STAKEHOLDERS' PERSPECTIVES ON THE IMPORTANCE OF S.C.A.N.S. FOR ADULT LITERACY CURRICULUM

by

ELLEN McGUIRE KILGOS

(Under the direction of THOMAS VALENTINE)

ABSTRACT

Welfare reform has profoundly affected the practice of adult literacy, restricting the length of time welfare recipients may receive educational services before entering the workforce. With increased pressure to prepare students for work quickly, program planners are challenged to determine which workplace topics should be included in short-term educational programs for students receiving Temporary Assistance for Needy Families (TANF). The purpose of this study was to measure and compare the extent to which three groups of stakeholders in the welfare-to-work process judge a selected list of topics as important for inclusion in the curriculum. Topics were derived from the 1991 report of the Secretary's Commission on Achieving Necessary Skills (SCANS). The present study rested on the democratic planning model of Cervero and Wilson (1994) who posit that key stakeholders should be represented in the planning process. A 45-item survey was developed and mailed to three groups: literacy instructors, prospective employers, and literacy students receiving public assistance. Responses from 115 instructors, 65 employers, and 112 students were included in the statistical analysis. There were two principal findings. (a) All three of the stakeholder groups in the welfare-to-work process strongly support the SCANS workplace topics. (b) There are differences

in the way instructors, employers, and students view the eight workplace topics, but these differences are relatively minor. Implications for practice, theory, and policy are discussed.

INDEX WORDS: Adult literacy, Curriculum, Program planning, Secretary's Commission on Achieving Necessary Skills (S.C.A.N.S.), Temporary Assistance to Needy Families (TANF), Welfare reform, Work First

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ELLEN McGUIRE KILGOS

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ELLEN McGUIRE KILGOS

Major Professor:	Thomas Valentine
Committee:	Ronald M. Cervero Talmadge C. Guy Sharan L. Merriam John Scott

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
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THE PROBLEM

> In the case of welfare reform, the chasm between political leaders and assistance recipients seems nearly unbridgeable. Has any member of Congress ever tried to live for a month on a welfare check? For that matter, have any of them ever tried to live on the check that a welfare recipient would receive if she were lucky enough to find a job? . . . . But progress has taught us that such hierarchical decision making is often foolish, an outmoded vehicle that resists the important information that ordinary people can provide about everything from the assembly line to the welfare line. (Quindlen, 2002, p. 64)

Introduction

Between 1935 and 1996, the Aid to Families with Dependent Children program (AFDC) provided cash assistance to individuals who were unable to work or whose income fell below a certain level (Strawn, Dacey, & McCart, 1994). Few work requirements were attached to these payments which could be received for an unlimited length of time. By the early 1990s, however, there was growing concern with the entitlement nature of AFDC, and in 1993, President William Clinton asked state governors to assist him in developing a plan to "end welfare as we know it." As a result, the National Governors's Association established the State and Local Task Force on Welfare Reform, which included governors, state legislators, county and city elected officials, and state welfare commissioners, to make recommendations for reforming the process. Following "four years of bipartisan collaboration and partisan struggle . . . intensified with the 1994 Republican rise to power in the House of Representatives and the introduction of the Contract with America" (Robinson & Nackerud, 2000, p. 196), the 104th United States Congress ushered in "the most comprehensive change in federal social welfare policy in 63 years" (Risler, Nackerud, & Robinson, 2000, p. 46). The

1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA; P.L. 104-193) passed the authority for designing and implementing welfare programs from the federal government to the states, a "devolution" which significantly changed welfare policy:

> First, it ended the entitlement to cash assistance replacing it with time-limited benefits. Second, it gave states wide-ranging authority to enforce work requirements and use sanctions. Third, it replaced the Job Opportunities and Basic Skills (JOBS) program--a welfare-to-work strategy that emphasized human capital development--with the Work First program that emphasizes early labor force attachment. (Morris & Orthner, 2000, p. 65)

Emphasizing the *temporary* nature of assistance, the new law imposed a lifetime limit of five years of assistance for any family, with provisions that states could reduce that limit to as few as two years. The intent of the legislation was "to reduce poor families' reliance on welfare and increase their work force participation" (Morris & Orthner, 2000, p. 65) by putting an end to the AFDC entitlement program. Reform measures were designed to "make welfare receipt unattractive (and eventually, unavailable) so that recipients will prefer (or will be forced) to accept even low-wage jobs" (p. 67).

Welfare Reform in Georgia

Forty-three states, including Georgia, implemented welfare reform initiatives even before it became federal law (Risler, Nackerud, & Robinson, 2000). Georgia's *Work First* initiative was launched in January 1996, and changed the focus "from income maintenance to self-sufficiency through employment" (p. 47). An advocate of welfare reform, Georgia Governor Zell Miller expressed strong support for reform initiatives:

> We are going to stop the decades-old practice of simply putting checks in the mail, month after month, year after year, and in some cases generation after generation. Instead, we are going to focus on . . . helping people get the skills for the jobs that they need to become self-sufficient and support their families. (quoted in Beck, 2000, p. 33)

Georgia's state plan for compliance with PRWORA, consequently, went beyond the federal mandate and reduced the lifetime limit of assistance for any family to four years.

> Our primary goal will be to provide necessary assistance to needy families with children on a temporary basis and provide parents with job preparation, work opportunities, enforcement of child support, and support services to enable them to become self-sufficient and leave the program as soon as possible. There will be no entitlement to any assistance under Georgia's TANF [Temporary Assistance for Needy Families] program, and cash assistance will be provided for a maximum of four years. (Georgia Department of Human Resources, 1996, p. 1)

The explicit message of Georgia's *Work First* initiative was that "employment is both the goal and the expectation for everyone [and that] the best way to succeed in the labor market [is] to join it and to develop work habits and skills on-the-job rather than in the classroom" (Risler, Nackerud, & Robinson, 2000, p. 47).

Educational Provisions in Georgia's Welfare Reform

One aspect of Georgia's welfare reform plan is the provision of education, which D'Amico (1997) considers the "last best hope" for recipients lacking basic literacy, "given the context of growing income and wage inequality, and the nature and limit of entry level opportunities" (p. ix). Since March 1999, the Georgia Department of Human Resources, Division of Family and Children Services (DFCS) has contracted with the Department of Technical and Adult Education, Office of Adult Literacy to provide educational services to TANF recipients without a high school diploma or GED (Georgia Department of Technical and Adult Education, 2002). The current contract, in effect through September 30, 2003, provides educational services for TANF recipients referred by county DFCS offices. Under the provisions of the contract, literacy programs provide classroom space, books, classroom materials, assessments, development of Student Education Plans, and instruction. DFCS caseworkers refer TANF recipients under 20 years of age without a high school diploma or GED directly to adult literacy programs. Recipients over 20 years of age who need literacy services are first referred to New

Connections to Work, a federally funded training and employment program that provides assessment, counseling, job-readiness/job retention services, life management workshops, and skills training, before entering literacy programs. After TANF recipients enter the literacy program, instructors provide DFCS caseworkers with student attendance and progress reports and refer students back to the DFCS caseworker or the New Connections to Work program following completion of adult literacy services.

While the intent of this effort is clearly to prepare welfare recipients for work, there is no one proven curriculum to accomplish this purpose. Literacy instructors, therefore, choose from among many methods as they prepare TANF recipients for the GED and help them "acquire the necessary basic skills to become self-sufficient citizens, to compete, and to experience success in today's workplace" (Georgia Department of Technical and Adult Education, 2001, p. 1).

Competing Ideologies of Adult Literacy

Adult literacy practitioners have long been challenged by the field's lack of a clear working philosophy to help them understand what they are doing and why they are doing it (Quigley, 1996). Program decisions have historically been made in the face of competing expectations from society and its various agencies, from the literacy profession and its institutions, and from the needs of the students themselves. Without a single philosophy to guide them, literacy practitioners struggle to find the right balance among four working philosophies (Quigley):

1. Vocational Perspective — "Literacy is mainly for job preparation and financial independence" (p. 110).
2. Liberal Perspective — "Literacy is mainly for acquiring cultural knowledge" (p. 110).

3. Humanist Perspective — "Literacy is mainly for personal growth, self-actualization, and self-esteem building" (p. 110).
4. Liberatory — "Literacy is mainly for critical thinking and political awareness" (p. 110).

Welfare mandates intensify this struggle, creating "dilemmas for practitioners that are not easily resolved" (Sparks, 1999, p. 20). In addition to the competing ideologies *within* the field of adult literacy itself, there are now competing ideologies between adult literacy and welfare reform.

The goals of adult literacy programs are usually "broader and more inclusive than mere job preparation or quick fixes." (Sparks, 1999, p. 22). Prior to 1996, states promoted self-sufficiency through programs such as the Job Opportunities and Basic Skills (JOBS) Training program which included services in education, job training, and job placement (Strawn, Dacey, & McCart, 1994). Welfare reform, however, greatly restricts the role of education, reserving it for only high school drop-outs under the age of 20 years and those TANF recipients who are unable to find employment or work-related placements. Reducing education to short-term programs "is particularly troublesome given the low education and skill levels of most welfare recipients . . ." (Hayes, 1999, p. 3). This emphasis on "only what is needed for welfare recipients to engage in paid work" (Dirkx, 1999, p. 84) produces very different types of programs from those emphasizing both academic and individual growth. "In other words, the role of ABE [Adult Basic Education] in welfare reform stands in stark contrast to the values and beliefs of many ABE practitioners" (Sparks, 1999, p. 16).

> If literacy education is considered to be "education related to work," how can and should this be interpreted? Does this mean literacy educators should teach job-specific literacy skills, such as reading blueprints or writing a work order? Many employers are citing the development of "soft skills," such as punctuality, politeness, or even a work ethic, as the major educational need. Should literacy educators make these skills the focus of their programming, or . . . . Would it be

> of greater benefit to help welfare recipients earn high school credentials, since credentials are a critical factor in increasing earnings and upward career mobility? (Hayes, 1999, p. 11)

Curriculum for Work

Welfare reform literacy is clearly vocational in orientation, continuing a trend of the early 1980s to increasingly link adult literacy education with economic and family welfare issues (Dirkx, 1999). Acknowledging that literacy practice is now "intimately intertwined" with the *Work First* environment requires "substantial rethinking of our practice--its basic tenets, its philosophical perspectives, and its models of curricula and instruction" (p. 83). By what methods should welfare recipients be prepared for the workplace?

Martin (1999) describes several approaches to literacy instruction for welfare recipients, ranging from the Academic Approach to the Situated Context and Cognition Approach. The Academic Approach, the dominant form of adult literacy education, focuses on developing a broad base of academic knowledge and skills (reading, writing, and arithmetic) which can be generalized to a variety of contexts. The goals of these programs is usually the GED or another credential. The Situated Context and Cognition Approach includes context-based programs in which learners are taught in a particular context and are not expected to generalize that knowledge outside the specific context. Falling between these two extremes is the Integrated Programs Approach which embraces aspects of both the Academic Approach and the Situation Context and Cognition Approach. While each approach has its merits, the fact remains that the "literature is inconclusive regarding the most effective matches between curricular approaches and types of current and former welfare recipients . . . ." (p. 55). What *is* certain is that the "outcome of adult literacy programs is being redefined to include not

only demonstrable skill in the so-called basics but also skills in an expanded range of other specific outcomes" (Dirkx, 1999, p. 89).

The Secretary's Commission on Achieving Necessary Skills

The question then becomes: What should be taught to ensure success in the workplace? In the early 1990s, the Secretary's Commission on Achieving Necessary Skills [SCANS] (1991b) addressed this exact question after being formally charged by Secretary of Labor Elizabeth Dole to "define the skills needed for the workplace" (p. xv). This 12 month Department of Labor study argued that, because of globalization and the expanding use of technology, a traditional education is no longer adequate for preparing students for the contemporary workplace. The Commission's message was that in today's demanding workplace, "good jobs depend on people who can put knowledge to work" (p. v).

According to the Commission (SCANS, 1991b), solid work performance requires a broader set of skills than are included in traditional education. The report defines workplace "know-how" as consisting of "five *competencies*, which, in conjunction with a three-part *foundation* of skills and personal qualitites, lie at the heart of job performance today" (p. vi). The five competencies which "represent the attributes that today's high performance employer seeks in tomorrow's employee" (p. xvi) are depicted in Table 1, while Table 2 displays the foundation skills on which they rest. These eight topics "are highly integrated, and most tasks require workers to draw on several of them simultaneously" (p. vi). Workers must possess both the skills and attitudes which enable them to be creative problem solvers.

SCANS and the Proposed Study

Although the Commission (SCANS, 1991b) focused on traditional schooling through grade 12, the initial report recommends that its proficiencies also be taught to

those "who are looking for work and are served by adult education and training programs. . . ." (p. 23). The skills and competencies outlined in the SCANS document

Table 1

Five Competencies of Effective Employees According to the Secretary's Commission on Achieving Necessary Skills (SCANS, 1991b)

COMPETENCY	**DESCRIPTION**
Resources	Allocating time, money, materials, space, and staff
Interpersonal Skills	Working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds
Information	Acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information
Systems	Understanding social, organizational, and technological systems, monitoring and correcting performance, and designing or improving systems
Technology	Selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies

Table 2

Three Part Foundation for Competent Employees According to the Secretary's Commission on Achieving Necessary Skills

FOUNDATION Skills	**DESCRIPTION**
Basic Skills	Reading, writing, arithmetic and mathematics, speaking, and listening
Thinking Skills	Thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning
Personal Qualities	Individual responsibility, self-esteem, sociability, self-management, and integrity

carry "serious implications" for each of the participant groups in this study: literacy instructors, employers, and literacy students.

- **Literacy Instructors** are urged to "instill in students the perspective on results that the SCANS skills demand. If you do not, you will be failing your students and your community as they try to adjust to the next century" (p. viii).
- **Employers** are warned that they "must orient their business practices to hiring and developing this know-how in employees. If you do not develop a world class workforce, your business inevitably will be at risk" (p. viii).
- **Adult literacy students** are warned that the eight topics define what individuals "must know and be able to do in order to hold a decent job and earn a decent living" (p. xix). Individuals who are "without the knowledge or foundation required to find and hold a good job . . . face the bleak prospects of dead-end work interrupted only by periods of unemployment" (p. xv).

Program Planning in the *Work First* Environment

One might assume that Georgia's *Work First* initiative, with its demand for a new focus, would generate an entirely different literacy curriculum from what has been offeredin the past. Traditions are strong, however, and many literacy programs continue to operate as they always have. Although workplace skills similar to the SCANS topics are being seen in instructional materials and in some programs, instruction varies from county to county. As a consequence, current program planning for Georgia's TANF recipients is neither uniform nor systematic.

Acknowledging the challenge of this planning context, instructors must make an assessment of how to proceed. Sparks (1999) discusses program planning for welfare recipients using the democratic practice model of Cervero and Wilson (1994). This model is based on the notion that "all people who are affected should be involved in the deliberation of what is important about the program" (p. 150) and that deciding on whose

interests should be represented in the planning process is "a central ethical question" (p. 138).

This research rested, therefore, on the premise that program planning is "a social activity in which people negotiate personal and organizational interests" (Cervero & Wilson, 1994, p. 4). Because power and interests are central to the process, "planners cannot act at all, much less effectively, without [first] reading the context" (p. 136). The assumption is that "each group has a potentially different set of interests in constructing the program," (p. 143) interests being the "motivations and purposes that lead people to act in certain ways when they must decide what to do or say" (p. 29). Planning can be especially complex in situations where the "people engaged in asymmetrical relationships, . . . rooted in social and political organizational structures" (p. 134) have competing interests. Responsible planners must be actively aware of these multiple interests within the planning context and must use ethical thinking if they are to have "a sense of 'what for' and not just 'how to'" (p. 137).

A central tenet of the Cervero and Wilson (1994) model is that planners must "nurture a substantively democratic planning process in situations marked by conflicting interests and asymmetrical relationships of power" (p. 129). In order to accomplish that, planners must anticipate how the power relationships will affect planning and then "use strategies that will give all legitimate actors an equivalent voice in constructing the program" (p. 129). The planner has the important responsibility of deciding how to represent each of these groups in the planning process.

Who are the Stakeholders in the Welfare-to-Work Curriculum?

There are many stakeholders in the welfare-to-work effort, including the taxpayers, other individuals who work, and all citizens of Georgia. However, there are three *critical* stakeholder groups who are very close to the process: literacy instructors, prospective employers, and literacy students. This study, therefore, considers the views

of those three critical stakeholder groups in the welfare-to-work process. Consistent with the Cervero and Wilson model, the stakeholder populations are quite different, having different stakes and different levels of expertise. Table 3 depicts the relationship of the three stakeholder groups to the workplace curriculum.

Table 3

Comparison of Three Groups in Relation to a Welfare-to-Work Curriculum

Stakeholders	**Expertise in Educational Planning**	**Expertise in Understanding the Workplace**	**Impact of Curriculum Topics Being Appropriate**
Instructors	Very High	Variable	High
Employers	Low	Very High	High
Students	Low	Low	Extremely High

As depicted in Table 3, instructors have very high expertise in educational planning, variable understanding of the entry-level workplace, and a high stake in the curriculum. Employers have low expertise in educational planning, a very high understanding of the workplace, and a reasonably high stake in the curriculum. These particular literacy students have a low level of expertise in educational planning and very little understanding of the workplace; however, they have the highest stake in the curriculum planning process.

Literacy Instructors as Stakeholders

To understand the position of instructors in the *Work First* environment, one must first understand the general challenges facing adult literacy programs. These programs provide educational services to the state's undereducated adults who wish to improve basic skills, prepare for the GED, prepare for acceptance in a technical college or other educational institution, prepare for the workplace or to become more productive citizens. Instructors have little information concerning students who enroll. Normally they bring

no school records to inform the program if they had been in special classes, had documented learning differences, exhibited behavior problems, or had other special needs. Many learners come to the program with a history of personal, financial, and educational defeats. Each learner has characteristics and experiences which affect them as learners. Some are self-directed; many are not. Students represent all ability levels. Some move through the program quickly, requiring only encouragement and/or a review. Others stay in the program for a longer period, possibly never reaching their long-term goals.

Increasingly, students are referred by the government, social agencies, and employers. The Department of Labor, corrections agencies, mental health agencies, and the Division of Family and Children Services often require attendance in literacy programs as a factor in compliance. While meeting these many responsibilities, instructors are currently facing the added challenge of planning for welfare reform recipients.

Many things impact planning for Georgia's literacy programs, from the federal government down to local referral agencies. But ultimately, state literacy instructors are responsible for much of the planning and all of the instruction for a diverse group of learners representing a wide range of ages and ability levels. The responsibility for curriculum planning is clearly specified in two documents issued by the Office of Adult Literacy. The *Position Description: Full-Time Literacy Teacher* document (Georgia Department of Technical and Adult Education, 1999b) lists seven "specific duties" including the following: "Plans and delivers effective and comprehensive adult literacy instruction based on the adult literacy *Teacher's Curriculum Guide* and the needs of the population to be served (p. 1)." A second document, *Guidelines for Implementation of Full-Time Teachers* (Georgia Department of Technical and Adult Education, 1999a),

includes “Curriculum development/revision activities” as one of 15 “indirect instructionally related activities (p. 4).”

A Curriculum Guide for the Georgia Adult Literacy Teacher (Georgia Department of Technical and Adult Education, Office of Adult Literacy, 1998) guides instructors in their planning. The guide, which is currently under revision, provides “skills overviews” (objectives) for mathematics, reading, and writing which are divided into four grade level divisions: 0-1.9, 2.0-5.9, 6.0-8.9, and 9.0-12.9. Following each objective is a “list of recommended materials to use in addressing the listed skills and competencies (p. 2).” Although the guide makes frequent references to occupational reading, writing, and math skills similar to the SCANS topics, there is no specific reference to SCANS. The state curriculum guide does not outline a specific workforce preparation curriculum, but rather “insures teacher flexibility and encourages creativity as instructional activities are being developed to meet the unique needs of students” (p. 2).

Planning work-focused instruction for welfare recipients, therefore, places even greater demands on literacy instructors, requiring them “to think about their practice in quite different ways from how they did in the past and to learn new skills that will be needed in this environment” (Dirkx, 1999, p. 85). This is certainly true for Georgia’s literacy instructors who are being charged “to shorten their curricula and focus more specifically on job readiness skills,” (p. 86).

Because they live and work in the community, literacy instructors understand both the local situation and the needs of its employers. More importantly, however, they possess an understanding of their learners and the learning process. Because of their critical role in planning and implementing literacy programs, Georgia literacy instructors should be included in a study of the state’s welfare reform curriculum.

Employers as Stakeholders

A newspaper article highlights the frustration of Georgia employers seeking *quality applicants*. A personnel manager explains, "I mean quality in the sense of people who can read and communicate, who have some proficiency in math and will show up to work" (quoted in Shearer, 1998, p. F1). A Labor Department Director adds, "One big problem for employers is finding people who are willing to work, people who can get along and won't disappear" (p. F1), emphasizing that the "lack of work ethic, or not knowing how to present themselves in a job interview" (p. F1) hinders many job applicants.

Georgia's employers are encouraged to hire welfare recipients, and many have complied. In a study of the impact of welfare reform in Georgia (Risler, Nackerud, & Robinson, 2000), only 18.8% of the Department of Family and Children Services caseworker respondents felt Georgia employers were unwilling to hire TANF recipients. But Knell (1998) suggests that "the role of employers in welfare reform is more than just providing jobs" (p. 21), calling for a collaborative effort in determining what skills TANF recipients need in order to succeed in the workplace. "The business community must join together with those from education, job/vocational training, support services, welfare offices and job preparation programs in order to provide support and opportunities to welfare recipients . . . . let's get together on what the skill sets are" (p. 21).

Although employers contributed to the development of the SCANS (1991b) competencies and foundation skills, a national sample of employers for all levels of positions was used. Surveying only Georgia employers of entry-level workers in the current study allows them the opportunity to indicate which of the eight SCANS topics, developed more than a decade ago at the federal level, should be included in the Georgia

literacy curriculum. It follows then that Georgia employers should be included in a study of the state's welfare reform curriculum.

Adult Literacy Students as Stakeholders

University of Georgia researchers interviewing 200 Georgia TANF recipients found that 97% are women who fall below the poverty line, with most receiving cash assistance between $201 to $300 per month (Daly, 2000). Forty-seven percent of those interviewed did not finish high school or earn a GED; 18% did not reach the ninth grade. Pregnancy, caring for a child, and family problems were common reasons for dropping out. Georgia directors of Family and Children Services and Family Connections programs considered a recipient's level of education to be the third most common barrier to employment, following transportation and childcare (Risler, Nackerud, & Robinson, 2000).

To understand the stake welfare recipients have in their educational programs, one must consider the jobs that TANF recipients with low skill levels can expect to attain. A study of North Carolina TANF recipients (Morris & Orthner, 2000) reveals that entry-level, lower-skilled job opportunities available to TANF recipients are "service and sales positions--nurse's aide, housekeeper, janitor, security guard, food preparation worker, cashier, cook--and their wage rates are among the lowest" (p. 78). Many service industry jobs are provided by temporary or contract services firms and offer "less opportunity for upward movement in the labor market. . .[and] "generally pay less than permanent positions and provide fewer employment-based benefits" (p. 83).

In a University of Georgia study (Condrey & Ross, 2000), a majority of Division of Family and Children Services respondents expressed concern that their agencies emphasize placing TANF recipients in jobs quickly, "with little concern for their potential growth and upward mobility on the job" (p. 183). Morris and Orthner (2000) further warn that dead-end jobs-- "those offering low wages and little potential for wage

growth and on-the-job skills development--will only move . . .TANF recipients from welfare dependent poverty to working poverty" (p. 71). Clearly, TANF recipients have a stake in acquiring the skills needed for jobs affording them greater opportunities for financial independence.

Welfare recipients, with their limited knowledge of the workplace, are the stakeholders with the least power. Because they lack work experience, they are not in a position to know what skills are necessary to enter and be successful in the workplace. Admittedly, welfare students do not understand educational programming, and many do not understand the workplace. On what basis, then are they considered stakeholders? For the very reasons already listed, welfare recipients have the highest stake of all in this undertaking. The consequences of a successful curriculum that prepares them for the workplace are higher for students than for either of the other two stakeholder groups. If a sound educational program is offered, students can become better prepared to survive the transition off welfare. But if a sound program is not offered, education will not be a meaningful contribution to the process.

Why is it important to know which topics welfare students think should be included in the curriculum? It has long been held that adult learners

> are motivated to engage in learning to the extent that they feel a need to learn and perceive a personal goal that learning will help to achieve; and they will invest their energy in making use of available resources . . . to the extent that they perceive them as being relevant to their needs and goals." (Knowles, 1980, p. 56)

It follows that welfare students must believe in the importance of the workplace topics if welfare reform literacy programs are to be successful. If students perceive any of the topics as irrelevant, they will not "buy in" to an instructional program which includes them. It is critical, then, to have an understanding of how welfare students currently view these topics, even if their perceptions are wrong about what is considered valuable. This

knowledge will allow planners to meet students where they are as they develop meaningful instruction to remedy the problem for both students and employers.

Because of these high stakes, Sparks (1999) considers TANF recipients the "principal stakeholders" (p. 24) in the planning process and expresses concern that, thus far, their "interests and voices have been left out of the equation" (p. 24). Again citing the Cervero and Wilson (1994) model, Sparks asks, "Who will stand with the recipient learners--the single mothers who must make it to self-sufficiency regardless of the level of their vocational and academic skills [and]. . . .At what strategic points in the process, if any, do welfare recipients have the opportunity to voice their choice from among various educational or training options?" (Sparks, 1999, p. 24). The clock is ticking for Georgia's TANF recipients as their lifetime eligibility slips away.

Statement of the Problem

Literacy education has always been multi-faceted in that its students represent a wide range of ages, cultures, and ability levels. In addition, its students strive to attain a variety of different goals. One of literacy education's key functions, however, has always been work orientation. Although workforce preparation for welfare recipients is neither the best form of literacy nor the best way of solving illiteracy as a social problem, curriculum development for welfare recipients is the focus of this study.

Welfare reform, "more than any preceding policy decisions, promises to fundamentally reshape our notions of [adult literacy] practice" (Dirkx, 1999, p. 93). The most dramatic shift is the "change in the delivery of education, from long-term to short-term and from the general to the specific" (Fisher, 1999, p. 35). Program planners are thus challenged to determine which workplace topics should be included in a short-term educational program for TANF students.

The Secretary's Commission on Achieving Necessary Skills (1991b) report is one of the most frequently cited documents on the needs of twenty-first century workers

(Packer, 1992). Based on "discussions and meetings with business owners, public employers, unions, and workers and supervisors in shops, plants, and stores" (SCANS, 1991b, p. xv), this combination of five competencies and a three-part foundation of skills is recommended as the basis for preparing welfare recipients for the workforce (Knell, 1998; Murphy & Johnson, 1998; U.S. DOL & U.S. DOE, 2000) and is included in published materials and staff development for literacy instructors. Helping TANF students become proficient in the eight SCANS topics is an ambitious undertaking, however, as they "must simultaneously be brought to high levels of intelligence, oral language, literacy and learning ability" (Sticht, 1997, p. 289).

Georgia's *Work First* approach can only succeed if employers hire and retain TANF recipients, but "employers describe a mismatch between their requirements and the skills of the former welfare recipients they have hired" (Fisher, 1999, p. 39). TANF recipients, with limited skills and education, have little chance of becoming proficient in all of the SCANS topics because educational programs are given limited time in the *Work First* environment, "regardless of the time it takes for low-skill learners to progress" (Sparks, 1999, p. 25). Without workplace skills, however, TANF recipients risk being trapped in dead-end, low-wage jobs with little hope of moving up the economic ladder. It is imperative that they acquire the necessary skills to become self-sufficient with some chance of advancement before they have used up their lifetime eligibility for welfare.

If Georgia's literacy programs are to play an important role in preparing welfare recipients for the workforce, it is critical that informed curriculum decisions be made. One argument for the ethics of this decision-making process is drawn from Cervero and Wilson (1994) who argue that the stakeholders who matter most should be represented in the planning process. Although the SCANS model has influenced literacy practice, it was the result of a national study conducted more than a decade ago for grades K-12. What is not currently known is the extent to which the three key stakeholder groups in

the Georgia welfare-to-work process perceive as valuable the SCANS model and to what extent their views vary. Sound educational planning to help individuals transition from welfare to work must be based on solid knowledge of the extent to which the three stakeholder groups value the proposed workplace topics.

Purpose of the Study and Research Questions

The purpose of this study was to measure and compare the extent to which three groups of stakeholders in the welfare-to-work process value the topics in the Secretary's Commission on Achieving Necessary Skills report as important for inclusion in the curriculum. The research questions guiding this study were as follows:

1. To what extent do *adult literacy instructors* judge the topics as important for inclusion in the curriculum?
2. To what extent do *prospective employers* judge the topics as important for inclusion in the curriculum?
3. To what extent do *adult literacy students* judge the topics as important for inclusion in the curriculum?
4. Are there significant differences in the way these three groups judge the importance of these topics for inclusion in the curriculum?

Significance of the Study

This study is specific to curriculum development for welfare recipients in the current *Work First* environment. The knowledge produced by the study has implications for program planning theory, policy makers, adult literacy instructors, and unemployed adult literacy students receiving TANF benefits.

The study contributes to the discussion of the Cervero and Wilson (1994) program planning model which posits that all those who are affected by a program should be included in its planning. Specifically, this study explores the applicability of this

democratic model to a planning arena in which the principal stakeholder group has limited knowledge and experience in the content area.

Equipped with a better understanding of the employment perceptions of both unemployed adult literacy students and prospective employers, policy makers will be better prepared to make informed policy decisions for moving unemployed adult literacy students from welfare-to-work.

Insights gained by this study are especially valuable to literacy instructors who design programs to prepare unemployed adult literacy students for the workplace. While the curriculum should be developed around those workforce topics which both students and employers indicate should be included in the curriculum, instructors must also be aware of any discrepancies between the two groups. If, for example, students do not wish to include topics which employers value highly, instructors must provide instruction to reflect the importance of possessing the employability skills that potential employers demand.

Adult literacy students who participated in the study had the opportunity to examine and then reflect upon those topics that have been recognized to be important in the workplace. More importantly, unemployed adult literacy students will greatly benefit from this study if literacy programs are planned and delivered based on a better understanding of the requirements for entry-level employment.

CHAPTER 2

LITERATURE REVIEW

This chapter contains four sections. In the first section, I will take an in-depth look at the Secretary's Commission on Achieving Necessary Skills (SCANS) literature, which serves as the measurement framework of the study. In the second section I will look at three other notions of worker competency, two from the perspectives of government planners and industry leaders, and one from the perspective of adult learners. In the third section I will look at welfare-to-work programs that include adult literacy components. The last section will provide an overview of the history of literacy legislation which explores the nature of the relationship between literacy and employment.

SCANS Workplace Know-How

Background

There has been a heightened awareness of worker competency since *Workforce 2000* (Johnston & Packer, 1987) sounded the alarm of an impending reduction of low skilled jobs and "a difficult challenge for the disadvantaged" (p. 96).

> The jobs that will be created between 1987 and 2000 will be substantially different from those in existence today. A number of jobs in the least-skilled job classes will disappear, while high-skilled professions will grow rapidly. Overall, the skill mix of the economy will be moving rapidly upscale, with most new jobs demanding more education and higher levels of language, math, and reasoning skills. (p. 96)

Johnston and Packer present a challenge: "This rapid increase in the skills required for new jobs in the economy must be put in the context of the competence of the new workers entering the workforce" (p. 102). Although there are references to increased

educational and skill requirements, the authors are not specific about the required skills. Since publication of *Workforce 2000*, several attempts have been made to describe these necessary workplace skills.

The Commission

What Work Requires of Schools: A SCANS Report for America 2000 (SCANS, 1991b) is a federal response to the concern that "more than half of our young people leave school without the knowledge or foundation required to find and hold a good job" (p. v). In 1990, Assistant Secretary of the Employment and Training Administration Roberts T. Jones and Secretary of Labor Elizabeth Dole created the Secretary's Commission on Achieving Necessary Skills, appointing Arnold Packer, co-author of *Workforce 2000,* as executive director. The commission, composed of researchers and representatives from schools, businesses, and organized labor, was asked to advise the Secretary of Labor on the level of skills required to enter the workforce. Composition of the commission is included in Appendix A. Specifically, the commission was charged to do the following:

- Define the skills needed for employment;
- Propose acceptable levels of proficiency; and
- Develop a dissemination strategy for the nation's schools, businesses, and homes. (1991b, p. xv)

Phase 1

SCANS was a working commission with each member serving both on an industrial task force and on a committee related to one of the issues of the report. During its first phase, the commission was interested in job descriptions, ratings of the importance of skills, job tasks, and tools used on the job. Jobs were analyzed through in-depth "discussions and meetings with business owners, public employers, unions, and

workers and supervisors in shops, plants, and stores" (1991b, p. xv). Sixty-two interviews, lasting between two and four hours, were conducted with representatives from 35 organizations. Between two and six individuals per job were interviewed. Fifteen jobs were selected that represent a progression of job levels: entry-level, experienced-worker level, and supervisory level. Jobs were also chosen which seem "to be in no danger of obsolescence" (1991a, p. 1-11) and which could be entered by both high school graduates and graduates of post-secondary education. Jobs from the following five economic sectors were included:

- Restaurant and Accommodations
- Manufacturing and Construction
- Office and Finance
- Health and Human Services
- Trade and Communications

Following 12 months of research, the commission's report to newly appointed Secretary of Labor Lynn Martin "speaks directly to" the six goals and four part strategy of America 2000 and "pertains directly to National Goals # 3 and #5" (SCANS, 1991b, p. xix):

> Goal 3: By the year 2000, American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy. (U. S. Department of Education, 1991, p. 38)
> Goal 5: By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship. (p. 39)

The commission determined that because of globalization and the growth of technology in the workplace, "workers must work smarter" (SCANS, 1991b, p. xv).

