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## AN AUTHENTIC ASSESSMENT FOR STUDENTS IN

## ACCOUNTING CAREER PATHWAYS

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Education: Vocational Option

by .

Marilyn Merriweather Johnson

December 1995

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December 1995

Approved by:

Theodore H. Zimmerman, Ed.D., First Reader

13/95 Date

Ronald K. Pendleton, Ph.D., Second Reader

#### ABSTRACT

The purpose of this project was to establish specific guidelines for the assessment of students enrolled in an Accounting Career Pathway Sequenced Program in secondary schools. Alternative means of evaluating students is a subject of many of the reforms efforts suggested to create a quality and valuable education for students graduating from high school in the 21st Century. Business and industry have raised its requirements for a highly skilled work force; therefore, forcing the educational system to re-evaluate their method of student learning accountability.

Developing an alternative method to conventional pencil and paper testing of student learning is an integral part of the reform movement in California as well as other states throughout the Nation. The project describes how student portfolios would be used to evaluate the competency levels of students enrolled in an Accounting Career Pathway.

The project demonstrates how a student's competency level would be assessed as the student progresses through the sequenced core courses and culminating with specialized classes. The California Department of Education Career-Technical Assessment Program (C-Tap) played an important part in providing the student portfolio rubric for the evaluation of student competency levels.

## ACKNOWLEDGEMENT

I offer my heartfelt thanks to my husband Bill, children Kazia and Kevin, for their continued support and encouragement through this long process.

I would like to thank my advisor, Dr. Ted Zimmerman, and my second reader,

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#### Chapter I

#### Introduction

There exist an apparent consensus by educators, and the general public that our schools are not preparing students to compete in today's global job market. Additionally, students are not actively participating in our democratic system and they seem to lack the values, both ethically and morally, that would enable them to be better citizens. These generally held beliefs have fueled the call for restructuring and reform of the educational system.

One aspect of this call for reform, is reviewing how students are evaluated and assessed on knowledge learned as the student progresses through the educational system. <u>Second To None, A Vision of the New California High School (Agee, 1992)</u>, outlines and describes the reforms suggested to create a quality and valuable education for students graduating from high school in the 21st Century. Developing a comprehensive accountability and assessment system is described as an integral factor in the restructuring of the educational system in California. The California High School Task Force, which was responsible for the <u>Second To None</u> report, views the new educational reforms as focusing on student performance that reflect actual achievement of application of knowledge. (Agee, 1992) The Task Force also sees assessment as the major strategy in bringing about significant educational reform. (Agee, 1992)

The project writer has over twenty-three years of teaching experience in Business Education and agrees with the suggested educational reforms outlined in Agee's (1992) <u>Second To None</u>, especially the educational strategy of assessing student performances on actual achievement and application of acquired knowledge. One of these alternative method of evaluating students is called authentic assessment. The working definition of authentic assessment according to Marzano (1992) . . . "polished products that have been

selected by the student and represent the student's best work." (p. 44) This assessment would occur continually and would reflect actual learning experiences that could be documented through observations, records of performance tasks verified by the teacher.

At the present time, a majority of California high schools are using assessment methods that are not competency or outcome based tools of evaluation; however, there appears to be a growing trend toward using alternative methods of evaluation. Conventional methods of assessing students, such as paper and pen testing, were designed to provide feedback on how much information was learned or in most cases memorized by the student doing the teaching process. This type of testing did not incorporate the application of learned knowledge for a specific job related task.

In an <u>Institute on Education and the Economy (IEE)</u> Brief (Inger, 1993), based on a report by Clifford Hill and Eric Larsen, entitled <u>Testing and Assessment in Secondary</u> <u>Education: A Critical Review of Emerging Practices</u>, states

Advocates of authentic assessment see this as an important function, but they believe that how and what we test has a powerful influence on how and what is taught. They believe that conventional testing is distorting educational goals, whereas authentic assessment can foster good educational practices. (Inger, 1993, p.1)

The project writer holds the opinion that students must demonstrate a level of competency in the subject matter being taught and must be able to apply this acquired knowledge in a real life working situation. However, up until recently, the educational structure and textbooks did not support a competency based or authentic assessment evaluation of student's work.

It is the project writer's desire to design a competency based evaluative tool to authentically assess student progress in Accounting Career Pathways. The authentic

assessment would include student work that is based on learning outcomes which demonstrate achievement and the student's application of learned knowledge.

The assessment of the student efforts would include the evaluating of acquired knowledge based on industry established competencies desired by the career field in business and technology the student has chosen to pursue. The student would compile a work in progress and showcase portfolio to demonstrate the student's competencies in their specialization.

#### Nature of the Problem

The remarkable consensus that our present educational system is not working as well as it should, has led to many calls for the restructuring and reforming of American education. (Inger, 1993) As previously stated, an integral part of this reform is adopting alternative ways of evaluating student progress. Traditionally, testing has resulted from standards deriving from within the educational system. In our present system, school is self-contained and compartmentalized. Math Departments, History Departments, Business Departments, each do their own thing; without integration of curriculum. Unfortunately life is not departmentalized, but a mixture of activities. Schools should reflect the interaction of all educational disciplines. "To dissolve this dualism, advocates of authentic assessment want assessments, and, as a consequence, schools, to focus on the broad knowledge and skills that individuals need to solve real-world problems." (Inger, 1993, p. 1)

The project writer believes that students should be required to produce evidence of their competency levels, rather than taking traditional pen and paper tests to demonstrate acquired knowledge. Agee (1992) describes an outcome based program as a collaboration between teacher and student to reach recognized level of performance. "When the teacher and the students have a vision of quality work, it is easier to form a partnership to assist students in producing good work. (Agee, 1992, p. 33)

Testing is designed to measure student knowledge under limited time constraints; however, authentic assessment offers an extended period of time in which students can demonstrate competencies over multiple tasks. Consequently, authentic assessment offers the most effective method of measuring student performance. This project would identify outcome based competencies desired for the evaluation of student skill level in Business and Technology Career Pathways, specifically the Accounting and Finance Career Pathway.

