Employment Service Providers (fifth) than by Business & Industry respondents (seventh). Consumer skills related to shopping, banking, and accessing community services were not high priorities according to Business & Industry respondents.

Health competencies were ranked fourth by Employment Service Providers and fifth by Business & Industry. The competency with the highest ratings from both groups, *Understand basic health and safety procedures,* also relates to most employment settings. Employment Service Providers placed a greater emphasis on two *Health* competencies: *Understand ailments and seek medical assistance* and *Understand how to select and use medications.*

Consumer Economics was ranked sixth by both groups. *Apply principles of budgeting* and *Use weights, measurement scales, and money* were the two most important skills in this area for both groups. Employment Service Providers gave considerably higher ratings (2.91) to *Understand how to obtain housing* than did Business & Industry respondents (2.27).

Chapter Six:
Adult Basic Education Program Results

This chapter focuses on the curriculum priorities identified on the IABSS by two of the major survey respondent groups: Instruction Providers and Learners. Combined responses from these two groups are referred to as Adult Basic Education Program responses. Providing input were 683 adult educators and 546 learners from all 15 community colleges and other adult basic education programs in Iowa. Instructor and Learner competency ratings are also compared.

SURVEY RESULTS BY COMPETENCY AREA

According to Iowa's Adult Basic Education Program respondents, consisting of the Instruction Provider and Learner groups, the four most highly ranked competency areas were *Basic Communication* (with a mean rating of 3.48), *Learning to Learn* (3.29), *Health* (3.24), and *Employment* (3.20). (See Table 6.1.)

The four most highly-rated competency areas for Adult Basic Education Program respondents were Basic Communication, Learning to Learn, Health, and Employment.

Table 6.1 - Competency Area Ratings: Adult Basic Education Program Respondents and Employability Respondents

Competency Area	Adult Basic Education Programs	Employment Service Providers	Business & Industry
Basic Communication[1]	3.48	3.59	3.49
Learning to Learn[2]	3.29	3.30	3.28
Health[3]	3.24	2.93	2.83
Employment[3]	3.20	3.42	3.32
Consumer Economics[4]	3.04	2.78	2.74
Community Resources[5]	2.87	2.82	2.49
Computation[3]	2.82	2.63	2.96
Government & Law[3]	2.67	2.47	2.37
N=	1,190	553	850

1 All ranks significantly different (p<.05) except for Adult Basic Education/Business & Industry.
2. Means not significantly different.
3. All ranks significantly different (p<.05).
4. All ranks significantly different (p<.05) except for Employment Services/Business & Industry.
5. All ranks significantly different (p<.05) except for Adult Basic Education/Employment Services.
CASAS, 1995

In comparing mean competency area ratings by Adult Basic Education Program respondents, Employment Service Providers, and Business & Industry respondents, it is evident that the Iowa Adult Basic Education Program group rated the areas of

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Health, Consumer Economics, and *Government & Law* higher than did the other two groups. *Employment* was rated significantly lower by the Adult Basic Education Program group.

Learners placed greater emphasis on Health, Government & Law, Computation, and Consumer Economics than did Instruction Providers.

Figure 6.1 compares mean competency area ratings by adult basic education program Instruction Providers and Learners. Overall, both groups rated all competency areas similarly. However, Learners placed greater emphasis on *Health, Government & Law, Computation,* and *Consumer Economics.* Instruction Providers gave higher ratings than Learners to *Basic Communication* and *Learning to Learn.*

Figure 6.1[†] - Mean Competency Area Ratings: Adult Basic Education Program Respondents
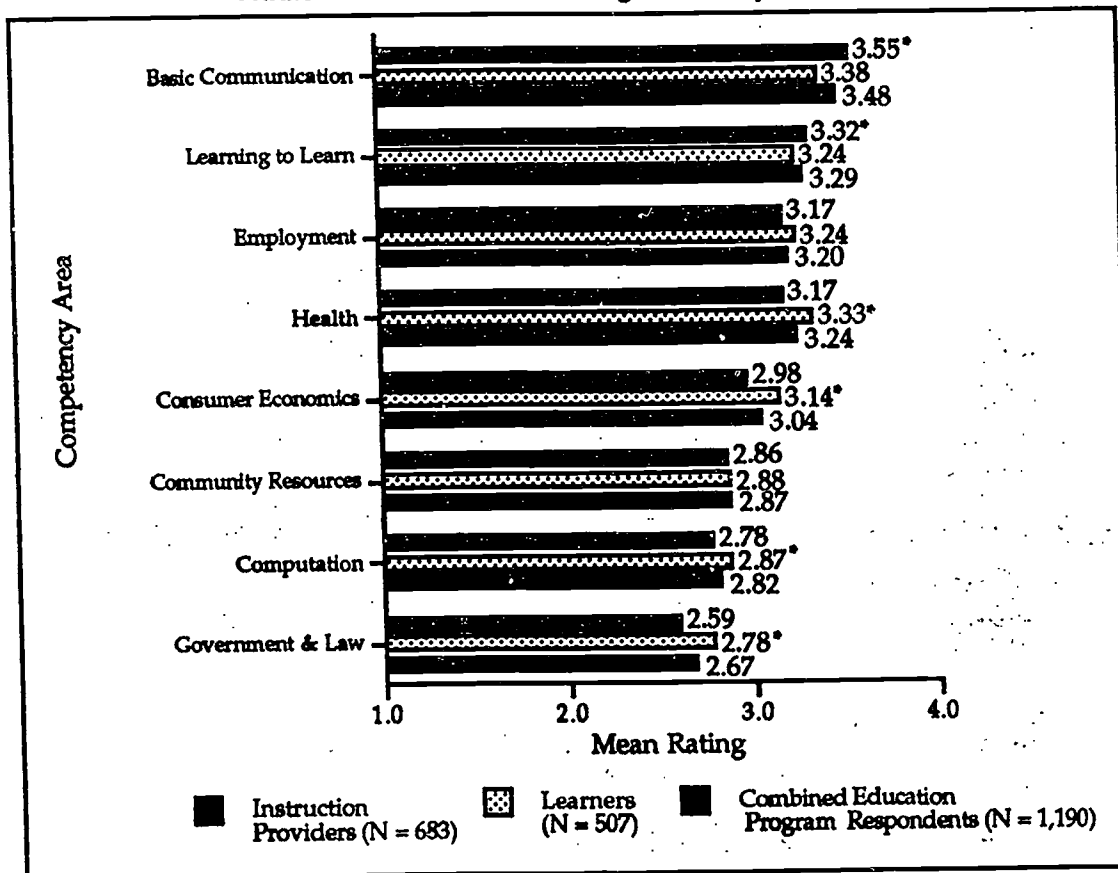
Competency Area	Instruction Providers (N = 683)	Learners (N = 507)	Combined Education Program Respondents (N = 1,190)
Basic Communication	3.55*	3.38	3.48
Learning to Learn	3.32*	3.24	3.29
Employment	3.17	3.24	3.20
Health	3.17	3.33*	3.24
Consumer Economics	2.98	3.14*	3.04
Community Resources	2.86	2.88	2.87
Computation	2.78	2.87*	2.82
Government & Law	2.59	2.78*	2.67

*Difference in means between Instruction Providers and Learners significant at p<.05.

CASAS, 1995

[†]The figures in this chapter present competencies or competency areas ranked in the same order of importance as the total survey population.

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SKILLS PRIORITIZED BY ADULT BASIC EDUCATION
PROGRAM RESPONDENTS

Most Essential Skills:
Adult Basic Education Program Respondent Ratings

The competencies rated highest (at the Top and High Priority Levels) by Iowa's Adult Basic Education Program respondents are presented in Table 6.2.

Twelve competencies were at the Top Priority Level (rated *very important* or *important* by 85% or more of the respondents), and had mean ratings ranging from 3.32 to 3.60. They were mainly in four competency areas: *Basic Communication, Learning to Learn, Employment,* and *Health*. As with other respondent groups, the competency, *Communicate in general interpersonal interactions,* was rated highest, with a mean rating of 3.60. Three other communication-related competencies were at the Top Priority Level.

The *Employment* competency, *Understand basic principles of getting a job,* was ranked second, indicating that job search skills were seen as essential. Following in importance were critical thinking skills, ranked fifth and sixth. Also rated in the Top Priority range were two mathematics-related competencies, *Compute using whole numbers* (ranked seventh) and *Use weights, measurement scales, and money* (ranked eleventh), as well as two *Health* competencies (ranked ninth and tenth).

Twenty competencies were at the High Priority Level (rated *very important* or *important* by 70 to 84% of the respondents), and had mean ratings ranging from 2.94 to 3.31. They were distributed among five competency areas: *Employment, Learning to Learn, Health, Consumer Economics,* and *Community Resources.*

CASAS Competency Area

Table 6.2
Most Essential Skills:
Adult Basic Education Program Respondent
Ratings (Top & High Priority Levels)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
		Top Priority Level								
1.	3.60	Communicate in general interpersonal interactions	•							
2.	3.51	Understand basic principles of getting a job			•					
3.	3.50	Communicate regarding personal information	•							
4.	3.48	Communicate effectively in the workplace			•					
5.	3.45	Demonstrate ability to use thinking skills		•						
6.	3.42	Demonstrate ability to use problem solving skills		•						
7.	3.39	Compute using whole numbers							•	
8.	3.38	Demonstrate effectiveness in working with people			•					
9.	3.38	Understand basic health and safety procedures				•				
10.	3.35	Understand ailments & seek medical assistance				•				
11.	3.32	Use weights, measurement scales, and money					•			
12.	3.32	Use language of clarification	•							
		High Priority Level								
13.	3.31	Understand job performance concepts & materials			•					
14.	3.30	Apply principles in the management of money					•			
15.	3.29	Understand how to select and use medications				•				
16.	3.27	Practice organizational & time management skills		•						
17.	3.27	Understand (workplace) safety procedures			•					
18.	3.25	Use the telephone and telephone book						•		
19.	3.22	Understand wages, benefits, & employ. concepts			•					
20.	3.21	Understand principles of health maintenance				•				
21.	3.18	Understand individual rights and responsibilities								•
22.	3.15	Demonstrate study skills		•						
23.	3.14	Understand aspects of personal management		•						
24.	3.09	Understand how to obtain housing and services						•		
25.	3.08	Compute using decimal fractions							•	
26.	3.06	Understand procedures to purchase goods					•			
27.	3.03	Understand concepts of time and weather						•		
28.	3.02	Use community agencies and services						•		
29.	3.01	Use banking and financial services					•			
30.	2.99	Apply principles of comparison shopping					•			
31.	2.96	Understand how to care for personal possessions					•			
32.	2.94	Understand medical and dental forms				•				

N = 1,190

CASAS, 1995

Somewhat Important Skills:
Adult Basic Education Program Respondent Ratings

Table 6.3 shows the 18 competencies that were at the Mid Priority Level (rated *very important* or *important* by 50 to 69% of the respondents), with mean ratings ranging from 2.52 to 2.93.

For Adult Basic Education Program respondents, most of the Mid Priority Level competencies were in four competency areas: *Computation* (five competencies); *Community Resources* (four); *Government & Law* (four); and *Employment* (three).

CASAS Competency Area

Table 6.3
Somewhat Important Skills:
Adult Basic Education Program Respondent Ratings (Mid Priority Level)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
33.	2.93	Compute using fractions							•	
34.	2.92	Effectively manage workplace resources			•					
35.	2.92	Understand voting and the political process								•
36.	2.91	Compute with percents, rates, and proportions							•	
37.	2.91	Understand procedures for auto maint./driving						•		
38.	2.90	Effectively utilize workplace technology			•					
39.	2.89	Use estimation and mental arithmetic							•	
40.	2.87	Locate and use transportation and travel info.						•		
41.	2.83	Measure area, volume, & linear dimensions							•	
42.	2.76	Use services provided by the post office						•		
43.	2.78	Understand social, org., & technological systems			•					
44.	2.75	Understand consumer protection laws					•			
45.	2.70	Understand principles of taxation								•
46.	2.63	Interpret data from graphs and compute averages							•	
47.	2.60	Understand civic responsibilities								•
48.	2.58	Understand aspects of society and culture						•		
49.	2.53	Use leisure time resources and facilities						•		
50.	2.52	Understand governmental activities								•

N = 1,190
CASAS, 1995

Most Mid Priority Level competencies were in four competency areas: Computation, Community Resources, Government & Law, and Employment.

Least Essential Skills:
Adult Basic Education Program Respondent Ratings

The five competencies at the Low Priority Level (rated *very important* or *important* by fewer than 50% of the respondents) had mean ratings ranging from 2.22 to 2.50—a slightly higher range than that of the Employability group. (See Tables 5.4 and 6.5.) These competencies are exclusively in the areas of *Computation* and *Government & Law* and cover topics such as environment, history, geography, economics, and higher level mathematics, including formulas, equations, statistics, and probability.

CASAS Competency Area

Table 6.4
Least Essential Skills:
Adult Basic Education Program Respondent
Ratings (Low Priority Level)

	Rating	Competency	Basic Communication	Learning to Learn	Employment	Health	Consumer Economics	Community Resources	Computation	Gov't & Law
51.	2.50	Understand environmental and science issues								•
52.	2.47	Understand historical and geographical info.								•
53.	2.45	Understand economics and economic systems								•
54.	2.46	Use expressions, equations, or formulas								•
55.	2.22	Use statistics and probability							•	

N= 1,190
CASAS, 1995

INDIVIDUAL COMPETENCY RATINGS BY COMPETENCY AREA: ADULT BASIC EDUCATION PROGRAM RESPONDENTS

Basic Communication Competency Ratings: Adult Basic Education Program Respondents

In the area of *Basic Communication*, the competency, *Communicate in general interpersonal interactions*, received the highest average rating from Adult Bas... Education Program respondents (3.60), followed by *Communicate regarding personal information* (3.50) and *Use language of clarification* (3.32). (See Figure 6.2.) Instruction Providers rated each of the *Basic Communication* competencies significantly higher than did Learners.

Instruction Providers rated each of the Basic Communication competencies significantly higher than did Learners.

Figure 6.2 - *Basic Communication* Competency Ratings: Adult Basic Education Program Respondents
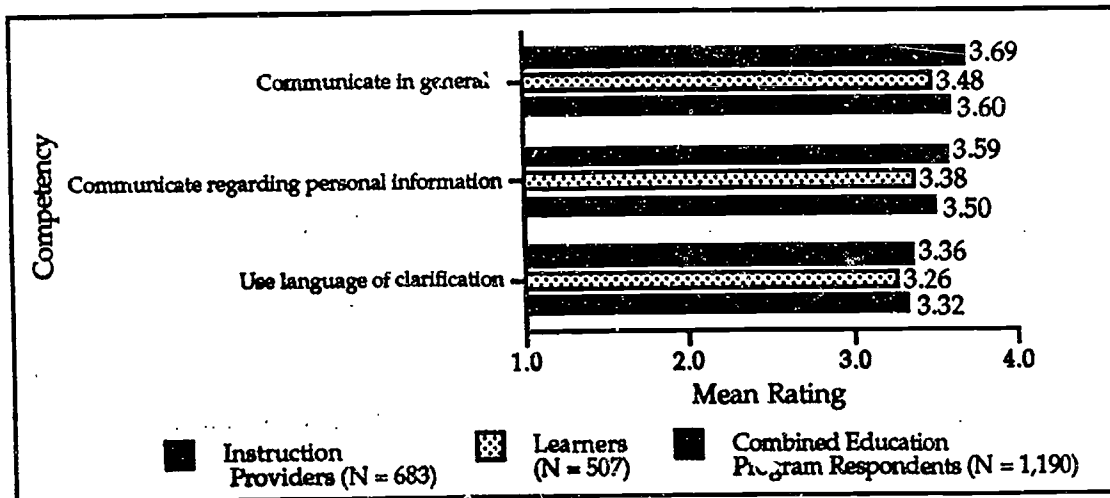
Note: All differences in means between Instruction Providers and Learners significant at p<.05.
CASAS, 1995

Employment Competency Ratings: Adult Basic Education Program Respondents

Figure 6.3 presents mean ratings for competencies in the area of *Employment*. *Understand basic principles of getting a job* (mean combined rating of 3.51) was the most important *Employment* competency from the perspective of all Adult Basic Education Program respondents. Learners rated this competency significantly higher than did Instruction Providers, suggesting that some learners in programs that are not specifically focused on employability may be interested in improving their job search skills.

Also rated at the Top Priority Level (see Table 6.2) were *Communicate effectively in the workplace* (mean combined rating of 3.48), rated significantly higher by Instruction Providers, and *Demonstrate effectiveness in working with people* (3.38). Learners, on the other hand, gave significantly higher ratings to four other *Employment* competencies: understanding (workplace) safety procedures; understanding wages and benefits;

managing workplace resources; and understanding social, organizational, and technological systems. *Understand job performance concepts and materials* was rated at the High Priority Level and was considered equally important by both groups.

Employability respondents rated the importance of technology in the workplace higher than did Adult Basic Education Program respondents.

Utilize common workplace technology was rated at the Mid Priority Level by Adult Basic Education Program respondents. In contrast, Business & Industry and Employment Service Providers rated the use of workplace technology at the High Priority Level. (See Tables 4.2 and 5.2.) These findings point to statistically significant differences in perceptions of the importance of technology in the workplace (p<.05) which have implications for instructional programs.

Figure 6.3 - *Employment* Competency Ratings: Adult Basic Education Program Respondents

Communicate effectively in the workplace — 3.54* / 3.40 / 3.48

Demonstrate effectiveness in working w/people — 3.43* / 3.32 / 3.38

Understand basic principles of getting a job — 3.46 / 3.57* / 3.51

Understand job performance concepts/materials — 3.28 / 3.36 / 3.31

Understand (workplace) safety procedures — 3.20 / 3.36* / 3.27

Understand wages, benefits, & employ. concepts — 3.14 / 3.34* / 3.22

Utilize common workplace technology — 2.86 / 2.96 / 2.90

Effectively manage workplace resources — 2.87 / 2.99* / 2.92

Understand social, org. & technological systems — 2.72 / 2.85* / 2.78

Competency (y-axis) / Mean Rating (x-axis): 1.0 2.0 3.0 4.0

Instruction Providers (N = 683)   Learners (N = 507)   Combined Education Program Respondents (N = 1,190,

*Difference in means between Instruction Providers and Learners significant at p<.05.

CASAS, 1995

Learning to Learn Competency Ratings:
Adult Basic Education Program Respondents

Learning to Learn skills were important to Adult Basic Education Program respondents. (See Figure 6.4.) Critical thinking skills were rated highest: *Demonstrate the ability to use thinking skills* had a mean rating of 3.45; *Use problem solving skills* was rated similarly at 3.42. Next in importance were organizational and time management skills (3.27). Each of these three areas was rated significantly higher by Instruction Providers than by Learners. The two groups agreed in the lower ratings of personal management skills (3.14) and study skills (3.15).

**Figure 6.4 - *Learning to Learn* Competency Ratings:
Adult Basic Education Program Respondents**
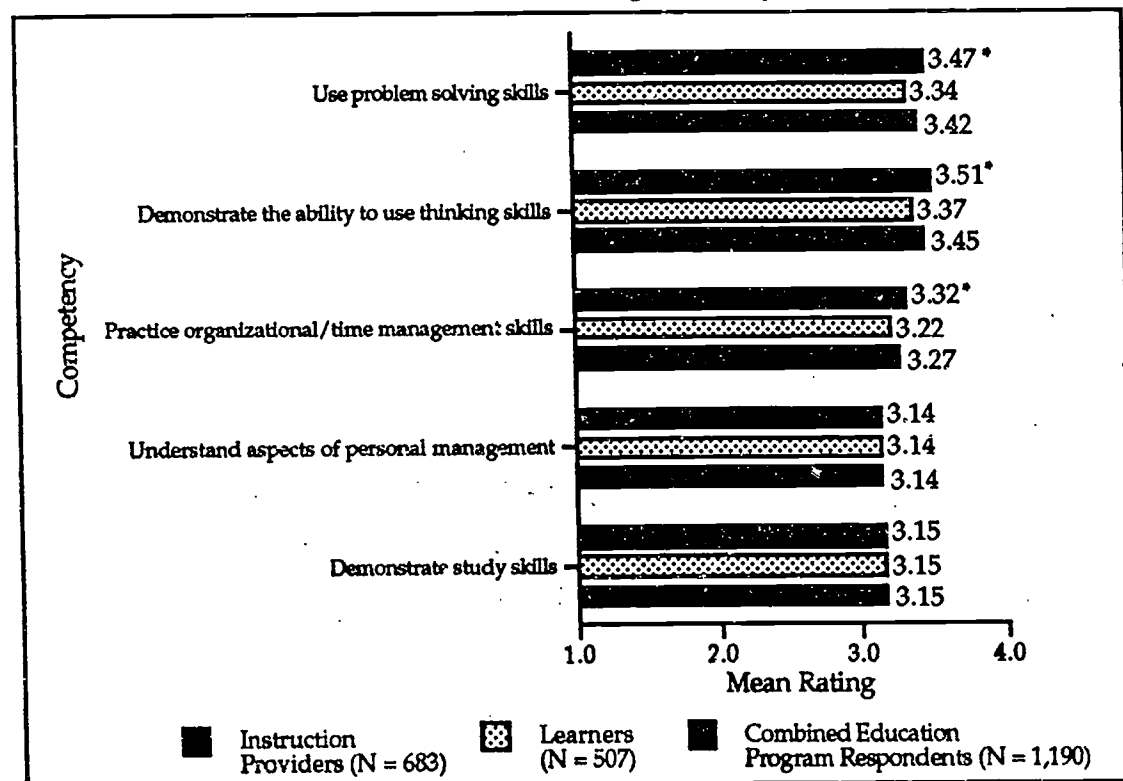
Use problem solving skills — 3.47* / 3.34 / 3.42

Demonstrate the ability to use thinking skills — 3.51* / 3.37 / 3.45

Practice organizational/time management skills — 3.32* / 3.22 / 3.27

Understand aspects of personal management — 3.14 / 3.14 / 3.14

Demonstrate study skills — 3.15 / 3.15 / 3.15

Competency (y-axis)

Mean Rating (x-axis): 1.0 2.0 3.0 4.0

■ Instruction Providers (N = 683)   ▒ Learners (N = 507)   ■ Combined Education Program Respondents (N = 1,190)

*Difference in means between Instruction Providers and Learners significant at p<.05.