> Their message to us was the same across the country and in every kind of job: good jobs depend on people who can put knowledge to work. New workers must be creative and responsible problem solvers and have the skills and attitudes on which employers can build. Traditional jobs are changing and new jobs are created everyday. High paying but unskilled jobs are disappearing. (1991b, p. v)

The commission proposed that success in the workplace required "workplace know-how," consisting of five competencies based on a three-part foundation. Competent workers must be skilled in managing or using the following:

Resources. Workers schedule time, budget funds, arrange space, or assign staff.

Interpersonal Skills. Competent employees are skilled team members and teachers of new workers; they serve clients directly and persuade co-workers either individually or in groups; they negotiate with others to solve problems or reach decisions; they work comfortably with colleagues from diverse backgrounds; and they responsibly challenge existing procedures and policies.

Information. Workers are expected to identify, assimilate, and integrate information from diverse sources; they prepare, maintain and interpret quantitative and qualitative records; they convert information from one form to another and are comfortable conveying information, orally and in writing, as the need arises.

Systems. Workers should understand their own work in the context of the work of those around them; they understand how parts of systems are connected, anticipate consequences, and monitor and correct their own performance, integrate multiple displays of data, and link symbols (e.g., displays on a computer screen) with real phenomena (e.g., machine performance).

Technology. Technology today is everywhere, demanding high levels of competence in selecting and using appropriate technology, visualizing operations,

using technology to monitor tasks, and maintaining and troubleshooting complex equipment. (1991b, p. 11-13)

Underlying these five competencies is a three-part foundation of skills and personal qualities.

> **Basic Skills**. Reading, writing, mathematics (arithmetical computation and mathematical reasoning), listening, and speaking;
>
> **Thinking Skills**. Creative thinking, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning; and
>
> **Personal Qualities**. Individual responsibility as well as self-esteem, sociability, self-management, and integrity. (1991b, p. 15)

This initial commission report identifies "five competencies and a three-part foundation of skills and personal qualities that lie at the heart of job-performance [and] span the chasm between school and the workplace" (SCANS, 1991b, p. xv). Contending that the SCANS skills can be taught, the commission challenges schools to incorporate them into the curriculum.

Phase 2

The commission's second publication, *Skills and Tasks for Jobs: A SCANS Report for America 2000* (SCANS, 1991a), describes how the SCANS competencies and foundation skills are used in 50 occupations. The report is designed to help educators plan courses to prepare students for the workforce and to help employers understand the appropriate skills for the workplace. This second research phase adds 35 jobs from the following economic sectors to the research base:

- Manufacturing, Agri-Business, Mining, and Construction
- Health and Human Services
- Office, Financial Services, and Government

- Accommodations and Personal Services
- Trade, Transportation, and Communications (SCANS, 1991a, p. 1-12)

Trained research staff conducted 142 interviews with representatives from 111 organizations for the 35 jobs. Intensive interviews covered several areas:

> interviewee background, a brief general job description (the purpose of the job, major duties, and most important knowledge and skill), ratings of the importance ("criticality") of each SCANS skill for successful performance on the job, description of specific job tasks that illustrated the use of skills identified as highly critical for the job (4 or 5 on the scale), and descriptions of exemplary job performance. (SCANS, 1991a, p. 1-10)

This second report (SCANS, 1991a) expands the definitions of the competencies and foundation skills and "illustrates the way in which the SCANS competencies and foundation skills occur in actual job tasks" (p. 2-3). Specific jobs and job tasks are listed in descending levels of difficulty for the SCANS competencies and foundation skills, with the exception of 5 foundation sub-skills: mathematics, knowing how to learn, reasoning, self-esteem, and integrity/honesty. This listing also illustrates that typically a job task "requires the exercise of multiple skills in concert" (p. 2-3).

Chapter Three (SCANS, 1991a) contains the ratings and illustrative tasks for the 35 jobs researched in Phase 2. Ratings are based on the responses of 142 interviewees who rated the importance (criticality) of each competency and foundation skill for his/her job from 1 (Not Critical) to 5 (Extremely Critical). First, means and standard deviations are reported for the 20 subsets of competencies and the 17 subsets of foundation skills. Next, each of the 35 jobs is described, and the mean and standard deviation of the competencies and foundation skills for each job are reported. Finally, tasks which demonstrate the use of some of the SCANS skills are included.

The Appendix (SCANS, 1991a) contains the same information as Chapter Two, but the information pertains to the 15 jobs included in Phase 1 of the research. The

commission recommends that curriculum developers, job counselors, and training directors use the detailed information contained in its final report.

Final Report

SCANS Chairman William E. Brock describes *Learning a Living: A Blueprint for High Performance: A SCANS Report for America 2000* (SCANS, 1992) as a "description of *how* we can prepare our young people, as well as those workers already on the job, for productive work in the 21st century" (p. vi). The report posits that education must be reinvented, with a mandate to "restructure schools around teaching SCANS foundation skills and competencies" (p. 12). Recommendations of the report define a "comprehensive nationwide agenda" (p. 19):

- The qualities of high performance that today characterize our most competitive companies must become the standard for the vast majority of our employers, public and private, large and small, local and global.
- The nation's schools must also be transformed into high-performance organizations.
- All Americans should be entitled to multiple opportunities to learn the SCANS know-how well enough to earn a decent living. (p. 19)

To achieve those principles, the commission proposes the following:

1. The nation's school systems should make the SCANS foundation skills and workplace competencies explicit objectives of instruction at all levels. . . .
2. Assessment systems should provide students with a resume documenting attainment of the SCANS know-how. . . .
3. All employers, public and private, should incorporate the SCANS know-how into all their human resource development efforts. . . .

4. The Federal Government should continue to bridge the gap between school and the high-performance workplace, by advancing the SCANS agenda. . .

5. Every employer in America should create its own strategic vision around the principles of the high-performance workplace. (p. 20-24)

Part Two of the report (SCANS, 1992) provides suggestions to educators and employers about how to put the SCANS agenda in place in local communities. Examples of existing programs are cited, along with resources and suggestions for materials.

Implementation

Following publication of the SCANS reports, several documents addressed the implementation of the SCANS recommendations. *SCANS In The Schools* (Pelavin Associates, 1992) suggests steps for educators in grades kindergarten through twelfth grade to take in incorporating SCANS know-how into the school curriculum. Beginning in kindergarten, children should begin to develop the foundation skills "that will allow them to acquire more specialized skills later on" (p. 10). As learners progress through the grades, they will develop skills "at successively more advanced levels" (p. 10). This approach is compared to a spiral "with a greater number and complexity of skills drawn into learning activities at higher grade levels" (p. 10).

Pelavin Associates (1992) give specific examples of teaching individual competencies at different grade levels to illustrate the spiral model. These examples emphasize learning in context and focus on students becoming more active in their learning, the premise being that when students work together on problems, they become more involved, become more responsible for their own learning, and use multiple skills. "Working on a project, students acquire and practice skills in ways they will actually use them on the job; they use many skills in combination, and all skills are directed toward a

purpose" (p. 9). Resources included in the discussions are referenced, and a bibliography for each of the competency domains is included.

Teaching the SCANS Competencies (SCANS, 1993) consists of six separate articles giving practical suggestions for teaching the SCANS know-how in classrooms and the workplace. The following six topics are explored:

- Incorporating SCANS know-how into the curriculum
- A high school project in which students assessed skill requirements in local workplaces
- Special issues for students and workers from other cultures
- Technology needs for implementing the SCANS know-how
- Assessment of how well the SCANS know-how is being taught and learned

Bibliographies and resource lists accompany each article.

SCANS Update

Workplace Essential Skills: Resources Related to the SCANS Competencies and Foundation Skills (U.S. Department of Labor & U.S. Department of Education, 2000) is designed as a resource or "road map" for educators or trainers who are incorporating workplace readiness skills into their curriculum. Acknowledging that other organizations have developed frameworks for describing the skills necessary for the workplace, this report uses the SCANS topics as the basis for a comparison of 56 skills frameworks. The comprehensive report contains a separate section for each of the eight SCANS topics. Each section contains the following 9 elements: (1) The original SCANS definition leads the section. (2) A panel of experts from business, government, and education comment on the skill. (3) A literature review of domestic and international sources regarding the skill is included. (4) The sources for the literature review are listed. (5) Hierarchical

behavioral scales for the skill are listed by level. (6) SCANS-O*Net Crosswalks compare SCANS definitions and scales to Occupational Informational Network (O*Net) information. (O*Net replaces the Dictionary of Occupational Titles). (7) When possible, the SCANS definition is matched to O*Net scale anchors of High, Medium, and Low. (8) Any other possible O*Net links are made. (9) Assessments relevant to the skill are listed. The study reports many commonalities among the numerous skills frameworks.

The appendices contain useful information such as the list of sources who have defined employment skills during the last 10 years, additional O*Net Crosswalk information, and the list of assessments which can be used to measure workplace-related skills. Appendix D of the report provides case studies and descriptions of six exemplary programs that integrate the SCANS topics into instructional programs. Three of the six programs provide instruction to adult students.

A SCANS 2000 Center is located at Johns Hopkins University and is managed by Arnold Packer, the former Assistant Secretary of Labor, co-author of *Workforce 2000*, and former Executive Director of the Secretary's Commission on Achieving Necessary Skills (SCANS). The center encourages lifelong learning and provides current information about SCANS projects in both classrooms and workplaces. The center's website, www.scans.jhu.edu, features the Career Transcript System, which is funded through a grant from the U.S. Department of Labor. Students who participate in the system are pre-tested, post-tested, evaluated on what they have learned, and given scores. A student thus builds an online career transcript which they can review and forward to current or potential employers as desired. The Career Transcript System documents knowledge and skills and can follow the student throughout his career.

Response to the SCANS Report

The 1991 SCANS report "created a common vocabulary to help the worlds of work and school to communicate" (SCANS, 1992, p. 5). Reactions ranged from a description as "the most richly detailed of the proposed reform initiatives to link the schoolhouse and workplace (Pullin, 1994, p. 37) to labeling it "gibberish--full of empty jargon and foolish recommendations. It's a good example of how wrongheaded 'expert' opinion can be" (Samuelson, 1991, p. A15).

The discussion of SCANS includes support for its content. The commission "doesn't blame the schools for what students don't know" (Packer, 1992, p. 28), but instead "outlines what workers will need to know in order to succeed in the economy of the next century" (p. 28). Packer posits that, "Teaching the SCANS skills requires less of a change in what is taught than in *how* it is taught" (p. 30). The report "has helped countless educators define quality instruction and develop effective curriculum for vocational education classes" (American Vocational Association, 1998, p. 1).

Because of the rising complexity of daily life and the workplace, "the new workplace puts a premium on higher order thinking, learning, and information-processing skills" (Gottfredson, 1997, p. 121) as outlined in the SCANS report. Tetreault (1997) commends the SCANS report for going beyond basic skills and addressing "several of the 'real' needs of the contemporary workforce. . . .The bottom line: employers want employees that get along and cause little or no grief. Low maintenance is the key to successful retention of a job" (p. 11). Grimes (1994) cites the SCANS report's inclusion of diversity issues as an impetus for Florida's Blueprint 2000, a school improvement initiative which acknowledges the state's growing ethnic and social diversity. This positive support for SCANS echoes "the need to accelerate the level and pace of training

people receive before they enter the workforce" (Rowley, Crist, & Presley, 1995, p. 1) in order to transform the workplace as described by SCANS.

Negative Critiques of SCANS

The SCANS (1991b) report, which has received much attention from educators, industry leaders, and government officials, has attracted critics as well. Implementation can be problematic. It is difficult for schools to implement new education standards from both the academic and work worlds (Pipho, 1996). SCANS is only one of many standards imposed on schools, which can make it difficult to develop a coordinated curriculum. "The chief danger may be an overload of ideas and materials" (p. 399).

Others warn that the SCANS report is incomplete. McNabb and Mills (1995) point out "the failure of the SCANS report to define in a functional manner the nature of personal qualities" (p. 589).

> Complex behaviors such as responsibility, self-esteem, sociability, self-management, and integrity/honesty are based on sociological, psychological, and philosophical precepts. These complex behaviors are culturally derived and frequently endemic to a community based upon religious values, implications from ethnic groups, and influences of parenting. (p. 591)

Because the report's interpersonal qualities are difficult to define, "a major attempt should still be made to articulate the particular behaviors which need to be taught in order to develop the kinds of personal qualities called for by the SCANS model" (p. 591).

While Huitt (1997) acknowledges that SCANS has been widely accepted, he warns that "there is still much to be discussed" (p. 2). Noting "serious omissions" in the SCANS report, Huitt states a case for four additional workforce qualifications: optimism, setting and using goals, self-efficacy, and self-regulation.

There are consequences for using skill requirements for analyzing work (Darrah, 1994; Hull, 1993). Hull is critical of lists of "skills that workers need but do not possess [and that] are sometimes determined by experts on blue-ribbon panels" (p. 33). Hull

refers to the "skills metaphor--that is, of the belief that literacy as a skill is a neutral, portable technique" (p. 34). Darrah is critical that the SCANS report "in effect describes the human contribution to work in terms of the relative importance of a list of skills defined a priori" (p. 66). Using the skills requirement concept which "replaces actual workers with typical ones" (p. 67), the researcher discusses fieldwork which was conducted in four workplaces to access and critique three tenets:

- First, skill requirements decompose workers or jobs into bundles of characteristic "skills" that measure what is important about work. . . .
- Second, the concept of skill requirements suggests that the skills identified are required in some direct, obvious way; logically, if they were absent, the work would not get done. . . .
- Third, the concept of skill requirements largely separates people from the contexts in which they work by treating the workplace as a backdrop to the actions of individuals. (p. 66 - 67)

Darrah concludes that using the concept of skill requirements to analyze jobs "was not so much wrong as it was incomplete" (p. 80) and that "objective characteristics are problematical" (p. 81). Darrah suggests instead that "the appropriate analytical unit in the study of skills may be the workplace and not the individual job" (p. 82) and that "individual job skills fade in importance as the workplace becomes more sharply etched" (p. 82). Other approaches to analyzing jobs "have the potential to provide information about how people actually work and how work and learning are shaped by workplaces" (p. 82).

In perhaps the most strongly worded criticism, Samuelson (1991) deems the SCANS competencies "so vague they're useless" (p. A15). Giving the report "an A for mumbo jumbo," he warns that "it sells our students short and condemns our schools to

mediocrity" (p. A15). He recommends instead that schools teach "two types of skills: a solid foundation in reading, writing, mathematics, science, and history; and good work and study habits" (p. A15).

Connection to Adult Literacy

Though the focus of the SCANS (1991b) report is students in grades kindergarten through twelve, with a "greater number and complexity of skills drawn into learning at higher grade levels" (Pelavin, 1992, p. 10), the commission specifically addresses the adult literacy population, dropouts who "enter the 'second chance' system" (SCANS, 1992, p. 74). The commission recognizes that a lifelong learning system must serve all adults, "including those who lack basic educational skills, and adults who did not complete high school" (p. 74). "If high-performance workplaces are to become the norm in the United States, the SCANS know-how must also form the foundation of adult education and training programs" (p. 14). However, adult programs must recognize that adult learners differ from high school students in several ways: motivation, other demands on time, financing of education, and educational providers (SCANS. 1992).

The SCANS commission addresses groups similar to the student population receiving Temporary Assistance for Needy Families (TANF) when recommending that the "SCANS know-how should also be taught in federally funded training programs for disadvantaged youth and adults, including displaced workers, under the Job Training Partnership Act (JTPA) of the Department of Labor, and public assistance training under the JOBS program of the Department of Health and Human Services" (SCANS, 1992, p. 22).

Adult Literacy Instructional Materials

The SCANS report's connection to adult literacy instruction is evident in the marketing of adult literacy materials. Both McGraw-Hill/Contemporary Books (2002)

and Steck-Vaughn (2002) promote their workforce and employability materials in terms of the SCANS topics. McGraw-Hill/Contemporary Books publishes *WORKmatters*, a series of workbooks that "address JTPA skills as well as SCANS competencies. . . . SCANS competencies include: working well with others, using resources, using information, understanding systems, and understanding and using technology" (p. 88). A second McGraw-Hill/Contemporary series, *Essential Skills for the Workplace*, is described as being "SCANS-correlated material" [that] "integrates basic skills within functional, realistic workplace contexts" (p. 91).

Steck-Vaughn (2002) also markets two products in terms of the SCANS topics. *The Career Interests Module* of *The Integrator Series* allows learners to work in computer-based modules which "correlate to the SCANS competencies" (p. 82). A second series, *Necessary Skills for the Workforce*, claims to "help learners develop the SCANS competencies with straightforward, how-to instruction and hands-on practical experience" (p. 87).

Research Focusing on SCANS

The SCANS (1991b) report provides the focus for several studies examining implementation of the eight SCANS topics. Bloch (1996) surveyed high school principals and counselors to determine their knowledge of two workforce preparation policies. They found more respondents were familiar with the SCANS report than the National Career Development Guidelines. However, responses indicate that school administrators and counselors "have limited knowledge of federal career development or workforce preparation policies and a low level of commitment to related career development outcomes" (p. 34). Expanding on the findings, Bloch observes that "links between familiarity with any policy statement and school practices range from nonexistent to extremely weak" (p. 34).

A four year longitudinal study examines trends in entry-level skills included in classified advertisements for jobs, using two SCANS competencies and one foundation skill (North & Worth, 1998). Citing wide use of the SCANS report, the researchers wanted "to determine if the workplace is currently seeking the skills and preparation — technology, interpersonal, and foundation skills related to communication — that the 1991 SCANS report authors advocated" (p. 196). Between 1992 and 1996, North and Worth analyzed 1800 classified ads to determine whether these competencies and basic skills were specifically included. Analysis of the ads revealed that the workplace is seeking the technology skills advocated by the SCANS report, but not seeking the interpersonal skills or basic skills. In a discussion of the results, the authors state that it is "highly unlikely" that interpersonal skills and basic skills are no longer important in the workplace. Rather, North and Worth conclude that what is "more probable is that these skills are just expected of applicants and specifically listing these skills in entry-level ads may not be deemed necessary" (p. 203). They add that "Workplace Know-How's can no longer be viewed simply as skills that can be acquired or 'picked up' along the way, either in school or at work. These skills are necessary for solid job performance for real work" (p. 204).

Mikulecky, Lloyd, and Conner (1997) examine the extent to which students working with a computer simulation program perform activities included in the SCANS skills. The Chelsea Bank simulation has small groups of students play the role of bank teller or customer service representative, interacting with customers who appear on the screen. Two separate studies were conducted. Students participating in the simulation program were observed to be more actively involved in their learning than students in traditional classrooms and to demonstrate SCANS skills in the following areas:

- resource identification and use,
- interpersonal skills needed on teams attempting to make decisions,
- acquiring, processing, and communicating information, and
- monitoring performance and recognizing the consequences of action systems. (p. 367)

SCANS and the Current Study

In its initial report, the commission specifically mentions each of the three participant groups in this study: instructors, employers, and students. The eight topics are relevant to *adult literacy instructors* who are directly involved with preparing students for the workforce. The SCANS report warns *employers* to develop workplace "know-how" in their employees if they want their businesses to succeed. And the eight topics are especially relevant to the *unemployed adult literacy student* participants in the study, as the topics represent the skills they must possess in order to be successful in the workplace.

Other Notions of Worker Competency

In this section I will examine three other notions of worker competency often cited in the literature. Two studies present the perspectives of government planners and industry leaders, and a third presents the perspective of adult learners.

Workplace Basics

Workplace Basics: The Skills Employers Want (Carnevale, Meltzer, & Holland, 1988) presents the results of a joint two year study conducted by the American Society for Training and Development (ASTD) and the United States Department of Labor (USDOL) Employment and Training Administration. Employers participating in the study indicate that they "want good basic academic skills *and much more*" (p. 8). The study concludes that the workplace needs "a new kind of worker with a much broader set

of skills--or at least a strong foundation of basics that will enable them to learn on the job" (p. 23). In addition to standard academic skills, employees must also possess "a foundation for building broader, more sophisticated job-related skills" (p. 24). This foundation includes the following:

- Learning to learn--the ability to acquire the knowledge and skills needed to learn effectively, no matter what the learning situation;
- Listening--the ability to heed the key points of customers', suppliers', and co-workers' concerns;
- Oral communication--the ability to convey an adequate response to those concerns;
- Problem-solving--the ability to think on one's feet;
- Creative thinking--the ability to come up with innovative solutions;
- Self-esteem--the ability to have pride in one's self and believe in one's potential to be successful;
- Goal-setting/motivation--the ability to know how to get things done;
- Personal and career development skills--the awareness of the skills needed to perform well in the workplace;
- Interpersonal skills--the ability to get along with customers, suppliers, and co-workers;
- Teamwork--the ability to work with others to achieve a goal;
- Negotiation--the ability to build consensus through give and take;
- Organizational effectiveness--the understanding of where the organization is headed, and how one can make a contribution;
- Leadership--the ability to assume responsibility and motivate co-workers when necessary. (p. 24)

The *workplace basics* were then reconfigured into 7 skill groups (Carnevale, Gainer, and Meltzer, 1988). Using the foundation of a building as the visual, the skill groups are as follows:

- The Foundation: Knowing how to learn. . . .
- Competence: Reading, writing, and computation. . . .
- Communication: Listening and oral communication. . . .
- Adaptability: Creative thinking and problem-solving. . . .
- Personal management: self esteem, goal setting/motivation, and personal/career development. . . .
- Group effectiveness: Interpersonal skills, negotiation, and teamwork. . . .
- Influence: Organizational effectiveness and leadership (pp. 8-15)

The skills model advanced by the ASTD and the USDOL is "a prescription for a well-rounded worker who has acquired a number of discrete skills and who has the capability to acquire more sophisticated skills when necessary" (p. 8). This study is recognized as "one of two employability skills inventories [that] have been acknowledged as the most relevant since they address several of the 'real' needs of the contemporary workforce" (Tetreault, 1997, p. 11).

Equipped for the Future

At a 1989 Education Summit in Charlottesville, Virginia, President George H. W. Bush and the nation's governors announced that "the time has come for the first time in the United States history, to establish clear national performance goals, goals that will make us internationally competitive" (quoted in United States Department of Education, 1991, p. 35). The summit set six educational goals to be achieved by the year 2000. While five of the goals are aimed at creating "A New Generation of American Schools" (p. i), Goal 5 specifically addresses the adult literacy population.

Adult Literacy and Lifelong Learning

> Goal 5: By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship. (p. 39)

America 2000: An Education Strategy (United States Department of Education, 1991) is a follow-up to the 1989 educational summit. President Bush's introduction of the America 2000 strategy again includes a reference to adult learners:

> For all of us, for the adults who think our school days are over, we've got to become a Nation of Students--recognize learning is a lifelong process. Finally, outside our schools we must cultivate communities where learning can happen. (p. i)

America 2000 sets forth a four part strategy to achieve the six educational goals. Part Three addresses the adult population: "For those of us already out of school and in the work force, we must keep learning if we are to live and work successfully in today's world. A 'Nation at Risk' must become a 'Nation of Students'" (p. 6). Providing services to adult learners was included:

> In most states, the present system for delivering adult literacy services is fractured and inadequate. Because the United States has far higher rates of adult functional illiteracy than other advanced countries, a first step is to establish in each state a public-private partnership to create a functionally literate work force. (p. 44)

The report is inclusive of adults throughout, recognizing that "close to 85 percent of America's workforce for the year 2000 is already in the work force today" (p. 10). The report marks a "Recommitment to Literacy" (p. 24):

> The nation's efforts will be strengthened by developing performance standards for all federally aided adult education programs and making programs accountable for meeting them. . . .The Administration will also work with congress and the Governors to enact sound literacy and adult education legislation. (p. 24)

Defining the Goal. In 1993, the National Education Goals Panel, charged with developing definitions for each of the six goals, asked the National Institute for Literacy

to join them in defining and setting standards for Goal 5, the goal most directly related to adult literacy (Stein, 1995). The institute felt that it

> is important that adults [sic] learners participate in this project. . . .Therefore, we need to understand what adult learners believe is most important to know and be able to do to compete in a global economy and to exercise the rights and responsibilities of citizenship. (p. 104)

In January, 1994, the institute invited adult learners to share their "thoughts in their own words" (p. 9) as they completed four statements:

- In my community, competing in the global economy means. . . .
- To me, having the knowledge and skills to compete in the global economy means. . . .
- To me, exercising the rights and responsibilities of citizenship means. . . .
- To exercise the rights and responsibilities of citizenship you have to be able to. . . . (p. 9)

More than 1500 adult learners from 149 programs in 34 states responded. The respondents were representative of adult students in "age, race, culture and ethnicity, as well as the full spectrum of programs. . ." (p. 4).

Equipped for the Future: A Customer-Driven Vision for Adult Literacy and Lifelong Learning (Stein, 1995) is a discussion of the adult learners' responses which revealed "a remarkably consistent vision" (p. 4) of what adults hope to gain by enrolling in literacy programs:

- to have access to information and orient themselves in the world;
- to give voice to their ideas and opinions and to have the confidence that their voice will be heard and taken into account;
- to solve problems and make decisions on their own, acting independently as a parent, citizen and worker, for the good of their families, their communities, and their nation;

- to be able to keep on learning in order to keep up with a rapidly changing world. (p. 4)

Equipped for The Future (EFF) used the responses from adult learners to develop the standards for Goal 5 of America 2000 (National Institute for Literacy, 2000a). Carrying out the adult roles of citizen, family member, and worker requires the skills included in Table 4.

Work Roles. From these standards, Equipped for the Future developed role maps describing what adults need to know in order to fulfill their roles as citizens/community members, parents/family members, and workers. The worker role map defines the ability "to change and actively participate in meeting the demands of a changing workplace in a changing world" (National Institute for Literacy, 2000b, p. 1).

Do the work

- Organize, plan, and prioritize work.
- Use technology, resources, and other work tools to put ideas and work directions into action.
- Respond to and meet new work challenges.
- Take responsibility for assuring work quality, safety, and results.

Work with others

- Communicate with others inside and outside the organization.
- Give assistance, motivation, and direction.
- Seek and receive assistance, support, motivation, and direction.
- Value people different than yourself.

Table 4

EFF Standards for Adult Literacy and Lifelong Learning

EFF Communication Skills

Read With Understanding	Determine the reading purpose; select reading strategies appropriate to the purpose; monitor comprehension and adjust reading strategies; analyze the information and reflect on its underlying meaning; integrate it with prior knowledge to address reading purpose.
Convey Ideas in Writing	Determine the purpose for communicating; organize and present information to serve the purpose, context, and audience; pay attention to conventions of English language usage, including grammar, spelling, and sentence structure, to minimize barriers to reader's comprehension; seek feedback and revise to enhance the effectiveness of the communication.
Speak So Others Can Understand	Determine the purpose for communicating; organize and relay information to effectively serve the purpose, context, and listener; pay attention to conventions of oral English communications, including grammar, word choice, register, pace, and gesture in order to minimize barriers to listeners' comprehension; use multiple strategies to monitor the effectiveness of the communication.
Listen Actively	Attend to oral information; clarify purpose for listening and use listening strategies appropriate to that purpose; monitor comprehension, adjusting listening strategies to overcome barriers to comprehension; integrate information from listening with prior knowledge to address listening purpose.

Observe Critically	Attend to visual sources of information, including television and other media; determine the purpose for observation and use strategies appropriate to the purpose; monitor comprehension and adjust strategies; analyze the accuracy, bias, and usefulness of the information; integrate it with prior knowledge to address viewing purpose.

EFF Decision-Making Skills

Use Math to Solve Problems and Communicate	Understand, interpret, and work with pictures, numbers, and symbolic information; apply knowledge of mathematical concepts and procedures to figure out how to answer a question, solve a problem, make a prediction, or carry out a task that has a mathematical dimension; define and select data to be used in solving the problem; determine the degree of precision required by the situation; solve problem using appropriate quantitative procedures and verify that the results are reasonable; communicate results using a variety of mathematical representations, including graphs, charts, tables, and algebraic models.
Solve Problems and Make Decisions	Anticipate or identify problems; use information from diverse sources to arrive at a clearer understanding of the problem and its root causes; generate alternative solutions; evaluate strengths and weaknesses of alternatives, including potential risks and benefits and short- and long-term consequences; select alternative that is most appropriate to goal, context, and available resources; establish criteria for evaluating effectiveness of solution or decision.
Plan	Set and prioritize goals; develop an organized approach of activities and objectives; actively carry out the plan; monitor the plan's progress while considering any need to adjust the plan; evaluate its effectiveness in achieving the goals.

EFF Interpersonal Skill

Cooperate With Others	Interact with others in ways that are friendly, courteous, and tactful, and that demonstrate respect for others' ideas, opinions, and contributions; seek input from others in order to understand their actions and reactions; offer clear input on own interests and attitudes so others can understand one's actions and reactions; try to adjust one's actions to take into account the needs of others and/or the task to be accomplished.
Advocate and Influence	Define what one is trying to achieve; assess interests, resources, and the potential for success; gather facts and supporting information to build a case that takes into account the interests and attitudes of others; present a clear case, using a strategy that takes into account purpose and audience; revise, as necessary, in response to feedback.
Resolve Conflict and Negotiate	Acknowledge that there is a conflict; identify areas of agreement and disagreement; generate options for resolving conflict that have a "win/win [sic] engage parties in trying to reach agreement on a course of action that can satisfy the needs and interests of all; evaluate results of efforts and revise approach as necessary.
Guide Others	Assess the needs of others and one's own ability to assist; use strategies for providing guidance that take into account the goals, task, context, and learning styles of others; arrange opportunities for learning that build on learner's strengths, seek feedback on the usefulness and results of the assistance.

EFF Lifelong Learning Skills

Take Responsibility for Learning	Establish learning goals that are based on an understanding of one's own current and future learning needs; identify own strengths and weaknesses as a learner and seek out opportunities for learning that help build self-concept as a learner; become familiar with a range of learning strategies to acquire or retain knowledge; identify and use strategies appropriate to goals, task, context, and the resources available for learning; monitor progress toward goals and modify strategies or other features of the learning situation as necessary to achieve goals; test out new learning in real-life applications.
Reflect and Evaluate	Take stock of where one is: assess what one knows already and the relevance of that knowledge; make inferences, predictions, or judgments based on one's reflections.
Learn Through Research	Pose a question to be answered or make a prediction about objects or events; use multiple lines of inquiry to collect information; organize, evaluate, analyze, and interpret findings.
Use Information and Communications Technology	Use computers and other electronic tools to acquire, process, and manage information; use electronic tools to learn and practice skills; use the Internet to explore topics and gather information.

(National Institute for Literacy, 2000a, p. 1-3)

Work within the big picture

- Work with organizational norms.
- Respect organizational goals, performance, and structure to guide work activities.
- Balance individual role and needs with those of the organization.
- Guide individual and organizational priorities based on industry trends, labor laws/contracts, and competitive practices.

Plan and direct personal and professional growth

- Balance and support work, career, and personal needs.
- Pursue work activities that provide personal satisfaction and meaning.
- Plan, renew, and pursue personal and career goals.
- Learn new skills. (p. 1)

The skills outlined in the EFF report have been integrated into the instructional programs of exemplary adult education programs (Knell, 1998; Murphy & Johnson, 1998; U.S. Department of Labor and U.S. Department of Education, 2000).

21st Century Skills for 21st Century Jobs

A joint report of the U. S. Department of Commerce, the U. S. Department of Education, U. S. Department of Labor, the National Institute of Literacy, and the Small Business Administration (1999) predicts that "the Nation's workers will need to be better-educated to fill new jobs and more flexible to respond to the changing knowledge and skill requirements of existing jobs" (p. iii). Linking higher levels of education with higher wages, the report reveals that "In 1997, the average high school graduate earned 42 percent more than the average person with less than a high school education" (p. 8). Due to globalization, advances in technology, "newer and more sophisticated systems of work, new ways to deliver products, and innovative systems of management, the majority of jobs in the 21st century will require employees to have a broad range and depth of skills" (p. 1). Prospective employees who wish to enter the workforce must understand that employers are seeking "employees with a portfolio of basic, technical, organizational, and company specific skills" (p. 2).

- ***Basic Skills*:** The academic basics of reading, writing, and computation are needed in jobs of all kinds. Reading skills are essential as most employees increasingly work with information on computer terminals,

forms, charts, instructions, manuals, and other information displays. Computation skills are needed to organize data for analysis and problem-solving. Writing is an essential part of communications, conveying guidance to others and establishing a permanent base of information.

- ***Technical Skills*:** Computer skills are well on their way to becoming baseline requirements for many jobs. Workers use a growing array of advanced information, telecommunications, and manufacturing technologies, as employers turn to technology to boost productivity and efficiency, and to deliver services to customers in new ways. . . . Moreover, information technology changes rapidly requiring workers to frequently upgrade their skills for competency.
- ***Organizational Skills*:** New systems of management and organization, as well as employee-customer interactions, require a portfolio of skills in addition to academic and technical skills. These include communication skills, analytical skills, problem-solving, creative-thinking, interpersonal skills, the ability to negotiate and influence, and self-manage. More than half of non-managerial employees participate in regularly scheduled meetings to discuss work-related problems, indicating the need for these skills.
- ***Company-Specific Skills*:** New technology, market changes, and competition drive companies to innovate, constantly upgrade products and services, and focus on continuous improvement of work processes. As a result, employees must frequently acquire new knowledge and skills specifically relevant to the company's products and services, production processes, or service-delivery modes. (U. S. Department of Commerce,

> the U. S. Department of Education, U. S. Department of Labor, the National Institute of Literacy, and the Small Business Administration, 1999, p. 2)

Welfare-To-Work Programs

Though education is considered an essential component in preparing welfare recipients for the workplace, there has been no consensus on the best match between program content and the needs of welfare recipients. Jenkins (1999) is critical of traditional adult literacy programs, suggesting that their focus on literacy skills and GED preparation has not adequately prepared welfare recipients for the workplace. D'Amico (1997) counters that such programs have been unable to provide evidence of their effectiveness for several reasons:

- Students leave programs before making significant progress.
- Programs lack a consistent vision of goals concerning program content.
- Adult literacy programs are underfunded.
- Eighty percent of adult literacy programs are staffed by part-time teachers.