## Significance of the Problem

Introducing and implementing suggested reform strategy of outcome based student performance, will provide a quality education to students participating in this type of evaluative process. "Advocates of authentic assessment believe that assessment practices, if sufficiently aligned with curriculum and instruction, can become a powerful means of achieving excellence in the classroom (Inger, 1992, p. 2) "We must strengthen the quality of our high schools, and this means radically changing the way they do business." (Agee, 1992, p. 5)

This project will present competency requirements for assessing students in business and technology career pathways, with the Accounting and Finance Career Pathway as the model. This would result in a "Work in Progress Portfolio", which would show evidence of finished and unfinished work, ideas, notes and logs on work in progress by the student. At the culmination of the career pathway program, a "Showcase

Portfolio" would contain the finished products of student work demonstrating student preparation and accomplishments.

## Statement of the Project

This project required identifying, collecting and categorizing competency based outcomes for Accounting and Finance Career Pathway; secondly, outlining performance based outcomes for the Accounting and Finance Career Pathway core curriculum and identifying these competencies as Career Performance Standards, Business Technology Core Standards, SCANS Competencies and Accounting and Finance Standards; thirdly, identifying documentation to be included in a work in progress and showcase portfolio. The project was to establish competency requirements and evaluative tools to be used by students in producing a work in progress and showcase portfolio for students in Accounting and Finance Career Pathway.

## Purpose of the Project

Conventional testing confines students to a limited amount of options and discourages active participation in the learning process, whereas "documentation practices motivate students to work at the highest level: they invest greater energy and achieve higher standards." (Inger, 1993, p. 2)

The purpose of this project, is to provide a work in progress and showcase portfolio that would provide students with an outcome base evaluative procedure, which would greatly improve the quality of the educational process for both the teacher and the student.

## Overview of Research Questions

Several factors were considered in order to fully address the purposed outcome of this project. One area of consideration, was the acquisition of Career Performance Standards desired by industry and business for the career pathway addressed in the project; secondly, what student work should be included in the portfolio which demonstrated the competencies required have been met by the student at the end of the sequenced program.

The job competencies were acquired by researching and reviewing business and industry standards, consulting high school Business and Technology Frameworks, governmental reports and expert opinions on alternative ways of evaluating student performances.

The primary goal of the project writer was to establish competencies and performance outcomes in the Accounting and Finance Career Pathway selected by students enrolled in Business and Technology Career Pathways.

#### Limitations

The project will limit itself to the Accounting and Finance Career Pathway. The project is limited to high school student population. The geographic area for this project was limited to California, due to the use of California Business Education Framework; however it is applicable to high school vocational programs throughout the United States.

## Definitions

The following definitions will be operative for the purpose of this project. Authentic Assessment-

Assessment that occurs continually in the context of a meaningful learning

environment and reflects actual and worthwhile learning experiences that can be

documented through observation, anecdotal records, journals, logs, actual work

samples, conferences, portfolios, performance tasks and other methods.

Culminating Activity-

Are enabling outcome; an activity that sums up and assess a significant area of study.

Curriculum-

The course of study in given area; an outline of content.

Enabling Outcome-

A culminating activity; an activity that sums up and assesses a significant area of study.

**Evaluation-**

The process of judging the assessment results for one purpose or another.

Exit demonstration-

The final culminating activity that proves a student has mastered an area of the curriculum.

## Information Management-

The system by which information is maintained regarding student progress in the curriculum.

Outcome based program-

The teacher and student work as partners to reach recognized levels of performance and that curriculum and instruction are organized to produce such results.

Showcase portfolio-

Finished product of student work demonstrating student accomplishments. Student Portfolio-

Evidence of the successful completion of selected outcome activities.

**Career Performance Standards** 

Describe the skills students will need to obtain employment and advance in their chosen career field.

Business Technology Core Standards-

Describe the basic skills and foundational knowledge needed to pursue a career pathway in business.

Career Path Specializations-

Prepares students for specific careers by building upon knowledge, skills, abilities

developed in the Business Technology Core and Career Path Clusters.

#### **SCANS**

Secretary's Commission on Achieving Necessary Skills identified competencies for successful job performance.

## Chapter II

## Review of Related Literature

## Introduction

"Restructuring" is a powerful word, which implies the system or organization is not working and needs to be improved; therefore, changes or a new way must be implemented in order to correct the recognized deficits of the system. One of these recognized deficits of the present educational system is student accountability. The call for an alternative way of evaluating students is a national interest of educators. Students often consider the educational system's present method of evaluating their progress by conventional paper and pencil testing, as an ineffective effort by both the teacher and student. On the other hand a "restructured" vision would be to evaluate the performance tasks so they reflect directly upon the training expectancies of students on activities that are beneficial to the student. This would be considered as authentic assessment.

How are the successes of the following occupations measured? A scientist, writer, business owner--by what they produce. If the educational system is to produce competent individuals, equipped with higher level thinking skills, then student must be given an opportunity to demonstrate this knowledge by producing documents, projects, or writings that clearly reflect the student's ability. "The conventional curriculum asks students only identify the discourse, things and performances that others have produced. . .."(Neumann, 1991, p. 460)

When current school reformers specify recommendations for school improvement, more effective ways of evaluating student learning is one of the major goals. <u>Second To None A Vision of the New California High School</u>, list establishing a comprehensive accountability and assessment system as one of the major areas of reform.

It stresses the need for an accountability system which ". . . emphasizes performance and application of knowledge." (Agee, 1992, p. 32) The result of this accountability system would be challenging learning activities for the student and it would provide documentation for future employers, colleges and universities as a strong indicator of student's preparation.

At the end of the student's high school years, a graduation portfolio would contain documentation on the student's work in core curriculum as well as documentation of student competencies in career pathway sequenced program. The portfolio would give a comprehensive overview of the student's abilities and preparation.

#### Authentic Assessment

"Teachers have long used portfolios to help students keep track of their work and present it in an organized way;" as stated by Inger (1993) in his review of <u>Authentic</u> <u>Assessment in Secondary Education, appearing in an Institute on Education The</u> <u>Economy (IEE) Brief</u>. Inger (1993) continues by saying what is new about this alternative method of measuring student work is portfolios can replace conventional paper and pencil testing.

One could ask, what does authentic assessment offer that conventional methods of evaluating students does not? First authentic assessment involves cognitive skills that encourages disciplined inquiry. (Neumann, 1991, p. 460), describes "Disciplined inquiry as having three features:

•Use of a prior knowledge base

•In-depth understanding rather than superficial awareness

•Production of knowledge in an integrated (rather than fragmented form)

Students realize that the work that they are doing is revelant and has value to their success in school. Authentic assessment requires students to produce work that reflects their efforts have value in their lives, in addition to demonstrating their competencies. The production of projects or other authentic measuring tools, allows the students to use knowledge from all discipline areas. Learning is not compartmentalized but diffuse and integrated, which are invaluable both to the individual and to society.