CASAS, 1995

Health Competency Ratings:
Adult Basic Education Program Respondents

Ratings for competencies relating to *Health* are presented in Figure 6.5. The *Health* competencies of greatest importance to all Adult Basic Education Program respondents were *Understand basic health and safety procedures*, which had a mean rating of 3.38, and *Understand ailments and seek medical assistance* (3.35). Learners differed from Instruction Providers in their ratings of two *Health* competencies. In terms of mean ratings, *Understand how to select medications* was considered to be more important by Learners (3.42) than by Instruction Providers (3.20). In fact, this competency was ranked by Learners as the most important *Health* competency. *Understand medical and dental forms* was not highly rated by Instruction Providers (mean of 2.81) but was rated 3.13 by Learners.

Learners gave higher ratings to selecting and using medications and filling out health forms than did Instruction Providers.

Figure 6.5 - *Health* Competency Ratings: Adult Basic Education Program Respondents
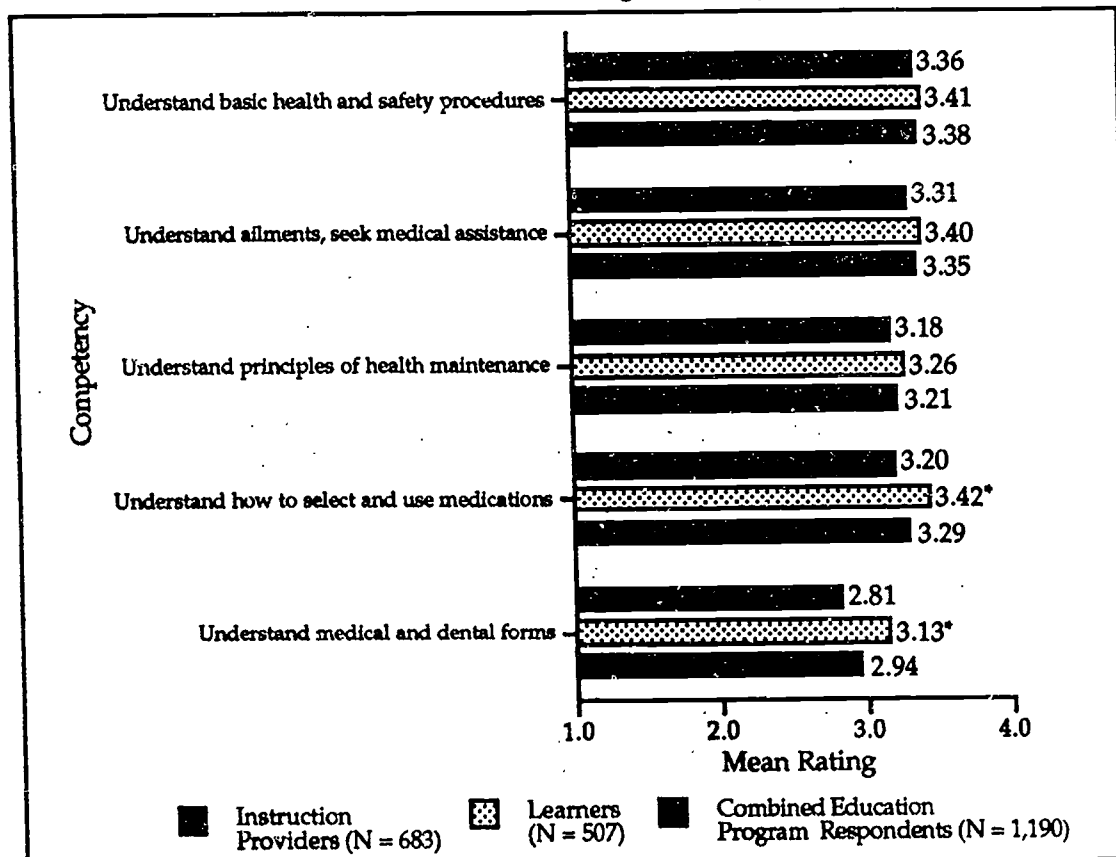
*Difference in means between Instruction Providers and Learners significant at p<.05.

CASAS, 1995

Computation Competency Ratings:
Adult Basic Education Program Respondents

As shown in Figure 6.6, the *Computation* competency with the highest mean rating by Adult Basic Education Program respondents was *Compute using whole numbers* (3.39), the only Top Priority Level competency in this area. (See Table 6.2.) *Compute using decimals* was rated at the High Priority Level. Fractions, percents, ratios, measurements, averages, and interpreting graphic data were considered somewhat important with mean ratings ranging from 2.63 to 2.93. Competencies related to higher order mathematics, such as formulas, equations, statistics, and probability were not a priority according to Adult Basic Education Program respondents (mean ratings of 2.22 - 2.46).

**Figure 6.6 - *Computation* Competency Ratings:
Adult Basic Education Program Respondents**

*Difference in means between Instruction Providers and Learners significant at p<.05.

CASAS, 1995

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Instruction Providers rated *Compute using whole numbers* significantly higher than did Learners. In contrast, Learners rated the three most advanced *Computation* competencies (*Interpret data from graphs; Use expressions, equations, or formulas; and Use statistics and probability*) significantly higher than did either Instruction Providers or Employment Service Providers. Learners' ratings of these skills were closer to Business & Industry's ratings. (See Chapter Five, Figure 5.5.)

Comparing *Computation* Competency Ratings: Adult Basic Education Program and Employability Respondents

While Employability respondents rated four *Computation* competencies at the Top or High Priority Levels, Adult Basic Education Program respondents gave high rankings to only two. However, because Adult Basic Education Program respondents tended to give higher ratings than Employability respondents, mean ratings for both groups were comparable. (See Table 6.5.)

Table 6.5 - *Computation* Competency Ratings: Adult Basic Education Program and Employability Respondents

Competency	Adult Basic Education		Employability	
	Rating	Ranking	Rating	Ranking
Compute using whole numbers	3.39	7	3.47	7
Compute using decimals	3.08	25	3.14	19
Compute using percents	2.91	36	3.02	21
Compute using fractions	2.93	33	2.96	24
N=	1,190		1,403	

Note: Difference in means between Adult Basic Education Program and Employability respondents significant at $p < .05$.
CASAS, 1995

Consumer Economics Competency Ratings: Adult Basic Education Program Respondents

Adult Basic Education Program respondents rated *Use weights, measurement scales, and money* and *Apply principles of budgeting* as the highest *Consumer Economics* competencies, with mean ratings of 3.32 and 3.30, respectively. (See Figure 6.7). These were followed by competencies related to banking, shopping, locating housing, and caring for personal possessions (mean ratings of 2.96 - 3.09). Two competencies were at the Mid Priority Level: *Understand procedures for auto maintenance and driving* (mean rating of 2.91) and *Understand consumer protection laws* (2.75).

**Figure 6.7 - *Consumer Economics* Competency Ratings:
Adult Basic Education Program Respondents**
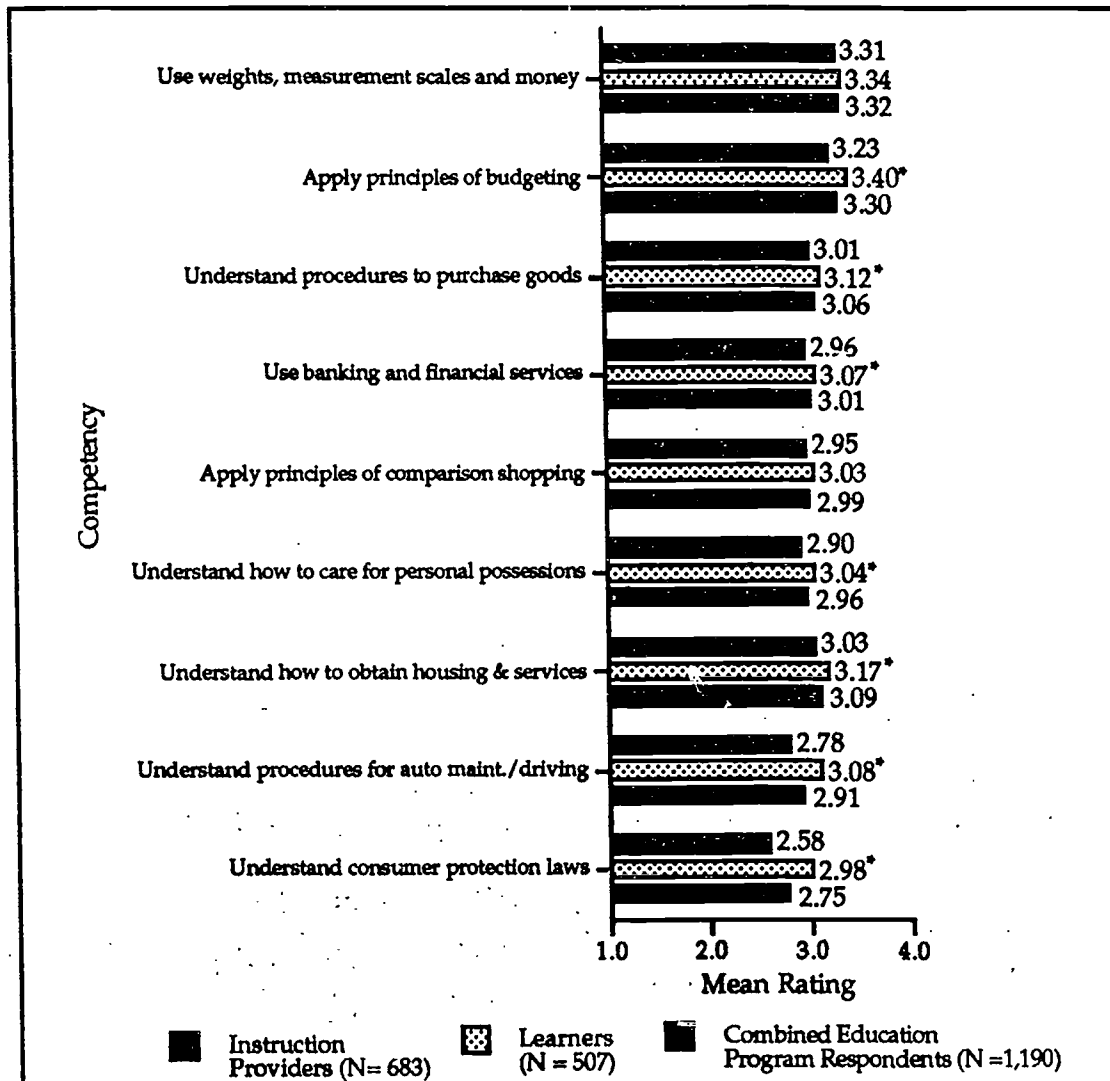
Learners rated all but two of the nine Consumer Economics competencies significantly higher than did Instruction Providers.

*Difference in means between Instruction Providers and Learners significant at p<.05.
CASAS, 1995

Learners rated all but two of the nine *Consumer Economics* competencies significantly higher than did Instruction Providers. Budgeting, car maintenance and driving, and understanding consumer protection laws were the three areas with the greatest disparities in ratings between the two groups. These differences suggest that Learners' needs in the area of *Consumer Economics* should be considered in developing curriculum and targeting instruction.

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Community Resources Competency Ratings: Adult Basic Education Program Respondents

As noted in Table 6.2, three *Community Resources* competencies were rated at the High Priority Level: *Use the telephone and telephone book; Understand concepts of time and weather;* and *Use community agencies and services*, which includes using community libraries, educational institutions, law enforcement, and social welfare agencies. Figure 6.8 shows the mean ratings for these competencies to be, respectively, 3.25, 3.03, and 3.02. Using transportation and post office services were rated significantly higher by Learners than by Instruction Providers. With respect to the use of leisure time resources and facilities, Instruction Providers gave higher ratings than Learners.

Using the telephone, understanding time and weather, and using community services were considered to be important to Adult Basic Education Program respondents.

Figure 6.8 - *Community Resources* Competency Ratings: Adult Basic Education Program Respondents

Competency / Mean Rating

Competency	Instruction Providers	Learners	Combined
Use the telephone and telephone book	3.29	3.20	3.25
Understand concepts of time and weather	3.03	3.04	3.03
Use community agencies and services	3.05	2.99	3.02
Locate and use transportation & travel info.	2.78	3.00*	2.87
Use the services provided by the post office	2.69	2.85*	2.76
Understand aspects of society and culture	2.58	2.59	2.58
Use leisure time resources and facilities	2.58*	2.47	2.53

Legend: ■ Instruction Providers (N= 683) ▨ Learners (N = 507) ■ Combined Education Program Respondents (N = 1,190)

*Difference in means between Instruction Providers and Learners significant at p<.05.

CASAS, 1995

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Government & Law Competency Ratings:
Adult Basic Education Program Respondents

Ratings by Adult Basic Education Program respondents placed most *Government & Law* competencies at the Mid Priority Level. (See Table 6.3.) The competency, *Understand individual rights and responsibilities* was an exception; it was seen as more important than other competencies in this area by all Adult Basic Education Program respondents; Learners rated this competency higher (3.35) than Instruction Providers (3.06). (See Figure 6.9.) Understanding concepts of voting and taxation were the next two highest rated competencies. Competencies relating to science, economics, history, and geography were not a high priority according to Adult Basic Education Program respondents.

Overall, Learners rated six out of the eight *Government & Law* competencies significantly higher than did Instruction Providers, indicating that Instruction Providers should emphasize these areas if they want to remain responsive to learners' needs.

Learners rated Understand individual rights and responsibilities higher than Instruction Providers.

Figure 6.9 - *Government & Law* Competency Ratings:
Adult Basic Education Program Respondents

Understand individual rights and responsibilities — 3.06 / 3.35* / 3.18

Understand voting and the political process — 2.88 / 2.96 / 2.92

Understand principles of taxation — 2.56 / 2.89* / 2.70

Understand civic responsibilities — 2.56 / 2.66 / 2.60

Understand governmental activities — 2.44 / 2.63* / 2.52

Understand enviromental and science issues — 2.43 / 2.58* / 2.50

Understand economics and economic systems — 2.35 / 2.59* / 2.45

Understand historical & geographical info. — 2.40 / 2.57* / 2.47

Mean Rating

Instruction Providers (N = 683) Learners (N = 507) Combined Education Program Respondents (N = 1,190)

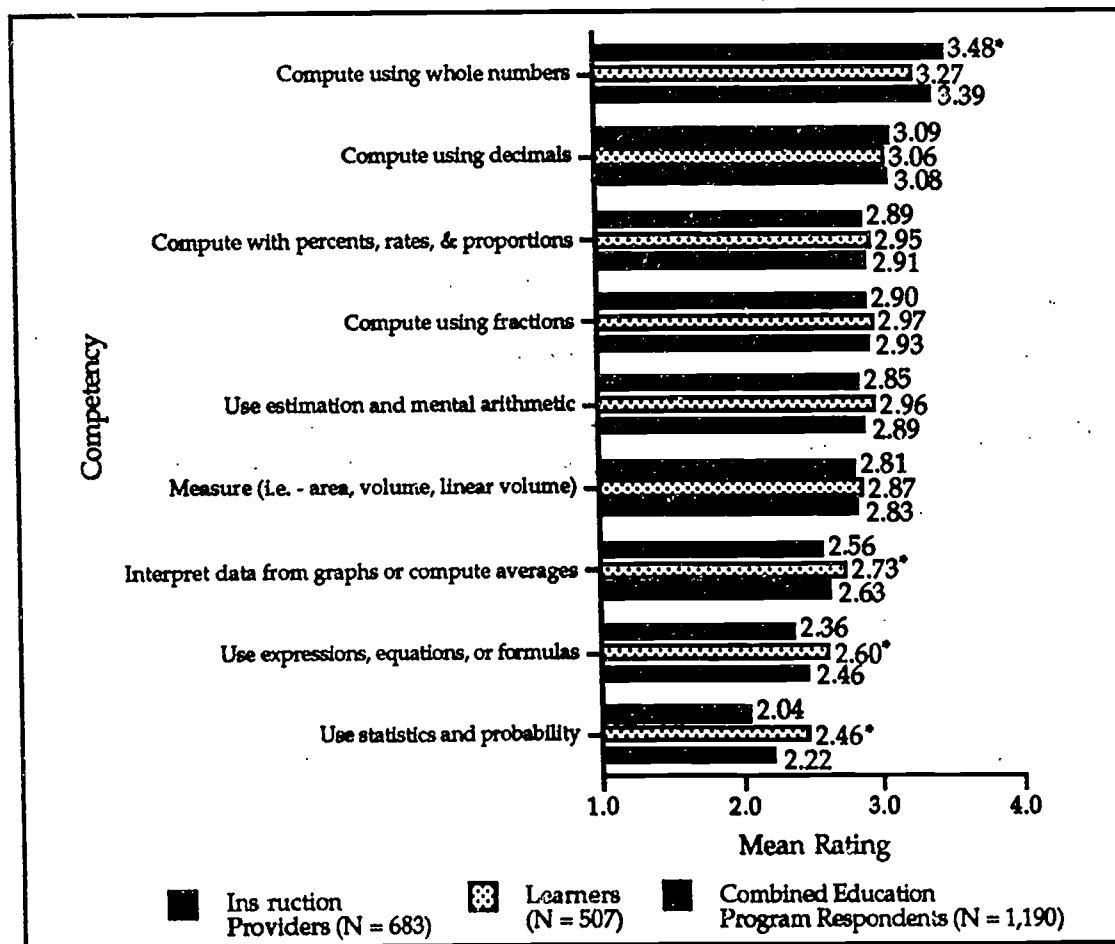*Difference in means between instruction providers and learners significant at p<.05.

CASAS, 1995

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SUMMARY

The Adult Basic Education Program respondent group consisted of Learners and Instruction Providers, including adult basic education program administrators and instructors. The four most highly rated competency areas by this group were *Basic Communication, Learning to Learn, Health,* and *Employment.* Learners placed greater importance on *Health, Consumer Economics, Computation,* and *Government & Law* as compared to Instruction Providers. In contrast, Instruction Providers gave higher ratings to *Basic Communication* and *Learning to Learn.*

Basic Communication competencies were rated highest overall by both Instruction Providers and Learners, although Instruction Providers rated each individual competency significantly higher than did Learners. Two *Employment* competencies that relate to communication skills in a workplace setting were rated highly by both groups. As with *Basic Communication,* Instruction Providers gave higher ratings to these two competencies than did Learners.

Understand basic principles of getting a job *was the* Employment *competency most highly valued by Instruction Providers and Learners.*

Understand basic principles of getting a job was the *Employment* competency most highly valued by both groups. Learners rated this competency higher than did Instruction Providers, suggesting that some learners in programs that are not specifically focused on employability may be interested in improving their job search skills.

Utilize common workplace technology was rated at the Mid Priority Level by Adult Basic Education Program respondents. In contrast, Business & Industry and Employment Service Providers rated the use of workplace technology at the High Priority Level. These findings point to statistically significant dif. rences in perceptions of the importance of technology in the workplace (p<.05) which have implications for instructional programs.

Critical thinking skills were the highest rated competencies in the area of *Learning to Learn.* Organizational and time management skills were also considered important. In these two areas Instruction Providers rated competencies higher than did Learners.

The two *Health* competencies rated highest by both groups were *Understand basic health and safety procedures* and *Understand ailments and seek medical assistance.* Learners rated selecting and using medications significantly higher than did Instruction Providers. In fact, this was the Learners' highest rated *Health* competency. Learners also rated filling out health forms significantly higher than did Instruction Providers.

Adult Basic Education Program respondents gave high rankings to only two *Computation* competencies: using whole numbers and using decimals. In comparison, Employability respondents, particularly those from Business & Industry, rated four *Computation* competencies among the most essential. Instruction Providers rated the most basic math skill, *Compute using whole numbers,* significantly higher than did Learners. In contrast, Learners (as well as Business & Industry) rated the three most advanced *Computation* competencies as moderately important, while Instruction Providers and Employment Service Providers perceived them as low priorities.