Knell (1998) considers literacy and education integral components of welfare reform and recommends that curricula and instruction be built around skills such as those included in the SCANS reports (1991a, 1991b) and Equipped for the Future (Stein, 1995). Knell describes two types of educational delivery systems, both requiring partnerships. A *comprehensive delivery system* provides most services through one entity such as a community college, while a *network system* collaborates with others agencies and programs for delivery of educational services.

Knell (1998) presents two welfare-to-work models which provide support for recipients, depending on their needs. The sequence of services depends on the individual's circumstances and allows for the participant's leaving a job. The *Pre-*

Employment Services Model places all services "up front;" orientation, job-search, assessment, and pre-employment service activities (which might include education) precede employment. The *Pre-and Post-Employment Services Model* provides some services "up-front" but provides most services after the participant secures employment. Pre-Employment Services consist of orientation, assessment, placement assistance, adult education placement, vocational training, and/or job training. Post-Employment Services offer job retention strategies, continued support and reassessment, customized adult education program, vocational/job training, community service, and a combination of work and education.

Martin (1999) presents four literacy program models for welfare-to-work initiatives. The dominant form of adult literacy instruction is the *Academic Approach*, which focuses on academic skills such as reading, writing, and arithmetic. These skills are generalizable to a variety of contexts. The goal of academic approach programs is usually a high school diploma, GED, or another credential. Martin notes that this approach may not be appropriate for those welfare recipients who have the lowest literacy skills.

The *Situated Context and Cognition Approach* combines approaches ranging from context-based programs to situated-cognition programs. Students move from context-specific knowledge to abstract, general knowledge similar to the goals of the academic approach. An example of this approach is a cognitive apprenticeship in which students develop and use cognitive tools in an authentic work activity. Collaborative learning, such as group problem solving, is an important feature of an apprenticeship.

The *Integrated Programs Approach* combines elements of both the academic approach and the situated-cognition approach. Using this approach, students develop a narrow base of skills that are generalizable for broader use. There are two types of

integrated literacy programs. (1) Integrated Literacy-Occupational Skills Programs target occupations that have a lack of workers. Basic skills instruction is then integrated with job skills training in a simulated job setting. (2) The *Integrated Literacy-Soft Skills Training* focuses on a narrow set of social and organizational skills which can be transferred to a much broader context. Literacy skills instruction can be combined with training for job-seeking skills, job survival and retention, life skills, and motivation.

D'Amico (1997) posits that successful programs must address the diverse needs of welfare recipients and be innovative in meeting those needs. For students seeking immediate employment, programs should provide links to employers who hire entry-level workers. For students with very low basic skills, programs should offer basic skills in the context of a work-like environment. For those individuals not ready for programs or work, programs should offer activities which teach the skills, competencies, and time commitments that are conceptually linked to the workplace.

Exemplary Programs

As demonstrated above, many frameworks have been suggested as being appropriate for literacy programs serving welfare recipients. The following section is a discussion of studies which examined successful welfare-to-work programs.

Citing a study conducted for the U. S. Department of Education, D'Amica (1997) describes six adult education programs (prior to the Personal Responsibility Act) that demonstrate how adult education programs "can and should offer many paths to work and to higher education opportunities for public assistance recipients" (p. 51). The six programs share the following 12 practices:

1. A well-defined mission.
2. Separate classes specifically for JOBS students.
3. Skilled, experienced teachers.

4. An emphasis on staff development.
5. Varied instructional approaches that involve active learning.
6. Frequent communication about students' progress between educators and JOBS program staff.
7. A stress on regular attendance, with aggressive follow-up for absences.
8. Relatively intensive class schedules.
9. A high degree of teacher-student and student-student interaction. (D'Amico, p. 41)

Murphy and Johnson (1998) conducted a national search for exemplary welfare-to-work programs and selected eight programs from 84 applicants. A discussion of the eight programs notes that organizing basic skills instruction around recognized work requirements was often an effective approach. Of the eight programs, two had curricula based on the SCANS topics, while two others taught basic skills in real-life contexts, using Equipped for the Future (Stein, 1995) as a model. Based on their study, Murphy and Johnson consider the following to be characteristic of successful programs:

- Focus on employment-related goals.
- Hands-on work experience.
- Collaboration with welfare agencies and other community organizations.
- A client enrollment and selection process that accepts clients with a wide range of abilities (i.e. no "creaming")
- Integration of basic skills components with other welfare-to-work activities.
- Clearly defined goals and outcomes.
- Achievement of a reasonable cost, broken down by outcome, (not by cost per student or cost per contact hour).

- Involvement of private sector employers.
- A strong record-keeping system that includes information on both cost and participant progress toward outcomes.
- Early intervention and personal attention in addressing potential problems.
- Use of "job-coaches" to assist clients in making the transition to work.
- Use of "job developers" who know of existing employment opportunities.
- Extensive support services, including child care and transportation.
- Commitment to continuous staff development. (p. 13)

Murphy and Johnson provide a Checklist for Success which could be used by other providers to assess educational services to welfare recipients:

- Are basic skills integrated with other welfare-to-work activities?
- Does your program have clearly defined goals and outcomes that relate directly to success in the workplace?
- Do you collaborate with welfare agencies and other community groups?
- Are private sector employers actively involved?
- Does your program include hands-on work experience for students?
- Is a staff member responsible for providing students with individual assistance in addressing problems that could interfere with attendance?
- Are support services available?
- Does your curriculum include both job readiness skills and life skills?
- Does your staff participate regularly in staff development activities? (p. 17)

Jenkins (1999) presents a different focus-- moving welfare recipients from low-wage, semi-skilled jobs to entry-level skilled jobs. In order to bridge the gap between low-wage and livable-wage jobs, Jenkins recommends "bridge programs" with the goal

of making educationally and economically disadvantaged individuals eligible for "secure entry-level jobs that pay a livable wage and provide opportunities for advancement" (p. 8). These programs, designed to help the disadvantaged or "hardest-to-employ," attempt to provide a job applicant with the basic qualifications for entry-level skilled positions.

There are three requirements for bridging the gap. (1) Policy makers must set a goal of enabling welfare recipients to secure liveable-wage jobs with the opportunity for advancement. (2) Policy makers should encourage the development of educational programs which support on-going advancement up the career ladder. (3) Employers should be involved in both the development and financing of bridge programs.

Because a job applicant seeking a skilled position must be "employable, trainable and technically literate" (Jenkins, 1999, p. 8), bridge programs must offer "intensive training in applied basic skills and technical fundamentals, and extensive assessment, counseling, case management and follow-up support, all in an environment that seeks to expose program participants to the culture and learning demands of the workplace" (p. 8). Individuals wishing to participate in bridge programs must satisfy four categories of qualifications:

1. Employable -- Drug free, reliable, strong work habits, ability to work well with others.
2. Trainable -- Can read and do math at least the 9th grade level, apply basic principles of science and technology, use computers, solve practical problems and communicate effectively, both orally and in writing.
3. Technically literate -- Can do basic shop math, use common measuring devices, read blueprints and schematics and is familiar with machine operation.

4. High School Diploma or GED -- There are exceptions, but most employers in more technologically advanced firms (which also tend to pay higher wages) require applicants for entry-level skilled jobs to have a high school credential. (p. 6)

It should be noted that six of the 12 bridge programs that Jenkins profiles have minimum academic requirements which would disqualify many current TANF students from attending such programs.

The following are characteristics of effective bridge programs:

- Effective bridge programs are demand-driven, with strong connections to employers offering livable-wage jobs....
- Bridge training should provide the foundation for career-long learning....
- Effective programs offer participants extensive case management and support over an extended period of time, in addition to training....
- Effective programs have strong ties to the local community....
- Effective programs are built on "community-business partnerships." (Jenkins, 1999, pp. 9-11)

The comprehensive *National Evaluation of Welfare-to-Work Strategies* (U.S. Department of Health and Human Services & U.S. Department of Education, 2001) summarizes the long-term effects of 11 mandatory welfare-to-work programs on recipients and their children. The study compares the effects of two alternative pre-employment strategies: employment-focused programs and education-focused programs. Four Labor Force Attachment (LFA) programs emphasized short-term job search assistance, such as a job club, and encouraged people to find employment quickly. Seven Human Capital Development (HCD) programs emphasized longer-term skill-building

activities. Depending on academic levels, participants were assigned to either basic skills activities or GED instruction.

Welfare recipients were randomly assigned to one or more program groups or to a control group which received no services. The analysis was based on data from 40,000 single parents and children during a five year follow-up period somewhere between 1991 and 1999. Along with descriptions of the 11 welfare-to-work programs (including two in Georgia), findings related to the many aspects of welfare reform are included in the detailed report. The following findings relevant to this dissertation show more support for employment-focused programs than for education-focused programs:

- Almost all programs helped participants work during more quarters and earn more than they would have in the absence of a program.
- Employment-focused programs had larger effects on employment, earnings, and welfare receipt than did the education-focused programs.
- Employment-focused programs moved recipients into jobs more quickly than did education-focused programs.
- Education-focused programs increased GED or high school diploma receipt, while employment-focused programs did not.
- Education-focused programs were more expensive to operate.
- The more disadvantaged groups (welfare recipients who lacked a high school diploma or GED, who had a history of welfare receipt, and who had not worked recently) had higher earnings because of the program, but still earned very little.
- Overall, comparing program participants to control groups, combined earnings were largely unaffected. Welfare and Food Stamp dollars were replaced by earnings and Earned Income Tax Credits.

One of the 11 programs, however, significantly outperformed all others in terms of employment, earnings, and return on money invested in the program. An employment-focused program in Portland, Oregon used a "mixed" approach, blending education or training with employment search and differed from the other 10 in several aspects. GED instruction was offered to those considered capable of attaining a GED. This program assigned some individuals to a short-term education or training and the majority to job search. Job search participants were instructed to wait for a *good* job, one that paid well above minimum wage and that offered stable employment. An experienced staff and full-time job developers contributed to the success of this program, which produced larger, more consistent employment and earnings increases than any other program.

This section has provided an overview of the recent discussion of welfare-to-work educational programs. While there is little consensus about a single best method, there is much to be learned from examining the many components of exemplary programs.

History of Literacy Legislation

In this section I will provide an overview of adult literacy legislation, including the events leading up to it and the initiatives driving it. Attention to the language of the purpose statements of the acts and amendments reveals an ongoing tension between the needs of individuals and the needs of the economy.

> The tensions remain between viewing literacy as a means of meeting the expectations of the larger society or as a means of responding to personal demands and goals; literacy as an individual achievement for personal mobility or as one element supporting community growth and development; literacy as a score on a test or as a relationship between an individual and a larger social context; and literacy as a unidimensional objective achievement or literacy as a multidimensional relativistic cultural construct. (Fingeret, 1991)

World War I

The U. S. military played a fundamental role in events leading up to the first Adult Education Act (Harman, 1987; Sticht, 2002) by focusing attention on the problems

of illiteracy and national defense (Levine, 1982; Rose, 1991; Sticht, 1987). During World War I, the U.S. Army developed the first group-administered, standardized intelligence tests, exposing the low literacy levels of many young soldiers (Sticht, 2002). Poorly educated soldiers created a serious problem for an Army in need of semi-skilled and skilled personnel (Ginzberg & Bray, 1953; Gray, 1956, Sticht, 1995), and the initial policy of rejecting illiterate inductees as unfit for service was changed in favor of training programs (Rose, 1991). The National Advisory Council on Adult Education (NACAE) (1980) reports that uneducated soldiers participated in 90 day educational programs to increase their skills to at least the fourth grade level and credits the military with the development of programs, instructional materials, and special techniques for the education of illiterate adults during WWI. These filmstrips, texts, and workbooks represent the first significant effort to provide materials designed for teaching adults (Costa, 1988).

World War II

"It was the large-scale screening of the younger male population consequent to the passage of the Selective Service Act of 1940 that turned a local and isolated fact into a national problem" (Ginzberg & Bray, 1953, p. 39). At the beginning of WWII "more than 4 million men in the labor force had less than five years of schooling; about 1.5 million were totally illiterate" (p. 4). Trainees unable to read orders, instructions, and signposts found it difficult to keep up with training schedules. In the spring of 1944, the Army initiated The Special Training Program, aimed at preparing uneducated soldiers for regular training (Ginzberg & Bray, 1953). Reading was taught using military job manuals, writing job-related instructions, and writing letters to relatives. Materials such as the *Army Reader, Men in the Armed Forces,* and *Army Arithmetic* were designed to improve literacy skills in the military life domain rather than general literacy skills. The

intent was to prepare soldiers as quickly as possible to begin regular training in the Army (Ginzberg & Bray, 1953).

In 1946, the United States Armed Forces Institute and the American Council on Education developed the General Educational Development (GED) Tests (NACAE, 1980). Developed by civilian test experts, the GED provided returning military personnel a means of documenting high school level academic skills and knowledge (Quigley, 1991a). Periodically updated to reflect current high school standards, the GED has become the "capstone" of public literacy education in America (Quigley, 1996). "The performance of adults with General Educational Development (GED) certificates is nearly identical to that of adults with high school diplomas" (Kirsch, 1993, p. 27), and employers continue to use the GED as an acceptable substitute for high school completion (Hawking, 1995).

Post War Years

After WWII, General Eisenhower became president of Columbia University. Concerned with the literacy problems of WWII, he established a research project titled "The Conservation of Human Resources" (Ginzberg & Bray, 1953) which focused on the relationship between education and work performance. The study determined that illiteracy and lack of education resulted in a significant underutilization of human resources which negatively affected defense and economic security. Ginzberg and Bray warned that this widespread problem called for federal intervention and policy. Following WWII, "the United States became a knowledge economy in which the acquisition and application of information was the foundation of work" (Stubblefield & Keane, 1989, p. 34). Thus literacy was perceived as necessary for economic growth and national security (Rose, 1991; Subblefield & Keane, 1989).

Literacy Legislation in the 1960s

"The election of John F. Kennedy in 1960 ushered in a decade of self-evaluation" (Cook, 1977, p. 102). With attention directed toward poverty and injustice, the federal government took a more active interest in adult literacy than it had in any other period in history. Kennedy requested legislation to combat adult literacy in both his 1962 and 1963 education addresses to Congress (Ellis, 1984; Rose, 1991). Pointing out the implications for both the economy and individual development in a 1962 speech to the U. S. House of Representatives, Kennedy stated that "the economic result of this lack of schooling is often chronic unemployment, dependency, or delinquency, with all the consequences this entails for these individuals, their families, their communities, and the Nation." (quoted in Rose, 1991, p. 13). The proposed legislation was part of an effort to deal with problems of chronic unemployment and dependence. Even though there was little objection to the legislation itself, literacy bills introduced in both the 87th and 88th Congresses failed (Rose, 1991).

Economic and social forces continued to drive legislative initiatives for the educational and training needs of poor, unemployed, unskilled, and undereducated adults. Although the Civil Rights Act prohibited job discrimination based on race, sex, age, religion, or national origin, adults with limited educations were at a competitive disadvantage (Ulin, 1976). By 1964, even though the nation's employment picture was improving, high concentrations of unemployment remained for Blacks, for non-English-speaking adults, and for the undereducated. Undereducated adults were at a disadvantage in the labor market and were unable to take advantage of available social services.

The government saw education as a factor in improving the economic status of the poor and unemployed (Rose, 1991). In 1964, the Adult Basic Education (ABE) Program was established as Title II-B of the Economic Opportunity Act. Because it did

not have enough support for passage on its own (Ellis, 1984), the act was attached to the anti-poverty bill and was just one small part of the legislation (Rose, 1991). Thus, "although individual quality of life remained a concern, the argument needed to be framed in terms of the national interest" (p. 32). Signed into law by President Johnson in August 1964, the act was the first federal poverty program and contained community action and development, job training, and education. Its goals reflected the "Democratic Party philosophy of providing a full education to every citizen to the limits of his capability" (p. 5). The act "was enacted at a time when there were millions of Americans at the poverty level although the U. S. was considered a rich nation" (Bina, 1976, p. 34). The Office of Economic Opportunity provided funds to the United States Office of Education to administer the program, requiring states to submit plans for program development (National Advisory Council on Adult Education [NACAE], 1980). The purpose statement emphasizes the belief in a strong connection between literacy and employment.

> It is the purpose of this legislation to initiate programs of instruction for persons 18 years old and older whose inability to read or write the English language constitutes a substantial impairment of their ability to obtain or retain employment. (Ulin, 1976, p. 13)

The 1966 Title III amendments to the Elementary and Secondary Education Act formally transferred the ABE program to the United States Office of Education (USOE), a move "seen as the beginning of the move toward parity with other education levels" (Rose, 1991, p. 32). Thus 1966 is considered the anniversary of literacy legislation because it was only then that adult education was recognized as part of the United States educational system.

The purpose of the Adult Education Act (AEA) was broadened to strengthen the nonvocational focus, going beyond the concept of education for employment to include the performance of various roles as parent and citizen. However, it was again necessary

to frame the legislation in terms of an emergency situation (employment) in order to qualify for federal funding (Rose, 1991).

> It is the purpose of this legislation to encourage and expand basic educational programs for adults to enable them to overcome English language limitations, to improve their basic education in preparation for occupational training and more profitable employment, and to become more productive and responsible citizens. (Ulin, 1976, p. 16)

An *adult* was defined as "any individual who has attained the age of eighteen" (Ulin, 1976, p. 17), and a distinction between adult education and adult basic education was also made.

> **Adult education**: Services or instruction below the college level for adults who do not have a certificate of graduation from secondary school and are not currently in schools.
>
> **Adult basic education**: Education for adults whose inability to speak, read, or write the English language constitutes a substantial impairment of their ability to get or retain employment, with a view to making them less likely to become dependent on others, to improving their ability to benefit from occupational training and otherwise increasing their opportunities for more profitable and productive employment, and to making them better able to meet their adult responsibilities. (Ulin, 1976, p. 17)

The language used to define *adult basic education* continues to emphasize the importance of education in terms of the economy.

Literacy Legislation in the 1970s

Crabtree (1970) acknowledges the tension between the needs of the economy and the needs of the individual when he points out the lack of a "commonly-accepted purpose" as one of the weaknesses of the ABE program.

> Is its basic purpose to train disadvantaged adults for employment? Is it to give them a foundation of literate understanding for improve [sic] functioning as citizens, parents, and homemakers? Is it all of these?. . . .But the adult is more than a worker. He is a citizen and, in most cases, a parent and a homemaker. He is an individual in search of a richer self-realization. He needs an educational program that prepares him for all of these roles. . . .The whole man must be educated, not just his vocational facsimile." (pp. 220-221)

Though critical of the legislation's overemphasis on the occupational objectives, Crabtree acknowledged that ABE programs allow adults the opportunity to participate in educational programs.

Amendments to the AEA during the 1970s represent a shift away from concern with grade level to functional literacy and were influenced by the Adult Performance Level (APL) Project (APL, 1975; Rose, 1991). As functional literacy became a more commonly accepted standard, the problem of objective measurement increased (Hunter & Harman, 1979, p. 17). Initiated and supported by the U.S. Department of Education, the APL project's purpose was "to specify the competencies which are functional to economic and educational success in today's society and to develop devices for assessing those competencies of the adult population of the United States" (APL, 1975, p. 1). University of Texas researchers defined 65 objectives (requirements for adult living) and identified five general-knowledge areas: consumer economics, occupational knowledge, community resources, health, and government and law. The skills necessary for functioning in each of these areas were communication skills, computation skills, problem-solving skills, and interpersonal relations skills. The study describes three levels of functional competency within each category. These levels are associated with different levels of adult success as measured by income, job status, and education. An APL 1 functions with great difficulty; an APL 2 is functional but not proficient in society; an APL 3 operates with a high level of proficiency. A test was developed to measure the performance of adults with respect to these objectives. "It is not possible to

point to any other development in the field of adult education which has been given as much sustained attention as has the APL Project" (Griffith, & Cervero, 1977, p. 221). Although the APL study brought adult basic education much needed attention (Rose, 1991), there were serious criticisms concerning the methodology, validity, and middle class bias of the study (Cervero, 1980; Griffith, & Cervero, 1977; Hayes & Valentine, 1989, Levine, 1982).

The 1970 amendments to the AEA extended the pool of potential participants to include those who had not received a secondary education. This change allowed funding of high school completion or equivalency programs, de-emphasizing basic education, and recognizing that participants were seeking GED certificates (DeSanctis, 1979). The word *basic* was deleted from the title "to minimize the stigmatizing perceptions of the Adult Education Act as a program for illiterates" (p. 19). The intent of the original 1964 legislation had been to serve the basic skills needs of adults, with funding based on the number of adults with less than sixth grade education, but it is "much easier to recruit and retain participants seeking a credential — the GED" (p. 16). The 1970 amendment revised the definition of *adult* to include "any individual who has attained the age of sixteen" (NACAE, 1980, p. 19), recognizing the fact that "the 16 year old high school dropout was being denied further education opportunities for up to two years" (DeSanctis, 1979, p. 15). The amendment placed a renewed emphasis on the needs of the economy by using the phrase "become more employable, productive and responsible citizens (NACAE, 1980, p. 30).

Amendments in 1972 and 1973 focused on individual needs by expanding the program to include special populations. The 1972 amendments authorized grants "to support planning, pilot and demonstration projects providing adult education for Indians" (NACAE, 1980, p. 21), and the 1974 amendment provided "programs for elderly persons

whose ability to speak and read the English language is limited and who live in an area with a culture different than their own" (p. 24). Amendments in 1974 re-emphasized the needs of the economy by requiring states to cooperate with labor force development and training programs, occupational educational programs, and reading improvement programs (Rose, 1991).

Amendments in 1978 shifted the focus back to the basic education program and away from the more successful secondary completion programs (Rose, 1991). The purpose includes the phrase "to enable all adults to acquire basic skills necessary to function in society" (NACAE, 1980, p. 3). An attempt was made to increase the underserved segments of the population by clearly mandating that states conduct vigorous programs of outreach for those most in need of instruction in basic skills (NACAE, 1980, p. 10). The plan also expanded the ABE delivery system to include business, labor, libraries, colleges, and community organizations in order to make entry into programs more convenient and attractive to clients (Ellis, 1984).

Literacy Legislation in the 1980s

Because of heightened concern with national productivity and the link between literacy and economic development, there was increased interest in adult literacy during the Reagan administration (Rose, 1991). This interest, however, did not result in increased funding. Prior to the Reagan years, government appropriations for adult education had grown steadily. During the early years of the Reagan administration, funding did not increase, and amendments were meant to "streamline the program" (Ellis, 1984, p. 7), emphasizing the use of volunteers. Amendments in 1984 expanded the basic purpose to enable "all adults to acquire basic literacy skills necessary to function in society" (Rose, 1991, p. 25). Expanding the eligible population, the definition of *adult*

was changed to one who is 16 or older or "who is beyond the age of compulsory school attendance under state law" (Ellis, 1984, p. 10).

"By 1987, the literacy crisis had expanded to include alarm over the literacy skills of current and future workers" (Gowen, 1992, p. 7). *Workforce 2000* (Johnson & Packer, 1987) predicts a shortage of skilled workers for future jobs requiring more sophisticated skills, stating that 27% of new jobs will be in the unskilled categories, compared to 40% of current jobs.

Reacting to this skills crisis, the 1988 revision of the Adult Education Act restates the purpose to emphasize basic literacy in terms of both the individual and the economy.

> It is the purpose of this title to assist the States to improve educational opportunities for adults who lack the level of literacy skills requisite to effective citizenship and productive employment. (Rose, 1991, p. 26)

Federal funding was substantially increased in 1988, with special grants available for workplace and English literacy programs. Looking at literacy as a "panacea" for a variety of social problems, Congress was in effect asking literacy providers to deliver services that would increase employability (Chisman & Associates, 1990). In noting this increased interest in literacy, Chisman states that "Congress discovered adult literacy" (p. 222).

Jump Start (Chisman, 1989) is an important document that influenced public opinion about literacy (Rose, 1991) and influenced the drafting of the National Literacy Act of 1991 (Sticht, 2002). Chisman reports the findings of the Project on Adult Literacy sponsored by the Southport Institute for Policy Analysis. The project's purpose was "to examine the federal government's role in promoting adult literacy--what it is and what it should be" (p. i). Chisman points out that 20-30 million adults have serious problems with basic skills and warns of the economic impact of literacy problems.

> There is no way in which the United States can remain competitive in a global economy, maintain its standard of living, and shoulder the burden of the

> retirement of the baby boom generation unless we mount a forceful national effort to help adults upgrade their basic skills in the very near future. (p. iii)

Pointing out that adult literacy is currently a very fragmented, low priority issue in Washington, Chisman (1989) urges the government to "jump start a more substantial effort than currently exists" (p. iv). He points out that increasingly complex business processes require workers with higher skill levels and that the U.S. must upgrade the quality of its workforce. Because of the economic implications, Chisman warns that the United States "is racing toward a demographic deadline" (p. 2) and must improve the skills of its workforce if it is to maintain a healthy economy, defend against foreign competition, improve productivity, and maintain its standard of living.

> The bottom line is that the plight of the twenty million-plus in the United States is a low-level priority for which responsibility is diffused among multiple institutions, almost all of them poorly supported, at every level of government and within the private sector. (p. 8)

The literacy problem should be considered "a national shame and a national waste" (p. 35), and is "easily one of the most tractable of our major national problems" (p. 35).

Literacy Legislation in the 1990s

At the 1990 Education Summit in Charlottesville, Virginia, President George H. W. Bush and the nation's governors, including Governor Clinton of Arkansas, adopted the goal that *all* of America's adults be literate by the year 2000 (U. S. Department of Education, 1991). The next year, Congress passed the National Literacy Act of 1991. Throughout the history of literacy legislation, there has been a struggle to define "literacy" (Harman, 1987), and two years passed before a definition was agreed upon for the NLA of 1991 (Rose, 1991).

> For the purpose of this Act the term "literacy" means an individual's ability to read, write, and speak in English, and to compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals and develop one's knowledge and potential. (Rose, 1991, p. 28)

Quigley (1991b) considers The National Literacy Act of 1991 a "breakthrough." "We have our *own* legislation. Until now we have always been 'embedded' in elementary and secondary legislation" (p. 169). Pointing out the phrase "to achieve one's goals, and develop one's knowledge and potential" (National Institute for Literacy, 1998, p. 2) in the purpose, Quigley notes that "for the first time illiterate adults are allowed to be people, not simply heads to be counted or units for the job training" (p. 169).

The act calls for the Department of Labor to administer a national Workforce Literacy Assistance Collaborative to provide small and medium-sized businesses with technical assistance in developing and implementing literacy programs (Rose, 1991). Although the definition includes individual development, the emphasis on workplace literacy and economic productivity "harkened back to the original emphasis of the act on development of a productive citizenry" (p. viii) and "is very much part of the original human capital views espoused by Ambrose Caliver and Ginzberg and Bray in the 1940s and 1950s" (p. 34). The NLA of 1991 again "points up the central tensions within adult education legislation from its inception" (p. 31).

In 1988, Congress called on the Department of Education to support a national literacy survey of American adults. The incentive for the National Adult Literacy Survey (NALS) (Kirsch, 1993) was clearly related to employment and economic issues, recognizing that literacy problems represent a national problem, not just an individual one.

> Although Americans today are, on the whole, better educated and more literate than any who preceded them, many employers say they are unable to find enough workers with the reading, writing, mathematical, and other competencies required in the workplace. Changing economic, demographic, and labor-market forces may exacerbate the problem in the future. . . .There is widespread agreement that we as a nation must respond to the literacy challenge, not only to preserve our

> economic vitality but also to ensure that every individual has a full range of opportunities for personal fulfillment and participation in society. (p. x)

Prior to the survey, a national panel of experts met to develop a definition of literacy and adopted a 1985 definition from a previous study: "Using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential" (Kirsch, 1993, p. 2). The survey measured three skills which are used in diverse tasks:

> **prose literacy**: the knowledge and skills needed to understand and use information from texts that include editorials, news stories, poems, and fiction
>
> **document literacy:** the knowledge and skills required to locate and use information contained in materials that include job applications, payroll forms, transportation schedules, maps, tables, and graphs
>
> **quantitative literacy:** the knowledge and skills required to apply arithmetic operations, either alone or sequentially, using numbers embedded in printed materials; for example, balancing a checkbook, figuring out a tip, completing an order form, or determining the amount of interest from a loan advertisement. (pp. 3-4)

Within each type of literacy, participants were reported according to five levels of literacy. Level 1 was the lowest skill level, and Level 5 was the highest. This method of ranking made it "possible to profile the various types and levels of literacy among different subgroups in our society" (Kirsch, 1993, p. 4). The Educational Testing Service conducted the 1992 NALS which is considered the "most significant survey of illiteracy in U. S. history" (Quigley, 1996). Responses from over 13,000 individuals provide comprehensive and detailed information that had not been available before. Results which illustrate the strong connection between literacy and employment are the following (Kirsch, 1993):

- Twenty-one to 23 percent-- 40 to 44 million of the 191 million adults in the U.S.--demonstrated skills in the lowest level (Level 1) of prose, document, and quantitative proficiencies.
- Twenty-five to 28 percent of the respondents, about 50 million adults, demonstrated skills in the next higher level of proficienty (Level 2) on each of the literacy scales.
- Individuals in Levels 1 and 2 experience considerable difficulty in performing tasks that required them to integrate or synthesize information.
- The 90 million adults in Levels 1 and 2 did not necessarily perceive themselves as being "at risk."
- Individuals in the higher levels of literacy were more likely to be employed, work more weeks in a year, and earn higher wages than individuals demonstrating lower proficiencies.
- Adults in the lowest level on each of the literacy scales were far more likely to receive food stamps.

In reporting results which "underscore literacy's strong connection to economic status" Kirsch (1993, p. 60) compares literacy skills to a "currency" in our society.

> Just as adults with little money have difficulty meeting their basic needs, adults with limited literacy skills are likely to find it more challenging to pursue their goals--whether these involve job advancement, consumer decision making, citizenship, or other aspects of their lives. Even if adults who performed in the lowest literacy levels are not experiencing difficulties at present, they may be at risk as the nation's economy and social fabric continue to change. (p. xix)

The title of the most recent literacy legislation is an indication of the current federal commitment to employability skills. On August 7, 1998, President Bill Clinton signed the Workforce Investment Act of 1998 into law. Three years in the making, the Act reforms the federal job training system by converting 70 federal programs into a set of block grants (Dervarics, 1998). "A major emphasis of the legislation is to strengthen

the links--that is, improve coordination--between the workforce investment system and the adult education, literacy, and vocational rehabilitation programs reauthorized in the bill and the vocational education programs addressed in separate legislation" (NGA Center for Best Practice, 1998, p. 1). Title II of the Act is Adult Education and Family Literacy Programs. The Act specifically allows federal funding for family literacy programs for the first time (NGA Center for Best Practice, 1998) and "puts family literacy on an equal footing with adult basic education and English as a Second Language (ESL) as an allowable service" (National Institute for Literacy, 1998, p. 4).

> The bill revises the purpose of the program as to assist adults to become literate and obtain the knowledge and skills necessary for employment and self-sufficiency, assist adults who are parents to obtain the educational skills necessary to become full partners in the educational development of their children, and assist adults in the completion of a secondary school education. (National Institute for Literacy, 1998, p.11)

Each state is required to hold public hearings in order to get input before developing its five-year plan for improving adult education and literacy. Each state director of adult education must send the state plan to the governor. After reviewing the state plan, the governor sends it to the U. S. Secretary of Education. Among the six required components of the state plan are the following two which illustrate an emphasis on both the needs of the economy and the needs of the individual:

- how the state will develop strategies to better serve low-income students, individuals with disabilities, single parents, displaced homemakers, and individuals with multiple barriers to educational enhancement (including those with limited English proficiency)
- how adult education and literacy activities will be integrated with career development and employment and training activities" (National Institute for Literacy, 1998, p. 2).

Throughout the legislative history, "little coordination exist[ed] among agencies serving adults" (Rose, 1991, p. viii). The Workforce Investment Act, however, calls for "more collaboration between adult education, job training, and vocational education programs" (National Institute for Literacy, 1998, p. 5). Programs are encouraged to integrate literacy instruction and occupational skill training and promote linkages with employers (NGA Center for Best Practices, 1998). One-stop career centers designed to provide helpful information for job seekers are the core of the new system providing counseling, skill assessments, training, job search assistance, or referrals to other programs and services.

One of the key changes in the law is a comprehensive performance accountability system designed to "assess states' effectiveness in achieving continuous improvement of adult education and literacy activities" (National Institute for Literacy, 1998, p. 2). The following core indicators of performance that must be measured illustrate an emphasis on both academic and employment needs:

1. Demonstrated improvements in reading, writing, and speaking in English; numeracy; problem-solving; English language acquisition; and other literacy skills.
2. Placement or retention in, or completion of, postsecondary education, training, unsubsidized employment, or career advancement.
3. Receipt of a high school diploma or the equivalent. (p. 3)

In spite of its focus on preparing students for employment, the current legislation allows for a full range of literacy services and "guide[s] the work of more than four thousand state, local, and community-based organizations that annually receive federal funds for adult education" (Sticht, 2002, p. 38).