Portfolios would include evidence of all competency areas, even in the absence of physical product or project. When student work is evaluated based on student work, students are allowed to direct and control the information that will be used to measure their abilities, it certainly offers a unique opportunity to the students. When the assessment methods change, it certainly has an impact on instruction (Marzano, 1992).

Paulson, Paulson and Meyers (1991) reports the strength of the use of portfolio to be :

- Learners share in the responsibility of assessing their work
- Data are gathered and evaluated continuously over the course of the learning project.
- Learners have an opportunity to learn about their own learning.
- Other stakeholders--develop an expanded view of what is learned. What are the downsides to portfolio assessment:
  - 1. Storage of selected student data
  - 2. Can be very costly in comparison to pen and paper standardized testing.
  - 3. Staff development to educate teachers on portfolio collection methods and evaluation.

What does this mean to educators? They will have to restructure the course curriculum, so it encompasses interaction between the teacher, student and others. Teachers will have to provide an integration of subject matter to the student, on the other hand, the student tries to interpret how this information will empower them.

Competency Based Education

According to <u>What Work Requires of School</u>, <u>A Secretary's Commission on</u> <u>Achieving Necessary Skills Report for America 2000</u>, (SCANS) June, 1991, "all American high schools students must develop a new set of competencies and foundation skills if they are to enjoy a productive, full, and satisfying life. (p. vi, 1991)

The competitive edge that characterizes this countries' most successful companies, depend upon the quality of the high performance of its workers. These companies depend upon its workers to be competent and dedicated to job performance excellence.

Our Nation's high schools must become dedicated to providing students with an educational opportunity that prepares them to be skilled and prepared to apply their knowledge in a work environment. The SCANS (1991) identifies five competencies that stand as the foundation of job performance, in addition to a three part foundation of skills and personal qualities. These competencies integrated with job specific competencies will produce students with solid skills and personal qualities needed for solid job performance.

Work Place Competencies: Effective workers can productively use:

• Resources-They know how to allocate time, money, materials, space, and staff.

- Interpersonal Skills-They can work on teams, teach others, serve customers, read, negotiate, and work well with people from culturally diverse backgrounds.
- Information-They can acquire and evaluate data, organize and maintain files, interpret and communicate, and use computers to process information.
- Systems-They understand social, organizational, and technological systems; they can monitor and correct performance; and they can design or improve systems.
- Technology-They can select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment.
  - Foundation Skills-Competent workers in the high-performance workplace need:
    - 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 selfmanagement, sociability, and integrity.

Students learn better if the material taught is in "context" with the real work environment. It has been the project writer's experience over the last twenty-three years of teaching, students have a difficult time applying "textbook" knowledge into practice unless it is taught in the context of the use(s) of the learning experience.

"Marketing educators as well as other vocational educators are under pressure to provide occupational preparation that addresses current and anticipated retail workforce needs." (Bunn, 1993, p. 38) This pressure is coming from the mandates under the Carl D. Perkins Vocational and Applied Technology Education Act of 1990. The purpose of the new act has been shortened from nine stated objectives in the previous Act to one, which reads:

It is the purpose of this Act to make the United States more competitive in the world economy by developing more fully the academic and occupational skill of all segments of the population. The purpose will principally be achieved through concentrating resources on improving educational programs leading to academic, occupational, training, and re-training skill competencies needed to work in a technologically advanced society." (Carl B. Perkins Vocational and Applied Technology Education Act Amendments of 1990, Sec. 2)

It is the project writer understanding of the Perkins Act (1990) is each state board receiving funds under this Act will develop and implement statewide system of core standards and measures of performance for secondary and postsecondary vocational education program. The need for these performance standards is to require greater accountability in vocational education.

According to the Perkins Act requirements, the guidelines used in developing these performance standards should address four performance measures: (Bunn, 1993, p. 38)

- 1. Academic achievement
- 2. Occupational competence
- 3. Access to and success in vocational education by targeted groups/special populations

4. Successful transition form school to employment

By having these standards, it will be a better way for the vocational educational facility providing the training to communicate to businesses and industry the

qualifications of the students being trained in the various vocational programs. Bunn (1993) states in her article <u>Use of Performance Standards and Skills in Marketing</u> <u>Education</u>: "As the international marketplace is demanding quality, timeliness, and customization of producing goods and services, increasing importance is being placed on the skills of individual workers." (Bunn, 1993, p. 39) The skills of the students must be evaluated according to the entry level work standards of industry they will be required to perform on the job.

According to the SCANS, (1991) work is changing, but most schools have not changed at the same pace.

"The problem is complex and so are the answers. Part of the difficulty is that employers and school personnel are passing each other like ships in the night: one speaks in Morse code, the other signals with flags. As a consequence of the miscommunication, secondary school students often see little connection between what they do in school and how they expect to make a living." (SCANS, 1991, p. 4)

In conclusion, there lies a great challenge before the educators in America, the challenge is described as three fold in the SCANS Report:

- Develop a better means of communicating, a common vocabulary to guide the conversation between the business and school communities.
- Set clear-cut standards and then convince students that effort invested in meeting these standards today will be rewarded in the world of work tomorrow.
- Assess and certify students' workplace readiness so that students, their parents, and employers will know where they stand.
   The last challenge is on the project writer will address in the next chapter.

## Chapter III

Introduction

Restructuring the educational system so there is more teacher and student accountability requires a commitment from school administrators, teachers, parents and students. The "new way" of doing business, also requires new rules. As stated in the SCANS Report (1991, p. 12), " 'learning to do' is integrated with 'learning to know' ". (p. 12)

One of the inherent component of an out-come based curriculum is the assessment of student acquisition and application of knowledge. "If teachers have to certify that the workplace competencies are acquired, they will make the effort to teach them." (SCANS, 1992, p. 15)

What should a good assessment system have? The SCANS Report, 1992, page 15, states:

- Establish clear, high standards of student performance.
- Encourage students to meet standards of creating a cumulative record of courses taken, projects completed, and assessments of student mastery of both academic subjects and SCANS competencies and
- Provide a basis for holding the education system and body politic accountable to meet the equity goal of providing all students with sufficient skills to earn a decent living.