All Adult Basic Education Program respondents felt it was very important for adults to accurately weigh, measure, count money, and make change. *Apply principles of budgeting* was also considered important, followed by competencies related to shopping, locatin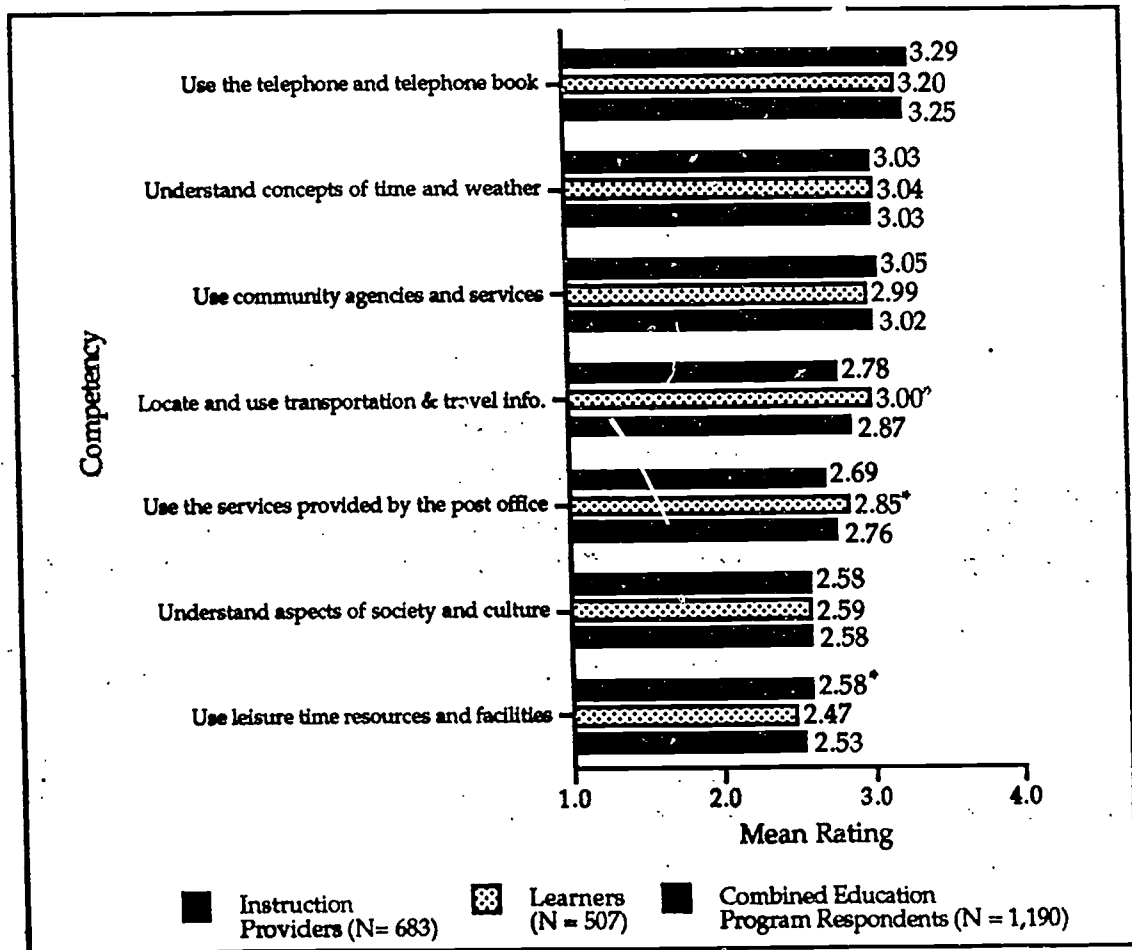g housing, and caring for personal possessions. Learners rated all but two of the nine *Consumer Economics* competencies significantly higher than did Instruction Providers. Budgeting, car maintenance and driving, and understanding consumer protection laws were the three areas with the greatest disparities in ratings between the two groups. These differences suggest that Learners' needs in the area of *Consumer Economics* should be considered in developing curriculum and targeting instruction.

Three competencies were rated as essential in the area of *Community Resources: Use the telephone and telephone book; Understand concepts of time and weather;* and *Use community agencies and services.* Using transportation and post office services were seen as moderately important and were rated higher by Learners than by Instruction Providers.

Adult Basic Education Program respondents considered most *Government & Law* competencies to be moderately important, with the exception of *Understand individual rights and responsibilities.* Learners and Instruction Providers rated this competency as a high priority. Learners gave higher ratings than Instructors for most of the competencies in this area.

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Chapter Seven:
Reaching a Statewide Consensus on Curriculum Development and Assessment

In this chapter, strategies for utilizing IABSS findings in the development of curriculum for employability and life skills programs are explored, and methods for targeting instruction are presented. The use of survey findings for program planning, staff development, assessment, and coordination of adult basic education programs are also discussed. Survey findings provide a solid foundation for building competency-based curriculum and customized assessment systems that will improve program effectiveness and accountability.

USING SURVEY FINDINGS TO DEVELOP CURRICULUM IN IOWA'S ADULT BASIC EDUCATION PROGRAMS

Background

Goal Six of America 2000's *National Education Goals* states that by the year 2000, "Every adult will be literate and have the skills necessary to compete in the global economy and participate in American democracy." It also states that every major American business will be involved in strengthening the connection between education and work.

The Iowa Adult Basic Skills Survey marks an important step in responding to these national goals and objectives. This landmark survey, the most extensive of its type, has gathered detailed input from the entire spectrum of agencies in Iowa concerned with improving adult basic skills: businesses and industries, employment training programs, government agencies, community colleges, community-based organizations, instructors, learners, and other literacy stakeholders.

IABSS data provide the information needed to formulate a broad consensus regarding adult basic education priorities for the state of Iowa. The results of this survey provide detailed guidance to define adult basic education curriculum objectives. In addition, the process of needs assessment and subsequent curriculum revision fulfills a number of program improvement and accountability requirements contained in Iowa's *Performance Indicators of Program Quality*.

Survey data provide the information needed to formulate a broad consensus regarding adult basic education priorities.

Curriculum Development Using Survey Results

Using competencies rated by survey respondents, programs can develop relevant curriculum based on clearly identified needs. Learners, in turn, will attain their goals

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more efficiently and quickly by focusing on skills that are essential for success in the job market, in academic programs, and in real life situations.

Adult basic education programs that serve learners with both employability and life skill goals may use the combined results from all IABSS respondents to guide curriculum planning. As outlined in Chapter Three:

- All respondent groups ranked *Basic Communication* first. *Learning to Learn* and *Employment* were rated very similarly as the next most important areas, followed by *Health*.
- The competency areas of *Consumer Economics* and *Community Resources* were considered moderately important by all survey respondents.
- *Computation* ranked seventh according to the aggregate ratings, although Business & Industry respondents ranked this area much higher (fourth).
- *Government & Law* ranked last (eighth).

The 11 individual competencies rated as top priorities by the total population of IABSS respondents are:

1. *Communicate in general interpersonal interactions*
2. *Communicate effectively in the workplace*
3. *Demonstrate effectiveness in working with people*
4. *Communicate regarding personal information*
5. *Demonstrate ability to use thinking skills*
6. *Understand basic principles of getting a job*
7. *Use problem solving skills*
8. *Use language of clarification*
9. *Compute using whole numbers*
10. *Understand job performance concepts & materials*
11. *Practice organizational and time management skills*

To make the curriculum most relevant to learners with either employability or life skills goals, programs should ensure that these 11 competencies are included in their curriculum. They should also consider the competencies rated as next most important (ranked 12 - 30 in Table 3.3) for inclusion and emphasis in their curriculum based on local needs and interests.

Another important consideration in revising curriculum based on survey results is to review the competencies rated as least essential. While the highest rated competencies indicate which skills to emphasize in instruction, knowing which competencies received lower ratings will also assist curriculum developers and instructors in making decisions about curriculum priorities. All 55 competencies listed on the survey have been previously validated as important; therefore, even competencies at the Low Priority Level may be quite important to some learners.

Developing Curriculum for Employability Programs

Programs serving learners with exclusively employment-related goals should give priority to Business & Industry and Employment Service Provider responses. (See Chapters Four and Five.) Competencies rated at the Top Priority Level (in the "top 27" for Business & Industry and in the "top 30" for Employment Service Providers) should be emphasized.

Employment-related programs should give priority to Business & Industry and Employment Service Provider responses.

Employability programs can also refer to the combined responses of Business & Industry and Employment Service Providers contained in Appendix E. It is important to review responses from both groups in the curriculum development process since they approached the survey from different points of view: Employment Service Providers focus on preparing clients for obtaining a job, while Business & Industry respondents are more concerned with workers' ability to function on the job.

Employability curriculum developers and instructors can make use of the learners' perspective provided in these survey results, especially in areas such as *Basic Communication, Employment,* and *Learning to Learn.* Survey findings for all five respondent groups can also be compared, discussed, and prioritized, resulting in curriculum changes based on both survey results and active dialogue within and among local programs.

IABSS findings of particular relevance for curriculum development and assessment in employability programs are presented below. All of these findings were statistically significant.

- Business & Industry and Employment Service Providers agreed about the three most important areas and about their order of priority: *Basic Communication, Employment,* and *Learning to Learn.*
- Business & Industry respondents ranked *Computation* higher (fourth) than all other groups, who ranked it sixth or seventh.
- Business & Industry respondents ranked all nine *Computation* skills higher than did Employment Service Providers.
- Employment Service Providers rated *Understand basic principles of getting a job* as the most important of the 55 competencies. Their rating was higher than that of Business & Industry respondents, who ranked it 19th.
- Employment Service Providers rated *Understand wages, benefits, and employment concepts* higher than did Business & Industry.
- Both groups rated *Learning to Learn* competencies similarly, except *Demonstrate study skills,* which was rated higher by Employment Service Providers.
- Employment Service Providers ranked *Community Resources* considerably higher than did Business & Industry respondents. In fact, Employment Service Providers rated all but one of the competencies in this area higher than did Business & Industry.
- *Health* was ranked fourth by Employment Service Providers and fifth by Business & Industry.
- *Consumer Economics* and *Government & Law* were ranked similarly by both groups (ranked sixth and eighth, respectively).

- Employment Service Providers gave considerably higher ratings to the *Consumer Economics* competency, *Understand how to obtain housing,* than did Business & Industry.
- Employment Service Providers rated *Government & Law* higher than did Business & Industry. *Understand individual rights and responsibilities* was rated much higher by Employment Service Providers.

Developing Curriculum for Life Skills Programs

General academic and life skills programs can base curriculum decisions on aggregate responses, as well as on Instruction Provider and Learner responses.

Programs serving learners with general life skills or academic goals (GED or High School diploma) can base curriculum prioritization decisions on the responses of the aggregate population, as well as on responses from Instruction Providers and Learners. (See Chapter Six.) The perspective of community-based and referral agencies ("Others") also contributes to the curriculum development process because these agencies frequently interact with adult learners in non-classroom situations. *(Appendix E contains complete responses from the "Other" group.)* For segments of the life skills curriculum that relate to employment, the Business & Industry and Employment Service Provider responses offer additional valuable information.

IABSS findings of particular interest for curriculum development and assessment in programs with a life skills focus are presented below. All of these findings were statistically significant.

- Instruction Providers and Learners both rated the following areas the four highest: *Basic Communication, Learning to Learn, Health,* and *Employment.*
- Learners placed greater importance on *Health, Consumer Economics Computation,* and *Government & Law,* as compared to Instruction Providers. Instruction Providers gave higher ratings to *Basic Communication* and *Learning to Learn.*
- Instruction Providers rated all *Basic Communication* competencies significantly higher than did Learners.
- *Understand basic principles of getting a job* was the *Employment* competency most highly valued by both groups. Learners rated this competency higher than did Instruction Providers, suggesting the importance of teaching job search skills, even in programs that are not specifically focused on employability.
- The highest rated *Learning to Learn* competencies dealt with critical thinking skills. Organizational and time management skills were also considered important. Instruction Providers rated these two areas higher than did Learners.
- The two *Health* competencies rated highest by both groups were *Understand basic health and safety procedures* and *Understand ailments and seek medical assistance.* Learners rated selecting and using medications significantly higher than did Instruction Providers. In fact, this was the Learners' highest rated *Health* competency. Learners also rated filling out health forms significantly higher than did Instruction Providers.
- Instruction Providers and Learners gave high rankings to only two *Computation* competencies: using whole numbers and using decimals. In comparison, Employability respondents, particularly Business & Industry respondents, rated four *Computation* competencies as Top Priority or High Priority.

- Learners rated many *Consumer Economics* competencies higher than did Instruction Providers. Budgeting, car maintenance and driving, and understanding consumer protection laws were the three areas with the greatest disparities in ratings between the two groups.

- Three *Community Resources* competencies were rated at the High Priority Level by Instruction Providers and Learners: *Use the telephone and telephone book; Understand concepts of time and weather;* and *Use community agencies and services.*

- Using transportation and post office services were rated at the Mid Priority Level, and were rated higher by Learners than by Instruction Providers.

- Most *Government & Law* competencies were rated at the Mid Priority Level, except *Understand individual rights and responsibilities.* Learners rated most of the competencies in this area higher than did Instruction Providers.

TARGETING INSTRUCTION

Targeting curriculum, instruction, and assessment involves working with the discrete competency statements contained in the *CASAS Competency List. (See Appendix C.)* For example, the discrete CASAS competency statements for the competency, *Communicate effectively in the workplace,* are:

4.6.1   *Follow, clarify, give, or provide feedback to instructions; give and respond appropriately to criticism.*

4.6.2   *Interpret and write work-related correspondence, including notes, memos, and letters.*

4.6.3   *Interpret written workplace announcements and notices.*

4.6.4   *Report progress on activities, status of assigned tasks, problems, and other situations affecting job completion.*

4.6.5   *Select and analyze work-related information for a given purpose and communicate it to others orally or in writing.*

Further assessment in the classroom or training program would determine specific learner needs for competency statements at different levels of ability; lessons could then be focused accordingly. Table 7.1 illustrates this for CASAS competency statement 4.6.2. Specification of basic skills objectives related to discrete competency statements at each level is also an important part of the curriculum development process.

Table 7.1 - Developing Benchmarks for Different Learner Levels

CASAS competency statement 4.6.2: *Interpret and write work-related correspondence, including notes, memos, and letters.*			
Level A Beginning	**Level B Intermediate**	**Level C Advanced**	**Level D High School**
Respond to specific oral comprehension questions based on a short, simple memo about a change in work schedule.	Read instructions on how to request a change of work schedule. Complete a form, indicating preferred work shift. Write the reason for requesting the change.	Write a brief memo to a supervisor requesting a change in work shift from mornings to evenings. Include an appropriate explanation for requesting the change.	Write a letter to a supervisor summarizing a team member's suggestions for accomplishing an increased production schedule, such as working overtime, weekends, or hiring temporary workers.

CASAS, 1995

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USING SURVEY FINDINGS FOR PROGRAM PLANNING

Local programs can use IABSS results to supplement information from their own community's demographics and needs assessments. Together, these provide a focus for program planning, specifically to:

These findings confirm the need for separate instructional strands within a program for learners with employment and general life skills goals.

- create a curriculum continuum
- articulate learner attainment of competencies
- determine certification benchmarks
- identify curriculum priorities across levels and programs

IABSS results indicate a great deal of agreement among respondent groups and identify significant areas of disagreement with respect to priorities for instruction. For example, Business & Industry respondents rated *Computation* and many *Employment* and *Learning to Learn* competencies much higher than did other respondent groups. These findings confirm the need for separate instructional strands within a program for learners with employment and general life skills goals.

IMPLICATIONS FOR STAFF DEVELOPMENT

The curriculum development process described above cannot be effectively implemented without concurrent staff development. IABSS results provide the necessary information to develop a common strategy for curriculum development or revision, with active involvement by instructional staff. Instructors will need to become familiar with survey findings, through individual review of this report and discussion with others, to clarify interpretation of the data. The curriculum review process should include participation and systematic feedback from instructors and learners as well as curriculum development specialists. It should also take into account specific learner goals in local communities. This process involves not only agreeing on curriculum changes but also determining strategies for involving instructors in how to implement the changes effectively and to evaluate and share results and outcomes.

Although a great deal of time and effort is required, the process of curriculum development provides long-term, quality benefits. If the principles underlying the curriculum changes are well understood by all stakeholders and if there has been active participation at all levels at every stage, then changes are generally met with broader acceptance. In addition, assessment based on carefully implemented curriculum revision can be appropriate and more meaningful for the program, the instructor, and the learner.

USING SURVEY FINDINGS TO DEVELOP COMMON ASSESSMENT INSTRUMENTS

By identifying critical competencies for adults in Iowa, customized assessment can be developed that can: establish learning plans or place learners into programs; monitor progress; and document outcomes for the benefit of learners, instructors, programs, state agencies, and other stakeholders. Competencies ranked at the Top and High Priority Levels can be used to determine the content of assessment instruments. Employability assessment instruments, based primarily on the combined results of Business & Industry and Employment Service Provider responses, can be developed. Similarly, the aggregate population's survey responses, as well as responses from Instruction Providers, Learners, and Others can be used to develop life skills assessment.

By identifying critical competencies, customized assessment can be developed to place learners, monitor progress, and document effectiveness.

Identifying critical competencies is an important step in the process of revising and developing curriculum and matching assessment to curriculum priorities. This survey provides the starting point for this process. CASAS assessment instruments are based on competencies that were used in the survey. Customized Iowa assessment instruments for placement, progress testing, and certification purposes can be developed using items drawn from the CASAS Item Bank or newly written items. Iowa's adult basic education providers will be asked to participate in the development and field testing of assessment instruments.

USING SURVEY FINDINGS TO PROMOTE COORDINATION AND COLLABORATION IN IOWA'S ADULT BASIC EDUCATION COMMUNITY

The results of the IABSS provide a solid foundation to continue building an integrated delivery system for all adult learners in Iowa and to promote coordination across agencies. Programs will benefit from:

- **Shared objectives.** In reviewing the survey findings regarding competency prioritization, adult basic education providers can reach statewide consensus regarding the most essential learner outcomes.
- **Shared curricula.** Adult basic education providers can work together to develop comprehensive curricula to meet the objectives identified by survey respondents.
- **Shared customized, statewide assessment.** After reaching a consensus regarding program objectives, a customized statewide assessment system can be developed to identify a learning plan, to place learners in programs, monitor their progress, and certify mastery of the targeted objectives.
- **Articulation among programs.** With common objectives and a common assessment system, instructional levels can be standardized, enabling articulation among levels and programs.

Programs will benefit from shared objectives, curricula, customized statewide assessment, and articulation among programs.

Business & Industry and Employment Service Providers are able to use survey results to focus their discussion and to make recommendations in the development of employability curricula. This process enables them to reach consensus regarding statewide objectives. Utilizing a common framework, employment service providers

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and employability education providers are able to articulate learners' attainment of skills in language that is meaningful to business and industry.

IABSS results assist adult basic education instructors in reaching consensus regarding a statewide life skills curriculum. The curriculum priorities defined by learners who responded to the survey will provide valuable insight for curriculum development. Learners' perspectives about the importance of specific competencies were not available on such a large scale in the past.

SUMMARY

Iowa's adult basic education programs will benefit greatly from using results from the Iowa Adult Basic Skills Survey to develop shared objectives, curricula, and customized statewide assessments. Programs that serve learners with both employability and life skill goals may use the combined results from all IABSS respondents reported in Chapter Three for curriculum planning. Programs planning a specifically employment-related curriculum can refer to the Business & Industry and Employment Service Provider results in Chapters Four and Five. Programs serving learners with general life skills or academic goals can base curriculum prioritization decisions on the responses of the aggregate population, as well as responses from Instruction Providers, Learners, and Others.

The IABSS provides clear guidance for the development of a research-based, customized curriculum and assessment system that will improve Iowa's adult basic education program effectiveness.

Once critical learning objectives have been agreed upon using the IABSS results, they can be used to develop skill-based multi-level curricula. A well-defined curriculum assists instructors in targeting instruction, and learner progress can be monitored using a customized assessment system. To develop a multi-level curriculum, learning benchmarks can be defined for each learner level. To target instruction at the classroom level, learning benchmarks for lesson modules can be developed using the discrete competencies outlined in the *CASAS Competency List*. Customized assessments measure the attainment of priority competencies based on curriculum objectives. These assessments assist in developing learning plans, accurately place learners into programs, monitor progress, and document program effectiveness.

The IABSS study thus provides clear guidance for the development of a research-based, customized curriculum and assessment system that will improve Iowa's adult basic education program effectiveness. This is the final step in the process of establishing a statewide accountability system.

Bibliography

Carnevale, Anthony P., Leila J. Gainer, and Ann S. Meltzer. *Workplace Basics: The Essential Skills Employers Want.* San Francisco: Jossey-Bass Inc., 1990.

Comprehensive Adult Student Assessment System (CASAS). *CASAS Statewide Accountability System For Federally Funded 321 ABE Programs, July 1, 1989 to June 30, 1990.* California: CASAS, Foundation for Educational Achievement, Inc., 1990.

—. *CASAS Statewide Accountability System For Federally Funded 321 ABE Programs, July 1, 1990 to June 30, 1991.* California: CASAS, Foundation for Educational Achievement, Inc., 1991.

—. *California Federally Funded ABE Program Reports. Student Progress and Goal Attainment in California's Federally Funded ABE Programs, July 1, 1991 to June 30, 1992.* California: CASAS, Foundation for Educational Achievement, Inc., 1992.

—. *California Federally Funded ABE Program Reports. Student Progress and Goal Attainment in California's Federally Funded ABE Programs, July 1, 1992 to June 30, 1993.* California: CASAS, Foundation for Educational Achievement, Inc., 1993.

—. *California Federally Funded ABE Program Reports. Student Progress and Goal Attainment in California's Federally Funded ABE Programs, July 1, 1993 to June 30, 1994.* California: CASAS, Foundation for Educational Achievement, Inc., 1994.

—. *CASAS Curriculum Materials Guide.* California: CASAS, Foundation for Educational Achievement, Inc., 1994.