Literacy legislation has undergone many changes since the initial Act in 1964: amendments, increased funding, revised definitions, and shifts in focus. These changes reflect the "combination of social and political forces operating in the larger society" (DeSanctis, 1979, p. 1).

> In the past, the lack of ability to read and use printed materials was seen primarily as an individual problem, with implications for a person's job opportunities, educational goals, sense of fulfillment, and participation in society. Now, however, it is increasingly viewed as a national problem, with implications that reach far beyond the individual. Concerns about the human costs of limited literacy have, in a sense, been overshadowed by concerns about the economic and social costs. (Kirsch, 1993, p. x)

What has *not* changed since the 1960s is the fact that "in order to justify its existence as a federal program, adult basic education needs to be defined constantly in terms of means, that is, what it can accomplish" (Rose, 1991, pp. 33-34). Throughout the legislative history, there has been controversy concerning a tension between the needs of the economy and the needs of the individual. Critical of using literacy programs as a solution to economic problems, Quigley (1996) warns, "Humanistic responses to learner needs have little role in serious policy formation" (p. 88). Rose (1991) echos this concern that "policy decisions have been made on the basis of criteria developed by the federal government and business and industry, usually far removed from the perceived need of the individuals affected" (p. 34). It must be acknowledged, however, that economic concerns have driven literacy legislation which has provided services to undereducated adults since 1964. Rose notes that "by the time that the initial adult education program was passed in 1964, the attitude of the adult education community was that any recognition of adult education was good" (p. 11). The history of adult literacy legislation illustrates that it does not have to be an *either/or* proposition, but rather that "education was an investment which brought returns to both the individual and society" (DeSanctis, 1979, p. 9).

CHAPTER 3

METHODOLOGY OF THE STUDY

The purpose of this study was to measure and compare the extent to which three groups of stakeholders in the welfare-to-work process value the topics in the Secretary's Commission on Achieving Necessary Skills report as important for inclusion in the curriculum. The research questions guiding this study were as follows:

1. To what extent do *adult literacy instructors* judge the topics as important for inclusion in the curriculum?
2. To what extent do *prospective employers* judge the topics as important for inclusion in the curriculum?
3. To what extent do *adult literacy students* judge the topics as important for inclusion in the curriculum?
4. Are there significant differences in the way these three groups judge the importance of these topics for inclusion in the curriculum?

The purpose of this chapter is to describe the methods used to answer these research questions. The chapter is organized into seven sections describing the study's conceptual and measurement framework, instrumentation, study population and sample, data collection, data preparation, distribution and reliability of key measures, and data analysis.

Conceptual and Measurement Frameworks

The conceptual framework for this study was the democratic planning model (Cervero and Wilson, 1994), which maintains that five stakeholder groups have interests that matter in planning educational programs: learners, teachers, planners, institutional

leadership, and the affected public. Guided by this model, the study used the same people to represent more than one stakeholder group. In the *Work First* context, the teachers *are* the planners, and they also represent the interests of the institutional leadership. The learners are the literacy students receiving Temporary Assistance for Needy Families (TANF). The affected public in this planning context is the employer group.

The heart of this study was about comparing and contrasting the views of three key stakeholder groups in the welfare-to-work process: literacy instructors, potential employers, and unemployed adult literacy students. Some might argue that, because of their lack of expertise in work-related matters, TANF recipients should be left out of planning the educational program. But because this aspect of welfare reform so critically impacts their potential for self-sufficiency, welfare recipients should be given an "equivalent voice" in planning the program. In order to capture these varied viewpoints and to give each group equivalent voice, the three key stakeholder groups were asked to respond to identical survey items.

In order for the three stakeholder groups to evaluate potential curriculum topics, a framework for instrument development was needed. For that purpose, I used the workplace topics included in the Secretary's Commission on Achieving Necessary Skills (SCANS) report (1991b). Unlike the current study, the original SCANS research had included neither educators nor students, focusing only on stakeholders from the business community: "business owners, public employers, unions, and workers and supervisors in shops, plants, and stores" (p. xv). For this study, the SCANS "skills required to enter employment" (p. xxi) provided a measurement framework for considering work-related topics that might or might not be included in an educational program for welfare recipients. I used the following eight topics from the SCANS report (1991b) to examine

which topics adult literacy instructors, prospective employers, and unemployed adult literacy students judge as important for inclusion in the welfare reform curriculum.

COMPETENCIES that effective workers can productively use or manage:

- **Resources**--allocate time, money, materials, space, and staff
- **Interpersonal Skills**--work on teams, teach others, serve customers, lead, negotiate, and work well with people from culturally diverse backgrounds
- **Information**--acquire and evaluate data, organize and maintain files, interpret and communicate, and use computers to process information
- **Systems**--understand social, organizational, and technological systems; monitor and correct performance; design or improve systems
- **Technology**--select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment

FOUNDATION SKILLS needed by competent workers:

- **Basic Skills**--reading, writing, arithmetic and mathematics, speaking, and listening
- **Thinking Skills**--the ability to learn, to reason, to think creatively, to make decisions, and to solve problems
- **Personal Qualities**--individual responsibility, self-esteem and self-management, sociability, and integrity

Instrumentation

In order to address the purpose of the study, I constructed a survey instrument based on the eight workplace topics presented in the SCANS documents (1991a, 1991b). The core content of the survey was identical for the three sample groups; however, procedures used to administer the instruments to the three groups varied. The surveys for literacy instructors and prospective employees were mailed, self-completion instruments.

The survey instruments for literacy students were designed for table-top administration, in which a single teacher administered them to a small group of students, reading items and offering explanation when necessary. Table 5 summarizes the three major steps in the development of the final survey instrument.

Development and Refinement of Item Pool

An important consideration in the development of a survey instrument is the concept of content validity, the extent to which an instrument measures what it purports to measure (Huck & Cormier, 1996). This is accomplished by "having experts carefully compare the content of the test against a syllabus or outline that specifies the instrument's claimed domain" (p. 89).

Table 5

Construction of the Survey Instrument

1.	Development and refinement of item pool
	• Item pool generation
	• Item critique group
	• Refinement by researcher and dissertation supervisor
	• Refinement by adult literacy practitioners
2.	Development and refinement of prototype survey instruments and cover letters
	• Development of Prototype Survey Instrument
	• Development of Prototype Cover Letters
	• Recasting of Directions
	• Seminar group critiques
	• Stakeholder group critiques
	• Institutional Review Board Recommendations
3.	Development of final survey instrument

Item Pool Generation. Validity required that there be careful correspondence between what was advanced by the Secretary's Commission on Achieving Necessary Skills (1991a, 1991b) and what appeared in the survey instrument. To achieve this, survey items were based directly on the SCANS documents. *Skills and Tasks for Jobs: A SCANS Report for America 2000* (The Secretary's Commission on Achieving Necessary Skills, 1991a) offers expanded definitions of the five Competencies and three Foundation Skills, followed by charts containing job tasks illustrating those topics. Job tasks are listed in descending levels of difficulty.

Using both the language of the definitions and the examples of the job tasks illustrating the workplace topics, I developed 266 items to reflect the workplace skills considered necessary by the Secretary's Commission on Achieving Necessary Skills (1991a). A table was created for each of the eight SCANS topics. Each table contained the expanded definitions of the sub-topic on the left side and corresponding survey items on the right side. These eight tables are included in Appendix B.

Item Critique Group. The 266 survey items were critiqued by a committee consisting of myself, the dissertation supervisor, four doctoral students in the Adult Education Department, and one practicing literacy instructor. Committee members were selected because of their extensive experience with the adult literacy student population. This initial screening group was charged with the task of retaining an undetermined number of items that captured the SCANS workplace topics. Committee members were asked to consider the following points:

- Is each item a good representation of SCANS?
- Is the wording appropriate for literacy students? Salant and Dillman (1994) advise survey developers to use clear, unambiguous language in writing "questions that respondents can understand and answer

objectively" (p. 77). This is especially important when writing items for literacy students.

Instructions to the committee were to save good items, eliminate poor items, rewrite vague items, and determine if any competency or foundation skill had been omitted. The group held three sessions of two hours each.

During the first two-hour critique session, the committee suggested two refinements on the process. The first refinement was that, in order to be included, an item must represent a topic appropriate for an entry-level job that would be realistic for a literacy student. Several of the sub-topics of the Workplace Competencies (SCANS, 1991a) seemed out of reach for literacy students approaching entry level positions. For example, the competencies of Allocates Money, Allocates Human Resources, and Interprets and Communicates Information were deemed to be not immediately relevant to undereducated adults who are just entering the workforce.

The second refinement was that each item had to be equally applicable to manufacturing or service professions to allow development of an instrument with the widest possible applicability. For instance, all items referring to "customers" were either eliminated or rewritten. From these three critique sessions, 169 items were carried forward (Appendix C).

Refinement by Researcher and Dissertation Supervisor. The dissertation supervisor and I met to further refine the list of 169 items. We deleted repetitious items, rewrote vague items, and added several new items. The resulting 92 items are included in Appendix D.

Refinement by Adult Literacy Practitioners. The 92 items were carried forward to a second screening group consisting of myself and two practicing literacy instructors. Each instructor had extensive experience with welfare-to-work literacy students. I have

almost 30 years experience in the adult literacy field, with the last 13 years as a full-time literacy instructor. The second instructor had eight total years experience teaching adult literacy students, four of those years as the instructor in a state welfare-to-work literacy program. The third instructor had 12 total years in adult literacy, the last one and one-half years as a TANF instructor.

In an effort to show respect for literacy students and "minimize respondent burden" (Salant & Dillman, 1994, p. 101), it was the express purpose of this group to reduce the number of items. A decision was made to choose seven items from each topic, seven being a number large enough to allow for adequate reliability. The group chose items based on two criteria: (a) the best representation of SCANS and (b) applicability to the literacy student sample. Ultimately, seven items were chosen from seven of the eight topics; however, an exception was made for the basic skills topic. Because basic skills are central to literacy instruction, 10 items in this topic were saved in order to have both a skill item and an application item for each of five basic skills: reading, writing, arithmetic, speaking, and listening. The group eliminated items that were similar or closely related; several items were rewritten. The remaining 59 items are included in Appendix E.

The development and refinement of the item pool began by the generation of 266 items. Through a series of steps, as depicted in Table 6, that number was reduced to 59.

Development and Refinement of Prototype Survey Instruments and Prototype Cover Letters

Development and refinement of the prototype survey instrument and prototype cover letters occurred in a series of steps. The process was informed by input from critique groups, stakeholder groups, the dissertation committee, and the Institutional Review Board.

Table 6

Item Pool Development and Refinement Process

Process	**Results**	**Appendix**
Item pool generation	266 items	C
Item Critique Group	169 items	D
Refinement by Researcher and Dissertation Supervisor	92 items	E
Refinement by Adult Literacy Practitioners	59 items	F

Development of Prototype Survey Instrument. The 59 items in Appendix E were randomized and developed into prototype survey instruments for instructors (Appendix F), employers (Appendix G), and adult learners (Appendix H). The survey was designed to have respondents rate the importance of each of the 59 workplace topics by circling *Not Important*, *Somewhat Important*, or *Very Important*.

Development of Prototype Cover Letters. Prototype cover letters to literacy instructors (Appendix I) and prospective employers (Appendix J) were also developed. At this juncture, two experienced literacy instructors critiqued the prototyped survey and prototype cover letters to literacy instructors and employers for clarity and conciseness. Their suggestions included (a) rewriting one paragraph of the instructor's cover letter to acknowledge their key role in the study and (b) increasing the space between items on the adult learner version of the survey. These suggestions were carefully considered for further development of the documents.

Recasting of Directions. Following the Prospectus hearing, the dissertation supervisor and I responded to concerns raised by the dissertation committee. We began by changing the focus of the study to one of determining which workplace topics should be included in the curriculum of state literacy programs serving welfare recipients. The

question posed to study participants thus changed from, "How important is each skill for entry level employees?" to "How important is it to teach each of the following topics?"

Because the original instrument was also deemed far too long with some of the wording cumbersome, the dissertation supervisor and I decided to work through several more rounds of instrument improvement. In order to do this, we pulled together a series of critique groups.

Seminar Group Critiques. Several meetings of the dissertation supervisor's doctoral students were devoted to critiquing both the instrumentation and data collection of this study. Initially, literacy instructors were to be the point of contact for the other two stakeholder groups. The prototype cover letter asked each instructor to perform three tasks: (a) to complete the instructor version of the survey, (b) to provide the names and contact information of at least two area employers who might employ entry-level employees, and (c) to select three TANF students and administer the student version of the prototype survey instrument. Instructors were then asked to return this information in a self-addressed, stamped manila envelopes.

At an August 2001 seminar meeting, members were asked to read and critique a description of the data collection process. The group's consensus was that I was placing too great a burden on literacy instructors. As a result of this panel's response, I greatly simplified the instructor role in data collection. The instructor's task was reduced to (a) taking the instructor version of the survey instrument and (b) supplying me with the names and contact persons of two companies that hire entry-level employees.

An October 2001 meeting of the dissertation supervisor's seminar group focused on the prototype cover letters and prototype survey instruments. Specifically, group members were asked to read and critique the adult literacy student version of the survey

instrument along with the instructions for administering it. In the discussion that followed, the group agreed that several changes should be made.

- The prototype cover letter to instructors should be shortened to fit on one page.
- The three point scale headings on the survey instrument should be changed from *Not Important*, *Somewhat Important*, or *Very Important* to a four point Likert scale with only the end points labeled *Not Important* and *Very important*.
- Survey items should be changed from complete sentences to phrases beginning with either *How to . . . .* or *The importance of . . . .*
- Because the group struggled with the wording of several survey items, it was decided to eliminate troublesome items which did not correlate exactly with the SCANS topics. This would also serve to shorten the lengthy 59-item survey instrument. Because this task would take considerable time, the group agreed to reconvene the next week for that purpose.

Following the critique session, I reworked the survey, incorporating these suggestions.

The seminar group reconvened during the next week to focus on the revised items. The specific task was to examine the 59 items, eliminate ambiguous items, and collapse similar items. The goal was to reduce the number of items so that there would be five items for seven of the SCANS topics and 10 items for the basic skills topic. This strategy reduced the prototype survey instrument to a more manageable 45 items.

Stakeholder Group Critiques. After the above changes were incorporated, the survey instruments appeared ready to test. Consequently, the dissertation supervisor and I decided to have it critiqued by representatives of the stakeholder groups: three literacy

instructors, three employers of entry-level workers, and three adult literacy students receiving public assistance.

Instructors. Three literacy instructors who are experienced in working with the welfare-to-work population critiqued both the prototype cover letter to instructors and the instructor version of the final survey instrument (Appendix K). Their concerns are listed below:

- The instructors first focused on the cover letter's instructions to instructors. They felt that asking instructors to provide the names and contact persons of two area employers of entry-level workers may interfere with questionnaires being returned. Instructors might complete items on the survey instrument but then set it aside to complete the employer information at a later time. I agreed that this burden could negatively impact the response rate. I ultimately decided to develop the employer sample independent of the instructor survey.
- The instructors made several wording suggestions, most of which were incorporated.

Employers. Three past and present employers of entry-level employees critiqued both the prototype cover letter to employers and the employer version of the final survey instrument (Appendix L). Their major concerns are listed below:

- Busy employers would be more likely to complete the survey instrument if the cover letter suggested that there would be something in it for them. To address this concern, I amended the cover letter. I mentioned the potential positive effects of the study and offered employers a brief research summary of the study.

- Two employers noted that they hesitated on some items because their responses would be job dependent. They had each worked in several different industries and explained that "entry-level employee" could mean different things in different settings. Consequently, the cover letter was amended to specify that the employer respond to the survey items based on entry level employees in their particular organizations.

Adult Literacy Students. Three adult literacy students who were currently receiving public assistance were invited to complete the student version of the final survey instrument (Appendix M). The students were advised that this was merely a critique and that their data would not be used. A fellow literacy instructor followed the "Instructions for Administering the Workplace Skills Questionnaire - Adult Literacy Student Version" (Appendix N) as she administered the survey instrument to the three students. The students completed the questionnaire in 10-15 minutes and then participated in a discussion of the process. Results of this activity are as follows:

- The instructor suggested that the instructions to students be read *before* distributing the instrument, as two of the students began to write before the instructor had completed the instructions.
- Students seemed thoughtful as they engaged in the activity, and there appeared to be appropriate variety in their responses.
- Student comments in the follow-up discussion illustrated that they had considered the items and wished to discuss various items that they felt were especially important. It was apparent that they had at least some knowledge or experience with many of the concepts.
- Students offered no suggestions for improving the survey instrument, although one student pointed out a typo on the survey. I tried to

encourage constructive criticism, but students may have been reluctant to offer suggestions. They did, however, appear to be very comfortable during the activity.

Suggestions from the seminar critique group and the stakeholder critique groups were incorporated into the survey instruments and cover letters. I presented these revisions to the dissertation committee via an extended memorandum and received permission to proceed with the study.

Institutional Review Board Recommendations. Additional changes to cover letters were made at the request of the Institutional Review Board (IRB). Those changes included the following:

- Add the title of the research to all cover letters.
- Include the word *research* in all cover letters.
- Inform participants that they will receive two follow-up reminders.
- Include contact information for the dissertation supervisor, the department, and the university in all cover letters.
- Develop a cover letter to literacy students as well. These letters should comply with the IRB consent check list.

These five changes were made and subsequently approved by the IRB.

Development of Final Survey Instrument

As outlined above, the development of the final survey instrument proceeded in many steps over a period of many months. Table 7 contains the 45 survey items which represent the eight SCANS workplace topics.

Ultimately, the 45 Likert-type items were arranged by "how to" and "importance of" items. The final survey instruments for instructors (Appendix K), employers

(Appendix L), and students (Appendix M) consisted of 45 items measuring eight workplace topics.

Table 7

Workplace Topics and Corresponding Survey Items

Workplace Topic	Survey Item
Resources	How to follow a work schedule How to decide which tasks are the most important How to predict the time it will take to get a job done How to keep track of the tools and supplies you need to get the job done The importance of meeting deadlines on the job
Interpersonal Skills	How to handle interpersonal problems at work The importance of working as a team member to reach a common goal The importance of being open to ideas from other workers The importance of demonstrating leadership ability The importance of working well with people from other cultures
Information	How to gather information needed to solve a problem How to keep daily records How to organize written information and records How to organize files in alphabetical or numerical order The importance of obtaining the information necessary to get the job done
Systems	The importance of understanding how the business works The importance of understanding how one's job performance affects the success of the company The importance of knowing what a company expects of employees The importance of understanding how the chain of command works The importance of offering suggestions to improve products or services
Technology	The importance of determining which tools are needed to do a job The importance of asking for help with equipment when needed The importance of using manuals to learn about equipment in the workplace The importance of maintaining equipment in good condition How to operate a computer

Basic Skills	The importance of understanding printed materials used in the workplace The importance of understanding spoken directions from a supervisor The importance of understanding spoken messages at work How to use printed information to complete a task How to do necessary writing on the job How to write information accurately How to use basic math in work situations How to interpret numerical tables, graphs, diagrams, and charts How to speak clearly to communicate at work How to explain a problem so that others can understand
Thinking Skills	The importance of considering consequences before making decisions The importance of carefully considering possible choices before making decisions The importance of having good problem-solving skills How to figure out solutions to workplace problems How to learn new things on the job
Personal Qualities	The importance of taking responsibility for one's own work The importance of regular attendance and punctuality The importance of being confident in one's knowledge, skills, and abilities The importance of establishing good relationships with others in the workplace The importance of being a trustworthy employee

In addition to the core 45 items, each version of the survey included slightly different background variables. For the instructor group, the background variables included the following:

- What is your gender? (Circle one.) Male Female
- In what year were you born? _____
- What is your race or ethnicity? _____
- What is your highest academic degree? (Check one.)

  _____Bachelor's degree

  _____Master's degree

  _____Specialist degree

_____Doctoral degree

_____Other (specify) _____

- How long have you been an adult literacy instructor? _____
- Approximately how many of your current students receive public assistance?

For the employer group, the background variables included the following:

- What is your gender? (Circle one.) Male Female
- In what year were you born? _____
- What is your race or ethnicity? _____
- What is your highest academic degree? (Check one.)

  _____No diploma

  _____GED

  _____High school diploma

  _____Technical school diploma or certificate

  _____Associate degree

  _____Bachelor's degree

  _____Master's degree

  _____Specialist degree

  _____Doctoral degree

  _____Other (specify) _____
- What is your current job title? _____
- How long have you been in that position? _____
- How long have you been with your organization? _____
- How would you classify your organization (manufacturing, service, retail, hospitality, etc.)? _____

- How many employees work for your organization? _____
- Approximately how many of those employees are entry level? _____

For the literacy student group, the background variables included the following:

- What is your gender? (Circle one.) Male Female
- In what year were you born? _____
- What is your race or ethnicity? _____
- What was the last grade you completed in school? _____
- How long have you been enrolled in the adult literacy program? _____
- What kind of job would you like to someday have?

  _____
- Have you ever been employed? _____Yes _____No
- If you have been employed in the past, please describe the last job you had.

The three versions of the survey, which included the university letterhead, were printed on white 11 x 17 paper, front and back, and then folded. The final versions of cover letters for instructors (Appendix O), employers (Appendix P), and students (Appendix Q) were also printed on University of Georgia Department of Adult Education letterhead.

This instrumentation section has described the extent to which I went to ensure the validity of the survey instrument. The validity of this work was based largely on the input of the three stakeholder groups and experts who had an understanding of the population with which I was concerned.

Study Population and Sample

The population of interest for this study included literacy instructors, potential employers, and unemployed literacy students. In order to determine the perceptions of these three groups who are most directly involved in the welfare-to-work process, I asked

the population of state literacy instructors and a sampling of the state's employers and literacy students to complete survey instruments containing identical items. The three groups were asked to rate the extent to which the workplace Competencies and Foundation Skills espoused by the Department of Labor (SCANS, 1991a, 1991b) should be included in the literacy curriculum.

Instructors

During the 1991-1999 administration of Governor Zell Miller, the Georgia legislature approved funding for one full-time literacy instructor in each county. Through this initiative and through other funding sources, there are a total of 174 full-time instructors. Georgia literacy instructors must have a minimum of a baccalaureate degree and must participate in staff development training. These instructors serve TANF students, along with other adult learners who enroll in the programs.

As a first step, I obtained a list of the 174 full-time literacy instructors who were currently employed to teach adult students in the state of Georgia. Including the population of all state literacy instructors captured both the different geographic and program contexts of Georgia. A cover letter and survey instrument were mailed to all instructors at their workplace address.

Employers. In developing the mailing list for potential employers of entry-level workers, every attempt was made to identify businesses that would be potential employers of entry-level people throughout the six Department of Technical and Adult Education consortia which divide the state. In order to identify entry-level jobs in Georgia, I interviewed several job developers and numerous literacy instructors about where welfare-to-work individuals, in fact, were able to find jobs. Most of the jobs they identified were low-paying positions such as housekeeper, janitor, security guard, food preparation worker, cook, nurse's aide, child care worker, cashier, warehouse worker,

and poultry worker. However unfortunate this is from a social perspective, it is the realistic career track for welfare-to-work participants.

In order to capture businesses hiring employees for the typical entry-level jobs described above, the decision was made to limit the employer sample to three classifications of businesses: manufacturing, service, and retail. Using the Georgia Business-To-Business Sales and Marketing Directory (2001-2002), the Georgia Manufacturing Register (2002), and chamber of commerce directories, I produced a convenience sample of employers who hire for entry-level positions in each of the six consortia. A minimum of eight employers in each business classification was selected from each consortium, with a larger number selected for consortium III, which includes the metropolitan Atlanta area. A cover letter and survey instrument were mailed to the personnel directors of 171 Georgia businesses. Thirty-two percent of the employers represented manufacturing businesses, 38% represented service businesses, and 30% represented retail businesses.

Students. Through personal contacts, I identified literacy instructors in each of the six consortia and asked them to select students who were receiving public assistance and who have less than a high school education to participate in the study. Specifically, instructors were asked to select TANF recipients who had been referred to the adult literacy program through the Department of Family and Children Services (DFCS). TANF supports these students' academic pursuits by paying child care and transportation expenses, and requires that they attend a literacy program for 30 hours per week. Many TANF students are young, ranging in age from 16 years to 20 years. I mailed administration instructions, cover letters, and survey instruments to the 20 instructors who agreed to participate in the research. Under the supervision of adult literacy

instructors, 114 literacy students completed the adult learner version of the survey instrument.

Data Collection

Data were collected by means of 45-item survey instruments (Appendices K, L, and M) containing a list of workplace Competencies and Foundation Skills adapted from the SCANS (1991a, 1991b) documents. The following procedures were used to collect data from three distinct populations: adult literacy instructors, prospective employers, and adult literacy students.

I. Literacy Instructors:

First Mailing - I mailed a packet containing a cover letter (Appendix O), the instructor version of the survey instrument (Appendix K), and a self-addressed, stamped envelope to 174 Georgia adult literacy instructors.

Postcard Follow-Up - Two weeks later, a follow-up postcard (Appendix R) was mailed to those instructors who had not returned a completed questionnaire.

Follow-Up Letter and Survey Instrument - Two weeks after the postcard reminder, I mailed a packet containing a follow-up letter (Appendix S), a second copy of the instructor version of the survey instrument, and a self-addressed, stamped envelope to those instructors who had not yet returned a completed questionnaire.

II. Prospective Employers:

First Mailing - I mailed a packet containing a cover letter (Appendix P), the employer version of the survey instrument (Appendix L), and a self-addressed, stamped envelope to 171 Georgia employers who were known to employ for entry-level positions.

Postcard Follow-Up - Two weeks later, a follow-up postcard (Appendix T) was mailed to those employers who had not returned a completed questionnaire.

Follow-Up Letter and Survey Instrument - Two weeks after the postcard reminder, I mailed a packet containing a follow-up letter (Appendix U), a second copy of the employer version of the survey instrument, and a self-addressed, stamped envelope to those employers who had not yet returned a completed questionnaire.

III. Adult Literacy Students:

Contact Literacy Instructors - After initial packets had been mailed to both instructors and employers, I called literacy instructors in each of the state's six consortia to ask their assistance in administering the adult learner version of the survey instrument to students who had received or who were currently receiving public assistance. Several instructors reported that they did not work directly with welfare recipients, but that they could pass the survey packet on to an instructor who was funded through TANF to specifically serve TANF recipients. I agreed with this procedure.

Mail Packets - I mailed a packet containing the instructions for administering the adult learner version of the survey instrument (Appendix N), the number of copies of the adult learner version of the survey instrument (Appendix M) that the instructor requested, and a self-addressed, stamped envelope to the 20 instructors who agreed to participate.

Follow-Up Phone Calls - A month after mailing the packets, I phoned those instructors who had not returned completed versions of the student questionnaires.

Response Rate

Following three mailings to the population of state literacy instructors, the final return rate for the surveys was 67.24%. Following three mailings to a sample of state employers, the final return rate for the surveys was 38.01%. Of the 194 student surveys mailed to 20 instructors, 114 student surveys were returned. Distribution and response rate information for instructors, employers, and students is displayed in Table 8.

Table 8

Distribution and Response Rates of Surveys

Survey Status	Instructors	Employers	Students
Distribution Method	Mail	Mail	Mail to instructors who administer instruments to students
Number Mailed	174	171	194 to 20 Instructors
Number of Dead Letters	0	7	N/A
Number Completed and Returned	117	65	114
Number Usable	115	65	112
Raw Response Rate	67.24%	38.01%	N/A
Adjusted Response Rate	67.24%	39.63%	N/A

Characteristics of Respondents

Literacy Instructors. Table 9 summarizes the characteristics of the instructors who responded to the survey. The 115 instructor respondents ranged in age from 25 to 73, with a mean age of 47.94. Instructors' period of time as literacy instructors ranged from four months to 324 months (27 years), with a mean of 85.60 months (7.1 years). The vast majority (82.5%) of instructor respondents were female. With respect to race/ethnicity, 80.9% were white, 18.2% were black, and .9% were Hispanic. As required by the Department of Technical and Adult Education, all instructors held at least

a baccalaureate degree; 64% held a bachelors degree and the remaining 36% held advanced degrees.

Prospective Employers. Table 10 summarizes the characteristics of the employers who responded to the survey. The 65 employer respondents ranged in age from 26 to 70

Table 9

Description of Instructor Respondents (n = 115)

Variable	Value	
Age	M = 47.94	SD = 10.73
Gender		
Female	82.5%	
Male	17.5%	
Race/Ethnicity		
White	80.9%	
Black	18.2%	
Hispanic	.9%	
Highest Earned Degree		
Bachelors Degree	64.0%	
Masters Degree	29.8%	
Specialist Degree	5.3%	
Doctoral Degree	.9%	
Months as a Literacy Instructor	M = 85.60	SD = 65.35

years, with a mean age of 47.32 years. The majority (57.8%) of employer respondents were female. With respect to ethnicity, 75.4% were white, 21.3% were black, 1.6% were Asian, and 1.6% were Pacific Islander. With respect to highest educational attainment, 17.5% were high school graduates, 11.1% held technical school credentials, 4.8% held associate degrees, while the remaining 66.7% held at least bachelors degrees.

Employer respondents represented manufacturing (40.0%), service (36.9%), and retail (23.1%) businesses. The mean value for length of time in the organization was

148.62 months (12.4 years), while the length of time in their present position was 109.24 months (9.10 years). The vast majority reported that they were either human resource directors (43.8%) or other type of manager (48.4%).

Table 10

Description of Employer Respondents (n = 65)

Variable	Value	
Age	M = 47.32	SD = 9.48
Gender		
Female	57.8%	
Male	42.2%	
Race/Ethnicity		
White	75.4%	
Black	21.3%	
Asian	1.6%	
Pacific Islander	1.6%	
Highest Academic Degree		
High School Diploma	17.5%	
Technical School Diploma or Certificate	11.1%	
Associate Degree	4.8%	
Bachelors Degree	36.5%	
Masters Degree	23.8%	
Doctoral Degree	4.8%	
Other	1.6%	
Business Classification		
Manufacturing	40.0%	
Service	36.9%	
Retail	23.1%	
Job Title		
Human Resource Director	43.8%	
President or C.E.O.	7.8%	
Other Manager	48.4%	
Months in Position	M = 109.24	SD = 100.25
Months in Organization	M = 148.62	SD = 114.99

Literacy Students. Table 11 summarizes the characteristics of the 112 literacy students who responded to the survey. Student respondents ranged in age from 17 to 59, with a mean age of 26.33 years. The majority were female (98.2%) and black (72.1%). With respect to formal education, student respondents reported having between six and 12 years of education, with a mean of 10.16 years. The number of months that students had been in the literacy program ranged from .25 to 36 (3 years), with a mean of 5.77 months. Most students (80.9%) reported having previous employment experience.

Table 11

Description of Literacy Student Respondents (n = 112)

Variable	**Value**	
Age	M = 26.33	SD = 9.39
Gender		
Female	98.2%	
Male	1.8%	
Race/Ethnicity		
White	27.9%	
Black	72.1%	
Years of Education	M = 10.16	SD = 1.22
Months in Literacy Program	M = 5.77	SD = 6.86
Employment Experience		
Yes	80.9%,	
No	19.1%	

Data Preparation

Each completed survey instrument was identified by the three-digit number that had been assigned for mailing purposes. The survey responses from the three groups were separated and entered into an Excel spreadsheet.

During the data cleaning process, the dissertation supervisor and I noted that a small number of surveys exhibited no variation in their responses. Specifically, some respondents selected all 4s or, much more rarely, all 3s. We debated about what to do, as

such uniformity can indicate a lack of effort. However, the nature of this research represented a specific challenge because the SCANS topics had already been identified as important during a year-long national study. Ultimately, after careful consideration, we decided to include these surveys in the analysis, provided that other responses on the survey, those dealing with demographics and personal history, were complete and appropriate. This decision to include surveys with no variance was supported by several other factors:

- Several respondents circled 4 and added an asterisk, a star, or underlining for further emphasis on the item. Others wrote the words "yes" or "very" after a response of 4. One instructor respondent added a 5 to the response scale for an item and circled the 5, which was entered as a 4.
- An instructor who circled all 4s was serious enough about the survey to have earlier e-mailed to apologize for being late in returning her response.
- An instructor respondent informed me that she had copied the survey before returning it, stating that her students needed to learn these skills. This instructor intended to incorporate the topics into the curriculum.
- An instructor who circled all 4s attached a full-page memo to the returned survey, emphasizing the challenge of preparing welfare-to-work population for the workforce. "These principles are especially important for welfare recipients since the structures in their lives heretofore often lacked these influences."

- An instructor circled a response of 4 for 39 of the 45 items and further added an asterisk to 29 of those 39 items.
- Twelve students circled 4 for all 45 items on the survey instrument. Because this seemed a high number, I talked with several instructors who administered the student survey. Instructors reported that the directions for administration were followed and that students took the task seriously.

Because of the above comments and notations, the dissertation supervisor and I felt that there was no reason to suspect that participants took the survey items casually. Surveys with responses of all 4s or all 3s were thus included in the analysis. Table 12 depicts the number of respondents in each of the groups who provided uniform responses along with the percentage of the group they represent.

Table 12

Respondents Providing Uniform Responses

	Selected all 4s	**Percent of Group**	**Selected all 3s**	**Percent of Group**
Instructors	7	6.09	0	0
Employers	2	3.08	1	1.54
Students	12	10.71	1	.89

Another decision was made concerning the two instances on instructor surveys when respondents circled two responses for a single item. In those two occurrences of a doubled response, the items were coded to reflect the midpoint of the two responses.