Additionally, according to Robert Marzano (1992), the author of Toward a <u>Comprehensive Model of Assessment</u>, six competencies should be included in an authentic assessment system: They are

- Knowledge of concepts, generalizations, processes and strategies that are considered critical to specific content areas.
- Ability to utilize complex reasoning processes
- Ability to gather and utilize information from a variety of sources in a variety of modes.
- Ability to communicate effectively through a variety of products.
- Ability to regulate one's own learning and development.
- Ability to work in a cooperative/collaborative manner.

These competencies seemly follow the components involved in the acquisition and utilization of information. Almost all tasks require that information be gathered before it can be added to the learner's base of information.

Why is it important the skills student learn be the ones required by industry? It is estimated there will be skill requirements in the workforce of the 21st Century that will not be able to be met by the students who are expected to enter the work force. This dilemma could cause serious consequences to the United States edge in the world's economy. Employers have concerns and complaints about the difficulty in hiring workers with basic skills. These concerns have been the driving force for several investigations by the Department of Labor reports; namely, the SCANS Reports.

Unlike some of our major International competitors, including Germany, the United States has not established occupational standards at the national and state levels for front-line occupations, except for some licensed occupations. States cannot build world-class workforces without establishing world-class skill standards. These occupational skill standards are critical in setting long-term strategic goals for state workforce preparation programs and evaluating the

effectiveness and efficiency of state investments in the front-line workforce. (Sheets, 1992, p. 1)

The discussion of the need for states to step forward and address the issue of defining skill standards for workforce preparation programs was addressed by the National Governor's Association. (Sheets, 1992) These suggested standards should reflect the standards of business and industry and this would best be accomplished if it becomes a cooperative effort. The various job training acts, requires accountability as major factors in receiving funding for job training programs. An example of this is the Job Training Partnership Act (JTPA) of 1982, which signified a significant shift in the focus of workforce preparation to an accountability systems that evaluated programs on performance rather than design standards. (Sheet, 1992)

Performance standards program focused more on the outcome result of the training program rather than concentrating on the internal administration or program design. The Family Support Act of 1988 required a performance based outcome system of evaluation for state welfare-to-work programs funded under the Job Opportunities and Basic Training Program (JOBS) at the beginning of 1993. (Sheets, 1992) Additionally, the 1990 Amendment to the Perkins Act was the first time federal education legislation has required state-administered system of performance standards and measures. "The Perkins Amendments require states to develop and implement a state-wide system of standards and measures of performance for secondary and post-secondary vocational-technical education by September 1992". (Sheet, 1992, p.8)

Goals

It is the goal of the project writer to utilize the already proposed and drafted Business Education Career Path Model Curriculum to design an authentic assessment for the Accounting and Finance Career Pathway Sequenced Program, offered by the Colton Joint Unified School District, that would enable teachers to evaluate students as they progress through the career pathway sequenced program, identifying competencies that student must acquire and identifying these competencies as meeting the SCANS Report five competencies that stand as the foundation of job performance, in addition to a three part foundation of skills and personal qualities, and the California Business Education Career Path and Model Curriculum Standards. The integration of the SCANS competencies with job specific competencies will produce students with solid skills and personal qualities needed for solid job performance.

## Chapter IV

## Project Proposal

The California Business Education Path and Model Curriculum Standards (California State Board of Education, Draft, 1994), has attempted to align curriculum changes to the national and state reforms and restructuring efforts. There is a recognition by the writers of the Business Education Career Path and Model Curriculum Standards to address the need for educational reforms due to the changes in the economy and the demand for a more competitive workforce. The project writer has built on the Business Education Model and Curriculum Standards to extend to the assessment of student performance.

Those individuals who are involved in the preparation of students to enter in the workforce are concerned about the need of a performance outcome based curriculum that allows students to demonstrate and apply their learned knowledge in context to its use in the global job market. To remain competitive in the world marketplace, the United States must have well trained and a highly motivated workforce. It is the responsibility of those who are responsible for this training on all levels to convey this need to the students they are responsible for preparing to enter the job market. Students who comprehend the business and economic relationships and who are able to adapt to change are the type of employees needed for the workforce of the 21st Century. The project proposal consisted of providing a work in progress and showcase portfolio documentation that would

provide students with an outcome based evaluative procedure. The project encompassed the following steps:

- Student Processing for Accounting Career Pathways. See "APPENDIX A: Student Processing for Accounting and Finance Career Pathways
- Student Application. See "Figure 1
- Business Education Career Pathway Core Sequence for an Acocunting Clerk. See *"Figure 2*
- Memo to counselor of student acceptance in the Career Pathway Program. See *"Figure 3*
- Parent Information Letter. See "Figure 4
- 2. Writing exit criteria, task performances, competency expectations and evidence needed (portfolio entries) to verify competencies have been acquired for each course in the Accounting and Finance Career Pathway. See "APPENDIX B: Core Competencies Accounting and Finance Career Pathway and See" APPENDIX C: Samples of Portfolio Verifications
- Business Education Career Path Cluster. See "Figure 5
- Career Performance Standards (CPS). See "Figure 6
- Business Technology Core Standards. See "Figure 7
- Accounting and Finance Standards. See "Figure 8
- SCANS Competencies. See "Figure 9
- Career Possibilites in Accounting and Finance Career Pathways. See "Figure 10

- General Description of Accounting and Finance Career Pathways. See *"Figure 11*
- Keyboarding/Computer Literacy. See "Figure 12
- Advanced Keyboard/Computer Literacy. See "Figure 13
- Introduction to Business. See "Figure 14
- Beginning Accounting. See"Figure 15

The project also utilized the efforts of the Career-Technical Assessment Program

(C-Tap). The C-Tap is a California Department of Education Program, developed by the Far West Laboratory for educational research and development. The project was designed to certify students enrolled in California high schools and regional occupational centers or programs.

The C-Tap requires students to master the following standards:

- Model Curriculum Standard-course content standards
- Career Preparation Standards-Common core competencies,
- Academic-basic skills, such as reading writing and math.

The student portfolio must contain five sections:

- Presenting the portfolio-Table of Content, a letter of introduction.
- Career Development- An application for employment or for college, a letter of recommendation and resume.
- Work Samples- Description of work, demonstrating mastery of important careertechnical skills
- Writing sample- Sample writings that demonstrate investigative, analytical, and writing abilities

Supervised Practical Experience Evaluation- Documentation of a student practical work experience.