Development Associates, Inc. *National Evaluation of Adult Education Programs. First Interim Report, Profiles of Service Providers.* Washington, D.C.: Office of Policy and Planning, U.S Department of Education, 1992.

—. *National Evaluation of Adult Education Programs. Second Interim Report, Profiles of Client Characteristics.* Washington, D.C.: Office of Policy and Planning, U.S Department of Education, 1993.

Henry, J.F., and S.U. Raymond. *Basic Skills in the U.S. Work Force.* New York: Center for Public Resources, 1983.

Iowa Department of Education. *Assessment and Adult Basic Education: The Iowa Model.* 1990.

—. *What Has Happened to Iowa's GED Graduates? A Two-, Five- and Ten-Year Follow-Up Study: Final Report.* April 1992.

—. *Performance Indicators of Program Quality for Iowa's Adult Basic Education Programs.* 1993.

—. *Iowa CASAS Pilot Project Reports: An Initial Evaluation of CASAS Effectiveness in Iowa's Adult Basic Education Programs.* 1994.

Jenkins, Lynn B. and Irwin S. Kirsch. *Adult Literacy in Iowa: Results of the State Adult Literacy Survey.* New Jersey: Educational Testing Service, 1994.

Kirsch, Irwin S. et al. *Adult Literacy in America: A First Look at the Results of the National Adult Literacy Survey.* Washington, D.C.: National Center for Education Statistics, 1993.

U.S. Department of Labor. The Secretary's Commission on Achieving Necessary Skills. *What Work Requires of Schools: A SCANS Report for America 2000.* Washington, DC.: SCANS, 1991.

—. The Secretary's Commission on Achieving Necessary Skills. *Skills and Tasks for Jobs: A SCANS Report for America 2000.* Washington, D.C.: SCANS, 1992.

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Appendix A : Survey Instrument

Iowa Adult Basic Skills Survey

(If you have already completed this survey for your program, agency or institution please disregard this request.)

USE NO. 2 PENCIL ONLY

Please mark the type of Program, Agency or Institution that you represent. (Mark all that apply.)

- ○ Adult Basic Education/ESL/GED Student
- ○ Business & Industry
- ○ Adult Basic Education Program
- ○ English-as-a-Second Language Program
- ○ GED Program
- ○ Adult High School Diploma Program
- ○ Alternative High School Program
- ○ JTPA SDA/PIC
- ○ JTPA Program Provider
- ○ Correctional Institution
- ○ Department of Human Services
- ○ Department of Employment Services
- ○ Division of Vocational Rehabilitation

- ○ Department of Education
- ○ Local School District
- ○ Area Education Agency
- ○ Community Based Organization
- ○ Community College
- ○ Promise JOBS
- ○ Department of Elder Affairs
- ○ Public Library
- ○ Homeless Program
- ○ Community Education
- ○ Adult Advisory Council
- ○ Developmental Education Program
- ○ Other (specify) _____

DIRECTIONS FOR MARKING ANSWERS

Use No. 2 pencil only.
Do NOT use ink or ballpoint pen.

Make dark marks that fill circle completely.

- ○ Correct
- ⊗ Not Correct

Cleanly erase any answer you change.

OFFICIAL USE ONLY

SECTION I

STEP 1 - READ each numbered competency statement; (e.g., 1.1. Use weights, measures, measurement scales and money). DECIDE how important each statement is to adult learners in your program, agency, or institution regarding basic life and employability skills necessary to function in today's society and workforce.

STEP 2 - MARK one response for each statement. Please use the following scale:

- ⓥ Very Important
- ⓘ Important
- ⓢ Somewhat Important
- ⓝ Not Important

RATING SCALE | COMPETENCY STATEMENTS

0. BASIC COMMUNICATION (verbal)

- ⓥⓘⓢⓝ 0.1 Communicate in general interpersonal interactions (i.e., in social and work situations)
- ⓥⓘⓢⓝ 0.2 Communicate regarding personal information (e.g., name, address, education, occupation)
- ⓥⓘⓢⓝ 0.3 Use language of clarification (e.g. "Was that two o'clock or three o'clock?")
- ⓥⓘⓢⓝ 0.4 Other (specify) _____

1. CONSUMER ECONOMICS

- ⓥⓘⓢⓝ 1.1 Use weights, measures, measurement scales, and money
- ⓥⓘⓢⓝ 1.2 Apply principles of comparison shopping in the selection of goods and services
- ⓥⓘⓢⓝ 1.3 Understand methods and procedures used to purchase goods and services
- ⓥⓘⓢⓝ 1.4 Understand methods and procedures to obtain housing and services and related maintenance
- ⓥⓘⓢⓝ 1.5 Apply principles of budgeting in the management of money
- ⓥⓘⓢⓝ 1.6 Understand consumer protection laws and resources
- ⓥⓘⓢⓝ 1.7 Understand procedures for the care, maintenance, and use of personal possessions
- ⓥⓘⓢⓝ 1.8 Use banking and financial services in the community
- ⓥⓘⓢⓝ 1.9 Understand methods and procedures for the purchase and maintenance of an automobile and interpret driving regulations
- ⓥⓘⓢⓝ 1.10 Other (specify) _____

2. COMMUNITY RESOURCES

- ⓥⓘⓢⓝ 2.1 Use the telephone and telephone book
- ⓥⓘⓢⓝ 2.2 Identify how to locate and use various types of transportation and interpret travel information
- ⓥⓘⓢⓝ 2.3 Understand concepts of time and weather
- ⓥⓘⓢⓝ 2.4 Use the services provided by the Post Office
- ⓥⓘⓢⓝ 2.5 Use community agencies and services
- ⓥⓘⓢⓝ 2.6 Use leisure time resources and facilities
- ⓥⓘⓢⓝ 2.7 Understand aspects of society and culture (information on social groups, religion, the arts)
- ⓥⓘⓢⓝ 2.8 Other (specify) _____

3. HEALTH

Ⓥ Ⓘ Ⓢ Ⓝ 3.1 Understand common ailments and seek appropriate medical assistance
Ⓥ Ⓘ Ⓢ Ⓝ 3.2 Understand medical and dental forms and related information
Ⓥ Ⓘ Ⓢ Ⓝ 3.3 Understand how to select and use medications
Ⓥ Ⓘ Ⓢ Ⓝ 3.4 Understand basic health and safety procedures
Ⓥ Ⓘ Ⓢ Ⓝ 3.5 Understand basic principles of health maintenance
Ⓥ Ⓘ Ⓢ Ⓝ 3.6 Other (specify)_____

4. EMPLOYMENT

Ⓥ Ⓘ Ⓢ Ⓝ 4.1 Understand basic principles of getting a job (e.g., resume, job search, interviews, and skills assessment)
Ⓥ Ⓘ Ⓢ Ⓝ 4.2 Understand wages, benefits, and concepts of employee organizations
Ⓥ Ⓘ Ⓢ Ⓝ 4.3 Understand safety standards and procedures in training programs and in the workplace
Ⓥ Ⓘ Ⓢ Ⓝ 4.4 Understand concepts and materials related to job performance and training (for success on the job)
Ⓥ Ⓘ Ⓢ Ⓝ 4.5 Effectively utilize common workplace technology and systems (computer, fax, office equipment)
Ⓥ Ⓘ Ⓢ Ⓝ 4.6 Communicate effectively in the workplace (i.e., written and oral communication skills)
Ⓥ Ⓘ Ⓢ Ⓝ 4.7 Effectively manage workplace resources (financial, informational and human resources)
Ⓥ Ⓘ Ⓢ Ⓝ 4.8 Demonstrate effectiveness in working with other people
Ⓥ Ⓘ Ⓢ Ⓝ 4.9 Understand how social, organizational, and technological systems work and operate effectively within them
Ⓥ Ⓘ Ⓢ Ⓝ 4.10 Other (specify)

5. GOVERNMENT AND LAW

Ⓥ Ⓘ Ⓢ Ⓝ 5.1 Understand voting and the political process
Ⓥ Ⓘ Ⓢ Ⓝ 5.2 Understand historical and geographical information
Ⓥ Ⓘ Ⓢ Ⓝ 5.3 Understand an individual's legal rights and responsibilities and procedures for obtaining legal advice
Ⓥ Ⓘ Ⓢ Ⓝ 5.4 Understand principles of taxation
Ⓥ Ⓘ Ⓢ Ⓝ 5.5 Understand governmental activities
Ⓥ Ⓘ Ⓢ Ⓝ 5.6 Understand civic responsibilities and activities (e.g., solve community problems)
Ⓥ Ⓘ Ⓢ Ⓝ 5.7 Understand environmental and science related issues
Ⓥ Ⓘ Ⓢ Ⓝ 5.8 Understand concepts of economics and economic systems
Ⓥ Ⓘ Ⓢ Ⓝ 5.9 Other (specify)_____

6. COMPUTATION

Ⓥ Ⓘ Ⓢ Ⓝ 6.1 Compute using whole numbers
Ⓥ Ⓘ Ⓢ Ⓝ 6.2 Compute using decimal fractions
Ⓥ Ⓘ Ⓢ Ⓝ 6.3 Compute using fractions
Ⓥ Ⓘ Ⓢ Ⓝ 6.4 Compute with percents, rate, ratio, or proportion
Ⓥ Ⓘ Ⓢ Ⓝ 6.5 Use expressions, equations, or formulas
Ⓥ Ⓘ Ⓢ Ⓝ 6.6 Measure (i.e., measure area, volume, linear dimensions)
Ⓥ Ⓘ Ⓢ Ⓝ 6.7 Interpret data from graphs or compute averages
Ⓥ Ⓘ Ⓢ Ⓟ 6.8 Use statistics and probability
Ⓥ Ⓘ Ⓢ Ⓝ 6.9 Use estimation and mental arithmetic
Ⓥ Ⓘ Ⓢ Ⓝ 6.10 Other (specify)_____

7. LEARNING TO LEARN

Ⓥ Ⓘ Ⓢ Ⓝ 7.1 Identify or practice effective organizational and time management skills in accomplishing goals
Ⓥ Ⓘ Ⓢ Ⓝ 7.2 Demonstrate ability to use thinking skills
Ⓥ Ⓘ Ⓢ Ⓝ 7.3 Demonstrate ability to use problem solving skills
Ⓥ Ⓘ Ⓢ Ⓝ 7.4 Demonstrate study skills
Ⓥ Ⓘ Ⓢ Ⓝ 7.5 Understand aspects of and approaches to effective personal management
Ⓥ Ⓘ Ⓢ Ⓝ 7.6 Other (specify)_____

SECTION II

INDICATE the top four priority competency areas for adult learners in your program, agency, or institution.
Please mark only four areas from the eight listed below. Please use the following scale:

① First Priority, ② Second Priority, ③ Third Priority, ④ Fourth Priority.

RATING SCALE	COMPETENCY AREAS	RATING SCALE	COMPETENCY AREAS
① ② ③ ④	0. BASIC COMMUNICATION	① ② ③ ④	4. EMPLOYMENT
① ② ③ ④	1. CONSUMER ECONOMICS	① ② ③ ④	5. GOVERNMENT AND LAW
① ② ③ ④	2. COMMUNITY RESOURCES	① ② ③ ④	6. COMPUTATION
① ② ③ ④	3. HEALTH	① ② ③ ④	7. LEARNING TO LEARN

Appendix B : Overview of CASAS

The Comprehensive Adult Student Assessment System (CASAS) is a non-profit organization that provides learner-centered curriculum management, assessment, and evaluation systems to education and training programs in the public and private sectors. The CASAS system is used extensively throughout the country in programs such as:

- Adult Basic Education
- English as a Second Language
- Employment preparation
- Workplace literacy
- Job Training Partnership Act (JTPA)
- Welfare reform (JOBS)
- Corrections
- Family learning
- Special education
- Secondary level programs

CASAS is the most widely used system for assessing the basic skills of adults within a functional context. CASAS was established more than a decade ago by a consortium of agencies to provide an education and assessment system relevant to the functional life skills needs of adults in our multicultural society. CASAS has been validated and approved by the U.S. Department of Education, National Diffusion Network, as an exemplary program in the area of adult literacy.

As part of the 1993 revalidation process by the U.S. Department of Education Program Effectiveness Panel, CASAS submitted data documenting its effectiveness for both learners and programs. The findings showed that learners enrolled in adult and alternative education programs that have implemented key elements of CASAS (1) demonstrate significant learning gains; (2) demonstrate increased hours of participation; and (3) achieve increased goal attainment.

This unique system includes more than 80 standardized assessment instruments. Assessment can also be customized to measure specific competencies. Instructors can use the system to place learners in programs, diagnose learners' instructional needs, monitor progress, and certify mastery of functional basic skills. A variety of assessment instruments measure functional reading, math, listening, speaking, and higher order thinking skills in everyday adult life and work contexts. Assessment has been validated with both native and non-native speakers of English.

Key components of the system are:

- the *CASAS Competency List*
- CASAS assessment instruments
- the *CASAS Curriculum Materials Guide*
- training
- implementation guides

All assessment is linked to competencies and instructional materials that focus on learners' goals. Results from most CASAS tests are reported as scaled scores that relate to a range of skill levels from beginning literacy to high school completion. Identification of these levels is based on assessment data gathered over a period of 12 years from more than two million adult learners.

Professional development activities are an integral component of the CASAS system. Training and development workshops enable programs to maximize their use of CASAS. The CASAS National Summer Institute, held each year in June, provides an opportunity for adult education practitioners from throughout the country to attend interactive workshops, hands-on training sessions, and forum discussions.

CASAS certified trainers located throughout the country assist educational agencies, community-based organizations, and business and industry. Trainers help to identify and design appropriate training and select and utilize standardized performance-based and multiple-choice CASAS assessment.

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Appendix C: CASAS Competencies

Section 1: CASAS Competencies as Used on the Survey
Section 2: CASAS Competency List
Section 3: CASAS/SCANS Correlation
Section 4: SCANS Competencies

SECTION 1. CASAS COMPETENCIES AS USED ON THE SURVEY

The *CASAS Competency List* contains more than 300 discrete competency statements which identify, in detail, the basic skills needed by adults in daily life situations and on the job. The 300 discrete competency statements are grouped into nine general *content areas* and are categorized within *competency areas*. The shaded area below indicates the parts of the *CASAS Competency List* used on this survey.

Table C.1 - CASAS Competencies as Used on the Survey

CASAS CONTENT AREA:	4.	Employment
CASAS COMPETENCY AREA:	4.1	Understand basic principles of getting a job
CASAS DISCRETE COMPETENCY STATEMENT:	4.1.1	Interpret governmental forms related to seeking work, such as applications for Social Security
	4.1.2	Follow procedures for applying for a job, including interpreting and completing job applications, résumés, and letters of application

To keep the survey brief, it was decided to use the 55 CASAS *competency areas*, not the 300 discrete CASAS *competency statements*. *(See Appendix C, Section 2.)* It was felt that this provided an adequate degree of specificity for survey purposes. However, the terminology on the survey form is different from that used in the *CASAS Competency List*: CASAS *content areas* are termed *competency areas* on the survey, and CASAS *competency areas* are called *competency statements* on the survey.

SECTION 2.   CASAS COMPETENCY LIST

0.   Basic Communication

0.1   Communicate in interpersonal interactions
    0.1.1   Identify or use appropriate non-verbal behavior in a variety of situations
            (e.g., handshaking)
    0.1.2   Identify or use appropriate language for informational purposes (e.g., to
            identify, describe, ask for information, state needs, command, agree or
            disagree, ask permission)
    0.1.3   Identify or use appropriate language to influence or persuade (e.g., to caution,
            request, advise, persuade, negotiate)
    0.1.4   Identify or use appropriate language in general social situations (e.g., to greet,
            introduce, thank, apologize, compliment, express pleasure or regret)
    0.1.5   Identify or use appropriate classroom behavior
    0.1.6   Clarify or request clarification

0.2   Communicate regarding personal information
    0.2.1   Respond appropriately to common personal information questions
    0.2.2   Complete a personal information form
    0.2.3   Interpret or write a personal note, invitation, or letter
    0.2.4   Converse about daily and leisure activities and personal interests

1.   Consumer Economics

1.1   Use weights, measures, measurement scales, and money
    1.1.1   Interpret recipes
    1.1.2   Use the metric system (see also 1.1.4, 6.6.1, 6.6.2, 6.6.3, 6.6.4)
    1.1.3   Interpret maps and graphs (see also 1.9.4, 2.2.1, 2.2.5)
    1.1.4   Select, compute, or interpret appropriate standard measurement for length,
            width, perimeter, area, volume, height, or weight (see also 1.1.2, 6.6.1, 6.6.2,
            6.6.3, 6.6.4, 6.6.5)
    1.1.5   Interpret temperatures (see also 6.6.4)
    1.1.6   Count, convert, and use coins and currency, and recognize symbols such as ($)
            and (.) (see also 6.1.1, 6.1.2, 6.1.3, 6.1.4, 6.1.5)
    1.1.7   Identify product containers and interpret weight and volume
    1.1.8   Compute averages (see also 6.7.5)
    1.1.9   Interpret clothing and pattern sizes and use height and weight tables

**1.2   Apply principles of comparison shopping in the selection of goods and
       services**
    1.2.1   Interpret advertisements, labels, charts, and price tags in selecting goods and
            services
    1.2.2   Compare price or quality to determine the best buys for goods and services
    1.2.3   Compute discounts (see also 6.4.1)
    1.2.4   Compute unit pricing
    1.2.5   Interpret letters, articles, and information about consumer-related topics

1.3   Understand methods and procedures used to purchase goods and services
    1.3.1   Compare different methods used to purchase goods and services
    1.3.2   Interpret credit applications and recognize how to use and maintain credit

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1.3.3 Identify or use various methods to purchase goods and services, and make returns and exchanges
1.3.4 Use catalogs, order forms, and related information to purchase goods and services
1.3.5 Use coupons to purchase goods and services
1.3.6 Use coin-operated machines
1.3.7 Interpret information or directions to locate merchandise (see also 2.5.4)
1.3.8 Identify common food items
1.3.9 Identify common articles of clothing

1.4 **Understand methods and procedures to obtain housing and related services**
1.4.1 Identify different kinds of housing, areas of the home, and common household items
1.4.2 Select appropriate housing by interpreting classified ads, signs, and other information
1.4.3 Interpret lease and rental agreements
1.4.4 Interpret information to obtain, maintain, or cancel housing utilities
1.4.5 Interpret information about tenant and landlord rights
1.4.6 Interpret information about housing loans and home-related insurance
1.4.7 Interpret information about home maintenance, and communicate housing problems to a landlord (see also 1.7.4)
1.4.8 Recognize home theft and fire prevention measures

1.5 **Apply principles of budgeting in the management of money**
1.5.1 Interpret information about personal and family budgets
1.5.2 Plan for major purchases (see also 1.5.1)
1.5.3 Interpret bills (see also 2.1.4)

1.6 **Understand consumer protection measures**
1.6.1 Interpret food packaging labels (see also 1.2.1, 3.5.1)
1.6.2 Identify consumer protection resources available when confronted with fraudulent practices
1.6.3 Identify procedures the consumer can follow if merchandise or service is unsatisfactory
1.6.4 Check sales receipts

1.7 **Understand procedures for the care, maintenance, and use of personal possessions**
1.7.1 Interpret product guarantees and warranties
1.7.2 Interpret clothing care labels
1.7.3 Interpret operating instructions, directions, or labels for consumer products (see also 3.4.1)
1.7.4 Interpret maintenance procedures for household appliances and personal possessions
1.7.5 Interpret information to obtain repairs

1.8 **Use banking and financial services in the community**
1.8.1 Demonstrate the use of savings and checking accounts, including using an ATM
1.8.2 Interpret the procedures and forms associated with banking services, including writing checks
1.8.3 Interpret interest or interest-earning savings plans
1.8.4 Interpret information about the types of loans available through lending institutions
1.8.5 Interpret information on financial agencies and financial planning

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1.9 Understand methods and procedures for the purchase and maintenance of an automobile and interpret driving regulations
1.9.1 Interpret highway and traffic signs (see also 2.2.2)
1.9.2 Identify driving regulations and procedures to obtain a driver's license (see also 2.5.7)
1.9.3 Compute mileage and gasoline consumption
1.9.4 Interpret maps related to driving (see also 1.1.3, 2.2.1, 2.2.5)
1.9.5 Interpret information related to the selection and purchase of a car
1.9.6 Interpret information related to automobile maintenance
1.9.7 Recognize what to do in case of automobile emergencies
1.9.8 Interpret information about automobile insurance

2. Community Resources

2.1 Use the telephone and telephone book
2.1.1 Use the telephone directory and related publications to locate information
2.1.2 Identify emergency numbers and place emergency calls (see also 2.5.1)
2.1.3 Interpret information about time zones (see also 2.3.1)
2.1.4 Interpret telephone billings
2.1.5 Interpret telegram rates and procedures
2.1.6 Interpret information about using a pay telephone
2.1.7 Take and interpret telephone messages, leave messages on answering machines, and interpret recorded messages (see also 4.5.4)
2.1.8 Use the telephone to make and receive routine personal and business calls

2.2 Understand how to locate and use different types of transportation and interpret related travel information
2.2.1 Ask for, give, follow, or clarify directions (see also 1.1.3, 1.9.4, 2.2.5)
2.2.2 Recognize and use signs related to transportation (see also 1.9.1)
2.2.3 Identify or use different types of transportation in the community, and interpret traffic information
2.2.4 Interpret transportation schedules and fares
2.2.5 Use maps relating to travel needs (see also 1.1.3, 1.9.4, 2.2.1)