Several returned surveys were considered invalid and were not included in the analysis. One instructor left all items blank, noting at the top that he/she would not be able to participate in the study because he/she would be retiring in July. The second instructor noted at the top of the first page, "Teach following directions and reading skills to handle most of these." At the top of the second page, the notation read, "Teach

reading and writing skills which we already do--the employer should instruct on many of these others." Pages two and three (items 11 - 45) of the survey were left blank, indicating resistance to the survey process. These two instructor surveys were not included in the analysis.

In addition, two student surveys were considered invalid. Both students wrote such inappropriate responses to the eight background information questions that the dissertation supervisor and I determined that the two students were also demonstrating resistance to the task.

Faulty Variables

On several background items, respondents essentially answered different questions. The final item on the instructor survey asked, "Approximately how many of your current students receive public assistance?" This item was interpreted in different ways by instructor respondents. Some respondents wrote numbers; others wrote percentages. Additional written comments following that item illustrated that instructors had different perceptions of public assistance. Remarks such as "although eight are Department of Labor referrals" and "100% because all my GED students are incarcerated" made it clear that the numbers did not accurately reflect the number of welfare recipients. Because of these inconsistences, this variable was not included in the analysis.

Two background variables on the employer survey were also problematical: (a) How many employees work for your organization? and (b) Approximately how many of those employees are entry level? Responses to the two questions indicated that some respondents referred to the number of employees at the local work site, while others referred to the number of corporate employees. Due to this discrepancy, the dissertation

supervisor and I considered these two variables of questionable validity and of no use to this study.

Distribution and Reliability of Key Measures

In the Instrumentation section of this chapter, I noted that the original intent was to have at least seven items for each of the eight topics being measured in order to achieve adequate reliability. Subsequently, however, the dissertation committee and critique groups determined that the 59-item prototype survey instrument was too lengthy. Because of the concern that the large number of items might adversely affect the response rate, the minimum number of items per topic was reduced to five.

Nunnally (1978) addressed the issue of adequate reliability with regard to instrumentation length when he stated the following:

> What a satisfactory level of reliability is depends on how a measure is being used. In the early stages of research on predicator tests or hypothesized measures of a construct, one saves time and energy by working with instruments that have only modest reliability, for which purpose reliabilities of .70 or higher will suffice. . . . For basic research, it can be argued that increasing reliabilities much beyond .80 is often wasteful of time and funds. At that level correlations are attenuated very little by measurement error. To obtain a higher reliability, say of .90, strenuous efforts at standardization in addition to increasing the number of items might be required. Thus the more reliable test might be excessively time-consuming to construct, administer, and score. (p. 245)

Using SPSS 10.0, I calculated the distribution and reliability for each of the eight measures for each of the three groups. In order to allow for an examination using more reliable measures, I also calculated three additional measures. Alpha coefficients were also computed for a combination of the Competencies, a combination of the Foundation Skills, and a total reliability score. As can be seen, combinations of the topics exhibited very high reliability, which allowed us to proceed.

Instructors

Table 13 presents the distribution and reliability for instructors. Instructors rated all of the Competencies and Foundation Skills highly, with no mean item mean score falling below 3.24 on a four point scale. Alpha coefficients ranged from .59 to .83. All but one of the reliabilities were .70 or above and therefore considered adequate for research purposes (Nunnally, 1978). The Personal Qualities topic, however, exhibited poor reliability with an alpha coefficient of .59. Combined Competencies, Combined Foundation Skills, and the total of all topics exhibited high reliability.

Table 13

Distribution and Reliability of Key Measures for Instructors

Measure	**Number of Items**	**M**	**SD**	**Mean Item Mean**	**Alpha**
Competency 1: Resources	5	17.10	2.80	3.42	.83
Competency 2: Interpersonal Skills	5	16.99	2.42	3.40	.78
Competency 3: Information	5	17.50	2.30	3.50	.72
Competency 4: Systems	5	16.20	2.82	3.24	.82
Competency 5: Technology	5	16.85	2.34	3.37	.71
Combined Competencies	25	84.80	10.59	3.39	.93
Foundation 1: Basic Skills	10	36.30	3.68	3.63	.85
Foundation 2: Thinking Skills	5	17.36	2.21	3.47	.76
Foundation 3: Personal Qualities	5	18.58	1.46	3.72	.59
Combined Foundation Skills	20	72.27	6.29	3.61	.89
Total	45	157.53	15.91	3.50	.95

Employers

Table 14 presents the distribution and reliability for employers. Employers also rated all of the Competencies and Foundation Skills highly, with no mean item mean score falling below 3.18 on a four point scale. Alpha coefficients ranged from .53 to .84. The majority (five) of the eight reliability estimates were .70 or above. Two Competencies rated below .70: Resources (.63) and Interpersonal Skills (.53). One Foundation Skill, Thinking Skills, rated below .70. Combined Competencies, Combined Foundation Skills, and the total of all topics, however, exhibited high reliability.

Table 14

Distribution and Reliability of Key Measures for Employers

Measure	**Number of Items**	**M**	**SD**	**Mean Item Mean**	**Alpha**
Competency 1: Resources	5	17.06	2.18	3.41	.63
Competency 2: Interpersonal Skills	5	17.46	1.81	3.49	.53
Competency 3: Information	5	15.91	2.97	3.18	.84
Competency 4: Systems	5	16.83	2.08	3.37	.70
Competency 5: Technology	5	16.02	2.55	3.20	.72
Combined Competencies	25	83.34	9.42	3.33	.90
Foundation 1: Basic Skills	10	33.57	4.36	3.36	.84
Foundation 2: Thinking Skills	5	17.47	1.82	3.49	.65
Foundation 3: Personal Qualities	5	18.45	1.63	3.69	.70
Combined Foundation Skills	20	69.45	6.70	3.47	.88
Total	45	152.78	15.45	3.40	.94

Literacy Students

Table 15 presents the distribution and reliability for literacy students. Students rated all of the Competencies and Foundation Skills quite highly, with no mean item

mean score falling below 3.40 on a four point scale. The alpha coefficients ranged from .74 to .84 with all above .70. Combined topics also exhibited high reliability.

Data Analysis

To answer research questions one, two, and three, I calculated the means and standard deviations for each of the eight SCANS topics for each of the three groups. I

Table 15

Distribution and Reliability of Key Measures for Students

Measure	**Number of Items**	**M**	**SD**	**Mean Item Mean**	**Alpha**
Competency 1: Resources	5	17.00	2.85	3.40	.75
Competency 2: Interpersonal Skills	5	17.39	2.96	3.48	.83
Competency 3: Information	5	17.58	2.47	3.52	.74
Competency 4: Systems	5	17.13	2.85	3.43	.81
Competency 5: Technology	5	17.61	2.73	3.52	.78
Combined Competencies	25	86.99	11.46	3.48	.93
Foundation 1: Basic Skills	10	35.30	4.47	3.53	.84
Foundation 2: Thinking Skills	5	17.51	2.83	3.50	.79
Foundation 3: Personal Qualities	5	18.09	2.54	3.62	.79
Combined Foundation Skills	20	70.98	8.98	3.55	.92
Total	45	158.08	20.04	3.51	.96

also calculated the mean item means which allowed me to compare across topics with an unequal number of items. It also had the benefit of expressing the group's mean in the metric of the 4 point response scale itself.

In order to answer research question four, I compared the way in which the three groups had rated the topics. In order to do this, I first rank ordered the mean item means, which allowed me to compare the relative importance assigned to each topic. I also

conducted a series of one-way ANOVAs which allowed a comparison of each of the means across the eight topics. Post hoc tests displayed the 24 pairwise contrasts of the mean differences for the three groups on the eight dependent variables.

Limitations

From a statistical standpoint, the instructor group was best; the total population of state literacy instructors was surveyed, and their response rate was good. However, both the employer group and literacy student group were convenience sample*s*. I developed the mailing list for employers from business and chamber of commerce directories, and I asked literacy instructors to select from their classes literacy students receiving public assistance. Therefore, we cannot generalize the results of this study. We must, instead, rely on logical inferences in interpreting these conclusions rather than on statistical inferences.

While reliabilities for some measures were low, they were adequate for the purposes of this study. However, low reliabilities can obscure recognition of some of the differences. By merging individual topics into two broad combined scores, I increased reliability, which allowed me to conduct statistical tests with more confidence.

Assumption

Because literacy programs have a long history of serving welfare recipients, it was assumed that the population of state-funded full-time adult literacy instructors would have at least some experience in the instruction of welfare recipients. There was strong support for this assumption. Welfare recipients live throughout the state, and most teenage recipients must attend an instructional program for a minimum of 30 hours per week. In addition, the instructor population was experienced, with a mean 7.1 years experience in adult literacy. However, I do not expressly know that all respondent instructors possess the knowledge necessary to give valid responses to the survey.

CHAPTER 4

RESULTS OF THE STUDY

This chapter presents the results of the statistical analysis described in the preceding chapter. The findings will be presented separately in relation to each of the four research questions.

Findings Related to Research Question #1

The descriptive statistics displayed in Table 16 were used to respond to the first research question which asked, "To what extent do adult literacy instructors judge the topics as important for inclusion in the curriculum"?

As can be seen, instructors rated the eight workplace topics highly, with mean item means ranging from 3.24 to 3.72 on a 1 (not important) to 4 (very important) point scale. Instructors judged the eight topics of workplace skills as important for inclusion in the curriculum in the following order (from greatest to least): (1) Personal Qualities, (2) Basic Skills, (3) Information, (4) Thinking Skills, (5) Resources, (6) Interpersonal Skills, (7) Technology, and (8) Systems.

Of the eight workplace topics, instructors rated the Personal Qualities topic (3.72) as most important for inclusion in the curriculum. Personal Qualities items in the survey asked respondents to rate the importance of qualities such as individual responsibility, self-esteem, sociability, self-management, and integrity.

Instructors judged the Basic Skills topic (3.63) second in importance for inclusion in the curriculum. There were ten Basic Skills items on the survey instrument--two each for reading, writing, arithmetic, speaking, and listening.

Table 16

Means and Distribution for Topic Scales for Instructors

Topic Scale	Mean	SD	Minimum	Maximum	Mean Item Mean
Resources	17.10	2.80	5.00	20.00	3.42
Interpersonal Skills	16.99	2.42	10.00	20.00	3.40
Information	17.50	2.30	8.50	20.00	3.50
Systems	16.20	2.82	5.00	20.00	3.24
Technology	16.85	2.34	8.00	20.00	3.37
Combined Competencies	84.80	10.59	39.50	100.00	3.39
Basic Skills	36.30	3.68	17.00	40.00	3.63
Thinking Skills	17.36	2.21	6.00	20.00	3.47
Personal Qualities	18.58	1.46	14.00	20.00	3.72
Combined Foundation Skills	72.27	6.29	41.00	80.00	3.61

Instructors judged the Systems topic (3.24) as least important for inclusion in the curriculum. Survey items in the Systems topic asked respondents to rate the importance of teaching the following topics: the understanding of the social, organizational, and technological systems; monitoring and correcting performance; and designing or improving systems.

Combined scores for the Competencies and Foundation Skills are also presented in Table 16. The five Competencies represent the skills that are necessary for success in the workplace, while the three Foundation Skills are the skills and qualities that support

the Competencies. Just as instructors judged a Foundation Skill (Personal Qualities) highest and a Competency (Systems) lowest, they rated Combined Foundation Skills (3.61) higher than Combined Competencies (3.39). Combined ratings of instructors were slightly higher than those of the employer group but lower than those of the student group.

Findings Related to Research Question #2

The descriptive statistics displayed in Table 17 were used to respond to the second research question which asked, "To what extent do prospective employers judge the topics as important for inclusion in the curriculum?"

As can be seen, employers also rated the eight workplace topics highly, with mean item means ranging from 3.18 to 3.69 on a 1 (not important) to 4 (very important) point scale. Employers judged the eight workplace topics as important for inclusion in the curriculum in the following order (from greatest to least): (1) Personal Qualities, (2.5) Thinking Skills, (2.5) Interpersonal Skills, (4) Resources, (5) Systems, (6) Basic Skills, (7), Technology, and (8) Information.

In responding to survey items, employers demonstrated a concern for both the Personal Qualities and Interpersonal Skills of employees. Employers judged the Personal Qualities topic (3.69) as most important for inclusion in the curriculum. This topic was included in the discussion of Research Question #1. Second in importance to employers were both the Interpersonal Skills topic (3.49) and the Thinking Skills topic (3.49). Survey items associated with the Interpersonal Skills topic pertained to working on teams, teaching others, leading, negotiating, and working well with people from culturally diverse backgrounds. The Interpersonal Skills topic was also the only workplace topic that employers ranked higher than did both instructors and students.

Table 17

Means and Distribution for Topic Scales for Employers

Topic Scale	Mean	SD	Minimum	Maximum	Mean Item Mean
Resources	17.06	2.18	11.00	20.00	3.41
Interpersonal Skills	17.46	1.81	12.00	20.00	3.49
Information	15.91	2.97	7.00	20.00	3.18
Systems	16.83	2.08	13.00	20.00	3.37
Technology	16.02	2.55	8.00	20.00	3.20
Combined Competencies	83.34	9.42	66.00	100.00	3.33
Basic Skills	33.57	4.36	22.00	40.00	3.36
Thinking Skills	17.47	1.82	14.00	20.00	3.49
Personal Qualities	18.45	1.63	15.00	20.00	3.69
Combined Foundation Skills	69.45	6.70	57.00	80.00	3.47

The Thinking Skills topic, also ranked second in importance by employers, referred to thinking creatively, making decisions, solving problems, knowing how to learn, and reasoning.

Employers judged the Information topic (3.18) as least important for inclusion in the curriculum. Survey items related to the Information topic asked respondents to rate the importance of teaching the following topics: acquiring and evaluating data, organizing and maintaining files, and interpreting and communicating.

Just as employers judged a Foundation Skill (Personal Qualities) highest and a Competency (Information) lowest, they rated Combined Foundation Skills (3.47) higher than Combined Competencies (3.33). Combined ratings of the employer group were lower than those of both the instructor and student groups.

Findings Related to Research Question #3

The descriptive statistics displayed in Table 18 were used to respond to the third research question which asked, "To what extent do adult literacy students judge the topics as important for inclusion in the curriculum?"

Students also ranked all measures highly, with mean item means ranging from 3.40 to 3.62 on a 1 (not important) to 4 (very important) point scale. Literacy students judged the eight workplace topics as important for inclusion in the curriculum in the following order (from greatest to least): (1) Personal Qualities, (2) Basic Skills, (3.5) Information, (3.5) Technology, (5) Thinking Skills, (6) Interpersonal Skills, (7), Systems, and (8) Resources.

The first and second place rankings by students were the same as those of instructors. Of the eight workplace topics, students judged the Personal Qualities topic (3.62) as most important and the Basic Skills topic (3.53) as second in importance for inclusion in the curriculum.

Students judged the Resources topic (3.40) as least important for inclusion in the curriculum. Survey items related to the Resources topic asked respondents to rate the importance of teaching the following topics: allocating time, money, materials, space, and staff.

Just as students judged a Foundation Skill (Personal Qualities) highest and a Competency (Information) lowest, they rated Combined Foundation Skills (3.55) higher

than Combined Competencies (3.48). The combined ratings of the student group were higher than those of both the instructor and employer groups.

Table 18

Means and Distribution for Topic Scales for Literacy Students

Topic Scale	**Mean**	**SD**	**Minimum**	**Maximum**	**Mean Item Mean**
Resources	17.00	2.85	7.00	20.00	3.40
Interpersonal Skills	17.39	2.96	7.00	20.00	3.48
Information	17.58	2.47	9.00	20.00	3.52
Systems	17.13	2.85	7.00	20.00	3.43
Technology	17.61	2.73	9.00	20.00	3.52
Combined Competencies	86.99	11.46	51.00	100.00	3.48
Basic Skills	35.30	4.47	22.00	40.00	3.53
Thinking Skills	17.51	2.83	8.00	20.00	3.50
Personal Qualities	18.09	2.54	6.00	20.00	3.62
Combined Foundation Skills	70.98	8.98	38.00	80.00	3.55

Findings Related To Research Question #4

The fourth research question asked, "Are there significant differences in the ratings of these three groups"? Although all ratings were high, there were some differences, both in terms of rank and in some specific comparisons related to the one-way ANOVA. Table 19 displays the rankings of the three groups. There are certain noteworthy findings that can be read from this table.

1. All three groups ranked the Personal Qualities topic as the most important topic for inclusion in the curriculum.
2. There was a marked tendency for instructors and students to think alike, particularly with respect to academic skills. Both instructors and students ranked the Basic Skills and Information topics, two components of literacy, quite high, whereas employers placed those near the bottom.
3. Employers ranked the Thinking Skills topic more highly than did either instructors or students.
4. Students ranked the Technology topic in fourth place, while instructors and employers ranked it seventh.
5. There was only one workplace topic which employers ranked more highly than did the other two stakeholder groups. Employers ranked the Interpersonal Skills topic in second place, while both instructors and students ranked it sixth.

To respond to the question of significant differences in the ratings of the three groups, I conducted a one-way Analysis of Variance (ANOVA) in order to compare the means across the eight measures. Post hoc contrasts allowed me to investigate mean differences among the three groups. The Bonferroni comparisons displayed the 24 pairwise contrasts of the mean differences for the three groups on the eight dependent variables.

In this analysis, one must consider the limited reliabilities of some measures, since they could have a pronounced effect on whether or not the statistical test could in fact recognize a difference. The areas where the findings might be considered inconclusive

Table 19

Rank Orders and Mean Item Means of the Workplace Topics

Instructors			Employers			Literacy Students		
Rank	**Topic**	**Mean Item Mean**	**Rank**	**Topic**	**Mean Item Mean**	**Rank**	**Topic**	**Mean Item Mean**
1	Personal Qualities	3.72	1	Personal Qualities	3.69	1	Personal Qualities	3.62
2	Basic Skills	3.63	2	Thinking Skills	3.49	2	Basic Skills	3.53
3	Information	3.50	2	Interpersonal Skills	3.49	3	Information	3.52
4	Thinking Skills	3.47	4	Resources	3.41	3	Technology	3.52
5	Resources	3.42	5	Systems	3.37	5	Thinking Skills	3.50
6	Interpersonal Skills	3.40	6	Basic Skills	3.36	6	Interpersonal Skills	3.48
7	Technology	3.37	7	Technology	3.20	7	Systems	3.43
8	Systems	3.24	8	Information	3.18	8	Resources	3.40

with respect to the differences would be the four measures that had reliabilities below .70: Resources, Interpersonal Skills, Thinking Skills, and Personal Qualities. The results of the 24 comparisons are depicted in Table 20.

An examination of the 24 possible pairings revealed a total of 6 significant differences:

- Instructors rated the Information topic more highly than did employers. There is statistical significance at the $\propto$ =.05 level (p = .000).
- Students rated the Information topic more highly than did employers. There is statistical significance at the $\propto$ =.05 level (p = .000).
- Students rated the Systems topic more highly than did instructors. There is statistical significance at the $\propto$ =.05 level (p = .027).
- Students rated the Technology topic more highly than did employers. There is statistical significance at the $\propto$ =.05 level (p = .000).
- Instructors rated the Basic Skills topic more highly than did employers. There is statistical significance at the $\propto$ =.05 level (p = .000).
- Students rated the Basic Skills topic more highly than did employers. There is statistical significance at the $\propto$ =.05 level (p = .025).

Additional Findings

The survey provided a four point Likert scale for evaluating the 45 survey items. However, some respondents were not satisfied with the rating scale only, but instead added either emphasis or their own comments.

Seven instructors, eight employers, and two students circled the highest rating of 4 and also added emphasis to at least one item:

Table 20

Results of Analysis of Variance for Eight Measures

Measure	Group 1		Group 2		Mean Difference	*p*
	Stakeholder	**Mean**	**Stakeholder**	**Mean**		
Resources	Instructors	17.10	Employers	17.06	.04	1.000
Resources	Instructors	17.10	Students	17.00	.10	1.000
Resources	Students	17.00	Employers	17.06	-.06	1.000
Interpersonal Skills	Instructors	16.99	Employers	17.46	-.47	.697
Interpersonal Skills	Instructors	16.99	Students	17.39	-.39	.738
Interpersonal Skills	Students	17.39	Employers	17.46	-.08	1.000
Information	Instructors	17.50	Employers	15.91	1.60	.000
Information	Instructors	17.50	Students	17.58	-.08	1.000
Information	Students	17.58	Employers	15.91	1.68	.000
Systems	Instructors	16.20	Employers	16.83	-.64	.386
Systems	Instructors	16.20	Students	17.13	-.94	.027

Measure	Group 1		Group 2		Mean Difference	*p*
	Stakeholder	**Mean**	**Stakeholder**	**Mean**		
Systems	Students	17.13	Employers	16.83	.30	1.000
Technology	Instructors	16.85	Employers	16.02	.83	.111
Technology	Instructors	16.85	Students	17.61	-.76	.077
Technology	Students	17.61	Employers	16.02	1.59	.000
Basic Skills	Instructors	36.30	Employers	33.57	2.73	.000
Basic Skills	Instructors	36.30	Students	35.30	1.00	.212
Basic Skills	Students	35.30	Employers	33.57	1.73	.025
Thinking Skills	Instructors	17.36	Employers	17.47	-.11	1.000
Thinking Skills	Instructors	17.36	Students	17.51	-.15	1.000
Thinking Skills	Students	17.51	Employers	17.47	.04	1.000
Personal Qualities	Instructors	18.58	Employers	18.45	.13	1.000
Personal Qualities	Instructors	18.58	Students	18.09	.49	.193
Personal Qualities	Students	18.09	Employers	18.45	-.36	.748

- In particular, item 42, "The importance of regular attendance and punctuality," generated a great deal of enthusiasm. Six instructors, five employers, and two students circled 4 and added asterisks, stars, triple underlining, or words such as "yes" or "very."
- Item 45, "The importance of being a trustworthy employee," was also highlighted. One instructor and three employers rated the item 4 with either a plus sign or asterisk following it.
- One instructor, one employer, and one student awarded item 41, "The importance of taking responsibility for one's own work," added emphasis.
- Items 20, 24, and 40 received added emphasis from two respondents.
- The following items received a rating of 4+ or 4* on one survey: 12, 14, 16, 18, 23, 25, 26, 27, 28, 30, 32, 33, 34, 35, 38, 39, 43, and 44.

As noted above, 17 respondents rated a total of 25 items by circling 4, with additional emphasis.

The unsolicited comments included the following:

<u>Instructors</u>

- An instructor added the words "How to" to item 42 (The importance of regular attendance and punctuality) and at the end of the survey noted that, "Work skills taught must include personal life skills and attitudes."
- An instructor attached a post-it note to the survey, expressing concern that some items may not be teachable.
- An instructor observed that "all items important but not necessarily responsibility of adult education teacher unless it's a workplace class."
- An instructor wrote that items 1 through 5 were supervisory issues. There were other comments of that nature throughout that survey.

- An instructor who assigned ratings of 4 to all 45 items included a full-page single-spaced explanation of her ratings.

Employers

- An employer circled the 4 for item 24 (The importance of demonstrating leadership ability) and added that, “A clear understanding of the difference between management and leadership should proceed [sic] the importance of demonstrating leadership ability.”

Students

Student participants did not add comments to the survey items.

CHAPTER 5

DISCUSSION OF THE FINDINGS

The purpose of this chapter is to present an overview of the study, a summary and discussion of the survey findings, and implications for practice, theory, and future research.

Overview of the Study

This study gathered data from three groups of stakeholders in the welfare-to-work process. The purpose of the study was to measure and compare the extent to which three groups of stakeholders in the welfare-to-work process judge a selected list of topics as important for inclusion in the curriculum. The research questions guiding this study were the following: (1) To what extent do *adult literacy instructors* judge the topics as important for inclusion in the curriculum? (2) To what extent do *prospective employers* judge the topics as important for inclusion in the curriculum? (3) To what extent do *adult literacy students* judge the topics as important for inclusion in the curriculum? (4) Are there significant differences in the ratings of these three groups?

The theoretical framework for the study was adapted from the democratic practice model of Cervero and Wilson (1994) which posits that all groups of stakeholders should be represented in the planning process. A survey instrument was developed to address the research questions of this study. The measurement framework for the survey was adapted from the five Competencies and three Foundation Skills presented in the Secretary's Commission on Achieving Necessary Skills (SCANS) report (1991a, 1991b). Specifically, a survey was developed to measure the extent to which the three stakeholder groups judge eight workplace topics as important for inclusion in the literacy curriculum.

The item pool for the survey was generated directly from *Skills and Tasks for Jobs: A SCANS Report for America 2000* (SCANS, 1991a) which provided expanded definitions of the Competencies and Foundation Skills and listed specific jobs and job tasks. The item pool refinement process entailed several critique sessions, rewriting of items, administering of the survey to representatives of the three participant groups, and further critiques and rewrites. The final instrument consisted of 45 items related to the eight workplace topics.

The sample for the survey was gathered from three stakeholder groups: literacy instructors, potential employers of entry-level workers, and literacy students receiving welfare benefits. The population of Georgia full-time adult literacy instructors received cover letters and surveys. After an initial mailing and two follow-up mailings, the adjusted response rate for this group was 67.24%. A sample of Georgia employers was selected from the Georgia Business-To-Business Sales and Marketing Directory (2001-2002), the 2002 Georgia Manufacturing Register (2002), and chamber of commerce directories. Employers representing manufacturing, service, and retail businesses received cover letters and surveys. After an initial mailing and two follow-up mailings, the adjusted response rate for this group was 39.63%. The literacy student sample was selected by instructors who agreed to participate in this process. Twenty instructors were mailed a total of 194 student surveys. After the initial mailing and follow-up telephone reminder, instructors returned 114 student surveys.

To address the first three research questions, the mean item mean scores for each of the eight SCANS topics were calculated for each of the three groups. For the fourth research question, a Oneway Analysis of Variance compared the means across the eight measures and displayed all possible pairwise contrasts of the mean differences. An examination of the 24 possible pairings revealed a total of six significant differences.

Summary of Findings

This study explored the extent to which three stakeholder groups judged eight workplace topics as important for inclusion in the curriculum. When rating the eight topics, instructors, employers, and literacy students ranked all eight topics highly, with mean item means ranging from 3.18 to 3.72 on a four point scale. Personal Qualities was the topic judged most important for inclusion in the curriculum. Personal Qualities items in the survey asked respondents to rate the importance of teaching the following subtopics in the curriculum:

- The importance of taking responsibility for one's one work
- The importance of regular attendance and punctuality
- The importance of being confident in one's knowledge, skills, and abilities
- The importance of establishing good relationships with others in the workplace
- The importance of being a trustworthy employee

This top rating of the Personal Qualities topic by all three groups was further emphasized by the many participants who added asterisks, stars, triple underlining, and words such as "yes" and "very" to their 4 rating of the various Personal Quality survey items.

Both instructors and students ranked the Basic Skills topic second. With this high ranking, both groups demonstrated their belief that reading, writing, arithmetic, speaking, and listening are important workplace topics.

The eight workplace topics were divided into five Competencies and three Foundation Skills, and mean item means were calculated for the Combined Competencies and Combined Foundation Skills. All three participant groups rated the Combined Foundation Skills, those skills and qualities that support the Competencies, higher than they rated the Competencies themselves.

When considering the differences in the groups' ratings, several observations were made. Overall, students rated the workplace topics and Combined Competencies and Combined Foundation Skills slightly higher than did the other two groups, and instructors rated the Combined Competencies and Combined Foundation Skills slightly higher than did employers. Both instructors and students rated the Information topic higher than did employers. Students rated the Systems topic higher than did instructors. Students rated the Technology topic higher than did employers. Both instructors and students rated the Basic Skills topic higher than did employers. Although instructors, employers, and literacy students rated all eight workplace topics highly, these differences among the three groups should be considered when planning the curriculum for a literacy program serving welfare-to-work participants.

Discussion of Findings

This section presents a discussion of the two major findings of the study.

The three stakeholder groups in the welfare-to-work process strongly support the SCANS workplace topics. The data analysis revealed that the three stakeholder groups highly value the eight workplace topics described in the SCANS report (1991a, 1991b). There was strong support in the sense that all three groups believed the eight topics were important, with no topics having a mean item mean below 3.18 on a four point scale. The knowledge that instructors, employers, and literacy students view the eight topics as important for inclusion in the curriculum provides strong support for using the SCANS topics as a basis for the welfare-to-work curriculum.

Such substantial agreement among the three stakeholder groups is somewhat surprising, however, considering their different relationships to the literacy curriculum. The conceptual framework of this study, a planning model which allows for negotiating the divergent interests of stakeholder groups (Cervero & Wilson, 1994), suggests that

these three groups would judge the eight workplace topics very differently. It was expected that there would be wider variance in the results. How then can this commonality among three groups with such obviously divergent interests be explained? I offer three possible explanations for this commonality: (1) stakeholder consensus, (2) hegemony, and (3) social desirability.

1. Stakeholder Consensus. The most positive explanation for the first finding is that all three stakeholder groups, in spite of their varied interests, judge all eight workplace topics as important for inclusion in the literacy curriculum for welfare recipients. All three groups, therefore, agree on the topics that entry-level workers should study in order to be successful in the workplace. This explanation is plausible only because the SCANS topics are the result of a comprehensive 12 month Department of Labor study based on interviews with individuals who also had conflicting interests in the workplace: "business owners, public employers, unions, and workers and supervisory in shops, plants, and stores" (SCANS, 1991b, p. xv). This explanation in turn provides further validation for the 1991 SCANS report, supporting the use of the eight workplace topics as a basis for instructing students receiving welfare benefits. Literacy programs can find additional support for SCANS by looking to earlier studies which determined that exemplary welfare-to-work educational programs often integrate the eight SCANS topics into the curriculum (Knell, 1998; Murphy & Johnson, 1998; U.S. Department of Health and Human Resources & U.S. Department of Education, 2001).

2. Hegemony. A second explanation, a more political one, is the notion of *hegemony*, "a form of ideological control in which dominant beliefs, values, and social practices are produced and distributed throughout a whole range of institutions such as schools, the family, mass media, and trade unions" (Girous, 1981, p. 94). This concept could explain why the student group, individuals who have not completed high school

and have little experience in the workplace, would be in agreement with instructors and employers and even rate the workplace topics more highly than did those two groups.

Following a review of the literature on educational programs for welfare recipients, Sandlin (1999) determined that "education is always a political enterprise" (p. 287) and that educational programs for welfare recipients in particular "[seek] to inculcate learners with the 'work values' of the dominant culture" (p. 287). Though the primary goal for students receiving Temporary Assistance for Needy Families (TANF) in educational programs is the GED, they are also quickly introduced to SCANS-like "work values" by caseworkers, instructors, and educational materials. Students become familiar with a SCANS-like vocabulary when caseworkers first assign them to literacy classes, as caseworkers instruct clients/students to consider the educational program their "work assignment." Students are then evaluated monthly on the *Georgia Department of Human Resources Record of Attendance and Performance Report*, a form on which instructors record student attendance and rate performance with one of four values (Excellent, Good, Satisfactory, or Unsatisfactory) on the following 11 work "attributes:"

1. **Attitude**: positive attitude toward work, coworkers; acceptance of supervision
2. **Judgement**: exercises good judgement in the absence of the supervisor
3. **Accepts Supervision**: accepts criticism without anger and improves performance; asks questions to understand assignments
4. **Performance of Duties**: completes tasks accurately, thoroughly, and timely
5. **Cooperativeness**: willingly cooperates with coworkers and supervisor; follows rules of the workplace

6. **Courtesy**: respects coworkers; interacts with courtesy; conduct appropriate to work place
7. **Personal Grooming**: dresses properly for the work setting; is clean and neat
8. **Works Well With Others**: collaborates with others to accomplish tasks; willingness to follow or lead
9. **Punctuality**: on time to begin work and returns from lunch or breaks promptly
10. **Dependability**: attends regularly
11. **Willingness to Work**: flexible; willing to work where and when needed; requests new assignments when tasks are completed

While the wording varies, the 11 work "attributes" strongly resemble the SCANS topics, especially Interpersonal Skills and Personal Qualities.

As noted in Chapter 2, welfare recipients assigned to literacy classrooms are also exposed to print materials which publishers advertise as containing instruction in the SCANS topics. It could be argued, then, that literacy programs attempt to "reproduce" in the student group work values similar to those in the SCANS report.

3. Social Desirability. The third explanation for this finding comes from a more moderate viewpoint, which recognizes the tendency for individuals to respond in a manner that is socially desirable rather than expressing their true feelings. While it might be expected that the instructor and employer stakeholder groups would support the SCANS report and judge the eight workplace topics highly, it was of special interest that the student group was also in full agreement. A consideration of the data collection process for the student group is important in exploring this finding.

Literacy instructors, authority figures who are often respected role models, were the point of contact for involving students receiving welfare benefits in the study. It can also be assumed that students completed the survey instrument in the literacy classroom. Instructors first asked students if they would like to participate and then administered the survey to those students who agreed. While every attempt was made to keep the language neutral in both the Cover Letter to Literacy Students (Appendix Q) and the Final Literacy Student Instrument (Appendix M), students read that they would rate "a list of the topics that some people think are important." Considering how the student data were collected, at the school site and under the direction of the instructor, it is possible that the message to the student group was that the workplace topics *were* indeed important for inclusion in the curriculum. As a result, students perhaps responded as they felt they were expected to, rather than thoughtfully and truthfully.