The four career path clusters in the California Business Education Career Path have been researched to be aligned with occupational opportunities projected by government and employment agencies. According to the statistics provided by the United States Department of Labor, the employment in business service industries will grow to 7.6 million by the year 2005. (Draft, 1994) According to the Dictionary of Occupational Training, Accounting profession and it derivatives occupations, is considered to grow well into the year 2005. Accounting is importance to all businesses, since all of businesses must maintain accurate financial records in order to make sound management decisions. Students who continue their education in the Accounting and finance field will find opportunities for employment. The C-Tap Rubric would be used to evaluate student work.

Career Paths as defined by the Business Education Career Path and Model Curriculum Standards is being "carefully articulated instructional or course sequences which lead students into and through career path clusters and specializations." (Draft, 1994, p. 10)

The local school district can use the Business Education Career Path and Model Curriculum Standards as simply a foundation for developing a Business Education Career Pathway Program that would best meet the needs of the students served by the school district.

The project writer took these foundation standards and built a needed authentic assessment tool that would evaluate students as they progressed through their chosen

career pathway. The assessment of students begin in core courses that gave the students basic skills necessary to be successful in their respective career pathways and continued through specialization classes. As previously stated, performance outcome based curriculum has as it evaluative process of student learning in context and application of learned knowledge, served as an excellent preparation for student transitioning from secondary to post-secondary education or making the transition from school to work.

The project is aligned with the California Business Education Path and Model Curriculum Standards, where provided, but goes a step further by identifying competencies as being SCANS suggested competencies, and if applicable, industry standards or preferably called Core Performance Standards..

As a business education teacher for over twenty-three years, the project writer built the project around a career pathway program designed by the writer and other business education teachers in the Colton Joint Unified School District. In the Colton Joint Unified School District, career path programs are organized into program sequences. When they are taken in sequential order, these courses prepare students to make a successful transition from high school directly into entry-level employment in a chosen career field--and/or into more technical training and education at the community college or university levels. The program sequences described in the Business Education Career Path Program are organized according to general occupational categories. Each sequenced course includes general employability skills that are appropriate to many occupations as well as job-specific training for a particular career field. Courses in each respective career pathway progresses from the introductory level (roughly coinciding with 9th or 10th grade) through intermediate. Capstone or advanced level courses are available through the Regional Occupational Programs (ROP). As the ROP is regional by design, all courses are not available at all high school sites. Students elect to enroll in a variety of sequences organized around the subject areas. (See Appendix A)

The Career Pathway Program was designed to include college bound students, students entering community college, trade or technical school and going directly from school to work. The program is also readily available to special population students as well as students with limited English speaking abilities. The Business Education Career Pathway Program included three Career Pathways: Accounting and Finance, Business Administration--Office Information Systems and Marketing Education. The project only addressed the Accounting and Finance Career Pathway Cluster.

It is the desire of the Colton High Business Education Career Pathway Program to enroll students beginning at the ninth grade level, in order to make sure that students are able to take all of the core classes required to receive a certificate at the end of the four year sequenced program. The sequences require every student to take a common core of four courses in business technology, including Keyboarding/Computer Literacy, Advanced Keyboarding/Computer Literacy, Introduction to Business, and Recordkeeping, during the first two to three years (grades 9-11) of the program. Students are encouraged to think of their program as the beginning a continuum that will take them

into post-secondary programs at the community college (technical) level or the baccalaureate (professional level).

During the four-year high school sequence, students will successfully complete the Colton Joint Unified School District graduation requirements, which also encompass the University of California's "a-f" entrance requirements. Students completing the career pathway sequenced program will be able:

• Find immediate employment

• Enter the one or two-hear certificate or associate degree programs at the community college

• Apply for admission to the University of California or other four-year institutions. Students enrolling in the program must complete a program application form.

Once a student enrolls, counselors and parents will be notified of the student's decision to be apart of the Career Pathway Program. Parents will be contacted personally by the department chair to review the program requirements and to solicit the support from the parent to help monitor the student's progress.

Students are counseled by the department chair or the monitoring teacher for guidance at the time of registration for classes. The success of the program depends on the cooperation of the student, parent, teachers, counselors and administrators.

The project gives a description of the career pathway, based on information gleamed from the Occupational Outlook Handbook, The Encyclopedia of Careers and

Vocational Guidance and The California Business Education Career Path and Model Curriculum Standards (Draft, 1994).

The competencies in the core classes will include:

- 1. Exit Criteria-Stated competencies
- 2. Performance Tasks-Action student must complete to accomplish the stated competency
- 3. Competency Expectation-Degree of competency
- 4. Portfolio Assessment-What it anything must be included in the student portfolio as evidence the competency requirement(s) have been met

The Exit Criteria are marked to indicate Business Technology Core Standards (BTC), as identified by the California Business Education Career Path and Model Curriculum Standards (Draft, 1994), as Scans recommended standards (SCANS), Accounting and Finance Standards (AFS) and in some instances, industry standards (Career Performance Standards (CPS). See "APPENDIX B: Core Competencies Accounting and Finance Career Pathway

#### Summary

The restructuring and reforms called for in education has as one of its major areas of concerns--student learning accountability. This accountability requires assessing knowledge learned by students as they progress through the educational system. Second To None, A Vision of the New California High School, outlines the reforms suggested to create a quality and valuable education for students graduating from high school in the 21st Century. Second To None sees the new educational reforms as focusing on student performance that reflect actual achievement of application of knowledge. The writers of <u>Second To None</u> also see assessment as the major strategy in bringing about significant educational reforms.

Assessment of enrolled in Business and Technology Career Pathways required determining the competency requirements desired by business and industry, determining the skill level requirements and how these acquired competencies will be documented. A good assessment tool helps to ensure that students are ready to transition from high school to community college or technical college, work, four year university or college.

### Chapter V

### Introduction

Job opportunities for students will be growing as the United States' involvement in the global market expands. Will the students who are destined to become apart of the work force in the 21st Century be prepared to survive in a demanding economic environment? Education--a good education--will be one of the factors that will contribute to these future workers' success in the global marketplace.

The mere thought of proving the training these future workers will need, offers a astronomical challenge to our educational system. In order to meet these challenges in a society that is best with a cycle of proverty, crime, racial tension and unemployment, the educational system needs to rise to the challenge of making changes that will prepare students for the future work force.