2.3 Understand concepts of time and weather
2.3.1 Interpret clock time (see also 2.1.3, 6.6.6)
2.3.2 Identify the months of the year and the days of the week
2.3.3 Interpret information about weather conditions

2.4 Use postal services
2.4.1 Address letters and envelopes
2.4.2 Interpret postal rates and types of mailing services
2.4.3 Interpret postal service forms and instructions on returned mail
2.4.4 Purchase stamps and other postal items and services
2.4.5 Interpret procedures for tracing a lost letter or parcel
2.4.6 Interpret a postal money order form

2.5 Use community agencies and services
2.5.1 Locate and utilize services of agencies that provide emergency help
2.5.2 Identify how and when to obtain social and governmental services (e.g., low-income housing, Social Security, Medicare), and how to interact with service providers
2.5.3 Locate medical and health facilities in the community (see also 3.1.3)

2.5.4 Read, interpret, and follow directions found on public signs and building directories (see also 1.3.7)

2.5.5 Locate and use educational services in the community, including interpreting and writing school-related communications

2.5.6 Use library services

2.5.7 Interpret permit and license requirements (see also 1.9.2)

2.5.8 (unassigned)

2.5.9 Identify child care services in the community (see also 3.5.7)

2.6 Use leisure time resources and facilities

2.6.1 Interpret information about recreational and entertainment facilities and activities

2.6.2 Locate information in T.V., movie, and other recreational listings

2.6.3 Interpret information in order to plan for outings and vacations

2.6.4 Interpret and order from restaurant and fast food menus, and compute related costs

2.7 Understand aspects of society and culture

2.7.1 Interpret information about holidays

2.7.2 Interpret information about ethnic groups, cultural groups, and language groups

2.7.3 Interpret information about social issues (see also 2.7.2)

2.7.4 Interpret information about religion

2.7.5 Interpret literary materials such as poetry and literature

2.7.6 Interpret materials related to the arts, such as fine art, music, drama, and film

3. Health

3.1 Understand how to access and utilize the health care system

3.1.1 Describe symptoms of illness, including identifying parts of the body; interpret doctor's directions

3.1.2 Identify information necessary to make or keep medical and dental appointments

3.1.3 Identify and utilize appropriate health care services and facilities, including interacting with providers (see also 2.5.3)

3.2 Understand medical and dental forms and related information

3.2.1 Fill out medical health history forms

3.2.2 Interpret immunization requirements

3.2.3 Interpret information associated with medical, dental, or life insurance

3.2.4 Ask for clarification about medical bills

3.3 Understand how to select and use medications

3.3.1 Identify and use necessary medications (see also 3.3.2, 3.3.3)

3.3.2 Interpret medicine labels (see also 3.3.1, 3.4.1)

3.3.3 Identify the difference between prescription, over-the-counter, and generic medications (see also 3.3.1.)

3.4 Understand basic health and safety procedures

3.4.1 Interpret product label directions and safety warnings (see also 1.7.3, 3.3.2)

3.4.2 Identify safety measures that can prevent accidents and injuries

3.4.3 Interpret procedures for simple first-aid

3.4.4 Interpret information about AIDS and other sexually transmitted diseases (see also 3.1.1)

3.4.5 Recognize problems related to drugs, tobacco, and alcohol and identify where treatment may be obtained

3.5 Understand basic principles of health maintenance
3.5.1 Interpret nutritional and related information listed on food labels (see also 1.6.1)
3.5.2 Select a balanced diet
3.5.3 Interpret food storage information
3.5.4 Identify practices that promote dental health
3.5.5 Identify practices that promote cleanliness and hygiene
3.5.6 Interpret information and identify agencies that assist with family planning (see also 2.5.3, 3.1.3)
3.5.7 Identify child rearing practices and community resources that assist in developing parenting skills (see also 2.5.9)
3.5.8 Identify practices that promote mental well-being
3.5.9 Identify practices that promote physical well-being

4. Employment

4.1 Understand basic principles of getting a job
4.1.1 Interpret governmental forms related to seeking work, such as applications for Social Security (see also 2.5.2)
4.1.2 Follow procedures for applying for a job, including interpreting and completing job applications, résumés, and letters of application
4.1.3 Identify and use sources of information about job opportunities such as job descriptions, job ads, and announcements, and about the workforce and job market
4.1.4 Identify and use information about training opportunities (see also 2.5.5)

4.1.5 Identify procedures involved in interviewing for a job, such as arranging for an interview, acting and dressing appropriately, and selecting appropriate questions and responses
4.1.6 Interpret general work-related vocabulary (e.g., experience, swing shift)
4.1.7 Identify appropriate behavior and attitudes for getting a job
4.1.8 Identify common occupations and the skills and education required for them
4.1.9 Identify procedures for career planning, including self-assessment

4.2 Understand wages, benefits, and concepts of employee organizations
4.2.1 Interpret wages, wage deductions, benefits, and timekeeping forms
4.2.2 Interpret information about employee organizations
4.2.3 Interpret employment contract and union agreements
4.2.4 Interpret employee handbooks, personnel policies, and job manuals

4.3 Understand work-related safety standards and procedures
4.3.1 Interpret safety signs found in the workplace (see also 3.4.1)
4.3.2 Interpret work safety manuals and related information
4.3.3 Identify safe work procedures and common safety equipment, including wearing safe work attire
4.3.4 Report unsafe working conditions and work-related accidents, injuries, and damages

4.4 Understand concepts and materials related to job performance and training
4.4.1 Identify appropriate behavior, attire, attitudes, and social interaction, and other factors that affect job retention and advancement

4.4.2 Identify appropriate skills and education for keeping a job and getting a promotion

4.4.3 Interpret job-i elated signs, charts, diagrams, forms, and procedures, and record information on forms, charts, checklists, etc. (see also 4.2.1, 4.3.1, 4.3.4)

4.4.4 Interpret job responsibilities and performance reviews (see also 4.4.2)

4.4.5 Identify job training needs and set learning goals

4.4.6 Interpret work specifications and quality standards

4.4.7 Demonstrate the ability to apply or transfer skills learned in one job situation to another

4.4.8 Interpret job-related technical information, such as from service manuals and training classes

4.5 Effectively utilize common workplace technology and systems

4.5.1 Identify common tools, equipment, machines, and materials required for one's job

4.5.2 Demonstrate simple keyboarding skills

4.5.3 Demonstrate ability to use a filing system or other ordered system (e.g., coded or numbered)

4.5.4 Demonstrate use of common business machines (see also 2.1.7, 2.1.8)

4.5.5 Demonstrate basic computer skills and use of common software programs, including reading or interpreting computer-generated printouts

4.5.6 Demonstrate ability to select, set up and use tools and machines in order to accomplish a task, while operating within a technological system

4.5.7 Demonstrate ability to identify and resolve problems with machines and to follow proper maintenance procedures

4.6 Communicate effectively in the workplace

4.6.1 Follow, clarify, give, or provide feedback to instructions; give and respond appropriately to criticism

4.6.2 Interpret and write work-related correspondence, including notes, memos, and letters (see also 4.4.3)

4.6.3 Interpret written workplace announcements and notices (see also 4.4.1, 4.4.3)

4.6.4 Report progress on activities, status of assigned tasks, and problems and other situations affecting job completion (see also 4.3.4)

4.6.5 Select and analyze work-related information for a given purpose and communicate it to others orally or in writing

4.7 Effectively manage workplace resources

4.7.1 Interpret or prepare a work-related budget, including projecting costs, keeping detailed records, and tracking status of expenditures and revenue

4.7.2 Identify or demonstrate effective management of material resources, including acquisition, storage, and distribution

4.7.3 Identify or demonstrate effective management of human resources, including assessing skills, making appropriate work assignments, and monitoring performance

4.7.4 Identify, secure, evaluate, process, and/or store information needed to perform tasks or keep records

4.8 Demonstrate effectiveness in working with other people

4.8.1 Demonstrate ability to work cooperatively with others as a member of a team, contributing to team efforts, maximizing the strengths of team members, promoting effective group interaction, and taking personal responsibility for accomplishing goals

4.8.2 Identify ways to learn from others and to help others learn job-related concepts and skills

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4.8.3 Demonstrate effective communication skills in working with customers and clients

4.8.4 Demonstrate initiative and resourcefulness in meeting the needs and solving the problems of customers

4.8.5 Demonstrate leadership skills, including effectively communicating ideas or positions, motivating and respecting others, and responsibly challenging existing policies

4.8.6 Demonstrate negotiation skills in resolving differences, including presenting facts and arguments, recognizing differing points of view, offering options, and making compromises

4.8.7 Identify and use effective approaches to working within a multicultural workforce, including respecting cultural diversity, avoiding stereotypes, and recognizing concerns of members of other ethnic and gender groups

4.9 Understand how social, organizational, and technological systems work, and operate effectively within them

4.9.1 Identify the formal organizational structure of one's work environment

4.9.2 Demonstrate how a system's structures relate to its goals

4.9.3 Identify sources of information and assistance, and access resources within a system

4.9.4 Assess the operation of a system or organization and make recommendations for improvement, including development of new systems

5. Government and Law

5.1 Understand voting and the political process

5.1.1 Identify voter qualifications

5.1.2 Interpret a voter registration form

5.1.3 Interpret a ballot

5.1.4 Interpret information about electoral politics and candidates

5.1.5 Interpret information about special interest groups

5.1.6 Communicate one's opinions on a current issue

5.2 Understand historical and geographical information

5.2.1 Interpret information about U.S. history

5.2.2 Identify or interpret U.S. historical documents

5.2.3 Interpret information about world history

5.2.4 Interpret information about U.S. states, cities, geographical features, and points of interest

5.2.5 Interpret information about world geography

5.3 Understand an individual's legal rights and responsibilities and procedures for obtaining legal advice

5.3.1 Interpret common laws and ordinances, and legal forms and documents

5.3.2 Identify individual legal rights and procedures for obtaining legal advice (see also 5.3.1)

5.3.3 Interpret basic court procedures

5.3.4 Interpret laws affecting door-to-door sales (see 1.6.2)

5.3.5 Interpret information about traffic tickets

5.3.6 Interpret information or identify requirements for establishing residency and/or obtaining citizenship

5.3.7 Identify common infractions and crimes, and legal consequences

5.3.8 Identify procedures for reporting a crime

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5.4 Understand information about taxes
    5.4.1 Interpret income tax forms
    5.4.2 Compute or define sales tax
    5.4.3 Interpret tax tables (see also 5.4.1, 5.4.2)
    5.4.4 Interpret tax information from articles and publications

5.5 Understand governmental activities
    5.5.1 Interpret information about international affairs
    5.5.2 Interpret information about legislative activities
    5.5.3 Interpret information about judicial activities
    5.5.4 Interpret information about executive activities
    5.5.5 Interpret information about military activities
    5.5.6 Interpret information about law enforcement activities
    5.5.7 Interpret information about local policy- making groups
    5.5.8 Identify local, state and federal government leaders

5.6 Understand civic responsibilities and activities
    5.6.1 Interpret information about neighborhood or community problems and their solutions
    5.6.2 Interpret information about civic organizations and public service groups
    5.6.3 Interpret civic responsibilities, such as voting, jury duty, taxes

5.7 Understand environmental and science- related issues
    5.7.1 Interpret information about environmental issues
    5.7.2 Interpret information about energy technology
    5.7.3 Interpret information about earth-related sciences
    5.7.4 Interpret information about new technologies and scientific issues

5.8 Understand concepts of economics
    5.8.1 Interpret economic information and statistics
    5.8.2 Interpret information on economic issues and trends
    5.8.3 Interpret information on world economic systems

6.   Computation

6.0 Demonstrate pre-computation skills
    6.0.1 Identify and classify numeric symbols
    6.0.2 Count and associate numbers with quantities, including recognizing correct number sequencing
    6.0.3 Identify information needed to solve a given problem
    6.0.4 Determine appropriate operation to apply to a given problem
    6.0.5 Demonstrate use of a calculator

6.1 Compute using whole numbers
    6.1.1 Add whole numbers
    6.1.2 Subtract whole numbers
    6.1.3 Multiply whole numbers
    6.1.4 Divide whole numbers
    6.1.5 Perform multiple operations using whole numbers

6.2 Compute using decimal fractions
    6.2.1 Add decimal fractions
    6.2.2 Subtract decimal fractions
    6.2.3 Multiply decimal fractions

6.2.4 Divide decimal fractions
6.2.5 Perform multiple operations using decimal fractions
6.2.6 Convert decimal fractions to common fractions or percents

6.3 Compute using fractions
6.3.1 Add common or mixed fractions
6.3.2 Subtract common or mixed fractions
6.3.3 Multiply common or mixed fractions
6.3.4 Divide common or mixed fractions
6.3.5 Perform multiple operations using common or mixed fractions
6.3.6 Convert common or mixed fractions to decimal fractions or percents
6.3.7 Identify or calculate equivalent fractions

6.4 Compute with percents, rate, ratio, and proportion
6.4.1 Apply a percent to determine amount of discount (see also 1.2.3)
6.4.2 Apply a percent in a context not involving money
6.4.3 Calculate percents
6.4.4 Convert percents to common, mixed, or decimal fractions
6.4.5 Use rate to compute increase or decrease
6.4.6 Compute using ratio or proportion (see also 6.4.5)

6.5 Use expressions, equations, and formulas
6.5.1 Recognize and evaluate simple consumer formulas
6.5.2 Recognize and apply simple geometric formulas
6.5.3 Recognize and apply simple algebraic formulas
6.5.4 Recognize and evaluate logical statements

6.6 Demonstrate measurement skills (see also 1.1)
6.6.1 Convert units of U.S. standard measurement and metric system
(see also 1.1.2, 1.1.4)
6.6.2 Recognize, use, and measure linear dimensions, geometric shapes, or angles
(see also 1.1.2, 1.1.4)
6.6.3 Measure area and volume of geometric shapes (see also 1.1.2, 1.1.4)
6.6.4 Use or interpret measurement instruments, such as rulers, scales, gauges, and
dials (see also 1.1.2, 1.1.4, 1.1.5, 4.3.3, 4.4.3)
6.6.5 Interpret diagrams, illustrations, and scale drawings (see also 1.1.4, 4.4.3)
6.6.6 Calculate with units of time
6.6.7 Solve measurement problems in stipulated situations
6.6.8 Interpret mechanical concepts or spatial relationships
6.6.9 Use or interpret switches and controls

6.7 Interpret data from graphs and compute averages
6.7.1 Interpret data given in a line graph (see also 1.1.3)
6.7.2 Interpret data given in a bar graph (see also 1.1.3)
6.7.3 Interpret data given in a picture graph
6.7.4 Interpret data given in a circle graph (see also 1.1.3)
6.7.5 Compute averages, medians, or modes (see also 1.1.8)

6.8 Use statistics and probability
6.8.1 Interpret statistical information used in news reports and articles
6.8.2 Interpret statements of probability

6.9 Use estimation and mental arithmetic
6.9.1 Use computation short cuts
6.9.2 Estimate answers

7.   Learning to Learn

7.1   Identify or practice effective organizational and time management skills in accomplishing goals
    7.1.1   Identify and prioritize personal, educational, and workplace goals (see also 4.4.5)
    7.1.2   Demonstrate an organized approach to achieving goals, including identifying and prioritizing tasks and setting and following an effective schedule
    7.1.3   Demonstrate personal responsibility and motivation in accomplishing goals
    7.1.4   Establish, maintain, and utilize a physical system of organization, such as notebooks, files, calendars, folders, and checklists (see also 4.5.2)

7.2   Demonstrate ability to use thinking skills
    7.2.1   Identify and paraphrase pertinent information
    7.2.2   Analyze a situation, statement, or process, identifying component elements and causal and part/whole relationships
    7.2.3   Make comparisons, differentiating among, sorting, and classifying items, information, or ideas
    7.2.4   Identify or make inferences through inductive and deductive reasoning to hypothesize, predict, conclude, and synthesize; distinguish fact from opinion, and determine what is mandatory and what is discretionary
    7.2.5   Evaluate a situation, statement, or process, assembling information and providing evidence, making judgments, examining assumptions, and identifying contradictions
    7.2.6   Generate ideas using divergent (brainstorming) and convergent (focus) approaches, and also through creative imagination
    7.2.7   Identify factors involved in making decisions, including considering goals, constraints, and consequences, and weighing alternatives

7.3   Demonstrate ability to use problem solving skills
    7.3.1   Identify a problem and its possible causes
    7.3.2   Devise and implement a solution to an identified problem
    7.3.3   Evaluate the outcome of an implemented solution and suggest modifications to the solution as needed
    7.3.4   Utilize problem solving strategies, such as breaking down the problem into component parts and generating alternative or creative solutions

7.4   Demonstrate study skills
    7.4.1   Identify or utilize effective study strategies
    7.4.2   Take notes or write a summary or an outline
    7.4.3   Identify, utilize, or create devices or processes for remembering information
    7.4.4   Identify or utilize appropriate informational resources (see also 4.9.3)
    7.4.5   Use reference materials, such as dictionaries and encyclopedias
    7.4.6   Use indexes and tables of contents
    7.4.7   Use computer-based or microfiche indexing systems to locate information
    7.4.8   Interpret visual representations, such as symbols, blueprints, flowcharts, and schematics (see also 6.6.5)
    7.4.9   Identify personal learning style
    7.4.10   Identify or utilize test-taking skills

7.5   Understand aspects of and approaches to effective personal management
    7.5.1   Identify personal values, qualities, interests, abilities, and aptitudes

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7.5.2 Identify or use strategies to develop a positive attitude and self-image, and self-esteem
7.5.3 Identify or use strategies to cope with negative feedback
7.5.4 Identify sources of stress, and resources for stress reduction
7.5.5 Identify personal, family, and work responsibilities, and ways to accommodate them and deal with related problems
7.5.6 Identify or use strategies for communicating more successfully
7.5.7 Identify constructive ways of dealing with change, including showing flexibility and adaptability, and updating skills

8. Domestic Skills

8.1 Perform self-care skills
8.1.1 Recognize and/or demonstrate hygiene and grooming skills (see 3.5.5)
8.1.2 Recognize and/or demonstrate dressing skills
8.1.3 Recognize and/or demonstrate dining skills and manners
8.1.4 Recognize and/or demonstrate selection and care of clothing and personal property

8.2 Perform home-care skills
8.2.1 Recognize and/or demonstrate meal and snack preparation tasks and activities (see 1.1.1, 3.5.2)
8.2.2 Recognize and/or demonstrate dishwashing and meal clean-up activities (see 3.5.5)
8.2.3 Recognize and/or demonstrate housekeeping and house cleaning tasks
8.2.4 Recognize and/or demonstrate laundry skills and related clothing-care skills (see 1.7.2, 1.7.3)
8.2.5 Recognize and/or demonstrate yard and garden tasks and activities
8.2.6 Recognize and/or demonstrate general household repair and maintenance (see 1.4.7, 1.7.4)

SECTION 3: CASAS/SCANS CORRELATION

The 1994 *CASAS Competency List* is correlated to the competencies which appear in *Skills and Tasks for Jobs: A SCANS Report for America 2000* by the Secretary's Commission on Achieving Necessary Skills (U.S. Department of Labor 1992). Table C.2 shows the CASAS IABSS Survey *competency statements* (which correspond to *competency areas* on the *CASAS Competency List*) that relate most closely to the SCANS competencies.

Table C.2 - Correlation of CASAS Competencies to SCANS Competencies

CASAS Competency Statement		SCANS Competency	
4.5	Effectively utilize common workplace technology and systems (computer, fax, office equipment)	C8	Uses computers to process information
		C18	Selects technology
		C19	Applies technology to task
		C20	Maintains and troubleshoots technology
4.6	Communicate effectively in the workplace (i.e., written and oral communication skills)	C7	Interprets and communicates information
4.7	Effectively manage workplace resources (financial, informational and human resources)	C2	Allocates money
		C3	Allocates material and facility resources
		C4	Allocates human resources
		C5	Acquires and evaluates information
		C6	Organizes and maintains information
4.8	Demonstrate effectiveness in working with other people	C9	Participates as a member of a team
		C10	Teaches others
		C11	Serves clients/customers
		C12	Exercises leadership
		C13	Negotiates to arrive at a decision
		C14	Works with cultural diversity
		F15	Personal quality: Social
4.9	Understand how social, organizational, and technological systems work, and operate effectively within them	C15	Understands systems
		C16	Monitors and corrects performance
		C17	Improves and designs systems
7.1	Identify or practice effective organizational and time management skills in accomplishing goals	C1	Allocates time
		F13	Personal quality: Responsibility
		F16	Personal quality: Self-management
7.2	Demonstrate ability to use thinking skills	F7	Creative thinking
		F8	Decision making
7.3	Demonstrate ability to use problem solving skills	F9	Problem solving
7.4	Demonstrate study skills	F10	Seeing things in the mind's eye
Inherent throughout CASAS competencies		F1	Basic skills: Reading
		F2	Basic skills: Writing
		F3	Basic skills: Arithmetic
		F5	Basic skills: Listening
		F6	Basic skills: Speaking

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Table C.3 presents the SCANS competencies, organized as they are in the SCANS Report, and indicates the correlation of discrete CASAS competencies to the SCANS competencies. A complete list of SCANS competencies is provided in Section 4 of this appendix.