There are differences in the way instructors, employers, and students view the eight workplace topics, but these differences are minor. Although all three stakeholder groups expressed strong support for the eight workplace topics, 24 pairwise contrasts revealed six significant differences in how the three groups view four of the topics: Information, Systems, Technology, and Basic Skills. Shared perceptions appear to reside in the classroom. Of the six significance differences, five involved the instructor group or student group rating a workplace topic more highly than did employers. It should not seem surprising that teachers and students agree on curriculum content. Educational materials and classroom activities experienced by students receiving welfare benefits are often determined by instructors and as such reflect their values. Students perhaps construct their own "meaning" of workplace topics based upon program content presented by instructors, as literacy instructors often transfer their own meaning onto the student group (Fingeret, 1991).

The following discussion explores the nature of the six significant differences:

1. *Instructors rated the Information topic more highly than did employers.* Survey items related to this workplace topic refer to the importance of gathering and organizing information in the workplace. Instructors, who are responsible for selecting materials, understand that Information Skills are important and note their inclusion in workforce preparation materials offered by publishers of adult literacy materials (McGraw-Hill/Contemporary Books, 2002; Steck-Vaughn, 2002). Instructors who work with welfare recipients also have the opportunity to observe their students' ability to gather and organize information and keep records. Most current TANF recipients are single parents under the age of 20. Perhaps because they are young and many are undereducated, they have relied on family members and authority figures such as caseworkers and instructors for locating information. It is not unusual for students to ask instructors for assistance in managing their student folder and contents, locating a phone number in the directory, or determining which city bus they should ride to reach a particular destination. Instructors have become accustomed to turning these questions into lessons for locating and managing information. It is perhaps from this perspective that instructors consider this an important skill to develop in their students.

Employers, on the other hand, might look at this topic from another perspective. Typical entry-level jobs for TANF recipients include positions such as nurse's aide, housekeeper, janitor, security guard, food preparation worker, cashier, and cook (Morris & Orthner, 2000). For these positions, employers might consider that the information needed to perform such jobs would be provided to the employee.

2. *Students rated the Information topic more highly than did employers.* As noted in the last section, students are exposed to workforce preparation materials which devote whole sections of workbooks to acquiring the skills of locating and managing

information (McGraw-Hill/Contemporary Book Company; 2002; Steck-Vaughn, 2002). In addition, class activities might include locating employment ads in a local newspaper, researching a particular position, locating the business on a city map, and locating information about the business in preparation for an interview. Finding that students consider Information an important topic is also consistent with the responses of 1500 adult learners from 149 literacy programs in 34 states (Stein, 1995). The Equipped for the Future (EFF) study revealed that adults want to have access to information in order to orient themselves to the world. EFF went on to include *using information* in one category of the Work Role of adults. As noted in the last section, in contrast to the student group focus on the Information topic, employers could perhaps reason that entry-level workers would be provided with the information required to perform the task.

3. *Students rated the Systems topic more highly than did instructors.* Items related to the Systems topic include the importance of understanding how the business works, how one's job performance affects the success of the company, what a company expects of employees, how the chain of command works, and offering suggestions to improve products or services. Students who responded to the survey have little experience with workplace systems. Almost 20% of student respondents reported having no prior work experience. Those who did report work experience had worked in typical entry-level positions in which there would be minimal exposure to all facets of the organization.

Instructors, however, have extensive experience in working within systems. Georgia's literacy instructors possess the minimum of a baccalaureate degree and have, therefore, navigated through the processes of an institution of higher education. Following that, instructors are currently on the staff of a technical college or in a program associated with a public school system. In addition, instructors are required to comply

with the regulations of the Georgia Office of Adult Literacy. With a minimum of these experiences working within systems, instructors are professionals in a position to appreciate the importance of being proficient in this workplace topic. This ratings difference, therefore, does not mean that instructors think the Systems topic is unimportant. Perhaps the difference is a result of instructors feeling that the Systems topic would not be critical in entry-level positions.

4. *Students rated the Technology topic more highly than did employers.* Survey Technology items include both computer skills and the importance of using other business equipment and tools. Reports generated during the past 15 years have warned of the impending reduction of low-skilled jobs and the need for technology skills to compete in the global economy (Carnevale, Gainer, & Meltzer, 1988; Chisman, 1989; Jenkins, 1999; Johnson & Packer, 1987; Kirsch, 1993; SCANS, 1991b). Students are made aware of the increased use of computers and other learning tools during their high school tenure, in their GED preparation, and from instructors and DFCS caseworkers who stress the importance of acquiring technical skills. In addition, students who peruse the want-ad section of any city newspaper find that technology skills are an important qualification for job attainment. The EFF study (Stein, 1995) also determined that keeping up with the "rapidly changing world" is important to adult literacy students.

The employer group ranking the Technology topic lower than did students for inclusion in the curriculum might be explained by the nature of technical skills required of entry-level workers. Employers might not require a high level of technical skills at the time of hire, but would rather expect to train entry-level employees for the technical work necessary for a particular job.

5. *Instructors rated the Basic Skills topic more highly than did employers.* Basic Skills items on the survey include proficiency in reading, writing, arithmetic, speaking,

and listening. It is expected that literacy instructors would rate the Basic Skills topic as extremely important for inclusion in the curriculum, as basic skills are the very foundation of such programs. DFCS caseworkers refer TANF recipients to adult literacy programs to study for the GED in preparation for the workplace. Solid basic skills are the requirement for both goals; individuals must be proficient in reading, writing, and arithmetic in order to be successful on the GED test or in the workplace.

This finding is supported by an expressed concern that the traditional academic approach of teaching basic skills is not preparing adult students for the workplace (Jenkins, 1999; Martin, 1999; U.S. Department of Health and Human Services & U.S. Department of Education, 2001). Rating five workplace topics more highly than the Basic Skills topic does not necessarily mean, however, that employers think basic skills are unimportant. Since even most entry-level jobs require at a least a GED, employers may expect students exiting such programs to already possess basic skills. It could also mean that employers correctly assume that basic skills are already being taught in the literacy curriculum.

6. *Students rated the Basic Skills topic more highly than did employers.*

Like instructors, students are in a position to understand the importance of basic skills instruction. They have been referred to the literacy program for the purpose of attaining the GED, which will enhance their opportunity for employment. TANF students entering literacy programs are initially administered an assessment such as the Test of Adult Basic Education (TABE) to determine basic skill levels. While there is an occasional student who is ready take the GED test, most pre-test results indicate a deficiency in at least one of the basic skills. Students begin at that point and work to improve skill levels until they become proficient enough to pass the GED. TANF

students attend other workplace-related workshops and are thus made aware that even most entry-level positions require a high school diploma or GED.

Even though this study has cited many reports warning that workers will need increasingly high levels of language, math, and reasoning skills, employers may not consider the Basic Skills topic important for many entry-level positions. This finding is consistent with conclusions drawn from a national evaluation of welfare-to-work strategies (U.S. Department of Health and Human Services & U.S. Department of Education, 2001). A follow-up study of 11 programs in six states (including Georgia) revealed that education-focused programs had smaller effects on employment, earnings, and welfare receipt than did employment-focused programs.

Implications for Practice

Recent legislation has profoundly affected the practice of adult literacy. First, the provisions of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act initiated a referral process which assigns TANF recipients to literacy programs to prepare for the GED and attain the skills necessary to become self-sufficient citizens capable of succeeding in the workplace. Second, the 1998 Workforce Investment Act further integrated literacy instruction with career development and employment activities. These policies are based on the belief that the link between literacy and employment has been firmly established (Kirsch, 1993).

This study was designed to assist instructors facing the "dilemma" of curriculum planning in this welfare-to-work environment (Sparks, 1999). The results have positive implications for practice, as all three stakeholder groups supported the SCANS topics, with some minor differences. One of the more interesting differences was that instructors and students ranked the Basic Skills topic more highly than did employers. This finding, along with SCANS' inclusion of other affective and behavioral skills,

provides support for moving away from the purely academic model of instruction. These results further support the premise that students should receive instruction in much more than basic skills (Jenkins, 1999; Knell, 1998; Martin, 1999; U.S. Department of Human Resources & U.S. Department of Education, 2001; SCANS, 1991a, 1991b). The enthusiasm with which the three groups responded to the survey item related to "regular attendance and punctuality" attests to the importance of including "soft skills" in the curriculum.

As instructors struggle to implement a curriculum that will prepare welfare recipients for the workplace, they can proceed with the knowledge that there is strong support for the SCANS topics. These eight workplace topics, which already had national validity based on expert panels a decade ago, now have validity based on three stakeholder groups in the current state welfare-to-work process. The SCANS topics thus represent a solution for curriculum planning. Instructors can design a workplace curriculum around the topics, as demonstrated by the instructor who copied the survey for that very purpose.

The SCANS topics are quite teachable, and the items, as I measured them, provide almost the basis for curriculum units. As presented in Table 21, the SCANS topics represent a useful curriculum framework of eight clear topics which break down into 45 teachable subtopics.

Implications for Planning Theory

The conceptual framework of this study was the democratic planning model (Cervero & Wilson, 1994) which suggests that all stakeholders should have a voice in planning the program. This study sought the responses of three principal stakeholder

groups in the welfare-to-work process. Instructors, employers, and literacy students are all profoundly affected by the quality of adult literacy programs which serve welfare recipients.

Table 21

Curriculum Topics and Subtopics

Topic	Subtopic
Resources	Following a work schedule Deciding which tasks are the most important Predicting the time it will take to get a job done Keeping track of the tools and supplies you need to get the job done Meeting deadlines on the job
Interpersonal Skills	Handling interpersonal problems at work Working as a team member to reach a common goal Being open to ideas from other workers Demonstrating leadership ability Working well with people from other cultures
Information	Gathering information needed to solve a problem Keeping daily records Organizing written information and records Organizing files in alphabetical or numerical order Obtaining the information necessary to get the job done
Systems	Understanding how the business works Understanding how one's job performance affects the success of the company Knowing what a company expects of employees Understanding how the chain of command works Offering suggestions to improve products or services
Technology	Determining which tools are needed to do a job Asking for help with equipment when needed Using manuals to learn about equipment in the workplace Maintaining equipment in good condition Operating a computer

Basic Skills	Understanding printed materials used in the workplace Understanding spoken directions from a supervisor Understanding spoken messages at work Using printed information to complete a task Doing necessary writing on the job Writing information accurately Using basic math in work situations Interpreting numerical tables, graphs, diagrams, and charts Speaking clearly to communicate at work Explaining a problem so that others can understand
Thinking Skills	Considering consequences before making decisions Carefully considering possible choices before making decisions Having good problem-solving skills Figuring out solutions to workplace problems Learning new things on the job
Personal Qualities	Taking responsibility for one's own work Regular attendance and punctuality Being confident in one's knowledge, skills, and abilities Establishing good relationships with others in the workplace Being a trustworthy employee

Instructors hold a powerful position in planning literacy programs, as they are often responsible for both selecting appropriate materials and also for delivering literacy services to adult students. Employers too have a stake in the welfare-to-work educational program. If welfare reform is to be successful, employers must be willing to employ welfare recipients. It was, therefore, important for potential employers to be included in this study and to have a say in what skill sets should be taught (Knell, 1998). It was disappointing, then, that only 39.63% of this group with the greatest power responded to the survey. While employer responses revealed five significant differences from instructors and/or students, the employer group did, however, consider all eight workplace topics important for inclusion in the curriculum.

While it would be accepted practice to include the instructor group and the employer group in the planning process, it was necessary to make a case for including

literacy students receiving welfare benefits. In Chapter One, the argument was made for including literacy students, who possess minimal workplace knowledge and experience, in the curriculum planning process. I argued that including this group with the least power but the greatest stake (Sparks, 1999) was necessary in order to achieve student "buy in" of the curriculum, as students must feel the learning program is "relevant to their needs and goals" (Knowles, 1980, p. 56).

In the Equipped for the Future study (Stein, 1995), literacy students revealed that they want "to give voice to their ideas and opinions and to have the confidence that their voice will be heard and taken into account" (p. 4). To that end, much of the survey refinement process focused on adjusting both the language of the items and the length of the survey itself for the student group.

Instructors have reported that student participants took the survey activity seriously, with only two student surveys out of 114 considered invalid. Student responses revealed that they highly value the eight workplace topics. By participating in the survey process, these students had the opportunity to voice their opinions (Sparks, 1999) and have taken a step toward becoming "partners in curriculum development and instruction" (Fingeret, 1991, p. 9). Results from this study, therefore, confirm the appropriateness of using the democratic planning model (Cervero & Wilson, 1994) when one of the stakeholder groups possesses minimal knowledge and experience with the content of the proposed program.

Although the planning model of Cervero and Wilson (1994) is based on the notion of competing interests and unequal power relationships, this study represents one of those happy instances when the key stakeholder groups viewed the subject at hand in basically the same manner. Although there were numerical differences, even significant

differences, there were probably not substantively important differences in how the three groups judged the topics.

Implications for Policy

This study provides practical contributions to the field of adult literacy. In the face of welfare reform, instructors can use the results of this study to plan a curriculum for welfare recipients preparing for the workforce. This planning solution exists, however, within a larger societal problem.

Most problematical is the premise on which the welfare-to-work process rests, that a job--any job--is the ticket to a better life. Legislators making the decisions that shape the lives of welfare recipients have little experience with the realities of living on minimum wage (Ehrenreich, 2001; Quindlen, 2002). Posing as an entry-level worker, Ehrenreich learned firsthand the challenge of surviving on minimum wage jobs:

> Something is wrong, very wrong, when a single person in good health, a person who in addition possesses a working car, can barely support herself by the sweat of her brow. You don't need a degree in economics to see that wages are too low and rents too high. (p. 199)

If the goal of welfare reform is to prepare individuals for entry-level jobs which will remove them from the welfare rolls, then a curriculum based on the SCANS topics represents a solution. But the larger societal issue *should be* providing these individuals with the skills they will need to "bridge the gap" between the miserable poverty of low-wage entry-level jobs and livable-wage jobs (Jenkins, 1999). Only then can welfare recipients be expected to advance in the workplace and become self-sufficient.

Implications for Research

Further studies are needed to extend the current research. First, there is an important limitation in this study in that the results cannot be generalized to all literacy programs serving welfare recipients. The findings of this study represent one state at one point in time. Additional research is needed to replicate this study with similar

populations of instructors, employers, and students in other states. Also needed is the replication of the study in other geographical regions with different populations. Replication is needed to increase confidence in these findings, especially given the use of convenience samples.

Second, additional research is needed to improve the reliability of items measuring such affective and behavioral topics as Personal Qualities and Interpersonal Skills. Seemingly, these topics merged a wide range of constructs which the SCANS report failed to define in a functional manner (McNabb & Mills, 1995). Perhaps a better conceptualization of the topics through additional qualitative research is necessary to get a more meaningful measure for these topics.

Although reliability problems emerged in the study, most topics exhibited adequate reliability of at least .70. Future researchers should thus find the survey instrument a short, efficient instrument with which to measure the importance of eight workplace topics.

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APPENDIX A

MEMBERS OF SECRETARY'S COMMISSION ON ACHIEVING NECESSARY SKILLS

Members of the Secretary's Commission on Achieving Necessary Skills, Established May, 1990

SCANS Chairman William E. Brock, Senior Partner, The Brock Group

Edward Aguirre, President, Aguirre International

J. Veronica Biggins, Director of Public Affairs and Municipal Relations, C&S/Sovran Corporation

James P. Black, Vocational Educational Center, Lauderdale County, Alabama

Charles E. Bradford, Director, Apprenticeship, Employment and training, President, IAM CARES, International Association of Machinists and Aerospace Workers

Patricia L. Brockett, Iowa Department of Commerce

Walton E. Burdick, Senior Vice President, Personnel, International Business Machines

James D. Burge, Corporate Vice President, Director of Government Affairs, Motorola, Inc.

Bruce Carswell, Senior Vice President, Human Resources, GTE Corporation

Thomas W. Chapman, President, Greater Southeast Community Hospital, Inc.

Paul F. Cole, Secretary/Treasurer, New York State AFL/CIO

Gloria J. Conn, Regional Vocational Administrator, Wayne County Intermediate School District

Gabriel Cortina, Assistant Superintendent, Los Angeles Unified School District

Frank P. Doyle, Senior Vice President, Corporate Relations Staff, General Electric Company

Jay H. Foreman, Executive Vice President and Executive Assistant to the President, United Food and Commercial Workers

Badi G. Foster, President, Aetna Institute for Corporate Education, Aetna Life and Casualty

William M. Gregory, President, Gregory Forest Products

Yvette Herrera, Assistant to the Executive Vice President-Training, Communications Workers of America

Madelyn P. Jennings, Senior Vice President, Gannett Company, Inc.

Joan Patterson, Administrative Assistant, UAW Chrysler Department, Executive Co-Director, UAW Chrysler National Training Center

Steffen Palko, Executive Vice President, Cross Timber Oil Company

Dale Parnell, Commissioner, Community Colleges, State of Oregon

Lauren B. Resnick, Director, Learning Research and Development Center, University of Pittsburgh

Richard E. Rivera, President and Chief Executive Officer, TGIFriday's, Inc.

Roger D. Semerad, President, RJR Nabisco Foundation

Thomas G. Sticht, President, Applied Behavioral & Cognitive Sciences, Inc.

Maria Tukeva, President, Bell Multi-Cultural High School

Gary D. Watts, Senior Director, National Center for Innovation in Education, National Education Association

Sharyn Marr Wetjen, Principal, High School Redirection, Brooklyn, New York

Gerald Whitburn, Secretary, Wisconsin Department of Health and Social Services

John H. Zimmerman, Senior Vice President, Human Resources, MCI Communications

(SCANS, 1991a, p. iii & iv)

APPENDIX B

WORKSHEETS FOR FIRST SURVEY CRITIQUE SESSION

Worksheets for First Survey Critique Group

Category 1
Workplace Competencies: Resources

Competencies	**Survey Items**
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 allocating 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.	The employee can develop a work schedule. The employee can follow a work schedule. The employee can work without wasting time. The employee can adjust his/her work schedule when necessary. The employee can create a list of steps to complete a task. The employee can prepare a time schedule for what he/she needs to do. The employee can rank tasks in order of importance. The employee can prioritize work tasks by importance. The employee can break large tasks into smaller ones. The employee can break large, complex projects into small steps. The employee can estimate the time needed to complete a task. The employee can list all work tasks that need to be done. The employee can make a schedule of when tasks must be completed. The employee can prioritize tasks when creating a plan of action.
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 allocating 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.	The employee can prepare a budget. The employee can follow a budget. The employee can figure the difference between estimated budgets and actual costs. The employee can calculate the costs of necessary supplies.

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 allocating 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.	The employee can safely transport materials. The employee can safely move materials. The employee can maintain equipment in good condition. The employee can make sure there are adequate supplies. The employee can distribute materials to the proper location. The employee can keep inventory of supplies. The employee can determine when additional supplies are needed.
C4--Allocates Human Resources - Assesses knowledge and skills and distributes work accordingly, evaluates performance and provides feedback. Competent performance in allocating human resources includes accurately assessing people's 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.	The employee can identify other workers' skills. The employee can make a match between other workers' talents and their work assignments. The employee can match workers to specific tasks. The employee can figure the number of workers needed to do a specific task. The employee can recognize other workers' differences. The employee can recognize other workers' strengths. The employee can negotiate how tasks will be divided among coworkers. The employee can select coworkers with the skills for the job.

Category 2
Workplace Competencies: Information

Competencies	**Survey Items**
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 posing analytic questions to determine specific information needs; selecting possible information and evaluating its appropriateness; and determining when new information must be created.	The employee can obtain necessary information. The employee can understand when new information is needed. The employee can obtain the needed information for a report. The employee can maintain daily records. The employee can gather information needed to solve a problem. The employee can gain new information to stay up to date on work-related trends. The employee can gather information for decision-making. The employee can draw a conclusion based on information.
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.	The employee can organize written information and records. The employee can maintain computerized information and records. The employee can understand information from computerized data bases, spreadsheets, and paper files. The employee can organize customers' files in alphabetical order for easy access. The employee can update records as information becomes available. The employee can keep track of a variety of business affairs using a planning book.

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.	The employee can gather information on a particular work topic. The employee can express himself clearly. The employee can present information to others by using written communication. The employee can deliver an oral report. The employee can communicate a problem to a supervisor. The employee can explain a problem so that everyone understands.
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.	The employee can use a computer software for workplace tasks. The employee can operate computer programs. The employee can use computers to store information. The employee can use computers to retrieve information. The employee can display data and information using graphs, tables, charts, and narratives. The employee can use a computer to check inventory. The employee can enter a customer order into a computer. The employee can input customer information into a computer. The employee can keep up with changing technology in the workplace.

Category 3
Workplace Competencies: Interpersonal

Competencies	**Survey Items**
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.	The employee can participate as a member of a team. The employee can contribute ideas and suggestions to a team. The employee can communicate with other workers to share ideas. The employee can help out in a different departments when extra help is needed. The employee can cooperate with other workers to ensure that a task is completed. The employee can work with others to solve problems together. The employee can work as part of a team so that all can be successful. The employee can share information and ideas to help others do a better job. The employee can work well with others to reach a common goal. The employee can do his/her fair share of the job when working with others. The employee can help a coworker who has a tough job. The employee can help a coworker who has fallen behind. The employee can volunteer to help a coworker. The employee can make the team goal the top priority. The employee can help resolve conflicts among team members.
C10--Teaches Others - Helps others learn. Demonstrating competence in teaching others includes helping others to apply related concepts and theories to tasks 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.	The employee can help other workers learn by passing on job-related information. The employee can teach new workers how to perform functions of the job. The employee can model proper behaviors to new employees. The employee can demonstrate proper procedures to less skilled workers. The employee can teach a coworker a new skill.

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.	The employee can provide service to a customer. The employee can resolve complaints from customers. The employee can resolve customers' problems in a satisfactory manner. The employee can use a positive manner when handling customer complaints. The employee can establish friendly relationships with customers. The employee can understand the importance of good service. The employee can use good manners in dealing with customers.
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; and taking minority viewpoints into consideration.	The employee can encourage other workers. The employee can take all viewpoints into consideration. The employee can motivate other employees. The employee can convince other employees to listen to new ideas. The employee can assist a coworker. The employee can earn the respect of coworkers. The employee can organize a work group. The employee treats workers fairly. The employee has a clear idea of what needs to be done. The employee is open to other workers' ideas.
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.	The employee can listen to all sides of an issue. The employee can reflect on all sides of an issue. The employee can adjust to new ideas. The employee can make reasonable compromises. The employee can offer new information to help decide an issue.

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; and understanding concerns of members of other ethnic and gender groups.	The employee can base impressions on individual performance. The employee can work well with coworkers of varied ethnic, social, and educational backgrounds. The employee respects all cultural groups. The employee can relay information to people who do not speak English. The employee can communicate using gestures.

Category 4
Workplace Competencies: Systems

Competencies	Survey Items
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.	The employee understands how the business works. The employee understands the chain-of-command. The employee can identify the right people to ask for information. The employee knows the company's structure. The employee can understand how his/her job relates to company goals. The employee keeps up with changes in the company. The employee understands the work flow of the company. The employee knows what the company expects of employees. The employee understands the procedures a worker must follow. The employee understands how the company responds to legal issues. The employee understands how his job fits into the broad purpose of the company. The employee learns the company's corporate culture or rules. The employee shows interest in all aspects of the company. The employee understands how his/her own job fits within the organization. The employee can understand the organizational chart from the president down to entry-level employees. The employee can understand the work flow of the company. The employee can understand the company's promotion practices. The employee can work within the 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; and making changes to the system to rectify system functioning and to ensure quality of product.	The employee can make changes to ensure the quality of the product or service. The employee can recognize when to change procedures. The employee can adjust work methods to increase productivity/efficiency. The employee can turn negative experiences into positive experiences. The employee knows how to voice a legal complaint. The employee knows how to report legal issues to proper person. The employee understands the process to follow in a dispute with a coworker.
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.	The employee makes suggestions to improve the organization. The employee can make changes to improve the company's products or services. The employee can develop more efficient ways of performing the job. The employee can offer suggestions for improved work methods.

Category 5
Workplace Competencies: Technology

Competencies	**Survey Items**
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 desired results.	The employee can judge which machine/tool will produce the desired results. The employee can judge which technology will produce the desired results. The employee can determine which tools can best accomplish a project. The employee can determine which method would best complete the project. The employee can select the appropriate procedures for a project.
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.	The employee can set up machines, including computers and their programming systems. The employee can operate machines, including computers and their programming systems. The employee can apply technology to tasks. The employee can enter information into a computer. The employee can use a computer to save information. The employee can bring up appropriate software programs on a computer. The employee can use word processing programs to create documents. The employee can use company e-mail. The employee stays current with the latest technological equipment in the workplace.

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.	The employee can perform routine preventative maintenance on technology. The employee recognizes when to get additional help with technology. The employee can inform maintenance personnel when equipment is not working. The employee can review an operation manual to identify an equipment problem. The employee can make minor repairs on office equipment. The employee can maintain equipment on a scheduled basis. The employee can replace the toner in a copy machine.

Category 6

Foundation Skills: Basic Skills

Skills	**Survey Items**
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; and judges the accuracy, appropriateness, style, and plausibility of reports, proposals, or theories of other writers.	The employee can read work material. The employee can understand written reports. The employee can read an inventory list. The employee can read a work order. The employee can read a memo from a supervisor.

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 details; and checks, edits, and revises for correct information, appropriate emphasis, form, grammar, spelling, and punctuation.	The employee can compose written reports. The employee can fill out forms. The employee can write a letter to a customer. The employee can write down accurate messages. The employee can write a memo to a coworker. The employee can write a clear message. The employee can take notes. The employee can compose (letters, directions, manuals, proposals, graphs, flow charts)
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.	The employee can use numbers in practical work situations. The employee can use percentages in practical work situations. The employee can interpret numerical tables, graphs, diagrams, and charts. The employee can keep track of inventory. The employee can make correct measurements. The employee can estimate the cost of a project. The employee can calculate the cost of supplies.
F4--Mathematics - Approaches practical problems by choosing appropriately from a variety of mathematical techniques; uses quantitative data to construct logical explanations for real world situations; expresses mathematical ideas and concepts orally and in writing; and understands the role of chance in the occurrence and prediction of events.	The employee can choose appropriate math techniques to solve practical problems.

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 support the speaker.	The employee can understand verbal messages. The employee can take telephone orders accurately. The employee can understand supervisor's oral instructions. The employee can understand customers' spoken requests. The employee can learn from listening to others. The employee can use eye contact to show he/she is paying attention. The employee can listen carefully to instructions. The employee pays attention to coworkers' body language. The employee gives full attention to what is being said. The employee nods to indicate he/she is paying attention.
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.	The employee can speak clearly to communicate a message. The employee can participate in conversations, discussions, and group presentations. The employee uses appropriate body language when speaking. The employee asks questions when needed. The employee can greet customers. The employee can exchange information with a customer. The employee can explain a procedure to a customer. The employee can describe the company's product (service) to a customer. The employee establishes eye contact when speaking. The employee can give a firm handshake. The employee can deliver a difficult message without being negative. The employee has good presentation skills. The employee can make a point clearly when speaking. The employee can use examples to explain a point. The employee uses language everyone can understand.

Category 7
Foundation Skills: Thinking Skills

Skills	**Survey Items**
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.	The employee can combine ideas/information in new ways to reveal new possibilities. The employee can suggest a service/product to best satisfy a customer. The employee can offer an alternative product to a customer when the first choice is not available. The employee can suggest new ideas/procedures to the supervisor. The employee can learn from past mistakes.
F8--Decision Making - Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.	The employee can evaluate what action should be taken. The employee choose between two possible courses of action. The employee can decide which method to use. The employee can choose alternatives to offer the customer. The employee can determine what equipment to use for a project. The employee can consider goals, alternatives, and risks and then choose the 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; devises and implements a plan of action to resolve it; evaluates and monitors progress; and revises plan as indicated by findings.	The employee can devise a plan to resolve a problem. The employee can handle complaints from customers. The employee can handle complaints from coworkers. The employee can make adjustments when customers change their minds. The employee can suggest solutions to problems.

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.	The employee can interpret charts. The employee can visualize a finished work project. The employee can foresee the final results of a project. The employee can visualize the materials needed for a project. The employee can understand symbols, pictures, and graphs. The employee can work with ideas (information, symbols, etc.). The employee can visualize himself/herself in workplace situations. The employee can visualize the steps leading to a goal.
F11--Knowing How To Learn - Recognizes and can use learning techniques to apply and adapt new knowledge and skills in both familiar and changing situations and is aware of learning tools such as personal learning styles (visual, aural, etc.), formal learning strategies (note taking or clustering items that share some characteristics), and informal learning strategies (awareness of unidentified false assumptions that may lead to faulty conclusions).	The employee can apply new knowledge/skills in familiar situations. The employee can apply new knowledge/skills in unfamiliar situations. The employee is aware of different individual learning styles. The employee can continue to learn new skills due to changing technology. The employee is willing to participate in work-training programs. The employee can research a topic to find information.
F12--Reasoning - Discovers a rule or principle underlying the relationship between two or more objects and applies it in solving a problem; uses logic to draw conclusions from available information; extracts rules or principles from a set of objects or written test; applies rules and principles to a new situation or determines which conclusion are correct when given a set of facts and a set of conclusions.	No items were deemed relevant.

Category 8

Foundation Skills: Personal Qualities

Qualities	Survey Items
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; and displays high standards of attendance, punctuality, enthusiasm, vitality, and optimism in approaching and completing task.	The employee can stay focused on a task. The employee arrives at work on time. The employee sees a work assignment through to the end. The employee can complete work assignments correctly. The employee can perform a job independently. The employee has a high level of commitment to the job. The employee does not avoid unpleasant tasks. The employee is willing to devote time to improve skills. The employee is willing to do any job, no matter how unimportant. The employee takes responsibility for his/her own work. The employee meets deadlines.
F14--Self-Esteem - Believes in own self-worth and maintains a positive view of self; demonstrates knowledge of own skills and abilities; is aware of impact on others; and knows own emotional capacity and needs and how to address them.	The employee is aware of his/her own skills/abilities. The employee can make a list of the skills they have. The employee shows confidence with positive body language. The employee can list his/her successes. The employee can describe how he/she can gain new skills.

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; and takes an interest in what others say and do.	The employee relates well to others. The employee is understanding, friendly, and polite in group settings. The employee is interested in what others do and say. The employee can establish a good relationship with customers. The employee gets along well with coworkers. The employee can demonstrate genuine concern for customers' problems. The employee can talk with customers in a friendly manner. The employee can understand other people's feelings. The employee can project a positive attitude. The employee is cheerful, helpful, and enthusiastic. The employee uses good manners. The employee treats everyone fairly.
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; and is a "self-starter."	The employee sets realistic personal goals. The employee displays self-control. The employee is a self-starter. The employee can organize the work area to perform a task. The employee can break weekly goals into daily sub-goals. The employee can determine the skills needed to be promoted in the company. The employee can take on new responsibility which requires learning a new skill. The employee deals with criticism from a supervisor in a professional manner. The employee realizes when you need to learn new work skills. The employee is willing to participate in additional training. The employee does what needs to be done without being told to do so.
F17--Integrity/Honesty - Can be trusted; recognizes when faced with making a decision or exhibiting behavior that may break with commonly-held personal or societal values; understands the impact of violating these beliefs and codes on an organization, self, and others; and chooses an ethical course of action. (SCANS, 1991a, pp. 2-4 - 2-10)	The employee can be trusted. The employee does not use company property for personal use. The employee respects coworkers' privacy. The employee understands his/her personal values. The employee keeps company information confidential. The employee does not take work supplies home for personal use.

APPENDIX C

REVISED WORKSHEETS FOLLOWING THREE SURVEY CRITIQUE SESSIONS

Revised Worksheets Following Three Survey Critique Sessions

Category 1
Workplace Competencies: Resources

Competencies	**Survey Items**
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 allocating 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.	The employee can follow a work schedule. The employee can work without wasting time. (can use time wisely) The employee can prioritize work tasks by importance. The employee can estimate the time needed to complete a task. The employee keeps the deadline for the task in mind. The employee can choose among tasks to determine which ones are most important.
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 allocating 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.	No items were deemed relevant.

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 allocating 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.	The employee can safely transport materials. *or* The employee can safely move materials. The employee can take care of equipment. The employee can maintain equipment in good condition. The employee can make sure there are adequate supplies. The employee can distribute materials to the proper location. The employee can keep inventory of supplies. The employee can determine when additional supplies are needed.
C4--Allocates Human Resources - Assesses knowledge and skills and distributes work accordingly, evaluates performance and provides feedback. Competent performance in allocating human resources includes accurately assessing people's 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.	No items were deemed relevant.

Category 2
Workplace Competencies: Information

Competencies	Survey Items
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 posing analytic questions to determine specific information needs; selecting possible information and evaluating its appropriateness; and determining when new information must be created.	The employee can obtain information necessary to get the job done. The employee can gather information needed to solve a problem. The employee can decide what information is needed for doing the job. The employee can gather information on a particular work topic.
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.	The employee can maintain daily records. The employee can organize written information and records. The employee can organize files in a logical order for easy access. The employee can update records as information becomes available.

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.	No items were deemed relevant.
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.	The employee can use a computer for workplace tasks. The employee can use computers to store information. The employee can use computers to retrieve information. The employee can use a computer to check inventory. The employee can enter a customer order into a computer. The employee can input customer information into a computer. The employee can enter information into a computer.

Category 3
Workplace Competencies: Interpersonal

Competencies	Survey Items
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.	The employee can work effectively as a member of a team. The employee can contribute ideas and suggestions to a team. The employee can cooperate with other workers to ensure that a task is completed. The employee can work with others to solve problems together. The employee can work well with others to reach a common goal. The employee can do his/her fair share of the job when working with others. The employee doesn't let interpersonal problems interfere with the team's job performance. The employee responsibly challenges existing procedures, policies, or authorities. The employee can responsibly question the way the workplace does things.