Small improvements are no longer acceptable. To meet the challenge of the 21st Century, California education needs to operate at a new plateau of student performance, teacher productivity and cost-effectiveness. (Restructuring California Education, a design for public education in the twenty-first Century, Recommendations to the California Business Roundtable, 1988, Berman, Weiler Associates, pg. 1)

The "new" way of doing business in the educational environment would make performance the driving force students, teachers and administrators. Americans must realize our society is based on work. (Carnevale, 1991). How this work is completed is depending upon the foundation preparation given to the future work force--the students of today.

The educational system is "charged" to provide students with the academic as well as the vocational skills necessary to be successful--not separate but equally focused on the combination of academic and vocational training is taught in context with its future application in the workplace. The new economy is going to require more preparation for work--this preparation needs to start on the high school level, with vocational awareness being taught in the elementary schools.

### Recommendations

The educational system should strive to provide:

Foundational Skills

- Students should have strong reading, writing and mathematical skills. Carnevale (1991) says workers need three levels or reading skills for job success: basic literacy, reading to do, which includes being able to locate printed information for immediate use; and reading to learn and reading to do, which includes using basic skills to do job specific skills in order to do problem solving.
- Application: Students should be given opportunity to read and then perform given tasks. Students would in turn be evaluated on the finished product. Students would also be given an opportunity to evaluate their success after the project was completed.

- Writing Skills-As the complexity of information grows, strong writing skills are required of workers.
- Application: Students should be given many opportunities to write in all classes. English assignments should reflect the type of writing required in the student career pathway choice.
- Mathematical skills-These skills should be taught in context with application in a specific career pathway. (Carnevale, 1991) says an effective curriculum should emphasize the sue of mathematical operations to solve work-related problems
- Application: Students should be given contextual problems encountered in a specific job or possible job situations.
- Work place competencies are enumerated by the Scans Report (1991) should be integrated into all curriculum areas. Departmentalization must stop as we know it and an integration of all curriculums must begin. "Competency standards and assessment should be based on performance standards and reflect current and future job needs." (Carnevelle, 1991, pg. 171)
- Application: A sequenced course of study which prepares students to enter the job market as well as prepare them for post-secondary educational opportunities.Students leaving high school are prepared to make job choices and have sufficient preparation to continue to community college, technical school or a four year college or university.

Accountability and assessment should be an integral part of the "new" education system. Performance and productivity have become essential measurement of knowledge and skills required for adequate performance and productivity has increased significantly, leading to the need for more formal education and training as well as for effective and efficient methods of planning and evaluating instructions. (Pucel, David J. Dr., Performance Based Instruction Design., pg. viii.)

Application: Alternative ways of assessing students' competencies should be utilized. Evidence of student competencies levels other than conventional paper and pencil testing should be utilized. For example, evidence of student competencies should be placed in the student's portfolio. For example, a completed accounting project which illustrates the student can complete the accounting cycle for a service business. documentation of student performance level should also be included in the student portfolio. For example, if students are required to type twenty-five words per minute, documentation should be placed in the student's folder after it has been signed by the teacher.

### Conclusion

In order for education to be considered as having value it must be functional to the individual and to the society to which the individual is a member. Educational reforms are presently underway all over this country, because our present educational system has not adapted the changing needs of society.

One of the major areas of reform is how to assess the knowledge of students as they progress through the educational system. Authentic assessment is one alternative method of assessing student "acquired" knowledge in context to the student's chosen career field. The assessment of the student efforts would include the evaluating of acquired knowledge based on career performance standards desired by the career field in business and technology the student has chosen to pursue. The student would compile a work in progress and showcase portfolio to demonstrate the student's competencies in their specialization. APPENDIX A: Student Processing for Accounting and Finance Career Pathways

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Figure	1.	Stin	dent	Ann	licatic	n H	$\alpha rm$	1.345
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# BUSINESS EDUCATION CAREER PATHWAY SEQUENCED PROGRAM

# STUDENT APPLICATION

Student Name	Date
Address	
Parent/Guardian	
Personal long-term goals:	
	2019 - 1990 - 2019 - 1990 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997
Short term goals:(high school years)	
2	
3.	8-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
Long term educational goals: (after high school)	
1.	
2	
3	
Extra-curricular activities:	
1.	
2	
3.	
What Business Technology Career Pathway would you like to pursu	
♦ Accounting and Finance	
Susiness Administration-Office Information Systems	
♦ Marketing Education	
Student Signature	Date
Interviewer	Date

Figure 2. Business Education Career Pathway Core Sequence for Accounting Clerk

#### **ACCOUNTING CLERK**

**Description:** An Accounting Clerk keeps financial records of a business, including payroll, accounts receivable, and accounts payable. This sequence prepares students for careers in accounting and financial services.

Grade 9

These are suggested order of sequencing classes. (May vary from school to school)

5	Semester 1	Semester 2	Advisor's\Counselor Approval
$(x, \mathbf{t}_{X}) \in \mathbf{t}_{X}$	English	English	
	Math	Math	
Nat	ural Science	Natural Science	
	<b>P. E.</b>	<b>P. E.</b>	
Keyl	ooarding/CL*	Keyboarding/CL*	

	Grade 10	
Semester 1	Semester 2	Advisor's\Counselor Approval
English	English	
Math	Math	
Natural Science	Natural Science	
World History	World History	
Intro. To Business*	Intro. To Business*	
Drivers Ed.	Recordkeeping*	

Grade 11

Semester 1	Semester 2	Advisor's\Counselor Approval
English	English	
U. S. History	U. S. History	
<b>P. E.</b>	<b>P. E.</b>	
Foreign Languages	Fine Arts (1 Yr.)	
Accounting*	Accounting*	

Grade 12

Semester 1	Advisor's\Counselor Approval	
English	English	
Principles of Democracy	Principles of Democracy Principles of Democracy	
Advanced Accounting**	Advanced Accounting**	

\*Required courses for certification

\*\*Suggested Business Electives: ROP Banking and ROP Computerized Business Applications

#### Figure 3. Memo to counselor

TO: Counselor

FROM: Department Chair /Advisor

SUBJECT: Business Career Path Enrollee

DATE:

Attached is an application for student admittance to the Business Career Path Sequenced Program. Please review the student's application and suggested sequenced courses to ensure the student will meet all graduation requirements, in addition to meeting college entrance requirements.

As soon as the student's program has been discussed with the student, please send a copy of the course sequence outline to the Business Department to be included in the student's records.

Thank you.

Figure 4. Parent Information Letter

Dear: (Parent's Name)

Your (name of son or daughter) has submitted an application to the Business And Technology Career Pathway Sequenced Program at (name of high school).