Table C.3 - Correlation of SCANS Competencies to Discrete CASAS Competencies

SCANS Comp.	SCANS Competency Area	SCANS Competency	CASAS Competency
C1	Resources	Allocates time	7.1.2
C2		Allocates money	4.7.1
C3		Allocates material and facility resources	4.7.2
C4		Allocates human resources	4.7.3
C5	Information	Acquires and evaluates information	4.7.4
C6		Organizes and maintains information	4.7.4
C7		Interprets and communicates information	4.6.5
C8		Uses computers to process information	4.5.5
C9	Interpersonal	Participates as a member of a team	4.8.1
C10		Teaches others	4.8.2
C11		Serves clients/customers	4.8.3, 4.8.4
C12		Exercises leadership	4.8.5
C13		Negotiates to arrive at a decision	4.8.6
C14		Works with cultural diversity	4.8.7
C15	Systems	Understands systems	4.9.1, 4.9.2,
C16		Monitors and corrects performance	4.9.3
C17		Improves and designs systems	4.9.4
			4.9.4
C18	Technology	Selects technology	4.5.6
C19		Applies technology to task	4.5.6
C20		Maintains and troubleshoots technology	4.5.7
F1	Basic Skills	Reading	These skills are
F2		Writing	inherent
F3		Arithmetic	throughout
F5		Listening	CASAS
F6		Speaking	competencies
F7	Thinking Skills	Creative thinking	7.2.6
F8		Decision making	7.2.7
F9		Problem solving	7.3 (all)
F10		Seeing things in the mind's eye	7.4.8
F13	Personal Qualities	Responsibility	7.1.3
F15		Social	4.8.1, 4.8.3
F16		Self-management	7.1.1, 7.1.3

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SECTION 4:   SCANS COMPETENCIES

The SCANS competencies on the following pages are taken from Table 2-1 in *Skills and Tasks for Jobs: A SCANS Report for America 2000* by the Secretary's Commission on Achieving Necessary Skills (U.S. Department of Labor 1992).

Table 2-1. Definitions of Competencies and Foundation Skills

Competencies

Resources

C1 Allocates Time - Selects relevant, goal-related activities, ranks them in order of importance, allocates time to activities, and understands, prepares, and follows schedules. Competent performance in managing time includes properly identifying tasks to be completed; ranking tasks in order of importance; developing and following an effective, workable schedule based on accurate estimates of such things as importance of tasks, time to complete tasks, time available for completion, and task deadlines; avoiding wasting time; and accurately evaluating and adjusting a schedule.

C2 Allocates Money - Uses or prepares budgets, including making cost and revenue forecasts, keeps detailed records to track budget performance, and makes appropriate adjustments. Competent performance in managing money includes accurately preparing and using a budget according to a consistent and orderly accounting method; accurately calculating future budgetary needs based on projected costs and revenues; accurately tracking the extent to which actual costs and revenues differ from the estimated budget, and taking appropriate and effective actions.

C3 Allocates Material and Facility Resources - Acquires, stores, and distributes materials, supplies, parts, equipment, space, or final products in order to make the best use of them. Competent performance in managing material and facility resources includes carefully planning the steps involved in the acquisition, storage, and distribution of resources; safely and efficiently acquiring, transporting or storing them; maintaining them in good condition; and distributing them to the end user.

C4 Allocates Human Resources - Assesses knowledge and skills and distributes work accordingly, evaluates performance and provides feedback. Competent performance in managing human resources includes accurately assessing peoples' knowledge, skills, abilities, and potential; identifying present and future workload; making effective matches between individual talents and workload; and actively monitoring performance and providing feedback.

Information

C5 Acquires and Evaluates Information - Identifies need for data, obtains them from existing sources or creates them, and evaluates their relevance and accuracy. Competently performing the tasks of acquiring data and evaluating information includes analytic questions to determine specific information needs; selecting possible information and evaluating its appropriateness; and determining when new information must be created.

C6   Organizes and Maintains Information - Organizes, processes, and maintains written or computerized records and other forms of information in a systematic fashion. Competently performing the tasks of organizing and maintaining information includes understanding and organizing information from computer, visual, oral and physical sources in readily accessible formats, such as computerized data bases, spreadsheets, microfiche, video disks, paper files, etc.; when necessary, transforming data into different formats in order to organize them by the application of various methods such as sorting, classifying, or more formal methods.

C7   Interprets and Communicates Information - Selects and analyzes information and communicates the results to others using oral, written, graphic, pictorial, or multi-media methods. Competently performing the tasks of communicating and interpreting information to others includes determining information to be communicated; identifying the best methods to present information (e.g., overheads, handouts); if necessary, converting to desired format and conveying information to others through a variety of means including oral presentation, written communication, etc.

C8   Uses Computers to Process Information - Employs computers to acquire, organize, analyze, and communicate information. Competently using computers to process information includes entering, modifying, retrieving, storing, and verifying data and other information; choosing format for display (e.g., line graphs, bar graphs, tables, pie charts, narrative); and ensuring the accurate conversion of information into the chosen format.

Interpersonal

C9   Participates as a Member of a Team - Works cooperatively with others and contributes to group with ideas, suggestions, and effort. Demonstrating competence in participating as a member of a team includes doing own share of tasks necessary to complete a project; encouraging team members by listening and responding appropriately to their contributions; building on individual team members' strengths; resolving differences for the benefit of the team; taking personal responsibility for accomplishing goals; and responsibly challenging existing procedures, policies, or authorities.

C10   Teaches Others - Helps others learn. Demonstrating competence in teaching others includes helping others to apply related concepts and theories to task through coaching or other means; identifying training needs; conveying job information to allow others to see its applicability and relevance to tasks; and assessing performance and providing constructive feedback/reinforcement.

C11   Serves Clients/Customers - Works and communicates with clients and customers to satisfy their expectations. Demonstrating competence in serving clients and customers includes actively listening to customers to avoid misunderstandings and identifying needs; communicating in a positive manner especially when handling complaints or conflict; efficiently obtaining additional resources to satisfy client needs.

C12 **Exercises Leadership** - Communicates thoughts, feelings, and ideas to justify a position, encourages, persuades, convinces, or otherwise motivates an individual or groups, including responsibly challenging existing procedures, policies, or authority. Demonstrating competence in exercising leadership includes making positive use of the rules/values followed by others; justifying a position logically and appropriately; establishing credibility through competence and integrity; taking minority viewpoints into consideration.

C13 **Negotiates to Arrive at a Decision** - Works toward an agreement that may involve exchanging specific resources or resolving divergent interests. Demonstrating competence in negotiating to arrive at a decision involves researching opposition and the history of the conflict; setting realistic and attainable goals; presenting facts and arguments; listening to and reflecting on what has been said; clarifying problems and resolving conflicts; adjusting quickly to new facts/ideas; proposing and examining possible options; and making reasonable compromises.

C14 **Works with Cultural Diversity** - Works well with men and women and with a variety of ethnic, social, or educational backgrounds. Demonstrating competence in working with cultural diversity involves understanding one's own culture and those of others and how they differ; respecting the rights of others while helping them make cultural adjustments where necessary; basing impressions on individual performance, not on stereotypes; understanding concerns of members of other ethnic and gender groups.

Systems

C15 **Understands Systems** - Knows how social, organizational, and technological systems work and operates effectively within them. Demonstrating competence in understanding systems involves knowing how a system's structures relate to goals; responding to the demands of the system/organization; knowing the right people to ask for information and where to get resources; and functioning within the formal and informal codes of the social/organizational system.

C16 **Monitors and Corrects Performance** - Distinguishes trends, predicts impact of actions on system operations, diagnoses deviations in the function of a system/organization, and takes necessary action to correct performance. Demonstrating competence in monitoring and correcting performance includes identifying trends and gathering needed information about how the system is intended to function; detecting deviations from system's intended purpose; troubleshooting the system: making changes to the system to rectify system functioning and to ensure quality of product.

C17 **Improves and Designs Systems** - Makes suggestions to modify existing systems to improve products or services, and develops new or alternative systems. Demonstrating competence in improving or designing systems involves making suggestions for improving the functioning of the system/organization; recommending alternative system designs based on relevant feedback; and responsibly challenging the status quo to benefit the larger system.

Technology

C18   Selects Technology - Judges which set of procedures, tools, or machines, including computers and their programs, will produce the desired results. Demonstrating competence in selecting technology includes determining desired outcomes and applicable constraints; visualizing the necessary methods and applicable technology; evaluating specifications; and judging which machine or tool will produce the results.

C19   Applies Technology to Task - Understands the overall intent and the proper procedures for setting up and operating machines, including computers and their programming systems. Demonstrating competence in how to apply technology to task includes understanding how different parts of machines interact and how machines interact with broader production systems; on occasion installing machines including computers; setting up machines or systems of machines efficiently to get desired results; accurately interpreting machine output; and detecting errors from program output.

C20   Maintains and Troubleshoots Technology - Prevents, identifies, or solves problems in machines, computers, and other technologies. Demonstrating competence in maintaining and troubleshooting technology includes identifying, understanding, and performing routine preventative maintenance and service on technology; detecting more serious problems; generating workable solutions to correct deviations; and recognizing when to get additional help.

Foundation Skills

Basic Skills

F1   Reading - Locates, understands, and interprets written information in prose and documents -- including manuals, graphs, and schedules -- to perform tasks; learns from text by determining the main idea or essential message; identifies relevant details, facts, and specifications; infers or locates the meaning of unknown or technical vocabulary; judges the accuracy, appropriateness, style, and plausibility of reports, proposals, or theories of other writers.

F2   Writing - Communicates thoughts, ideas, information, and messages in writing; records information completely and accurately; composes and creates documents such as letters, directions, manuals, reports, proposals, graphs, flow charts; uses language, style, organization, and format appropriate to the subject matter, purpose, and audience. Includes supporting documentation and attends to level of detail; checks, edits, and revises for correct information, appropriate emphasis, form, grammar, spelling, and punctuation.

F3   Arithmetic - Performs basic computations; uses basic numerical concepts such as whole numbers and percentages in practical situations; makes reasonable estimates of arithmetic results without a calculator; and uses tables, graphs, diagrams, and charts to obtain or convey quantitative information.

F5   Listening - Receives, attends to, interprets, and responds to verbal messages and other cues such as body language in ways that are appropriate to the purpose; for example, to comprehend, to learn, to critically evaluate, to appreciate, or to support the speaker.

Thinking Skills

F6   Speaking - Organizes ideas and communicates oral messages appropriate to listeners and situations; participates in conversation, discussion, and group presentations; selects an appropriate medium for conveying a message; uses verbal language and other cues such as body language appropriate in style, tone, and level of complexity to the audience and the occasion; speaks clearly and communicates a message; understands and responds to listener feedback; and asks questions when needed.

F7   Creative Thinking - Uses imagination freely, combines ideas or information in new ways, makes connections between seemingly unrelated ideas, and reshapes goals in ways that reveal new possibilities.

F8   Decision Making - Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.

F9.   Problem Solving - Recognizes that a problem exists (i.e., there is a discrepancy between what is and what should or could be); identifies possible reasons for the discrepancy, and devises and implements a plan of action to resolve it. Evaluates and monitors progress and revises plan as indicated by findings.

F10   Seeing Things in the Mind's Eye - Organizes and processes symbols, pictures, graphs, objects or other information; for example, sees a building from a blueprint; a system's operation from schematics; the flow of work activities from narrative descriptions; or the taste of food from reading a recipe.

Personal Qualities

F13   Responsibility - Exerts a high level of effort and perseverance toward goal attainment. Works hard to become excellent at doing tasks by setting high standards, paying attention to details, working well and displaying a high level of concentration even when assigned an unpleasant task. Displays high standards of attendance, punctuality, enthusiasm, vitality, and optimism in approaching and completing tasks.

F15   Social - Demonstrates understanding, friendliness, adaptability, empathy and politeness in new and on-going group settings. Asserts self in familiar and unfamiliar social situations; relates well to others; responds appropriately as the situation requires; takes an interest in what others say and do.

F16   Self-Management - Assesses own knowledge, skills, and abilities accurately; sets well-defined and realistic personal goals; monitors progress toward goal attainment and motivates self through goal achievement; exhibits self-control and responds to feedback unemotionally and non-defensively; is a "self-starter."

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Appendix D: Survey Methodology and Data Analysis

RESPONDENT PROFILE

Survey forms were received from 3,483 respondents. In identifying themselves, respondents could mark on the survey as many program types as they felt they represented. Table D.1 shows the overall distribution of the programs, agencies, and institutions that respondents represented or had involvement with, which includes multiple program type marks. Program types were categorized into five main groups, as described in Chapter Two.

Table D.1
Distribution of All Program Type Responses
by IABSS Respondents, Including Multiple Marks

Category	Program Type	# of times marked
Business & Industry	Business & Industry	899
Employment Service Providers	JTPA SDA/PIC	152
	Dept. of Employment Services	312
	Promise JOBS	157
	JTPA	96
	Other Employment Service Provider	54
Instruction Providers	Community College	413
	Adult Basic Education	372
	English as a Second Language	121
	GED	260
	Alt. High School Program	149
	Adult High School Diploma	47
	Developmental Education	54
	Correctional Institution	55
	Post Secondary School	50
Learners	ABE, ESL, GED Learner	546
Community-based Agencies, Referral Agencies, and Other Agencies (Others)	Dept. of Human Services	115
	Dept. of Education	38
	Div. Vocational Rehabilitation	90
	Dept. of Elder Affairs	102
	Public Library	275
	Area Education Agency	27
	Local School District	80
	Community-based Org.	17
	Homeless Program	30
	Community Education	59
	Adult Advisory Council	43
	Health Care Provider	49
	Other Social Service Provider	54
	Other	91

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TREATMENT OF "OTHER" PROGRAM TYPE RESPONSES

There were 388 "Other" responses in the Program Type section of the survey instrument. These "Other" responses were reviewed to determine whether they could be assigned to one of the existing 25 program type categories printed on the survey or whether it was appropriate to create new categories. It was possible to classify 181 of the "Other" program responses into existing categories. The remaining 207 were placed into four new categories: Other Employment Service Providers (N = 54); Post Secondary Schools (N = 50); Health Care Providers (N = 49); and Other Social Service Providers (N = 54).

TREATMENT OF "OTHER" COMPETENCY STATEMENT RESPONSES

In Section I of the survey, "Competency Statements," there were 797 write-in responses under "Other." Thirty of these responses were disregarded because they were comments that did not relate specifically to competency identification. An additional 80 were disregarded because their meaning was unclear. Most of the remaining 687 responses were reclassified into one of the 55 competencies on the survey form and were included as such in the analysis of survey results. A number of responses dealt with three competencies that did not appear in the survey, but the incidence was insufficient to include them in the analysis. These were: *Demonstrate correct use of English; Solve math problems;* and *Apply math skills to practical situations.*

VALIDITY

One measure of validity related to respondents' interpretation of the survey. The integrity of individual responses was obtained by analyzing the variation among respondents' individual competency ratings. The data were analyzed to determine if a respondent assigned the same rating to 85 percent or more of the competency statements. A lack of variation in ratings was viewed as an indication that the respondent did not apply a level of judgment required for meaningful results or did not understand the survey. This procedure identified 47 survey respondents who were not included in further analysis.

RELIABILITY

The reliability of the survey data was measured with results from Section II of the survey. In Section II, respondents were asked to indicate the top four priority competency areas for adult learners in their program, agency, or institution. The responses to Section II were ranked and compared to the rankings of the competency areas in Section I. Comparisons between Sections I and II for the total population, as well as for each of the five respondent groups, were conducted. In each case the ranks assigned in Section I and Section II were identical (Spearman's rank order correlation = 1.00, p .05).

Appendix E : Data Tables

The tables in this appendix show the distribution of competency rating responses by various respondent groups. The elements described below are contained in each table.

- Total mean, calculated on the basis of the following ratings on a four-point scale:

Rating	Degree of Importance
4	Very important
3	Important
2	Somewhat important
1	Not important

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- Priority Level Ranking, consisting of the combined percentages in the *very important* and *important* categories
- Percentage distributions of responses in the four rating categories (*very important, important, somewhat important, not important*)
- Number of valid survey forms with a rating for each competency

Data are included for all survey respondents (aggregate), the five main respondent groups, as well as key sub samples of survey respondents. The following tables are presented:

Table E.1   Aggregate Survey Results

Table E.2   Business & Industry Survey Results

Table E.3   Employment Service Provider Survey Results

Table E.4   Instruction Provider Survey Results

Table E.5   Learner Survey Results

Table E.6   Other Respondent Survey Results: Community-based Agencies, Referral Agencies, and Other Agencies

Table E.7   Employability Survey Results: Combined Business & Industry and Employment Service Provider Responses

Table E.8   Adult Basic Education Program Survey Results: Combined Instruction Provider and Learner Responses

Table E.9   Public Library Survey Results

Table E.10   JTPA SDA/PIC Survey Results

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Table E.1 - Aggregate Survey Results

Competency Statement	Total Mean	Priority Ranking[†]	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.52						3,469
0.1-Communicate in general interpersonal interactions	3.66		72%	23%	4%	1%	3,458
0.2-Communicate regarding personal information	3.50		62	28	8	2	3,438
0.3-Use language of clarification	3.40		53	35	10	2	3,420
Consumer Economics	2.89						3,471
1.1-Use weights, measurement scales, and money	3.25		46%	38%	12%	4%	3,445
1.2-Apply principles of comparison shopping	2.83		24	44	24	8	3,438
1.3-Understand procedures to purchase goods	2.93		28	44	21	7	3,442
1.4-Understand how to obtain housing & services	2.80		28	38	21	13	3,436
1.5-Apply principles of budgeting	3.16		43	36	15	6	3,441
1.6-Understand consumer protection laws	2.60		16	38	36	10	3,440
1.7-Understand how to care for personal possessions	2.82		22	45	26	7	3,439
1.8-Use banking and financial services	2.89		27	43	23	7	3,435
1.9-Understand procedures for auto maintenance & driving	2.69		23	37	25	15	3,429
Community Resources	2.78						3,475
2.1-Use the telephone and telephone book	3.30		49%	36%	12%	3%	3,459
2.2-Locate and use transportation and travel information	2.75		22	40	28	10	3,438
2.3-Understand concepts of time and weather	2.94		29	43	22	6	3,440
2.4-Use services provided by the post office	2.66		18	39	34	9	3,432
2.5-Use community agencies and services	2.92		30	40	23	7	3,446
2.6-Use leisure time resources and facilities	2.34		10	31	42	17	3,441
2.7-Understand aspects of society and culture	2.50		15	33	39	13	3,434
Health	3.05						3,459
3.1-Understand ailments and seek medical assistance	3.13		41%	38%	15%	6%	3,415
3.2-Understand medical and dental forms	2.70		21	39	28	12	3,401
3.3-Understand how to select and use medications	3.01		40	32	17	11	3,378
3.4-Understand basic health and safety procedures	3.27		46	38	12	4	3,363
3.5-Understand principles of health maintenance	3.10		36	43	16	5	3,303

[†] The Priority Ranking is the sum of the *very important* and *important* percentages.

Table E.1 - Aggregate Survey Results (continued)

Competency Statement	Total Mean	Priority Ranking†	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.25		61%	27%	8%	4%	3,460
4.1-Understand basic principles of getting a job	3.44		40	43	13	4	3,436
4.2-Understand wages, benefits, and employment concepts	3.19		47	37	12	4	3,429
4.3-Understand (workplace) safety procedures	3.27		50	39	8	3	3,418
4.4-Understand job performance concepts & materials	3.36		35	41	19	5	3,420
4.5-Utilize common workplace technology	3.05		65	28	5	2	3,416
4.6-Communicate effectively in the workplace	3.55		32	44	20	4	3,415
4.7-Effectively manage workplace resources	3.04		60	32	6	2	3,405
4.8-Demonstrate effectiveness in working with people	3.49		25	42	26	7	3,411
4.9-Understand social, organizational, & technological systems	2.85						3,399
Government & Law	2.53		23%	38%	27%	12%	3,452
5.1-Understand voting and the political process	2.72		8	31	45	16	3,425
5.2-Understand historical & geographical info	2.31		30	42	22	6	3,422
5.3-Understand an individual's legal rights & responsibilities	2.96		14	37	35	14	3,432
5.4-Understand principles of taxation	2.52		10	35	42	13	3,409
5.5-Understand governmental activities	2.43		13	37	38	12	3,404
5.6-Understand civic responsibilities	2.51		9	33	43	15	3,400
5.7-Understand environmental and science issues	2.37		9	33	43	15	3,397
5.8-Understand economics and economic systems	2.37						3,413
Computation	2.75		55%	32%	10%	3%	3,455
6.1-Compute using whole numbers	3.38		38	35	20	7	3,425
6.2-Compute using decimals	3.03		31	34	26	9	3,420
6.3-Compute using fractions	2.86		31	35	25	9	3,416
6.4-Compute with percents, rate, ratio, and proportion	2.89		14	26	40	20	3,415
6.5-Use expressions, equations, or formulas	2.34		25	35	28	12	3,402
6.6-Measure area, volume, & linear dimensions	2.73		16	32	36	16	3,411
6.7-Interpret data from graphs or compute averages	2.49		10	22	41	27	3,401
6.8-Use statistics and probability	2.15		27	39	25	9	3,408
6.9-Use estimation and mental arithmetic	2.85						3,419
Learning to Learn	3.26		49%	36%	12%	3%	3,454
7.1-Practice organizational & time management skills	3.31		56	36	7	1	3,426
7.2-Demonstrate ability to use thinking skills	3.47		55	36	8	1	3,435
7.3-Use problem solving skills	3.44		31	42	20	7	3,421
7.4-Demonstrate study skills	2.98		36	41	19	4	3,415
7.5-Understand aspects of personal management	3.10						3,409

† The Priority Ranking is the sum of the *very important* and *important* percentages.