C10--Teaches Others - Helps others learn. Demonstrating competence in teaching others includes helping others to apply related concepts and theories to tasks 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.	The employee can teach new workers how to perform on the job. The employee can demonstrate proper procedures to less skilled workers. The employee can teach a coworker a new skill. The employee can justify existing procedures to someone who doesn't understand them. The employee can constructively show a coworker what is right and what is wrong. The employee can provide constructive criticism when teaching people how to do the job.
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.	The employee can provide quality service to a customer. The employee can resolve customers' problems in a satisfactory manner. The employee can use good manners in dealing with customers.

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; and taking minority viewpoints into consideration.	The employee can motivate other employees. The employee can earn the respect of coworkers. The employee is open to ideas from other workers. The employee demonstrates leadership ability.
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.	The employee can make 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; and understanding concerns of members of other ethnic and gender groups.	The employee can work well with people of varied ethnic and racial backgrounds. The employee can work well with people of varied social and educational backgrounds.

Category 4
Workplace Competencies: Systems

Competencies	Survey Items
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.	The employee understands how the business works. The employee understands the chain-of-command. The employee can identify the right people to ask for information. The employee understands how his/her job performance affects the success of the company. The employee keeps up with changes in the company. The employee knows what the company expects of employees. The employee understands the unwritten rules of the workplace. The employee understands how his/her job impacts other people's jobs. The employee understands how his/her own job fits within the organization. The employee understands the process to follow in a dispute with a coworker. The employee understands the process to follow in a dispute with a supervisor. The employee can learn the workplace culture or rules.

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; and making changes to the system to rectify system functioning and to ensure quality of product.	The employee can make necessary changes to ensure the quality of the product or service. The employee can adjust work methods to increase productivity/efficiency.
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.	The employee can make suggestions to improve the organization. The employee can make changes to improve the company's products or services. The employee can develop more efficient ways of performing the job. The employee can offer suggestions for improved work methods.

Category 5
Workplace Competencies: Technology

Competencies	Survey Items
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 desired results.	The employee can determine which tools can best accomplish a project.
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.	The employee knows how to use a computer as needed on the job. The employee can use office equipment as needed on the job. The employee understands how to operate a computer. The employee understands how to operate office equipment.

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.	The employee recognizes how to get additional help with the technology he/she needs to operate. The employee can inform maintenance personnel when equipment is not working. The employee can use the equipment manual.

Category 6
Foundation Skills: Basic Skills

Skills	Survey Items
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; and judges the accuracy, appropriateness, style, and plausibility of reports, proposals, or theories of other writers.	The employee can read work-related material. The employee can understand written materials necessary to do the job. The employee can find written information needed to get the job done. The employee can understand written material used in the workplace. The employee knows how to use written information to complete a job task. The employee can locate the written information needed to do the job. The employee can apply written information to complete a job task. The employee understands the written materials used in the workplace. The employee knows how to effectively use written materials to complete a task.
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 details; and checks, edits, and revises for correct information, appropriate emphasis, form, grammar, spelling, and punctuation.	The employee can present information to others by using written communications. The employee is able to do necessary writing on the job. The employee can record information accurately in writing. The employee can write his/her ideas well enough so that others can understand. The employee can express his/her ideas in writing. The employee can present information to others by using written communication.

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.	The employee can use basic math in practical work situations. The employee can interpret numerical tables, graphs, diagrams, and charts. The employee can estimate.
F4--Mathematics - Approaches practical problems by choosing appropriately from a variety of mathematical techniques; uses quantitative data to construct logical explanations for real world situations; expresses mathematical ideas and concepts orally and in writing; and understands the role of chance in the occurrence and prediction of events.	The employee knows how to apply basic math to solve practical problems in the workplace.
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 support the speaker.	The employee can understand spoken messages. The employee can listen carefully to co-workers and supervisors. The employee can respond to spoken messages appropriately. The employee accurately listens to verbal messages. The employee uses spoken information on the job. The employee accurately understands spoken _____(information, directions, instructions, messages).

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.	The employee can express himself clearly. The employee can explain a problem so that everyone understands. The employee can deliver an oral report. The employee can communicate a problem to a supervisor. The employee can speak clearly to communicate a message. The employee knows how to speak appropriately to different types of people (e.g. supervisors, co-workers, customers). The employee can effectively communicate a message. The employee asks questions when needed.

Category 7
Foundation Skills: Thinking Skills

Skills	**Survey Items**
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.	The employee can combine ideas/information in new ways to reveal new possibilities. The employee can think of new ways to do the job. The employee can think of (figure out) solutions to workplace problems. The employee can think creatively on the job. The employee can apply creative thinking to new situations. The employee can figure out new ways to do (improve) the job.

F8--Decision Making - Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.	The employee can evaluate what action should be taken. The employee can choose the best alternative. The employee has good decision-making skills. The employee can make appropriate decisions when faced with choice. The employee can consider consequences before making decisions. The employee can consider consequences before making decisions. The employee evaluates the consequences of the decisions they make. The employee carefully considers possible choices before making decisions.
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; devises and implements a plan of action to resolve it; evaluates and monitors progress; and revises plan as indicated by findings.	The employee can figure out a way to resolve a problem. The employee can suggest solutions to problems. The employee has good problem-solving skills. The employee knows how to solve problems encountered on the job. The employee knows when there is a problem to be solved. The employee can suggest new ways to solve problems in the workplace.
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.	No items were deemed relevant.

F11--Knowing How To Learn - Recognizes and can use learning techniques to apply and adapt new knowledge and skills in both familiar and changing situations and is aware of learning tools such as personal learning styles (visual, aural, etc.), formal learning strategies (note taking or clustering items that share some characteristics), and informal learning strategies (awareness of unidentified false assumptions that may lead to faulty conclusions).	The employee can learn technology needed for the job. The employee knows how to learn a new work process. The employee knows how to learn new information to do the job. The employee knows how to learn to do a new job. The employee knows the best way for him/her to learn what he/she needs to know.
F12--Reasoning - Discovers a rule or principle underlying the relationship between two or more objects and applies it in solving a problem; uses logic to draw conclusions from available information; extracts rules or principles from a set of objects or written test; applies rules and principles to a new situation or determines which conclusion are correct when given a set of facts and a set of conclusions.	The employee has good reasoning skills. The employee uses good reasoning skills on the job.

Category 8
Foundation Skills: Personal Qualities

Qualities	Survey Items
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; and displays high standards of attendance, punctuality, enthusiasm, vitality, and optimism in approaching and completing task.	The employee sees a work assignment through to the end. The employee takes responsibility for his/her own work. The employee is enthusiastic on the job. The employee understands the importance of regular attendance and punctuality. The employee works well even when assigned an unpleasant task.
F14--Self-Esteem - Believes in own self-worth and maintains a positive view of self; demonstrates knowledge of own skills and abilities; is aware of impact on others; and knows own emotional capacity and needs and how to address them.	The employee believes in his/her own skills/abilities. The employee believes in his/her own self worth The employee is confident in his/her skills and abilities. The employee has a positive opinion of his/herself. The employee shows positive self-esteem. The employee is confident in his/her ability to do the job. The employee demonstrates that he/she has confidence in his/her ability. The employee demonstrates confidence at work. The employee is aware that he/she has an effect on other people.

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; and takes an interest in what others say and do.	The employee relates well to others. The employee is understanding, friendly, and polite in group settings. The employee takes an interest in what others say and do. The employee can establish a good relationship with customers. The employee gets along well with coworkers. The employee can demonstrate genuine concern for customers' problems. The employee can talk with customers in a friendly manner. The employee can understand other people's feelings. The employee can project a positive attitude. The employee is cheerful, helpful, and enthusiastic. The employee is polite to people around him/her. The employee uses good manners. The employee treats everyone fairly. The employee asserts him/herself in familiar and unfamiliar social situations.
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; and is a "self-starter."	The employee sets realistic personal goals. The employee is a self-starter. The employee can respond to feedback in an appropriate manner.

F17--Integrity/Honesty - Can be trusted; recognizes when faced with making a decision or exhibiting behavior that may break with commonly-held personal or societal values; understands the impact of violating these beliefs and codes on an organization, self, and others; and chooses an ethical course of action. (SCANS, 1991a, pp. 2-4 - 2-10)	The employee can be trusted. The employee understands the results of violating the company's rules.

APPENDIX D

WORKSHEETS FOR SECOND SURVEY CRITIQUE GROUP

Worksheets for Second Critique Group

Category 1

Workplace Competencies: Resources (C1 - C4)

Effective workers knows how to allocate time, money, materials, space, and staff.

1. The employee can follow a work schedule.
2. The employee can use time wisely.
3. The employee can prioritize work tasks by importance.
4. The employee can estimate the time needed to complete a task.
5. The employee keeps the deadline for the task in mind.
6. The employee can make sure there are adequate supplies.
7. The employee can distribute materials to the proper location.
8. The employee can keep an inventory of supplies.

Category 2

Workplace Competencies: Information (C5 - C8)

Effective workers can acquire and evaluate data, organize and maintain files, interpret and communicate, and use computers to process information.

1. The employee can obtain information necessary to get the job done.
2. The employee can gather information needed to solve a problem.
3. The employee can decide what information is needed for doing the job.
4. The employee can maintain daily records.
5. The employee can organize written information and records.
6. The employee can organize files in a logical order for easy access.
7. The employee can update records as information becomes available.
8. The employee can use a computer for workplace tasks.
9. The employee can enter information into a computer.

Category 3

Workplace Competencies: Interpersonal (C9 - C14)

Effective workers can work on teams, teach others, serve customers, lead, negotiate, and work well with people from culturally diverse backgrounds.

1. The employee can work effectively as a member of a team.
2. The employee can contribute ideas and suggestions to a team.
3. The employee can work with others to solve problems together.

4. The employee can work well with others to reach a common goal.
5. The employee doesn't let interpersonal problems interfere with the job.
6. The employee can appropriately question the way things are done in the workplace.
7. The employee can demonstrate proper procedures to less skilled workers.
8. The employee can teach a coworker a new skill.
9. The employee can provide constructive criticism when teaching people how to do the job.
10. The employee can motivate other employees.
11. The employee is open to ideas from other workers.
12. The employee demonstrates leadership ability.
13. The employee can work well with people of varied ethnic and racial backgrounds.
14. The employee can work well with people of varied social and educational backgrounds.

Category 4

Workplace Competencies: Systems (C15 - 17)

Effective workers can understand social, organizational, and technological systems; they can monitor and correct performance; and they can design or improve systems.

1. The employee understands how the business works.
2. The employee understands the chain-of-command.
3. The employee understands how his/her job performance affects the success of the company.
4. The employee keeps up with changes in the company.
5. The employee knows what the company expects of employees.
6. The employee understands the unwritten rules of the workplace.
7. The employee understands how his/her job impacts other people's jobs.
8. The employee understands how his/her own job fits within the organization.
9. The employee understands the process to follow in a dispute with a coworker.
10. The employee understands the process to follow in a dispute with a supervisor.
11. The employee can learn the workplace culture or rules.
12. The employee can make necessary changes to ensure the quality of the product or service.
13. The employee can adjust work methods to increase productivity/efficiency.
14. The employee can make suggestions to improve the organization.
15. The employee can offer suggestions for improved work methods.

Category 5

Workplace Competencies: Technology(C18 - C20)

Effective workers can select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment.

1. The employee can determine which tools are needed to do a job.
2. The employee understands how to operate a computer.
3. The employee understands how to operate office equipment.
4. The employee recognizes how to get additional help with equipment when needed.
5. The employee can use the manuals to learn about equipment in the workplace.
6. The employee can operate a calculator.
7. The employee can take care of equipment.
8. The employee can maintain equipment in good condition.
9. The employee knows how to use a variety of tools.

Category 6

Foundation Skills: Basic Skills (F1 - F6)

Competent workers reading, writing, arithmetic and mathematics, speaking, and listening skills.

1. The employee can understand written material used in the workplace.
2. The employee knows how to use written information to complete a job task.
3. The employee is able to do necessary writing on the job.
4. The employee can record information accurately in writing.
5. The employee can use basic math in work situations.
6. The employee can interpret numerical tables, graphs, diagrams, and charts.
7. The employee understands spoken directions from a supervisor.
8. The employee understands spoken messages at work.
9. The employee can speak clearly to communicate at work.
10. The employee can explain a problem so others can understand.

Category 7

Foundation Skills: Thinking Skills

Competent workers possess the ability to learn, to reason, to think creatively, to make decisions, and to solve problems.

1. The employee can figure out solutions to workplace problems.
2. The employee can think creatively on the job.
3. The employee can figure out new ways to do the job.
4. The employee has good decision-making skills.
5. The employee can consider consequences before making decisions.
6. The employee carefully considers possible choices before making decisions.
7. The employee has good problem-solving skills.
8. The employee knows how to learn a new work process.
9. The employee knows how to learn new information to do the job.
10. The employee knows how to learn to do a new job.
11. The employee has good reasoning skills.

Category 8

Foundation Skills: Personal Qualities (F13 - F17)

Competent workers possess individual responsibility, self-esteem and self-management, sociability, and integrity.

1. The employee sees a work assignment through to the end.
2. The employee takes responsibility for his/her own work.
3. The employee understands the importance of regular attendance and punctuality.
4. The employee works well even when assigned an unpleasant task.
5. The employee is confident in his/her knowledge, skills, and abilities.
6. The employee demonstrates confidence at work.
7. The employee relates well to others.
8. The employee takes an interest in what others say and do.
9. The employee can establish a good relationship with others in the workplace.
10. The employee is polite to people around him/her.
11. The employee treats others fairly.
12. The employee is comfortable in social situations.
13. The employee is realistic about his/her own knowledge, skills, and abilities.
14. The employee can set realistic personal goals.
15. The employee is a self-starter.
16. The employee can be trusted.

APPENDIX E

FINAL 59 SURVEY ITEMS FOR PROTOTYPE SURVEY INSTRUMENT

Final 59 Survey Items

Category 1

Workplace Competencies: Resources (C1 - C4)

Effective workers knows how to allocate time, money, materials, space, and staff.

1. The employee can follow a work schedule.
2. The employee can prioritize work tasks by importance.
3. The employee can estimate the time needed to complete a task.
4. The employee keeps the deadline for the task in mind.
5. The employee can make sure there are adequate supplies.
6. The employee can distribute materials to the proper location.
7. The employee can keep an inventory of supplies.

Category 2

Workplace Competencies: Information (C5 - C8)

Effective workers can acquire and evaluate data, organize and maintain files, interpret and communicate, and use computers to process information.

1. The employee can obtain information necessary to get the job done.
2. The employee can gather information needed to solve a problem.
3. The employee can decide what information is needed for doing the job.
4. The employee can maintain daily records.
5. The employee can organize written information and records.
6. The employee can organize files in a logical order for easy access.
7. The employee can use a computer for workplace tasks.

Category 3

Workplace Competencies: Interpersonal (C9 - C14)

Effective workers can work on teams, teach others, serve customers, lead, negotiate, and work well with people from culturally diverse backgrounds.

1. The employee can work effectively as a member of a team to reach a common goal.
2. The employee doesn't let interpersonal problems interfere with the job.
3. The employee can appropriately question the way things are done in the workplace.
4. The employee can provide constructive criticism when teaching people a new skill.
5. The employee is open to ideas from other workers.

6. The employee demonstrates leadership ability.
7. The employee can work well with people from culturally diverse backgrounds.

Category 4

Workplace Competencies: Systems (C15 - 17)

Effective workers can understand social, organizational, and technological systems; they can monitor and correct performance; and they can design or improve systems.

1. The employee understands how the business works.
2. The employee understands how his/her job performance affects the success of the company.
3. The employee knows what the company expects of employees.
4. The employee understands the process to follow in a dispute with another employee.
5. The employee can learn the workplace culture or rules.
6. The employee can make necessary changes to ensure the quality of the product or service.
7. The employee can offer suggestions for improved work methods.

Category 5

Workplace Competencies: Technology(C18 - C20)

Effective workers can select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment.

1. The employee can determine which tools are needed to do a job.
2. The employee understands how to operate a computer.
3. The employee understands how to operate office equipment.
4. The employee recognizes how to get additional help with equipment when needed.
5. The employee can use the manuals to learn about equipment in the workplace.
6. The employee can maintain equipment in good condition.
7. The employee knows how to use a variety of tools.

Category 6

Foundation Skills: Basic Skills (F1 - F6)

Competent workers reading, writing, arithmetic and mathematics, speaking, and listening skills.

1. The employee can understand written material used in the workplace.
2. The employee knows how to use written information to complete a job task.
3. The employee is able to do necessary writing on the job.
4. The employee can record information accurately in writing.
5. The employee can use basic math in work situations.
6. The employee can interpret numerical tables, graphs, diagrams, and charts.
7. The employee understands spoken directions from a supervisor.
8. The employee understands spoken messages at work.
9. The employee can speak clearly to communicate at work.
10. The employee can explain a problem so others can understand.

Category 7

Foundation Skills: Thinking Skills

Competent workers possess the ability to learn, to reason, to think creatively, to make decisions, and to solve problems.

1. The employee can figure out solutions to workplace problems.
2. The employee can figure out new ways to do the job.
3. The employee can consider consequences before making decisions.
4. The employee carefully considers possible choices before making decisions.
5. The employee has good problem-solving skills.
6. The employee knows how to learn new information to do the job.
7. The employee knows how to learn to do a new job.

Category 8

Foundation Skills: Personal Qualities (F13 - F17)

Competent workers possess individual responsibility, self-esteem and self-management, sociability, and integrity.

1. The employee takes responsibility for his/her own work.
2. The employee understands the importance of regular attendance and punctuality.
3. The employee is confident in his/her knowledge, skills, and abilities.
4. The employee can establish a good relationship with others in the workplace.
5. The employee is realistic about his/her own knowledge, skills, and abilities.

6. The employee is a self-starter.
7. The employee can be trusted.

APPENDIX F

PROTOTYPE SURVEY INSTRUMENT: INSTRUCTOR VERSION

WORKPLACE SKILLS QUESTIONNAIRE
Instructor Version

DIRECTIONS: The world of work requires many different skills. Below you will find a list of the skills that some people think are important. However, we are interested in knowing if *you* think they are important. Please read each of the skills listed below, and then ask yourself how important each skill is for entry level employees. Please circle only one response for each item and leave no item blank. As you can see, the rating scale ranges from Not Important to Very Important.

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
1.	The employee can maintain equipment in good condition.	Not	Somewhat	Very
2.	The employee is confident in his/her knowledge, skills, and abilities.	Not	Somewhat	Very
3.	The employee understands how to operate office equipment.	Not	Somewhat	Very
4.	The employee understands how his/her job performance affects the success of the company.	Not	Somewhat	Very
5.	The employee can figure out new ways to do the job.	Not	Somewhat	Very
6.	The employee can appropriately question the way things are done in the workplace.	Not	Somewhat	Very
7.	The employee understands how to operate a computer.	Not	Somewhat	Very
8.	The employee understands how the company works.	Not	Somewhat	Very
9.	The employee is able to do necessary writing on the job.	Not	Somewhat	Very
10.	The employee can organize written information and records.	Not	Somewhat	Very
11.	The employee can understand written material used in the workplace.	Not	Somewhat	Very
12.	The employee is a self-starter.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
13.	The employee understands the process to follow in a dispute with another employee.	Not	Somewhat	Very
14.	The employee can follow a work schedule.	Not	Somewhat	Very
15.	The employee knows how to use a variety of tools.	Not	Somewhat	Very
16.	The employee is realistic about his/her own knowledge, skills, and abilities.	Not	Somewhat	Very
17.	The employee can distribute materials to the proper location.	Not	Somewhat	Very
18.	The employee can use the manuals to learn about equipment in the workplace.	Not	Somewhat	Very
19.	The employee doesn't let interpersonal problems interfere with the job.	Not	Somewhat	Very
20.	The employee knows how to learn to do a new job.	Not	Somewhat	Very
21.	The employee can record information accurately in writing.	Not	Somewhat	Very
22.	The employee can use basic math in work situations.	Not	Somewhat	Very
23.	The employee takes responsibility for his/her own work.	Not	Somewhat	Very
24.	The employee can maintain daily records.	Not	Somewhat	Very
25.	The employee understands spoken messages at work.	Not	Somewhat	Very
26.	The employee knows how to learn new information to do the job.	Not	Somewhat	Very
27.	The employee can establish a good relationship with others in the workplace.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
28.	The employee can obtain information necessary to get the job done.	Not	Somewhat	Very
29.	The employee can make sure there are adequate supplies.	Not	Somewhat	Very
30.	The employee can interpret numerical tables, graphs, diagrams, and charts.	Not	Somewhat	Very
31.	The employee can speak clearly to communicate at work.	Not	Somewhat	Very
32.	The employee can provide constructive criticism when teaching people a new skill.	Not	Somewhat	Very
33.	The employee has good problem-solving skills.	Not	Somewhat	Very
34.	The employee can offer suggestions for improved work methods.	Not	Somewhat	Very
35.	The employee is open to ideas from other workers.	Not	Somewhat	Very
36.	The employee can learn the workplace culture or rules.	Not	Somewhat	Very
37.	The employee can use a computer for workplace tasks.	Not	Somewhat	Very
38.	The employee can gather information needed to solve a problem.	Not	Somewhat	Very
39.	The employee can prioritize work tasks by importance.	Not	Somewhat	Very
40.	The employee can decide what information is needed for doing the job.	Not	Somewhat	Very
41.	The employee carefully considers possible choices before making decisions.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
42.	The employee recognizes how to get additional help with equipment when needed.	Not	Somewhat	Very
43.	The employee keeps the deadline for the task in mind.	Not	Somewhat	Very
44.	The employee can consider consequences before making decisions.	Not	Somewhat	Very
45.	The employee understands spoken directions from a supervisor.	Not	Somewhat	Very
46.	The employee can organize files in a logical order for easy access.	Not	Somewhat	Very
47.	The employee demonstrates leadership ability.	Not	Somewhat	Very
48.	The employee knows how to use written information to complete a job task.	Not	Somewhat	Very
49.	The employee can estimate the time needed to complete a task.	Not	Somewhat	Very
50.	The employee can be trusted.	Not	Somewhat	Very
51.	The employee can explain a problem so others can understand.	Not	Somewhat	Very
52.	The employee can figure out solutions to workplace problems.	Not	Somewhat	Very
53.	The employee can make necessary changes to ensure the quality of the product or service.	Not	Somewhat	Very
54.	The employee understands the importance of regular attendance and punctuality.	Not	Somewhat	Very
55.	The employee can work effectively as a member of a team to reach a common goal.	Not	Somewhat	Very
56.	The employee can work well with people from culturally diverse background	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?	*Not Important*	*Somewhat Important*	*Very Important*
	<----------	----------	---------->
57. The employee knows what the company expects of employees.	Not	Somewhat	Very
58. The employee can keep an inventory of supplies.	Not	Somewhat	Very
59. The employee can determine which tools are needed to do a job.	Not	Somewhat	Very

Background Information

The following information is needed for research purposes in order to describe the nature of the sample group. Please answer the questions as accurately as possible.

60. What is your gender? (Circle one.) Male Female

61. What is your age? _____years

62. What is your race or ethnicity? _____

63. What is your highest academic degree?

_____ Bachelor's degree
_____ Masters degree
_____ Specialist degree
_____ Doctoral degree
_____ Other (specify) _____

64. How long have you been an educator?_____

65. How long have you been an adult literacy instructor? _____

66. Do you work in literacy full-time or part-time? (Circle one). Full-time Part-time

Business Contacts

67. This study of necessary workplace skills is designed to get the perspectives of three groups: literacy students, literacy instructors, and employers of entry level workers. You can help by identifying at least three area employers who you believe hire entry level employees such as your students. I will contact these employers separately, sending them a survey similar to the one you just completed. Unless you request that I do so, I will not mention your name when I contact them.

    If you know the names and phone numbers of a contact person (such as the personnel or human resources director), I would greatly appreciate your listing that information as well. Even if you don't know the phone number, please return this with just the name of the business. Thank you for your help.

_____	_____	_____	_____
Company Name	Contact Person	Position	Phone Number
_____	_____	_____	_____
Company Name	Contact Person	Position	Phone Number
_____	_____	_____	_____
Company Name	Contact Person	Position	Phone Number

APPENDIX G

PROTOTYPE SURVEY INSTRUMENT: EMPLOYER VERSION

WORKPLACE SKILLS QUESTIONNAIRE
Employer Version

DIRECTIONS: The world of work requires many different skills. Below you will find a list of the skills that some people think are important. However, we are interested in knowing if *you* think they are important. Please read each of the skills listed below, and then ask yourself how important each skill is for entry level employees. Please circle only one response for each item and leave no item blank. As you can see, the rating scale ranges from Not Important to Very Important.

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
1.	The employee can maintain equipment in good condition.	Not	Somewhat	Very
2.	The employee is confident in his/her knowledge, skills, and abilities.	Not	Somewhat	Very
3.	The employee understands how to operate office equipment.	Not	Somewhat	Very
4.	The employee understands how his/her job performance affects the success of the company.	Not	Somewhat	Very
5.	The employee can figure out new ways to do the job.	Not	Somewhat	Very
6.	The employee can appropriately question the way things are done in the workplace.	Not	Somewhat	Very
7.	The employee understands how to operate a computer.	Not	Somewhat	Very
8.	The employee understands how the company works.	Not	Somewhat	Very
9.	The employee is able to do necessary writing on the job.	Not	Somewhat	Very
10.	The employee can organize written information and records.	Not	Somewhat	Very
11.	The employee can understand written material used in the workplace.	Not	Somewhat	Very
12.	The employee is a self-starter.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
13.	The employee understands the process to follow in a dispute with another employee.	Not	Somewhat	Very
14.	The employee can follow a work schedule.	Not	Somewhat	Very
15.	The employee knows how to use a variety of tools.	Not	Somewhat	Very
16.	The employee is realistic about his/her own knowledge, skills, and abilities.	Not	Somewhat	Very
17.	The employee can distribute materials to the proper location.	Not	Somewhat	Very
18.	The employee can use the manuals to learn about equipment in the workplace.	Not	Somewhat	Very
19.	The employee doesn't let interpersonal problems interfere with the job.	Not	Somewhat	Very
20.	The employee knows how to learn to do a new job.	Not	Somewhat	Very
21.	The employee can record information accurately in writing.	Not	Somewhat	Very
22.	The employee can use basic math in work situations.	Not	Somewhat	Very
23.	The employee takes responsibility for his/her own work.	Not	Somewhat	Very
24.	The employee can maintain daily records.	Not	Somewhat	Very
25.	The employee understands spoken messages at work.	Not	Somewhat	Very
26.	The employee knows how to learn new information to do the job.	Not	Somewhat	Very
27.	The employee can establish a good relationship with others in the workplace.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
28.	The employee can obtain information necessary to get the job done.	Not	Somewhat	Very
29.	The employee can make sure there are adequate supplies.	Not	Somewhat	Very
30.	The employee can interpret numerical tables, graphs, diagrams, and charts.	Not	Somewhat	Very
31.	The employee can speak clearly to communicate at work.	Not	Somewhat	Very
32.	The employee can provide constructive criticism when teaching people a new skill.	Not	Somewhat	Very
33.	The employee has good problem-solving skills.	Not	Somewhat	Very
34.	The employee can offer suggestions for improved work methods.	Not	Somewhat	Very
35.	The employee is open to ideas from other workers.	Not	Somewhat	Very
36.	The employee can learn the workplace culture or rules.	Not	Somewhat	Very
37.	The employee can use a computer for workplace tasks.	Not	Somewhat	Very
38.	The employee can gather information needed to solve a problem.	Not	Somewhat	Very
39.	The employee can prioritize work tasks by importance.	Not	Somewhat	Very
40.	The employee can decide what information is needed for doing the job.	Not	Somewhat	Very
41.	The employee carefully considers possible choices before making decisions.	Not	Somewhat	Very
42.	The employee recognizes how to get additional help with equipment when needed.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
43.	The employee keeps the deadline for the task in mind.	Not	Somewhat	Very
44.	The employee can consider consequences before making decisions.	Not	Somewhat	Very
45.	The employee understands spoken directions from a supervisor.	Not	Somewhat	Very
46.	The employee can organize files in a logical order for easy access.	Not	Somewhat	Very
47.	The employee demonstrates leadership ability.	Not	Somewhat	Very
48.	The employee knows how to use written information to complete a job task.	Not	Somewhat	Very
49.	The employee can estimate the time needed to complete a task.	Not	Somewhat	Very
50.	The employee can be trusted.	Not	Somewhat	Very
51.	The employee can explain a problem so others can understand.	Not	Somewhat	Very
52.	The employee can figure out solutions to workplace problems.	Not	Somewhat	Very
53.	The employee can make necessary changes to ensure the quality of the product or service.	Not	Somewhat	Very
54.	The employee understands the importance of regular attendance and punctuality.	Not	Somewhat	Very
55.	The employee can work effectively as a member of a team to reach a common goal.	Not	Somewhat	Very
56.	The employee can work well with people from culturally diverse background	Not	Somewhat	Very
57.	The employee knows what the company expects of employees.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
58.	The employee can keep an inventory of supplies.	Not	Somewhat	Very
59.	The employee can determine which tools are needed to do a job.	Not	Somewhat	Very

Background Information

The following information is needed for research purposes in order to describe the nature of the sample group. Please answer the questions as accurately as possible.

60. What is your gender? (Circle one.) Male Female

61. What is your age? _____years

62. What is your race or ethnicity? _____

63. What is your highest academic degree?

_____ No diploma
_____ High school diploma
_____ Technical school diploma or certificate
_____ Associate degree
_____ Bachelor's degree
_____ Masters degree
_____ Specialist degree
_____ Doctoral degree
_____ Other (specify) _____

64. What is your current job title?_____

65. How long have you been in that position? _____

66. How many employees work for your company? _____

67. Approximately how many of those employees are entry level? _____

APPENDIX H

PROTOTYPE SURVEY INSTRUMENT: ADULT LEARNER VERSION

Instructors: As you administer the attached questionnaire to literacy students, please read aloud the directions enclosed in the box below.

Instructions for Administering the Workplace Skills Questionnaire - Adult Learner Version

You are being asked to participate in a study being conducted by the University of Georgia. The study is designed to find out what skills people think are important in the workplace. Each of the items on the questionnaire lists a skill which some people think is important in the workplace. But we need to know if *you* think it is important. Please read each item carefully and decide if you think that skill is ***Not Important***, ***Somewhat Important***, or ***Very Important*** for employees to have.

Your name will not appear on the survey; therefore, your responses are anonymous. **This questionnaire is a voluntary activity. You are not required to participate, and there will be no penalty if you choose not to participate**.

WORKPLACE SKILLS QUESTIONNAIRE
Adult Learner Version

DIRECTIONS: The world of work requires many different skills. Below you will find a list of the skills that some people think are important. However, we are interested in knowing if *you* think they are important. Please read each of the skills listed below, and then ask yourself how important each skill is for entry level employees. Please circle only one response for each item and leave no item blank. As you can see, the rating scale ranges from Not Important to Very Important.

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
1.	The employee can maintain equipment in good condition.	Not	Somewhat	Very
2.	The employee is confident in his/her knowledge, skills, and abilities.	Not	Somewhat	Very
3.	The employee understands how to operate office equipment.	Not	Somewhat	Very
4.	The employee understands how his/her job performance affects the success of the company.	Not	Somewhat	Very
5.	The employee can figure out new ways to do the job.	Not	Somewhat	Very
6.	The employee can appropriately question the way things are done in the workplace.	Not	Somewhat	Very
7.	The employee understands how to operate a computer.	Not	Somewhat	Very
8.	The employee understands how the company works.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
9.	The employee is able to do necessary writing on the job.	Not	Somewhat	Very
10.	The employee can organize written information and records.	Not	Somewhat	Very
11.	The employee can understand written material used in the workplace.	Not	Somewhat	Very
12.	The employee is a self-starter.	Not	Somewhat	Very
13.	The employee understands the process to follow in a dispute with another employee.	Not	Somewhat	Very
14.	The employee can follow a work schedule.	Not	Somewhat	Very
15.	The employee knows how to use a variety of tools.	Not	Somewhat	Very
16.	The employee is realistic about his/her own knowledge, skills, and abilities.	Not	Somewhat	Very
17.	The employee can distribute materials to the proper location.	Not	Somewhat	Very
18.	The employee can use the manuals to learn about equipment in the workplace.	Not	Somewhat	Very
19.	The employee doesn't let interpersonal problems interfere with the job.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
20.	The employee knows how to learn to do a new job.	Not	Somewhat	Very
21.	The employee can record information accurately in writing.	Not	Somewhat	Very
22.	The employee can use basic math in work situations.	Not	Somewhat	Very
23.	The employee takes responsibility for his/her own work.	Not	Somewhat	Very
24.	The employee can maintain daily records.	Not	Somewhat	Very
25.	The employee understands spoken messages at work.	Not	Somewhat	Very
26.	The employee knows how to learn new information to do the job.	Not	Somewhat	Very
27.	The employee can establish a good relationship with others in the workplace.	Not	Somewhat	Very
28.	The employee can obtain information necessary to get the job done.	Not	Somewhat	Very
29.	The employee can make sure there are adequate supplies.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
30.	The employee can interpret numerical tables, graphs, diagrams, and charts.	Not	Somewhat	Very
31.	The employee can speak clearly to communicate at work.	Not	Somewhat	Very
32.	The employee can provide constructive criticism when teaching people a new skill.	Not	Somewhat	Very
33.	The employee has good problem-solving skills.	Not	Somewhat	Very
34.	The employee can offer suggestions for improved work methods.	Not	Somewhat	Very
35.	The employee is open to ideas from other workers.	Not	Somewhat	Very
36.	The employee can learn the workplace culture or rules.	Not	Somewhat	Very
37.	The employee can use a computer for workplace tasks.	Not	Somewhat	Very
38.	The employee can gather information needed to solve a problem.	Not	Somewhat	Very
39.	The employee can prioritize work tasks by importance.	Not	Somewhat	Very
40.	The employee can decide what information is needed for doing the job.	Not	Somewhat	Very
41.	The employee carefully considers possible choices before making decisions.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
42.	The employee recognizes how to get additional help with equipment when needed.	Not	Somewhat	Very
43.	The employee keeps the deadline for the task in mind.	Not	Somewhat	Very
44.	The employee can consider consequences before making decisions.	Not	Somewhat	Very
45.	The employee understands spoken directions from a supervisor.	Not	Somewhat	Very
46.	The employee can organize files in a logical order for easy access.	Not	Somewhat	Very
47.	The employee demonstrates leadership ability.	Not	Somewhat	Very
48.	The employee knows how to use written information to complete a job task.	Not	Somewhat	Very
49.	he employee can estimate the time needed to complete a task.	Not	Somewhat	Very
50.	The employee can be trusted.	Not	Somewhat	Very
51.	The employee can explain a problem so others can understand.	Not	Somewhat	Very
52.	The employee can figure out solutions to workplace problems.	Not	Somewhat	Very
53.	The employee can make necessary changes to ensure the quality of the product or service.	Not	Somewhat	Very
54.	The employee understands the importance of regular attendance and punctuality.	Not	Somewhat	Very
55.	The employee can work effectively as a member of a team to reach a common goal.	Not	Somewhat	Very

HOW IMPORTANT IS EACH SKILL FOR ENTRY LEVEL EMPLOYEES?		*Not Important*	*Somewhat Important*	*Very Important*
		<----------	----------	---------->
56.	The employee can work well with people from culturally diverse background	Not	Somewhat	Very
57.	The employee knows what the company expects of employees.	Not	Somewhat	Very
58.	The employee can keep an inventory of supplies.	Not	Somewhat	Very
59.	The employee can determine which tools are needed to do a job.	Not	Somewhat	Very

Background Information

The following information is needed for research purposes in order to describe the nature of the sample group. Please answer the questions as accurately as possible.