The Business and Technology Career Pathway Sequenced Program provides students with an opportunity to help relate academic instruction to the real world, and prepare them to meet their post-secondary educational and career goals.

The program offers students an opportunity to receive a certificate in one of three Career Pathways: --Accounting and Finance, Business Administration--Office Information Systems and Marketing Education.

The sequenced program described in the enclosed brochure will enable your student to prepare to make the transition from high school to community college or technical school, find immediate employment or apply for admission to the University of California or other four-year institutions. During the four year sequenced program, (student name) will complete the (name of high school district) graduation requirement, which also encompass the University of California's "A-F" entrance requirements.

(Student's name) decision to pursue a certificate in the Business and Technology Career Pathway Sequenced Program is an important one and it is the desire of the Business Education Department, counselors and administrators to keep you informed of your student's progress in the program.

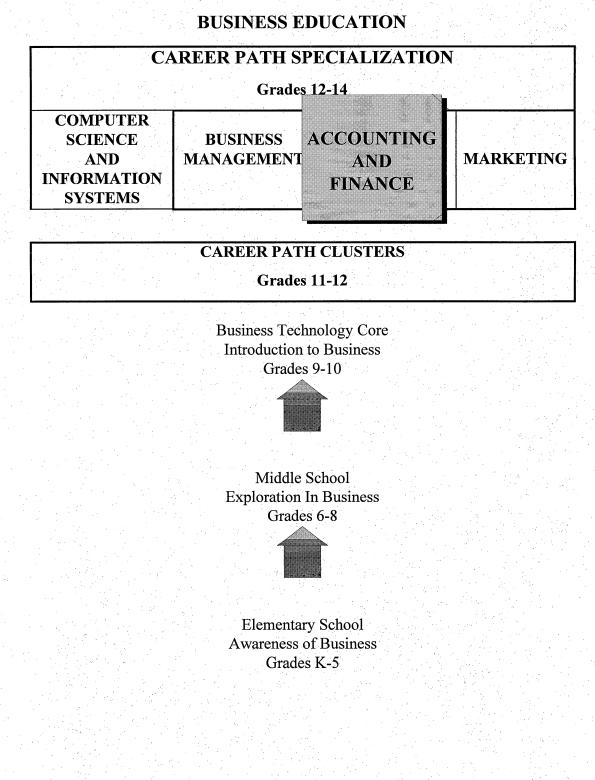
Please review the enclosed brochure for additional details about the program. If you have any questions about your student's decision, please contact the Counseling Department at (phone extension).

Thank you.

Sincerely yours,

APPENDIX B: Core Competencies Accounting and Finance Career Pathway

Figure 5. Career Path Clusters



### Figure 6. Career Performance Standards

CPS.1-Communication Skills-Student will understand principles of effective

communication. They will communicate both orally and in writing. They will listen attentively and follow instructions, requesting clarification or additional information as needed.

- CPS.2-Employment Literacy-Students will understand career paths and strategies for obtaining employment within their chosen fields. They will assume responsibility for professional growth. They will understand and promote the role of their field within a productive society, including the purposes of professional organizations.
- CPS.3-Interpersonal Skills-Students will understand key concepts in group dynamics, conflict resolution, and negotiation. They will work cooperatively, share responsibilities, accept supervision, and assume leadership roles. They will demonstrate cooperative working relationships across gender and cultural groups.
- CPS.4-Occupational Safety-Students will understand occupational safety issues including the avoidance of physical hazards in the work environment. They will operate equipment safely so as not to endanger themselves or others. They will demonstrate proper handling of hazardous materials.

CPS.5-Personal Skills-Students will understand how personal skill development affects their employability. They will exhibit positive attitudes, self-confidence, honesty, perseverance, self-discipline, and personal hygiene. They will manage time and balance priorities as well as demonstrate a capacity for lifelong learning.

CPS6-Technology Literacy-Students will understand and adapt to changing technology by identifying, learning, and applying new skills to improve job performance.

They will effectively employ technologies revelant to their fields. CPS7-Thinking and Problem-Solving Skills-student will will exhibit critical and creative thinking skills, logical reasoning, and problem solving. They will ill apply numerical estimation, measurement, and calculation, as appropriate. They will recognize problem situations; identify, locate, and organize needed information or data; and propose, evaluate, and select from alternative solutions.

#### Figure 7. Business Technology Core Standards

- BTC1Business Communications-Students will understand communications as applied to business situations. They will demonstrate competency by selecting and using appropriate forms of business communication while working individually and in groups.
- BTC2-Business Environment-Students will understand the development and structure of business environments. They will demonstrate competency by identifying economic, environmental, and legal factors that impact organizations and by recognizing issues that challenge those in leadership roles.
- BTC3-Career Preparation and Job Acquisition-Students will understand career preparation and job acquisition skills required for employment, professional growth, and employment transitions in the field of business. They will demonstrate competency by matching skills and aptitudes to business occupations, exploring business career options, and applying job acquisitions skills.
- BTC4-Economics of Business-Students will understand international and domestic business and economic viewpoints from a global perspective. They will demonstrate competency by describing economic and business practices among diverse societies.

- BTC5-Financial Concepts-Students will understand how to apply a variety of financial concepts in domestic and international business situations. They will demonstrate competency by using appropriate technology and accessing resources to solve computational problems.
- BTC6-Functions of Business-Students will understand functions and practices of business. They will demonstrate competency by identifying and describing activities and practices of business operations.
- BTC7-Human Resource Development-Students will understand the factor essential to the development of human resources that contribute to a productive work force in a culturally diverse, global environment. They will demonstrate competency by describing the ways in which human resource development affects the productivity of an organization.
- BTC8-Leadership Development-Students will understand the personal qualities that are the basis for developing leadership skills. They will demonstrate competency by identifying and using leadership skills in a variety of individual and group work situations.
- BTC9-Technology-Students will understand technology used in business. They will demonstrate competency by utilizing technology to access, manipulate, and produce information.

### Figure 8. Accounting and Finance Standards

Students will understand basic accounting principles and procedures affecting businesses. They will demonstrate competency by preparing and maintaining accounting records. Instructional content leading to mastery of the standard should include but is not limited

to:

AFS1-Accounting Cycle-apply the accounting cycle for both a service business and a merchandising business through closing the books for a sole proprietorship, a partnership, and a corporation.

AFS2-Accounting Principles-describe and apply accounting principles and concepts.