Table E.2 - Business and Industry Survey Results

Competency Statement	Total Mean	Priority Ranking	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.49						850
0.1-Communicate in general interpersonal interactions	3.68		72%	24%	4%	<1%	847
0.2-Communicate regarding personal information	3.35		50	37	11	2	843
0.3-Use language of clarification	3.46		56	35	8	1	840
Consumer Economics	2.74						849
1.1-Use weights, measurement scales, and money	3.48		60%	30%	8%	2%	848
1.2-Apply principles of comparison shopping	2.71		23	37	28	12	845
1.3-Understand procedures to purchase goods	2.83		26	39	28	7	845
1.4-Understand how to obtain housing & services	2.27		12	29	32	27	844
1.5-Apply principles of budgeting	2.98		36	35	21	8	844
1.6-Understand consumer protection laws	2.42		14	30	39	17	843
1.7-Understand how to care for personal possessions	2.70		19	42	30	9	843
1.8-Use banking and financial services	2.78		26	38	24	12	839
1.9-Understand procedures for auto maintenance & driving	2.50		17	34	30	19	844
Community Resources	2.49						850
2.1-Use the telephone and telephone book	3.20		45%	34%	16%	5%	850
2.2-Locate and use transportation and travel information	2.38		14	30	35	21	843
2.3-Understand concepts of time and weather	2.84		27	39	25	9	843
2.2-Use services provided by the post office	2.47		16	31	37	16	839
2.5-Use community agencies and services	2.31		10	31	38	21	841
2.6-Use leisure time resources and facilities	1.93		5	17	44	34	843
2.7-Understand aspects of society and culture	2.31		12	28	39	21	843
Health	2.83						844
3.1-Understand ailments and seek medical assistance	2.84		27%	41%	21%	11%	834
3.2-Understand medical and dental forms	2.50		16	36	30	18	831
3.3-Understand how to select and use medications	2.63		24	33	24	19	828
3.4-Understand basic health and safety procedures	3.21		43	39	13	5	822
3.5-Understand principles of health maintenance	2.98		30	44	21	5	790

† The Priority Ranking is the sum of the *very important* and *important* percentages.

Table E2 - Business and Industry Survey Results (continued)

Competency Statement	Total Mean	Priority Ranking[†]	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.32						849
4.1-Understand basic principles of getting a job	3.17		43%	37%	14%	6%	843
4.2-Understand wages, benefits, and employment concepts	3.17		37	44	17	2	844
4.3-Understand (workplace) safety procedures	3.43		57	32	9	2	835
4.4-Understand job performance concepts & materials	3.50		57	36	6	1	841
4.5-Utilize common workplace technology	3.24		45	37	14	4	838
4.6-Communicate effectively in the workplace	3.63		69	26	4	1	834
4.7-Effectively manage workplace resources	3.23		42	40	16	2	834
4.8-Demonstrate effectiveness in working with people	3.64		69	27	3	1	836
4.9-Understand social, organizational, & technological systems	2.92		28	42	25	5	836
Government & Law	2.37						846
5.1-Understand voting and the political process	2.41		17%	30%	30%	23%	841
5.2-Understand historical & geographical info	2.11		6	26	42	26	840
5.3-Understand an individual's legal rights & responsibilities	2.55		15	37	35	13	838
5.4-Understand principles of taxation	2.46		15	33	35	17	834
5.5-Understand governmental activities	2.31		9	32	39	20	832
5.6-Understand civic responsibilities	2.33		10	32	39	19	832
5.7-Understand environmental and science issues	2.34		10	32	41	17	833
5.8-Understand economics and economic systems	2.41		11	34	39	16	837
Computation	2.96						848
6.1-Compute using whole numbers	3.56		64%	29%	6%	1%	838
6.2-Compute using decimals	3.31		52	32	12	4	836
6.3-Compute using fractions	3.09		42	31	20	7	834
6.4-Compute with percents, rate, ratio, and proportion	3.19		45	33	18	4	835
6.5-Use expressions, equations, or formulas	2.54		20	29	37	14	833
6.6-Measure area, volume, & linear dimensions	2.98		37	31	24	8	835
6.7-Interpret data from graphs or compute averages	2.61		22	31	32	15	833
6.8-Use statistics and probability	2.29		15	23	39	23	839
6.9-Use estimation and mental arithmetic	3.05		37	36	22	5	840
Learning to Learn	3.28						848
7.1-Practice organizational & time management skills	3.41		53%	35%	9%	2%	841
7.2-Demonstrate ability to use thinking skills	3.53		59	35	5	1	844
7.3-Use problem solving skills	3.53		61	33	5	1	840
7.4-Demonstrate study skills	2.81		25	40	26	9	836
7.5-Understand aspects of personal management	3.13		38	41	18	3	838

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[†] The Priority Ranking is the sum of the *very important* and *important* percentages.

Table E.3 - Employment Service Provider Survey Results

Competency Statement	Total Mean	Priority Ranking[†]	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.59						550
0.1-Communicate in general interpersonal interactions	3.71		76%	19%	5%	<1%	549
0.2-Communicate regarding personal information	3.66		72	23	4	1	548
0.3-Use language of clarification	3.41		53	37	9	1	548
Consumer Economics	2.78						552
1.1-Use weights, measurement scales, and money	3.02		32%	44%	17%	7%	549
1.2-Apply principles of comparison shopping	2.67		18	44	25	13	551
1.3-Understand procedures to purchase goods	2.75		21	47	19	13	549
1.4-Understand how to obtain housing & services	2.91		29	42	19	10	550
1.5-Apply principles of budgeting	3.08		40	38	14	8	551
1.6-Understand consumer protection laws	2.52		11	39	40	10	550
1.7-Understand how to care for personal possessions	2.65		15	46	29	10	550
1.8-Use banking and financial services	2.82		21	45	28	6	550
1.9-Understand procedures for auto maintenance & driving	2.64		20	38	28	14	544
Community Resources	2.82						552
2.1-Use the telephone and telephone book	3.41		51%	39%	9%	1%	550
2.2-Locate and use transportation and travel information	2.95		27	47	22	4	547
2.3-Understand concepts of time and weather	2.93		28	43	22	7	550
2.2-Use services provided by the post office	2.60		13	41	40	6	549
2.5-Use community agencies and services	3.23		39	48	11	2	549
2.6-Use leisure time resources and facilities	2.18		6	25	49	20	550
2.7-Understand aspects of society and culture	2.41		13	31	41	15	549
Health	2.93						551
3.1-Understand ailments and seek medical assistance	2.99		33%	42%	16%	9%	548
3.2-Understand medical and dental forms	2.55		16	38	31	15	540
3.3-Understand how to select and use medications	2.96		36	36	16	12	542
3.4-Understand basic health and safety procedures	3.13		41	38	15	6	537
3.5-Understand principles of health maintenance	2.96		33	41	17	9	536

[†] The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.3 – Employment Service Provider Survey Results (continued)

Competency Statement	Total Mean	Priority Ranking†	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.42		84%	13%	3%	<1%	550
4.1-Understand basic principles of getting a job	3.81		48	43	8	1	548
4.2-Understand wages, benefits, and employment concepts	3.39		49	40	10	<1	549
4.3-Understand (workplace) safety procedures	3.38		59	34	6	<1	548
4.4-Understand job performance concepts & materials	3.52		40	43	15	2	549
4.5-Utilize common workplace technology	3.22		75	22	3	<1	548
4.6-Communicate effectively in the workplace	3.71		34	47	17	2	548
4.7-Effectively manage workplace resources	3.13		66	28	5	<1	545
4.8-Demonstrate effectiveness in working with people	3.60		32	40	24	4	546
4.9-Understand social, organizational, & technological systems	3.01						540
Government & Law	2.47		22%	38%	29%	11%	551
5.1-Understand voting and the political process	2.71		5	28	51	16	550
5.2-Understand historical & geographical info	2.21		28	47	22	3	550
5.3-Understand an individual's legal rights & responsibilities	3.00		10	36	40	14	551
5.4-Understand principles of taxation	2.41		10	34	47	9	548
5.5-Understand governmental activities	2.43		12	35	41	12	546
5.6-Understand civic responsibilities	2.48		6	28	46	20	547
5.7-Understand environmental and science issues	2.20		6	33	49	12	546
5.8-Understand economics and economic systems	2.32						548
Computation	2.63		51%	35%	11%	3%	550
6.1-Compute using whole numbers	3.35		29	38	26	7	547
6.2-Compute using decimals	2.89		24	37	31	8	548
6.3-Compute using fractions	2.76		22	40	30	8	549
6.4-Compute with percents, rate, ratio, and proportion	2.77		9	22	48	21	548
6.5-Use expressions, equations, or formulas	2.19		18	35	31	16	544
6.6-Measure area, volume, & linear dimensions	2.56		10	31	44	15	547
6.7-Interpret data from graphs or compute averages	2.36		7	18	49	26	546
6.8-Use statistics and probability	2.05		19	43	30	8	546
6.9-Use estimation and mental arithmetic	2.73						549
Learning to Learn	3.30		52%	36%	10%	2%	550
7.1-Practice organizational & time management skills	3.38		56	39	4	1	549
7.2-Demonstrate ability to use thinking skills	3.50		52	41	6	1	549
7.3-Use problem solving skills	3.45		34	43	18	5	548
7.4-Demonstrate study skills	3.07		38	39	18	5	546
7.5-Understand aspects of personal management	3.11						

†The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.4 - Instruction Provider Survey Results

Competency Statement	Total Mean	Priority Ranking†	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.55						681
0.1-Communicate in general interpersonal interactions	3.69	96%	74%	22%	3%	1%	681
0.2-Communicate regarding personal information	3.59	91	69	22	7	2	674
0.3-Use language of clarification	3.36	86	51	35	12	2	669
Consumer Economics	2.98						679
1.1-Use weights, measurement scales, and money	3.31	87%	49%	38%	9%	4%	672
1.2-Apply principles of comparison shopping	2.95	75	26	49	20	5	674
1.3-Understand procedures to purchase goods	3.01	75	31	44	20	5	673
1.4-Understand how to obtain housing & services	3.03	75	35	40	17	8	669
1.5-Apply principles of budgeting	3.23	82	44	38	14	4	673
1.6-Understand consumer protection laws	2.58	54	12	42	38	8	673
1.7-Understand how to care for personal possessions	2.90	71	23	48	24	5	674
1.8-Use banking and financial services	2.96	73	27	46	22	5	671
1.9-Understand procedures for auto maintenance & driving	2.78	65	26	39	23	12	669
Community Resources	2.86						681
2.1-Use the telephone and telephone book	3.29	85%	48%	37%	11%	4%	675
2.2-Locate and use transportation and travel information	2.78	65	21	44	27	8	674
2.3-Understand concepts of time and weather	3.03	78	29	49	18	4	677
2.2-Use services provided by the post office	2.69	59	18	41	34	7	671
2.5-Use community agencies and services	3.05	74	34	40	22	4	675
2.6-Use leisure time resources and facilities	2.58	54	12	42	37	9	673
2.7-Understand aspects of society and culture	2.58	51	14	37	42	7	673
Health	3.17						678
3.1-Understand ailments and seek medical assistance	3.31	86%	48%	38%	12%	2%	668
3.2-Understand medical and dental forms	2.81	66	21	45	28	6	670
3.3-Understand how to select and use medications	3.20	80	46	34	15	5	662
3.4-Understand basic health and safety procedures	3.36	88	51	37	9	3	666
3.5-Understand principles of health maintenance	3.18	84	38	46	13	3	646

† The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.4 - Instruction Provider Survey Results (continued)

Competency Statement	Total Mean	Priority Ranking†	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.17						677
4.1-Understand basic principles of getting a job	3.46		62%	27%	7%	4%	671
4.2-Understand wages, benefits, and employment concepts	3.14		38	43	14	5	671
4.3-Understand (workplace) safety procedures	3.20		43	40	12	5	672
4.4-Understand job performance concepts & materials	3.28		45	42	9	4	670
4.5-Utilize common workplace technology	2.86		27	40	24	9	670
4.6-Communicate effectively in the workplace	3.54		65	27	5	3	672
4.7-Effectively manage workplace resources	2.87		25	44	25	6	666
4.8-Demonstrate effectiveness in working with people	3.43		57	32	8	3	668
4.9-Understand social, organizational, & technological systems	2.72		19	42	30	9	662
Government & Law	2.59						675
5.1-Understand voting and the political process	2.88		26%	42%	25%	7%	669
5.2-Understand historical & geographical info	2.40		7	37	44	12	668
5.3-Understand an individual's legal rights & responsibilities	3.06		32	46	18	4	671
5.4-Understand principles of taxation	2.56		12	43	33	12	666
5.5-Understand governmental activities	2.44		9	37	42	12	666
5.6-Understand civic responsibilities	2.56		14	39	35	12	667
5.7-Understand environmental and science issues	2.43		10	35	44	11	667
5.8-Understand economics and economic systems	2.35		9	32	44	15	670
Computation	2.78						676
6.1-Compute using whole numbers	3.48		63%	26%	8%	3%	670
6.2-Compute using decimals	3.09		43	31	17	9	670
6.3-Compute using fractions	2.90		34	31	25	10	668
6.4-Compute with percents, rate, ratio, and proportion	2.89		33	34	21	12	667
6.5-Use expressions, equations, or formulas	2.36		14	28	38	20	666
6.6-Measure area, volume, & linear dimensions	2.81		28	36	25	11	667
6.7-Interpret data from graphs or compute averages	2.56		18	34	33	15	668
6.8-Use statistics and probability	2.04		8	20	39	32	667
6.9-Use estimation and mental arithmetic	2.85		29	37	23	11	669
Learning to Learn	3.32						677
7.1-Practice organizational & time management skills	3.32		50%	34%	14%	2%	671
7.2-Demonstrate ability to use thinking skills	3.51		59	33	7	<1	674
7.3-Use problem solving skills	3.47		60	29	9	2	670
7.4-Demonstrate study skills	3.15		39	41	15	5	670
7.5-Understand aspects of personal management	3.14		37	43	17	3	669

† The Priority Ranking is the sum of the *very important* and *important* percentages.

Table E.5 - Learner Survey Results

Competency Statement	Total Mean	Priority Ranking†	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.38						504
0.1-Communicate in general interpersonal interactions	3.48		60%	31%	7%	2%	500
0.2-Communicate regarding personal information	3.38		57	28	11	4	499
0.3-Use language of clarification	3.26		46	38	13	3	493
Consumer Economics	3.14						507
1.1-Use weights, measurement scales, and money	3.34		50%	37%	11%	2%	502
1.2-Apply principles of comparison shopping	3.03		29	48	20	3	496
1.3-Understand procedures to purchase goods	3.12		33	48	16	3	499
1.4-Understand how to obtain housing & services	3.17		40	42	15	3	499
1.5-Apply principles of budgeting	3.40		56	31	10	3	499
1.6-Understand consumer protection laws	2.98		31	40	24	5	498
1.7-Understand how to care for personal possessions	3.04		32	43	21	4	499
1.8-Use banking and financial services	3.07		34	42	20	4	498
1.9-Understand procedures for auto maintenance & driving	3.08		39	38	15	8	497
Community Resources	2.88						505
2.1-Use the telephone and telephone book	3.20		45%	34%	17%	4%	503
2.2-Locate and use transportation and travel information	3.00		31	42	24	3	496
2.3-Understand concepts of time and weather	3.04		34	40	22	4	496
2.4-Use services provided by the post office	2.85		24	42	29	5	496
2.5-Use community agencies and services	2.99		28	46	23	3	498
2.6-Use leisure time resources and facilities	2.47		12	35	41	12	496
2.7-Understand aspects of society and culture	2.59		19	33	36	12	495
Health	3.33						505
3.1-Understand ailments and seek medical assistance	3.40		55%	33%	10%	2%	495
3.2-Understand medical and dental forms	3.13		39	39	18	4	491
3.3-Understand how to select and use medications	3.42		60	26	10	4	484
3.4-Understand basic health and safety procedures	3.41		55	34	9	2	482
3.5-Understand principles of health maintenance	3.26		45	38	14	3	496

† The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.5 - Learner Survey Results (continued)

Competency Statement	Total Mean	Priority Ranking[1]	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.24						504
4.1-Understand basic principles of getting a job	3.57		69%	22%	5%	4%	502
4.2-Understand wages, benefits, and employment concepts	3.34		53	33	8	6	497
4.3-Understand (workplace) safety procedures	3.36		55	30	10	5	497
4.4-Understand job performance concepts & materials	3.36		52	36	8	4	496
4.5-Utilize common workplace technology	2.96		31	40	23	6	494
4.6-Communicate effectively in the workplace	3.40		55	33	9	3	495
4.7-Effectively manage workplace resources	2.99		30	43	21	6	491
4.8-Demonstrate effectiveness in working with people	3.32		48	40	9	3	494
4.9-Understand social, organizational, & technological systems	2.85		24	45	23	8	495
Government & Law	2.78						502
5.1-Understand voting and the political process	2.96		31%	40%	22%	7%	496
5.2-Understand historical & geographical info	2.57		15	36	39	10	496
5.3-Understand an individual's legal rights & responsibilities	3.35		51	35	11	3	500
5.4-Understand principles of taxation	2.89		28	41	24	7	495
5.5-Understand governmental activities	2.63		17	37	36	10	497
5.6-Understand civic responsibilities	2.66		16	42	34	8	495
5.7-Understand environmental and science issues	2.58		13	41	36	10	492
5.8-Understand economics and economic systems	2.59		16	39	33	12	496
Computation	2.87						504
6.1-Compute using whole numbers	3.27		48%	35%	13%	4%	500
6.2-Compute using decimals	3.06		38	36	19	7	497
6.3-Compute using fractions	2.97		33	37	23	7	498
6.4-Compute with percents, rate, ratio, and proportion	2.95		32	38	22	8	498
6.5-Use expressions, equations, or formulas	2.59		22	31	33	14	496
6.6-Measure area, volume, & linear dimensions	2.87		29	37	26	8	497
6.7-Interpret data from graphs or compute averages	2.73		23	38	28	11	489
6.8-Use statistics and probability	2.46		16	32	33	19	494
6.9-Use estimation and mental arithmetic	2.96		32	39	21	8	496
Learning to Learn	3.24						502
7.1-Practice organizational & time management skills	3.22		45%	35%	17%	3%	496
7.2-Demonstrate ability to use thinking skills	3.37		50	39	10	1	498
7.3-Use problem solving skills	3.34		48	39	11	2	496
7.4-Demonstrate study skills	3.15		39	40	17	3	495
7.5-Understand aspects of personal management	3.14		39	40	17	4	492

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1. The Priority Ranking is the sum of the *very important* and *important* percentages.

Table E.6 - Other Respondent Survey Results: Community-based Agencies, Referral Agencies, and Other Agencies

Competency Statement	Total Mean	Priority Ranking[†]	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.56						826
0.1-Communicate in general interpersonal interactions	3.68		73%	22%	4%	1%	853
0.2-Communicate regarding personal information	3.55		65	26	8	1	846
0.3-Use language of clarification	3.42		55	34	10	1	843
Consumer Economics	2.88						856
1.1-Use weights, measurement scales, and money	3.08		35%	42%	18%	5%	847
1.2-Apply principles of comparison shopping	2.86		24	45	24	7	845
1.3-Understand procedures to purchase goods	2.96		28	46	20	6	848
1.4-Understand how to obtain housing & services	2.87		29	40	21	10	847
1.5-Apply principles of budgeting	3.17		43	38	13	6	847
1.6-Understand consumer protection laws and resources	2.63		15	40	37	8	849
1.7-Understand how to care for personal possessions	2.87		22	48	25	5	846
1.8-Use banking and financial services	2.88		25	45	23	7	849
1.9-Understand procedures for auto maintenance & driving	2.61		19	39	26	16	849
Community Resources	2.91						859
2.1-Use the telephone and telephone book	3.39		53%	35%	10%	2%	854
2.2-Locate and use transportation and travel information	2.82		24	41	27	8	851
2.3-Understand concepts of time and weather	2.93		27	44	23	6	847
2.2-Use services provided by the post office	2.77		22	40	32	6	849
2.5-Use community agencies and services	3.21		42	40	16	2	855
2.6-Use leisure time resources and facilities	2.57		15	36	39	9	852
2.7-Understand aspects of society and culture	2.61		18	34	38	9	847
Health	3.07						853
3.1-Understand ailments and seek medical assistance	3.20		44%	37%	14%	5%	843
3.2-Understand medical and dental forms	2.66		20	38	30	12	842
3.3-Understand how to select and use medications	3.04		41	33	15	11	835
3.4-Understand basic health and safety procedures	3.27		45	40	12	3	830
3.5-Understand principles of health maintenance	3.14		36	45	15	4	813

†The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.6 - Other Respondent Survey Results: Community-based Agencies, Referral Agencies, and Other Agencies (continued)

Competency Statement	Total Mean	Priority Ranking[1]	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.15						853
4.1-Understand basic principles of getting a job	3.38		56%	30%	8%	6%	846
4.2-Understand wages, benefits, and employment concepts	3.05		32	47	14	7	843
4.3-Understand (workplace) safety procedures	3.06		35	43	16	6	840
4.4-Understand job performance concepts & materials	3.18		39	45	11	5	840
4.5-Utilize common workplace technology	2.98		31	42	20	7	842
4.6-Communicate effectively in the workplace	3.46		60	30	7	3	840
4.7-Effectively manage workplace resources	2.98		29	45	21	5	842
4.8-Demonstrate effectiveness in working with people	3.42		55	36	6	3	840
4.9-Understand social, organizational, & technological systems	2.79		24	40	28	8	840
Government & Law	2.52						851
5.1-Understand voting and the political process	2.77		23%	40%	29%	8%	843
5.2-Understand historical & geographical info	2.36		9	29	50	12	842
5.3-Understand an individual's legal rights & responsibilities	3.04		31	45	21	3	846
5.4-Understand principles of taxation	2.40		10	36	39	15	839
5.5-Understand governmental activities	2.42		8	36	46	10	837
5.6-Understand civic responsibilities	2.59		14	39	39	8	834
5.7-Understand environmental and science issues	2.32		8	30	48	14	835
5.8-Understand economics and economic systems	2.25		6	28	50	16	837
Computation	2.54						851
6.1-Compute using whole numbers	3.22		44%	38%	12%	6%	844
6.2-Compute using decimals	2.80		26	38	26	10	843
6.3-Compute using fractions	2.61		19	36	33	12	841
6.4-Compute with percents, rate, ratio, and proportion	2.64		21	35	32	12	841
6.5-Use expressions, equations, or formulas	2.08		7	21	46	26	837
6.6-Measure area, volume, & linear dimensions	2.46		14	35	34	17	839
6.7-Interpret data from graphs or compute averages	2.26		9	29	43	19	839
6.8-Use statistics and probability	2.00		6	20	42	32	837
6.9-Use estimation and mental arithmetic	2.66		20	38	30	12	839
Learning to Learn	3.18						850
7.1-Practice organizational & time management skills	3.23		43%	40%	13%	4%	842
7.2-Demonstrate ability to use thinking skills	3.42		52	38	8	2	843
7.3-Use problem solving skills	3.36		50	38	10	2	840
7.4-Demonstrate study skills	2.87		24	46	22	8	839
7.5-Understand aspects of personal management	2.99		32	41	22	5	837

[1] The Priority Ranking is the sum of the *very important* and *important* percentages.