60. What is your gender? (Circle one.) Male Female

61. What is your age? _____years

62. What is your race or ethnicity? _____

63. What was the last grade you completed in school? _____

64. How long have you been enrolled in the adult literacy program? _____

65. Have you ever been employed? _____Yes _____No

If you have been employed in the past, please describe the last job you had.

APPENDIX I

PROTOTYPE COVER LETTER TO LITERACY INSTRUCTORS

(University of Georgia Letterhead)

Date

Dear Fellow Adult Literacy Instructor:

As a literacy instructor, you understand what a challenge it can be to help out-of-work people connect to the world of work. In recent years we have all heard much discussion about the quality of the American workforce. Articles and books have addressed this problem, with several containing lists of skills needed for success in the workplace. Certainly those of us working with the literacy population understand the importance of skill development. But are we really sure exactly *which* skills matter? And do our students and potential employers see things the same way?

As a doctoral student under the direction of Dr. Tom Valentine, I am currently involved in a study of the necessary skills for entry level employees. The study uses a list of skills that the Department of Labor prepared entitled What Work Requires of Schools: A SCANS Report for America 2000. *In my study, I will compare how important GED students, literacy instructors, and potential employers think these skills are.* The ultimate goal of my study is to analyze and compare the perceptions of employers, literacy instructors, and literacy students enrolled in GED programs regarding these workplace skills.

This kind of information could be useful to literacy teachers both in planning instruction and in opening up meaningful discussion of the workplace with our students. As you can imagine, in order to compare the perceptions of three different groups of people, I have to be able to access the data. You are one of the few teachers in Georgia that I am asking to participate in this study, and I will be using your opinions to represent the views of the field as a whole.

As an unfunded researcher, data collection presents a very real challenge. I am hoping that you, as my literacy colleague, will agree to help me with this important but somewhat difficult study, though I fully understand if you are unable to do so. Specifically, I am asking you to help with this study by completing the following two tasks:

1. First I ask you to complete the attached yellow **Workplace Skills Questionnaire - Instructor Version**. This will allow me to see what you as a teacher believe to be the most necessary skills. Your responses, of course, are strictly confidential, and I will protect your identity in every

way possible. However, I have put a code number at the bottom of each instrument so that I can keep a record of the response rate. As soon as I have an adequate number of responses, I will destroy any identifying information about the participants in the study.

Please note that on the last page of the questionnaire, I ask you to write down names of at least two area employers that you think might hire entry level employees such as your students. This information will allow me to also survey employers about their opinions of the necessary skills.

2. Next I ask you to ask three of your students to fill out the blue **Workplace Skills Questionnaire - Adult Learner Version**. If possible, *please select students who are unemployed and have less than a high school education*. If a student has difficulty with the vocabulary or any of the items, you may read the items aloud or explain key concepts.

I know I am asking a lot. Because this is an unfunded study, I cannot afford to pay you for your time. I can, however, provide you with a summary of findings which you might find useful in your work. I will also prepare some form of instructional material for you to use with your students.

After completing the instructor survey and student surveys, please return them in the self-addressed, stamped envelope by _____. If you have questions concerning this study, please feel free to contact me at (706) 549-0367, (706) 355-5028, or ekilgos@negia.net. Thank you.

Sincerely,

Ellen McGuire Kilgos

ek

Enclosures (2)

For questions or problems about your rights please call or write: Ms. Julia Alexander, Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-6514; E-Mail Address IRB@uga.edu.

APPENDIX J

PROTOTYPE COVER LETTER TO EMPLOYERS

(University of Georgia Letterhead)

Date

Dear

In recent years there has been great concern about the quality of the American workforce. Many articles and books have addressed this problem, with several containing lists of skills needed for success in the workplace. As a graduate student in the Adult Education Department at the University of Georgia under the direction of Dr. Tom Valentine, I am currently involved in a study of the necessary skills for entry level employees. At the heart of my study is a list of skills that the Department of Labor prepared entitled *What Work Requires of Schools: A SCANS Report for America 2000.* I am very interested in knowing how Georgia employers view this listing of skills. Consequently, I am sending you this survey.

The enclosed Workplace Skills Questionnaire contains items reflecting the Department of Labor's listing. Would you please take 10 minutes out of your busy schedule to indicate how important you feel it is for entry level employees to have each of these skills? Upon completing the survey, please return it in the self-addressed, stamped envelope by _____.

Your responses, of course, are strictly confidential, and I will protect your identity in every way possible. However, I have put a code number at the bottom of each instrument so that I can keep a record of the response rate. As soon as I have an adequate number of responses, I will destroy any identifying information about the participants in the study.

If you have questions concerning this survey, please feel free to contact me at (706) 549-0367, (706) 355-5028, or ekilgos@negia.net. Thank you.

Sincerely,

Ellen McGuire Kilgos

ek
Enclosure

For questions or problems about your rights please call or write: Ms. Julia Alexander, Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-6514; E-Mail Address IRB@uga.edu.

APPENDIX K

FINAL INSTRUCTOR SURVEY INSTRUMENT

(University of Georgia Letterhead)

Workplace Skills Questionnaire

Instructor Version

DIRECTIONS: For those of us who spend a lot of time preparing students to enter the world of work, we know how difficult it can be to decide which topics to teach. The task is even more difficult when working with welfare recipients who often have had little experience with the workplace. Below you will find a list of the topics that some people think are important. As you read the list, please indicate how important you think it is that each topic be taught to welfare recipients who are preparing to enter the workforce. Please circle only one response for each item.

How important is it to teach each of the following topics?	**Not Important**			**↔ Very Important**
1. How to follow a work schedule.	**1**	**2**	**3**	**4**
2. How to decide which tasks are the most important.	**1**	**2**	**3**	**4**
3. How to predict the time it will take to get a job done	**1**	**2**	**3**	**4**
4. How to keep track of the tools and supplies you need to get the job done.	**1**	**2**	**3**	**4**
5. How to gather information needed to solve a problem.	**1**	**2**	**3**	**4**
6. How to keep daily records.	**1**	**2**	**3**	**4**
7. How to organize written information and records.	**1**	**2**	**3**	**4**
8. How to organize files in alphabetical or numerical order. . . .	**1**	**2**	**3**	**4**
9. How to handle interpersonal problems at work.	**1**	**2**	**3**	**4**
10. How to operate a computer.	**1**	**2**	**3**	**4**
11. How to write information accurately.	**1**	**2**	**3**	**4**
12. How to use basic math in work situations.	**1**	**2**	**3**	**4**

How important is it to teach each of the following topics?		Not Important			↔ Very Important
13.	How to interpret numerical tables, graphs, diagrams, and charts.	**1**	**2**	**3**	**4**
14.	How to speak clearly to communicate at work.	**1**	**2**	**3**	**4**
15.	How to explain a problem so that others can understand.	**1**	**2**	**3**	**4**
16.	How to figure out solutions to workplace problems.	**1**	**2**	**3**	**4**
17.	How to learn new things on the job.	**1**	**2**	**3**	**4**
18.	The importance of meeting deadlines on the job..	**1**	**2**	**3**	**4**
19.	The importance of obtaining the information necessary to get the job done.	**1**	**2**	**3**	**4**
20.	The importance of working as a team member to reach a common goal.	**1**	**2**	**3**	**4**
21.	The importance of being open to ideas from other workers.	**1**	**2**	**3**	**4**
22.	The importance of demonstrating leadership ability	**1**	**2**	**3**	**4**
23.	The importance of working well with people from other cultures	**1**	**2**	**3**	**4**
24.	The importance of understanding how the business works	**1**	**2**	**3**	**4**
25.	The importance of understanding how one's job performance affects the success of the company.	**1**	**2**	**3**	**4**
26.	How to use printed information to complete a task.	**1**	**2**	**3**	**4**
27.	How to do necessary writing on the job.	**1**	**2**	**3**	**4**
28.	The importance of knowing what a company expects of employees	**1**	**2**	**3**	**4**

How important is it to teach each of the following topics?		Not Important ↔ Very Important			
29.	The importance of understanding how the chain of command works	**1**	**2**	**3**	**4**
30.	The importance of offering suggestions to improve products or services	**1**	**2**	**3**	**4**
31.	The importance of determining which tools are needed to do a job	**1**	**2**	**3**	**4**
32.	The importance of asking for help with equipment when needed	**1**	**2**	**3**	**4**
33.	The importance of using manuals to learn about equipment in the workplace.	**1**	**2**	**3**	**4**
34.	The importance of maintaining equipment in good condition	**1**	**2**	**3**	**4**
35.	The importance of understanding printed materials used in the workplace.	**1**	**2**	**3**	**4**
36.	The importance of understanding spoken directions from a supervisor	**1**	**2**	**3**	**4**
37.	The importance of understanding spoken messages at work	**1**	**2**	**3**	**4**
38.	The importance of considering consequences before making decisions	**1**	**2**	**3**	**4**
39.	The importance of carefully considering possible choices before making decisions.	**1**	**2**	**3**	**4**
40.	The importance of having good problem-solving skills.	**1**	**2**	**3**	**4**
41.	The importance of taking responsibility for one's own work	**1**	**2**	**3**	**4**
42.	The importance of regular attendance and punctuality.	**1**	**2**	**3**	**4**

How important is it to teach each of the following topics?	Not Important ↔ Very Important			
43. The importance of being confident in one's knowledge, skills, and abilities	**1**	**2**	**3**	**4**
44. The importance of establishing good relationships with others in the workplace.	**1**	**2**	**3**	**4**
45. The importance of being a trustworthy employee.	**1**	**2**	**3**	**4**

Background Information

The following information is needed for research purposes in order to describe the nature of survey participants. Remember, your confidentiality is guaranteed.

46. What is your gender? (Circle one.) Male Female

47. In what year were you born? _____

48. What is your race or ethnicity? _____

49. What is your highest academic degree? (Check one.)

_____ Bachelor's degree
_____ Master's degree
_____ Specialist degree
_____ Doctoral degree
_____ Other (specify) _____

50. How long have you been an adult literacy instructor? _____

51. Approximately how many of your current students receive public assistance? _____

Thank you for taking the time to complete this survey!

I.D. #_____
(for mailing purposes only)

APPENDIX L

FINAL EMPLOYER SURVEY INSTRUMENT

(University of Georgia Letterhead)

WORKPLACE SKILLS QUESTIONNAIRE

Employer Version

DIRECTIONS: Employers understand that the world of work requires many different skills. Successful employees must not only be good at their tasks but must also possess certain personal qualities. Because these skills and qualities can be acquired both inside and outside the classroom, educators preparing adult students to enter the workforce are not always certain which topics to teach. Below you will find a list of the topics that some people think are important. However, we are interested in knowing if *you* think they are important. As you read the list, please indicate how important you think it is that each topic be taught to welfare recipients who are seeking work. Please circle only one response for each item.

How important is it to teach each of the following topics?		**Not Important**			**Very Important**
1.	How to follow a work schedule.	**1**	**2**	**3**	**4**
2.	How to decide which tasks are the most important.	**1**	**2**	**3**	**4**
3.	How to predict the time it will take to get a job done. . . .	**1**	**2**	**3**	**4**
4.	How to keep track of the tools and supplies you need to get the job done.	**1**	**2**	**3**	**4**
5.	How to gather information needed to solve a problem. . . .	**1**	**2**	**3**	**4**
6.	How to keep daily records.	**1**	**2**	**3**	**4**
7.	How to organize written information and records.	**1**	**2**	**3**	**4**
8.	How to organize files in alphabetical or numerical order. .	**1**	**2**	**3**	**4**
9.	How to handle interpersonal problems at work.	**1**	**2**	**3**	**4**
10.	How to operate a computer.	**1**	**2**	**3**	**4**

How important is it to teach each of the following topics?		Not Important ↔ Very Important			
11.	How to use printed information to complete a task.	**1**	**2**	**3**	**4**
12.	How to do necessary writing on the job.	**1**	**2**	**3**	**4**
13.	How to write information accurately.	**1**	**2**	**3**	**4**
14.	How to use basic math in work situations.	**1**	**2**	**3**	**4**
15.	How to interpret numerical tables, graphs, diagrams, and charts	**1**	**2**	**3**	**4**
16.	How to speak clearly to communicate at work.	**1**	**2**	**3**	**4**
17.	How to explain a problem so that others can understand. .	**1**	**2**	**3**	**4**
18.	How to figure out solutions to workplace problems.	**1**	**2**	**3**	**4**
19.	How to learn new things on the job.	**1**	**2**	**3**	**4**
20.	The importance of meeting deadlines on the job.	**1**	**2**	**3**	**4**
21.	The importance of obtaining the information necessary to get the job done	**1**	**2**	**3**	**4**
22.	The importance of working as a team member to reach a common goal	**1**	**2**	**3**	**4**
23.	The importance of being open to ideas from other workers	**1**	**2**	**3**	**4**
24.	The importance of demonstrating leadership ability.	**1**	**2**	**3**	**4**
25.	The importance of working well with people from other cultures	**1**	**2**	**3**	**4**
26.	The importance of understanding how the business works.	**1**	**2**	**3**	**4**
27.	The importance of understanding how one's job performance affects the success of the company.	**1**	**2**	**3**	**4**

How important is it to teach each of the following topics?		Not Important			↔ Very Important
28.	The importance of knowing what a company expects of employees	**1**	**2**	**3**	**4**
29.	The importance of understanding how the chain of command works	**1**	**2**	**3**	**4**
30.	The importance of offering suggestions to improve products or services	**1**	**2**	**3**	**4**
31.	The importance of determining which tools are needed to do a job	**1**	**2**	**3**	**4**
32.	The importance of asking for help with equipment when needed	**1**	**2**	**3**	**4**
33.	The importance of using manuals to learn about equipment in the workplace.	**1**	**2**	**3**	**4**
34.	The importance of maintaining equipment in good condition	**1**	**2**	**3**	**4**
35.	The importance of understanding printed materials used in the workplace	**1**	**2**	**3**	**4**
36.	The importance of understanding spoken directions from a supervisor	**1**	**2**	**3**	**4**
37.	The importance of understanding spoken messages at work.	**1**	**2**	**3**	**4**
38.	The importance of considering consequences before making decisions	**1**	**2**	**3**	**4**
39.	The importance of carefully considering possible choices before making decisions.	**1**	**2**	**3**	**4**
40.	The importance of having good problem-solving skills.	**1**	**2**	**3**	**4**

How important is it to teach each of the following topics?		Not Important			↔ Very Important
41.	The importance of taking responsibility for one's own work	**1**	**2**	**3**	**4**
42.	The importance of regular attendance and punctuality.	**1**	**2**	**3**	**4**
43.	The importance of being confident in one's knowledge, skills, and abilities	**1**	**2**	**3**	**4**
44.	The importance of establishing good relationships with others in the workplace.	**1**	**2**	**3**	**4**
45.	The importance of being a trustworthy employee.	**1**	**2**	**3**	**4**

Background Information

The following information is needed for research purposes in order to describe the nature of survey participants. Please answer the questions as accurately as possible.

46. What is your gender? (Circle one.) Male Female

47. In what year were you born? _____

48. What is your race or ethnicity? _____

49. What is your highest academic degree? (Check one.)

_____ No diploma
_____ GED
_____ High school diploma
_____ Technical school diploma or certificate
_____ Associate degree
_____ Bachelor's degree
_____ Master's degree
_____ Specialist degree
_____ Doctoral degree
_____ Other (specify) _____

50. What is your current job title?_____

51. How long have you been in that position? _____

52. How long have you been with your organization? _____

53. How would you classify your organization (manufacturing, service, retail, hospitality, etc.)? _____

54. How many employees work for your organization? _____

55. Approximately how many of those employees are entry level? _____

Thank you for taking the time to complete this survey!

I.D.#_____
(for mailing purposes only)

APPENDIX M

FINAL LITERACY STUDENT INSTRUMENT

(University of Georgia Letterhead)

WORKPLACE SKILLS QUESTIONNAIRE

Adult Literacy Student Version

DIRECTIONS: The world of work requires many different skills. Successful workers are both good at their jobs and also have certain personal qualities. You have probably already learned many of these skills in school and in your daily lives. We want to know which workplace topics *students* think should be taught. Below you will find a list of the topics that some people think are important. Please read the following list of workplace topics and indicate how important you think it is that each topic be taught in your class. Please circle only one response for each item.

How important is it to teach each of the following topics?		**Not Important**			**Very Important**
1.	How to follow a work schedule.	**1**	**2**	**3**	**4**
2.	How to decide which tasks are the most important.	**1**	**2**	**3**	**4**
3.	How to predict the time it will take to get a job done.	**1**	**2**	**3**	**4**
4.	How to keep track of the tools and supplies you need to get the job done.	**1**	**2**	**3**	**4**
5.	How to gather information needed to solve a problem. . . .	**1**	**2**	**3**	**4**
6.	How to keep daily records.	**1**	**2**	**3**	**4**
7.	How to organize written information and records.	**1**	**2**	**3**	**4**
8.	How to organize files in alphabetical or numerical order. .	**1**	**2**	**3**	**4**
9.	How to handle interpersonal problems at work.	**1**	**2**	**3**	**4**
10.	How to operate a computer.	**1**	**2**	**3**	**4**

How important is it to teach each of the following topics?		Not Important			↔ Very Important
11.	How to use printed information to complete a task.	**1**	**2**	**3**	**4**
12.	How to do necessary writing on the job.	**1**	**2**	**3**	**4**
13.	How to write information accurately.	**1**	**2**	**3**	**4**
14.	How to use basic math in work situations.	**1**	**2**	**3**	**4**
15.	How to interpret numerical tables, graphs, diagrams, and charts	**1**	**2**	**3**	**4**
16.	How to speak clearly to communicate at work.	**1**	**2**	**3**	**4**
17.	How to explain a problem so that others can understand. .	**1**	**2**	**3**	**4**
18.	How to figure out solutions to workplace problems.	**1**	**2**	**3**	**4**
19.	How to learn new things on the job.	**1**	**2**	**3**	**4**
20.	The importance of meeting deadlines on the job.	**1**	**2**	**3**	**4**
21.	The importance of obtaining the information necessary to get the job done	**1**	**2**	**3**	**4**
22.	The importance of working as a team member to reach a common goal	**1**	**2**	**3**	**4**
23.	The importance of being open to ideas from other workers .	**1**	**2**	**3**	**4**
24.	The importance of demonstrating leadership ability.	**1**	**2**	**3**	**4**
25.	The importance of working well with people from other cultures	**1**	**2**	**3**	**4**
26.	The importance of understanding how the business works.	**1**	**2**	**3**	**4**
27.	The importance of understanding how one's job performance affects the success of the company.	**1**	**2**	**3**	**4**

How important is it to teach each of the following topics?		Not Important			Very Important
28.	The importance of knowing what a company expects of employees	**1**	**2**	**3**	**4**
29.	The importance of understanding how the chain of command works	**1**	**2**	**3**	**4**
30.	The importance of offering suggestions to improve products or services	**1**	**2**	**3**	**4**
31.	The importance of determining which tools are needed to do a job	**1**	**2**	**3**	**4**
32.	The importance of asking for help with equipment when needed	**1**	**2**	**3**	**4**
33.	The importance of using manuals to learn about equipment in the workplace.	**1**	**2**	**3**	**4**
34.	The importance of maintaining equipment in good condition	**1**	**2**	**3**	**4**
35.	The importance of understanding printed materials used in the workplace	**1**	**2**	**3**	**4**
36.	The importance of understanding spoken directions from a supervisor	**1**	**2**	**3**	**4**
37.	The importance of understanding spoken messages at work	**1**	**2**	**3**	**4**
38.	The importance of considering consequences before making decisions	**1**	**2**	**3**	**4**
39.	The importance of carefully considering possible choices before making decisions.	**1**	**2**	**3**	**4**
40.	The importance of having good problem-solving skills.	**1**	**2**	**3**	**4**
41.	The importance of taking responsibility for one's own work.	**1**	**2**	**3**	**4**

How important is it to teach each of the following topics?		Not Important			Very Important
42.	The importance of regular attendance and punctuality. . . .	**1**	**2**	**3**	**4**
43.	The importance of being confident in one's knowledge, skills, and abilities	**1**	**2**	**3**	**4**
44.	The importance of establishing good relationships with others in the workplace.	**1**	**2**	**3**	**4**
45.	The importance of being a trustworthy employee.	**1**	**2**	**3**	**4**

Background Information

The following information is needed for research purposes in order to describe the nature of survey participants. Please answer the questions as accurately as possible.

46. What is your gender? (Circle one.) Male Female

47. In what year were you born? _____

48. What is your race or ethnicity? _____

49. What was the last grade you completed in school? _____

50. How long have you been enrolled in the adult literacy program? _____

51. What kind of job would you like to someday have? _____

52. Have you ever been employed? _____Yes _____No

53. If you have been employed in the past, please describe the last job you had.

Thank you for taking the time to complete this survey!

I.D. #_____
(for mailing purposes only)

APPENDIX N

INSTRUCTIONS FOR ADMINISTERING THE WORKPLACE SKILLS QUESTIONNAIRE - ADULT LITERACY STUDENT VERSION

Instructions for Administering the Workplace Skills Questionnaire - Adult Literacy Student Version

Instructors: As you administer the enclosed questionnaires to literacy students, please follow these steps:

1. Gather a group of adult literacy students that you believe are currently receiving public assistance or who have received public assistance in the past.

2. Distribute the cover letter and a "Workplace Skills Questionnaire - Adult Literacy Student Version" to each student.

3. Allow students time to read the cover letter. Ask students if they have questions concerning the letter.

4. Read the first three survey questions aloud to students and explain the scale responses. Ask students if they have questions.

5. Observe students to be certain they are completing the survey correctly. Occasionally ask if there are any questions. You may assist them in reading items with which they have difficulty.

6. Students are instructed to insert their blank or completed surveys in the self-addressed, stamped manila envelope that has been provided. Please seal and mail this envelope containing the student versions of the questionnaires. **Thank you for participating in this important segment of the research project.**

APPENDIX O

FINAL COVER LETTER TO LITERACY INSTRUCTORS

(University of Georgia Letterhead)

April 3, 2002

Dear Fellow Adult Literacy Instructor:

As a literacy instructor, you understand what a challenge it can be to help unemployed people connect to the world of work. In recent years we have all heard much discussion about the quality of the American workforce. Articles and books have addressed this problem, with several containing lists of skills needed for success in the workplace. Certainly those of us working with the literacy population understand the importance of skill development. But are we really sure exactly *which* skills matter? And do our students and potential employers see things the same way?

As a full-time literacy instructor as well as a doctoral student under the direction of Dr. Tom Valentine, I am currently involved in a research study provisionally entitled *Necessary Skills for Entry Level Employees*. The goal of this study is to analyze and compare the perceptions of employers, literacy instructors, and literacy students regarding workplace skills. Hopefully this information will be useful to literacy teachers both in planning instruction and in opening up a meaningful discussion of the workplace with our students.

As one of Georgia's full-time literacy instructors, it is very important that your voice be heard in this matter. The data you can provide are essential to the success of this study, and we are hoping that you will agree to help us. We ask that you take about 10 minutes to complete the attached **Workplace Skills Questionnaire**. This will allow us to see which workplace skills you as a teacher believe should be included in the curriculum.

Of course, your participation is strictly voluntary, and your responses will be confidential. We will contact everyone on the mailing list with two reminders if they fail to reply. If you would like to be removed from the mailing list, please let us know. We will protect the identity of participants in every way possible. However, we have put a code number at the bottom of each instrument so that we can keep a record of the responses for the purpose of follow-up. As soon as the data collection is complete, we will destroy the mailing list and any identifying information about the participants in the study.

After completing the questionnaire, please return it in the self-addressed, stamped envelope by April 19, 2002. Because this is an unfunded study, we cannot afford to pay you for your valuable time. We can, however, provide you with a summary of findings which you might find useful in your work. If you are interested in the results of this study, please include your business card or a completed "Final Report Form" with your questionnaire. If you have questions concerning this study, please feel free to contact me at (706)549-0367, (706)355-5028, or ekilgos@charter.net. Thank you.

Sincerely,

Ellen McGuire Kilgos
Study Director
University of Georgia

Tom Valentine
Associate Professor
Department Of Adult Education
University of Georgia
(706) 542-4017 or tvnj@aol.com

For questions or problems about your rights please call or write: Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-6514; E-Mail Address IRB@uga.edu.

APPENDIX P

FINAL COVER LETTER TO EMPLOYERS

(University of Georgia Letterhead)

April 3, 2002

Dear Georgia Employer:

In recent years there has been great concern about the quality of the American workforce. Many articles and books have addressed this problem, with several containing lists of skills needed for success in the workplace. I am currently conducting a related research study provisionally entitled *Necessary Skills for Entry Level Employees* under the direction of Dr. Tom Valentine. At the heart of this study is a list of skills that the Department of Labor included in a report entitled *What Work Requires of Schools: A SCANS Report for America 2000.* We are very interested in knowing the extent to which Georgia employers think these skills should be taught in programs preparing welfare recipients for the workplace. It is hoped that the results of this research study will have positive implications for preparing students for the workplace. Consequently, we are sending you this survey.

Because this is an unfunded study, we cannot afford to pay you for your valuable time. We can, however, provide you with a summary of findings which you might find useful in your work. If you are interested in the results of the study, please include your business card or a completed "Final Report Form" with your questionnaire.

The enclosed **Workplace Skills Questionnaire** contains items reflecting the Department of Labor's listing. Would you please take 10 minutes out of your busy schedule to indicate how important you feel it is for entry level employees in your organization to be taught each of these skills? Upon completing the survey, please return it in the self-addressed, stamped envelope by April 19, 2002.

Of course, your participation is strictly voluntary, and your responses will be confidential. We will contact everyone on the mailing list with two reminders if they fail to reply. If you would like to be removed from the mailing list, please let us know. We will protect the identity of participants in every way possible. However, we have put a code number at the bottom of each instrument so that we can keep a record of the responses for the purpose of follow-up. As soon as the data collection is complete, we will destroy the mailing list and any identifying information about the participants in the study.

If you have questions concerning this survey, please feel free to contact me at (706)549-0367, (706)355-5028, or ekilgos@charter.net. Thank you for your assistance.

Sincerely,

Ellen McGuire Kilgos
Study Director
University of Georgia

Tom Valentine
Associate Professor
Department of Adult Education
University of Georgia
(706) 542-4017 or tvnj@aol.com

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APPENDIX Q

COVER LETTER TO LITERACY STUDENTS

(University of Georgia Letterhead)

April 3, 2002

Dear Adult Literacy Student:

Many students attend adult literacy classes with the intent of entering the workforce. Instructors who are anxious to help students prepare for the world of work often relate classroom activities to the workplace, and many textbooks describe skills that are important for getting and keeping a job.

As a full-time literacy instructor as well as a student under the direction of Dr. Tom Valentine, I am currently involved in a research study entitled *Necessary Skills for Entry Level Employees*. This study is designed to find out which topics should be included in classes designed to prepare adult learners for the workplace. Each item on the questionnaire lists a topic which some people think is important in the workplace. We are asking you to spend about 15 minutes to participate in this study because we need to know which of these skills *you* think should be taught in your class.

Your name will not appear on the questionnaire; therefore, your responses are anonymous. This questionnaire is a voluntary activity, and there will be no penalty if you choose not to participate. If you do not wish to participate, feel free to turn in a blank questionnaire.

The questionnaire is not a test, and there are no right or wrong answers. We simply want to know your opinion. Please read each item carefully and then mark one answer. This will allow us to see which workplace skills you as a student believe should be included in the curriculum. When you have finished this activity, please return your questionnaire to the manila envelope that your instructor will make available.

If you have questions concerning this study, please feel free to contact me at (706)549-0367, (706)355-5028, or ekilgos@charter.net. Thank you for your assistance.

Sincerely,

Ellen McGuire Kilgos
Study Director
University of Georgia

Tom Valentine
Associate Professor
Department Of Adult Education
University of Georgia
(706) 542-4017 or tvnj@aol.com

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APPENDIX R

POST CARD REMINDER TO INSTRUCTORS

Necessary Workplace Skills Study

Dear Fellow Literacy Instructor

In early January, I sent you a questionnaire seeking your help in determining what workplace skills and competencies should be taught in Georgia's adult literacy programs. If you have already completed and returned the questionnaire, please accept my sincere thanks.

If you have not completed the questionnaire, I still need your help to successfully complete this study. Your input is important for developing relevant workplace preparation programs. Please complete and return the questionnaire today.

If you did not receive a questionnaire, or if it was misplaced, please call or e-mail, and I will mail another questionnaire to you immediately. The phone numbers are (H)706/549-0367 and (W)706/355-5028. The e-mail address is ekilgos@charter.net.

Thank you for your assistance.

Sincerely,

Ellen Kilgos
Study Director
University of Georgia

Tom Valentine
Associate Professor
University of Georgia

APPENDIX S

FOLLOW-UP LETTER TO INSTRUCTORS

(University of Georgia Letterhead)

May 16, 2002

Dear Adult Literacy Instructor:

We recently wrote to you seeking your opinions concerning which workplace skills and competencies should be included in a curriculum preparing welfare recipients for the workforce. As of today, we have not received your completed questionnaire. We realize that you may not have had time to complete it. However, we would genuinely appreciate hearing from you.

The study is being conducted so that instructors like yourself can identify the workplace skills and competencies you believe should be included in the curriculum. We are writing to you again because the study's usefulness depends on receiving completed questionnaires from Georgia's full-time literacy instructors.

If your questionnaire has been misplaced, a replacement is enclosed. We would be happy to answer any questions you have about the study. Please call Ellen Kilgos at either (H)706/549-0367 or (W)706/355-5028. The e-mail address is ekilgos@charter.net.

Sincerely,

Ellen McGuire Kilgos
Study Director
University of Georgia

Tom Valentine
Associate Professor
Department of Adult Education
University of Georgia
(706) 542-4017 or tvnj@aol.com

For questions or problems about your rights please call or write: Dr. Chris A. Joseph, Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706)542-6514; E-Mail Address IRB@uga.edu.

APPENDIX T

POST CARD REMINDER TO EMPLOYERS

Necessary Workplace Skills Study

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If you have not completed the questionnaire, I still need your help to successfully complete this study. Your input is important for developing relevant workplace preparation programs. Please complete and return the questionnaire today.

If you did not receive a questionnaire, or if it was misplaced, please call or e-mail, and I will mail another questionnaire to you immediately. The phone numbers are (H)706/549-0367 and (W)706/355-5028. The e-mail address is ekilgos@charter.net.

Thank you for your assistance.

Sincerely,

Ellen Kilgos
Study Director
University of Georgia

Tom Valentine
Associate Professor
University of Georgia

APPENDIX U

FOLLOW-UP LETTER TO EMPLOYERS

(University of Georgia Letterhead)

May 16, 2002

Dear Georgia Employer:

We recently wrote to you seeking your opinions concerning which workplace skills and competencies should be included in a curriculum preparing welfare recipients for the workforce. As of today, I have not received your completed questionnaire. We realize that you may not have had time to complete it. However, we would genuinely appreciate hearing from you.

The study is being conducted so that employers like yourself can identify the workplace skills and competencies you believe should be included in the curriculum. We are writing to you again because the study's usefulness depends on receiving completed questionnaires from Georgia's employers.

If your questionnaire has been misplaced, a replacement is enclosed. We would be happy to answer any questions you have about the study. Please call Ellen Kilgos at either (H)706/549-0367 or (W)706/355-5028. The e-mail address is ekilgos@charter.net.

Sincerely,

Ellen McGuire Kilgos
Study Director
University of Georgia

Tom Valentine
Associate Professor
Department of Adult Education
University of Georgia
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