Table E7 - Employability Survey Results: Combined Business & Industry and Employment Service Provider Responses

Competency Statement	Total Mean	Priority Ranking	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.53						1,400
0.1-Communicate in general interpersonal interactions	3.69		74%	22%	4%	<1%	1,396
0.2-Communicate regarding personal information	3.47		58	32	8	2	1,391
0.3-Use language of clarification	3.44		55	36	8	1	1,388
Consumer Economics	2.76						1,401
1.1-Use weights, measurement scales, and money	3.30		49%	36%	11%	4%	1,397
1.2-Apply principles of comparison shopping	2.69		21	39	27	13	1,396
1.3-Understand procedures to purchase goods	2.80		24	42	24	10	1,394
1.4-Understand how to obtain housing & services	2.52		19	34	27	20	1,394
1.5-Apply principles of budgeting	3.02		37	36	18	9	1,395
1.6-Understand consumer protection laws	2.46		13	34	39	14	1,393
1.7-Understand how to care for personal possessions	2.68		17	43	30	10	1,393
1.8-Use banking and financial services	2.79		24	41	25	10	1,389
1.9-Understand procedures for auto maintenance & driving	2.56		18	36	29	17	1,388
Community Resources	2.62						1,402
2.1-Use the telephone and telephone book	3.28		48%	36%	13%	3%	1,400
2.2-Locate and use transportation and travel information	2.60		19	37	30	14	1,390
2.3-Understand concepts of time and weather	2.88		28	40	24	8	1,393
2.4-Use services provided by the post office	2.52		15	35	38	12	1,388
2.5-Use community agencies and services	2.67		22	37	28	13	1,390
2.6-Use leisure time resources and facilities	2.03		6	20	46	28	1,393
2.7-Understand aspects of society and culture	2.35		12	29	40	19	1,392
Health	2.87						1,395
3.1-Understand ailments and seek medical assistance	2.90		30%	41%	19%	10%	1,382
3.2-Understand medical and dental forms	2.52		16	37	30	17	1,371
3.3-Understand how to select and use medications	2.76		29	34	21	16	1,370
3.4-Understand basic health and safety procedures	3.18		42	39	14	5	1,359
3.5-Understand principles of health maintenance	2.97		31	43	19	7	1,326

† The Priority Ranking is the sum of the *very important* and *important* percentages.

Table E.7 - Employability Survey Results: Combined Business & Industry and Employment Service Provider Responses (cont.)

Competency Statement	Total Mean	Priority Ranking	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.36						1,399
4.1-Understand basic principles of getting a job	3.42	87%	59%	28%	9%	4%	1,391
4.2-Understand wages, benefits, and employment concepts	3.26	86	42	44	13	1	1,393
4.3-Understand (workplace) safety procedures	3.41	90	54	36	9	1	1,383
4.4-Understand job performance concepts & materials	3.51	93	58	35	6	1	1,390
4.5-Utilize common workplace technology	3.24	83	43	40	14	3	1,386
4.6-Communicate effectively in the workplace	3.66	96	71	25	4	<1	1,382
4.7-Effectively manage workplace resources	3.19	82	39	43	16	2	1,379
4.8-Demonstrate effectiveness in working with people	3.62	95	68	27	4	1	1,382
4.9-Understand social, organizational, & technological systems	2.95	71	30	41	24	5	1,376
Government & Law	2.41						1,397
5.1-Understand voting and the political process	2.53	52%	19%	33%	30%	18%	1,391
5.2-Understand historical & geographical info	2.15	32	5	27	46	22	1,396
5.3-Understand an individual's legal rights & responsibilities	2.73	61	20	41	30	9	1,389
5.4-Understand principles of taxation	2.44	47	13	34	37	16	1,382
5.5-Understand governmental activities	2.36	42	10	32	42	16	1,378
5.6-Understand civic responsibilities	2.39	44	11	33	40	16	1,379
5.7-Understand environmental and science issues	2.29	39	8	31	43	18	1,379
5.8-Understand economics and economic systems	2.37	42	9	33	43	15	1,385
Computation	2.83						1,398
6.1-Compute using whole numbers	3.47	90%	59%	31%	8%	2%	1,385
6.2-Compute using decimals	3.14	77	43	34	17	6	1,384
6.3-Compute using fractions	2.96	68	35	33	24	8	1,383
6.4-Compute with percents, rate, ratio, and proportion	3.02	72	36	36	23	5	1,383
6.5-Use expressions, equations, or formulas	2.40	42	16	26	41	17	1,377
6.6-Measure area, volume, & linear dimensions	2.82	63	30	33	26	11	1,382
6.7-Interpret data from graphs or compute averages	2.51	48	17	31	37	15	1,379
6.8-Use statistics and probability	2.19	32	11	21	43	25	1,385
6.9-Use estimation and mental arithmetic	2.93	69	30	39	25	6	1,389
Learning to Learn	3.29						1,398
7.1-Practice organizational & time management skills	3.40	89%	53%	36%	9%	2%	1,390
7.2-Demonstrate ability to use thinking skills	3.52	95	58	37	4	1	1,393
7.3-Use problem solving skills	3.50	94	58	36	5	1	1,388
7.4-Demonstrate study skills	2.91	70	29	41	23	7	1,384
7.5-Understand aspects of personal management	3.12	78	38	40	18	4	1,384

†The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.8 - Adult Basic Education Program Survey Results: Combined Instruction Provider and Learner Responses

Competency Statement	Total Mean	Priority Ranking†	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.48						1185
0.1-Communicate in general interpersonal interactions	3.60	94%	68%	26%	5%	1%	1181
0.2-Communicate regarding personal information	3.50	89	64	25	9	2	1173
0.3-Use language of clarification	3.32	86	50	36	12	2	1162
Consumer Economics	3.04						1186
1.1-Use weights, measurement scales, and money	3.32	87%	49%	38%	10%	3%	1174
1.2-Apply principles of comparison shopping	2.99	75	27	48	20	5	1170
1.3-Understand procedures to purchase goods	3.06	78	32	46	18	4	1172
1.4-Understand how to obtain housing & services	3.09	78	37	41	16	6	1168
1.5-Apply principles of budgeting	3.30	83	49	34	15	2	1172
1.6-Understand consumer protection laws	2.75	61	20	41	32	7	1171
1.7-Understand how to care for personal possessions	2.96	73	27	46	23	4	1173
1.8-Use banking and financial services	3.01	75	30	45	21	4	1169
1.9-Understand procedures for auto maintenance & driving	2.91	70	32	38	20	10	1166
Community Resources	2.87						1186
2.1-Use the telephone and telephone book	3.25	82%	47%	35%	14%	4%	1178
2.2-Locate and use transportation and travel information	2.87	68	25	43	26	6	1170
2.3-Understand concepts of time and weather	3.03	77	31	46	20	3	1173
2.2-Use services provided by the post office	2.76	62	20	42	32	6	1167
2.5-Use community agencies and services	3.02	75	32	43	22	3	1173
2.6-Use leisure time resources and facilities	2.53	51	12	39	39	10	1169
2.7-Understand aspects of society and culture	2.58	51	16	35	40	9	1168
Health	3.24						1183
3.1-Understand ailments and seek medical assistance	3.35	87%	51%	36%	11%	2%	1163
3.2-Understand medical and dental forms	2.94	72	29	43	24	4	1161
3.3-Understand how to select and use medications	3.29	82	52	30	13	5	1146
3.4-Understand basic health and safety procedures	3.38	89	53	36	9	2	1148
3.5-Understand principles of health maintenance	3.21	84	41	43	13	3	1142

†The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.8 - Adult Basic Education Program Survey Results: Combined Instruction Provider and Learner Responses (continued)

Competency Statement	Total Mean	Priority Ranking	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.20						1181
4.1-Understand basic principles of getting a job	3.51		65%	25%	6%	4%	1173
4.2-Understand wages, benefits, and employment concepts	3.22		45	39	11	5	1168
4.3-Understand (workplace) safety procedures	3.27		48	36	11	5	1169
4.4-Understand job performance concepts & materials	3.31		48	39	9	4	1166
4.5-Utilize common workplace technology	2.90		29	40	23	8	1164
4.6-Communicate effectively in the workplace	3.48		61	30	6	3	1167
4.7-Effectively manage workplace resources	2.92		27	44	23	6	1157
4.8-Demonstrate effectiveness in working with people	3.38		54	35	8	3	1162
4.9-Understand social, organizational, & technological systems	2.78		22	43	27	8	1157
Government & Law	2.67						1171
5.1-Understand voting and the political process	2.92		28%	41%	24%	7%	1165
5.2-Understand historical & geographical info	2.47		11	37	42	10	1164
5.3-Understand an individual's legal rights & responsibilities	3.18		40	42	15	3	1171
5.4-Understand principles of taxation	2.70		19	42	29	10	1161
5.5-Understand governmental activities	2.52		13	37	39	11	1163
5.6-Understand civic responsibilities	2.60		15	40	35	10	1162
5.7-Understand environmental and science issues	2.50		11	38	40	11	1159
5.8-Understand economics and economic systems	2.45		12	35	39	14	1166
Computation	2.82						1180
6.1-Compute using whole numbers	3.39		56%	30%	10%	4%	1170
6.2-Compute using decimals	3.08		41	33	18	8	1167
6.3-Compute using fractions	2.93		35	33	24	8	1166
6.4-Compute with percents, rate, ratio, and proportion	2.91		33	36	22	9	1165
6.5-Use expressions, equations, or formulas	2.46		17	29	36	18	1162
6.6-Measure area, volume, & linear dimensions	2.83		28	37	25	10	1164
6.7-Interpret data from graphs or compute averages	2.63		20	36	31	13	1157
6.8-Use statistics and probability	2.22		11	25	37	27	1161
6.9-Use estimation and mental arithmetic	2.89		30	39	22	9	1165
Learning to Learn	3.29						1179
7.1-Practice organizational & time management skills	3.27		48%	35%	15%	2%	1167
7.2-Demonstrate ability to use thinking skills	3.45		56	35	8	1	1172
7.3-Use problem solving skills	3.42		55	33	10	2	1166
7.4-Demonstrate study skills	3.15		39	41	16	4	1165
7.5-Understand aspects of personal management	3.14		38	42	17	3	1161

† The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.9 - Public Library Survey Results

Competency Statement	Total Mean	Priority Ranking	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.50						273
0.1-Communicate in general interpersonal interactions	3.64		72%	21%	5%	2%	272
0.2-Communicate regarding personal information	3.49		63	26	9	2	270
0.3-Use language of clarification	3.37		55	30	12	3	267
Consumer Economics	2.79						273
1.1-Use weights, measurement scales, and money	3.00		33%	42%	18%	7%	271
1.2-Apply principles of comparison shopping	2.78		23	44	21	12	269
1.3-Understand procedures to purchase goods	2.88		28	41	21	10	270
1.4-Understand how to obtain housing & services	2.59		21	36	24	19	270
1.5-Apply principles of budgeting	3.06		40	36	13	11	270
1.6-Understand consumer protection laws	2.61		14	43	33	10	270
1.7-Understand how to care for personal possessions	2.86		23	45	25	7	269
1.8-Use banking and financial services	2.83		22	47	23	8	270
1.9-Understand procedures for auto maintenance & driving	2.47		18	34	23	25	269
Community Resources	2.92						275
2.1-Use the telephone and telephone book	3.49		61%	29%	7%	3%	271
2.2-Locate and use transportation and travel information	2.58		12	44	34	10	271
2.3-Understand concepts of time and weather	2.83		22	46	25	7	270
2.2-Use services provided by the post office	2.97		29	43	24	4	271
2.5-Use community agencies and services	3.12		35	44	19	2	273
2.6-Use leisure time resources and facilities	2.68		18	40	35	7	271
2.7-Understand aspects of society and culture	2.71		24	30	40	6	271
Health	2.88						273
3.1-Understand ailments and seek medical assistance	2.98		38%	32%	20%	10%	271
3.2-Understand medical and dental forms	2.54		16	39	26	19	269
3.3-Understand how to select and use medications	2.85		37	29	16	18	269
3.4-Understand basic health and safety procedures	3.07		36	42	16	6	269
3.5-Understand principles of health maintenance	2.97		29	45	21	5	268

†The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.9 – Public Library Survey Results (continued)

Competency Statement	Total Mean	Priority Ranking	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.20						273
4.1-Understand basic principles of getting a job	3.40		56%	33%	9%	2%	270
4.2-Understand wages, benefits, and employment concepts	3.09		35	45	15	5	268
4.3-Understand (workplace) safety procedures	3.02		33	42	19	6	269
4.4-Understand job performance concepts & materials	3.17		37	47	12	4	270
4.5-Utilize common workplace technology	3.26		42	45	10	3	267
4.6-Communicate effectively in the workplace	3.52		62	31	4	3	268
4.7-Effectively manage workplace resources	3.12		35	46	16	3	270
4.8-Demonstrate effectiveness in working with people	3.36		50	41	6	3	270
4.9-Understand social, organizational, & technological systems	2.85		24	44	26	6	267
Government & Law	2.58						271
5.1-Understand voting and the political process	2.83		24%	42%	28%	6%	267
5.2-Understand historical & geographical info	2.64		13	42	41	4	269
5.3-Understand an individual's legal rights & responsibilities	2.94		26	47	23	4	269
5.4-Understand principles of taxation	2.41		7	42	36	15	266
5.5-Understand governmental activities	2.43		4	43	45	8	267
5.6-Understand civic responsibilities	2.66		13	46	36	5	268
5.7-Understand environmental and science issues	2.46		7	40	44	9	268
5.8-Understand economics and economic systems	2.26		4	33	48	15	265
Computation	2.56						271
6.1-Compute using whole numbers	3.18		43%	38%	13%	6%	267
6.2-Compute using decimals	2.84		26	40	26	8	268
6.3-Compute using fractions	2.67		18	40	34	8	268
6.4-Compute with percents, rate, ratio, and proportion	2.66		19	37	35	9	270
6.5-Use expressions, equations, or formulas	2.08		4	20	54	22	267
6.6-Measure area, volume, & linear dimensions	2.49		10	43	34	13	267
6.7-Interpret data from graphs or compute averages	2.31		6	32	49	13	268
6.8-Use statistics and probability	2.14		5	25	49	21	268
6.9-Use estimation and mental arithmetic	2.63		17	40	33	10	268
Learning to Learn	3.19						271
7.1-Practice organizational & time management skills	3.23		41%	45%	13%	1%	269
7.2-Demonstrate ability to use thinking skills	3.43		51	41	7	1	268
7.3-Use problem solving skills	3.30		44	44	10	2	268
7.4-Demonstrate study skills	2.99		28	49	19	4	268
7.5-Understand aspects of personal management	2.97		29	43	24	4	267

†The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.10 - JTPA SDA/PIC Survey Results

Competency Statement	Total Mean	Priority Ranking	Very Important	Important	Somewhat Important	Not Important	N
Basic Communication	3.62						151
0.1-Communicate in general interpersonal interactions	3.76		78%	20%	2%	-	150
0.2-Communicate regarding personal information	3.67		71	25	4	-	150
0.3-Use language of clarification	3.42		51	40	9	-	151
Consumer Economics	3.00						152
1.1-Use weights, measurement scales, and money	3.29		44%	42%	13%	1%	151
1.2-Apply principles of comparison shopping	2.96		28	45	22	5	152
1.3-Understand procedures to purchase goods	2.97		24	54	19	3	151
1.4-Understand how to obtain housing & services	3.15		36	47	13	4	152
1.5-Apply principles of budgeting	3.32		49	37	13	1	152
1.6-Understand consumer protection laws	2.56		9	45	40	6	151
1.7-Understand how to care for personal possessions	2.87		22	49	24	5	151
1.8-Use banking and financial services	2.96		25	50	21	4	152
1.9-Understand procedures for auto maintenance & driving	2.90		27	43	25	5	150
Community Resources	2.82						152
2.1-Use the telephone and telephone book	3.36		46%	45%	8%	1%	152
2.2-Locate and use transportation and travel information	2.95		25	48	25	2	151
2.3-Understand concepts of time and weather	2.99		27	49	21	3	152
2.2-Use services provided by the post office	2.59		15	38	38	9	152
2.5-Use community agencies and services	3.10		34	47	15	4	152
2.6-Use leisure time resources and facilities	2.30		6	27	56	11	152
2.7-Understand aspects of society and culture	2.46		12	34	43	11	152
Health	3.20						152
3.1-Understand ailments and seek medical assistance	3.30		43%	45%	11%	1%	152
3.2-Understand medical and dental forms	2.83		19	49	28	4	150
3.3-Understand how to select and use medications	3.31		48	36	14	1	149
3.4-Understand basic health and safety procedures	3.34		47	40	12	1	146
3.5-Understand principles of health maintenance	3.16		38	44	14	4	147

†The Priority Ranking is the sum of the *very important* and *important* percentages.

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Table E.10 - JTPA SDA/PIC Survey Results (continued)

Competency Statement	Total Mean	Priority Ranking¹	Very Important	Important	Somewhat Important	Not Important	N
Employment	3.40						152
4.1-Understand basic principles of getting a job	3.76		79%	18%	3%	—	152
4.2-Understand wages, benefits, and employment concepts	3.39		49	42	9	—	152
4.3-Understand (workplace) safety procedures	3.42		52	39	9	—	152
4.4-Understand job performance concepts & materials	3.55		58	39	3	—	152
4.5-Utilize common workplace technology	3.13		33	47	20	—	152
4.6-Communicate effectively in the workplace	3.70		73	24	3	—	152
4.7-Effectively manage workplace resources	3.06		30	48	21	1	151
4.8-Demonstrate effectiveness in working with people	3.58		64	30	5	1	151
4.9-Understand social, organizational, & technological systems	2.96		26	46	25	3	151
Government & Law	2.58						152
5.1-Understand voting and the political process	2.96		27%	47%	22%	4%	152
5.2-Understand historical & geographical info	2.34		4	34	53	9	152
5.3-Understand an individual's legal rights & responsibilities	3.03		29	47	22	2	152
5.4-Understand principles of taxation	2.51		11	38	45	6	151
5.5-Understand governmental activities	2.41		5	37	51	7	152
5.6-Understand civic responsibilities	2.59		12	43	37	8	150
5.7-Understand environmental and science issues	2.39		6	34	53	7	151
5.8-Understand economic and economic systems	2.41		6	37	49	8	150
Computation	2.92						152
6.1-Compute using whole numbers	3.57		63%	33%	3%	1%	152
6.2-Compute using decimals	3.26		41	45	11	3	152
6.3-Compute using fractions	3.10		38	39	20	3	152
6.4-Compute with percents, rate, ratio, and proportion	3.13		34	48	15	3	151
6.5-Use expressions, equations, or formulas	2.55		15	35	39	11	151
6.6-Measure area, volume, & linear dimensions	2.94		26	46	23	5	151
6.7-Interpret data from graphs or compute averages	2.67		21	35	35	9	150
6.8-Use statistics and probability	2.22		8	23	50	19	151
6.9-Use estimation and mental arithmetic	2.87		21	49	26	4	152
Learning to Learn	3.36						151
7.1-Practice organizational & time management skills	3.38		50%	40%	8%	2%	151
7.2-Demonstrate ability to use thinking skills	3.55		59	38	3	<1	151
7.3-Use problem solving skills	3.49		56	38	5	1	150
7.4-Demonstrate study skills	3.21		40	44	13	3	151
7.5-Understand aspects of personal management	3.17		39	43	15	3	150

¹The Priority Ranking is the sum of the *very important* and *important* percentages.

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