- AFS3-Cash Management-prepare bank reconciliation's, establish and maintain petty cash and change accounts, identify cash control techniques, and describe cash flow concepts.
- AFS4-Computer Accounting/Spreadsheet-use a computer to maintain accounting records AFS5-Payroll-describe and apply basic payroll theory and procedures including withhold and tax reporting.

AFS6-Receivable and Payable-create and maintain subsidiary ledgers for accounts receivable and payable.

Figure 9. SCANS Competencies

- S1-Resources-They know how to locate time, money, materials, space, and staff. S2-Interpersonal Skills-They can work on teams, teach others, serve customers, read,
  - negotiate, and work well with people from culturally diverse backgrounds.
- S3-Information-They can acquire and evaluate data, organize and maintain files, interpret

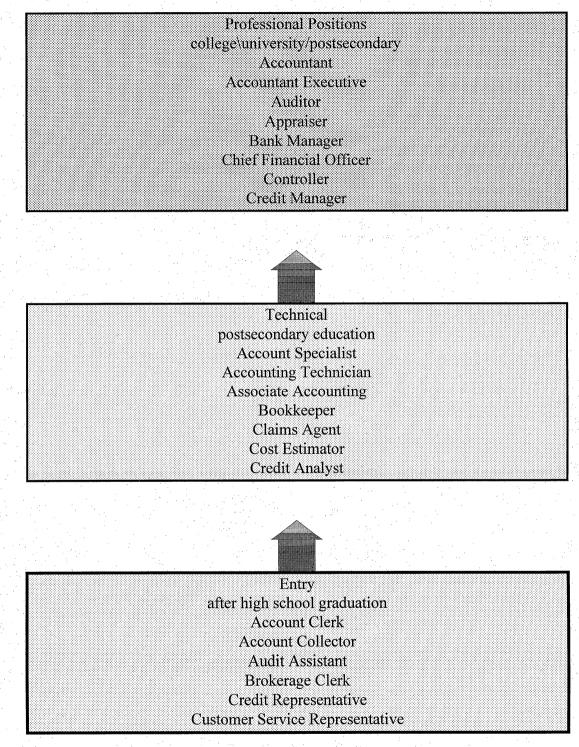
and communicate, and use computers to process information.

- S4-Systems-They understand social, organizational and technological systems; they can monitor and correct performance; and they can design or improve systems.
- S5-Technology-They can select equipment and tolls, apply technology to specific tasks, and maintain and troubleshoot equipment.
- S6-Foundation Skills-Competent workers in the high-performance workplace need:
- S6.1-Basic Skills-reading, writing, arithmetic and mathematics, speaking, and listening.
- S6.2-Thinking Skills-the ability to learn, to reason, to think creatively, to make decisions, and to solve problems.

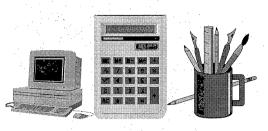
S6.3-Personal Qualities-individual responsibility, self-esteem and self-management,

# sociability and integrity

Figure 10. Career Possibilities in Accounting and Finance Career Pathways



## Figure 11. General Description of Accounting and Finance Career Pathways



# **ACCOUNTING AND FINANCE**

Description: Individuals receiving training in this career cluster will find job opportunities growing faster than the average for all occupations through the year 2005. This career cluster requires knowledge of basic accounting concepts and computer literacy. Students should have above average computational skills, along with critical and decision making skills. Students who intend to pursue a business vocation, should have a background in Accounting.

**Requirements:** 

- 1. Work well on your on and with others
- 2. High ethical standards
- 3. Pleasing personality
- 4. Ability to think logically
- 5. Good computational skills
- 6. Good oral and written communication skills
- 7. Neat, accurate and orderly work habits
- 8. Sound judgment

Employment outlook:

Employment opportunities are expected to grow because of the need for all businesses to have financial records.

	<b>r</b>		·
Exit Criteria	Performance Task	Competency Expectation	Portfolio Assessment
1. Students will	Students will	One hundred	
be able to identify	arrange the steps	percent	
the five steps in	in correct		
the computer	sequence and		
information	write a brief		
processing cycle	description of		
S4, CPS1, CPS6	what takes place		
	in each step		
2. Students will	Students will list	One hundred	
be able to describe	ten examples of	percent on ten out	
the uses of	the use of	of twenty possible	
computers in	computers and	examples.	
society	their impact on		
S7	society.		
3. Students will	Students will	1. Use Reference	Keyed report is to
be able to describe	complete a	materials in the	be included in
the use of	research paper,	library.	student's portfolio
computers in their	describing:	2. Write	to demonstrate
profession or	a. Why they are	effectively	writing skills,
vocational area of	interested in the	(Expository	formatting of an
interest.	profession/vocatio	writing)	unbound
CPS1, CPS2, S3,	nal area they have	3. Think and	manuscript.
BTC3, BTC9	chosen to	problem solve	
	research.	4. Understand	
	b. Educational	career	
	preparation	opportunities and	
	needed for their	career pathways	
	career choice.		8.2 
	c. The impact of		· · ·
	computers and		
	uses of computers		
	in their chosen		
	career field.		· ·

Figure 12. Core Competencies--Beginning Keyboarding/Computer Literacy

	Performance	Competency	Portfolio
Exit Criteria	Task	Expectation	Assessment
4. Students will	Students will	When students are	
be able to	define computer	given a list of	
understand	terminology as it	terms to define,	
computer	is presented by the	they will be	
terminology	teacher.	expected to pass	
CPS6, S4 , S6,		with 85%	
BTC9.		accuracy.	and the second
5. Students will	Student will	Will complete	
be able to prepare	format a disk,	with 100 percent	
a disk to receive	using the	accuracy	
information	operating system		
CPS6, S4, BTC9	taught in the		
	course		
6. Students will	Students will save	Will complete	
learn to save and	and retrieve	with 100%	
retrieve data	documents from a	proficiency	
CPS6, S4, S5,	hard drive or		
BTC9	student data disk		
7. Students will	Students will learn	Students will key	Timed writings
type using the	to key introduced	given assignments	verification on
"touch" system	alpha and numeric	using the "tough	three minute
	keys by touch.	type" method at a	timed writings
		minimum of 25	will be entered
		NWAM.	into the student's
			portfolio, with
			teacher's signature
			for verification.
			See "Figure 16
			and
			Figure 17
	<b>A 1 11</b>	<b>0</b> 1 111	
8. Students will	Students will	Students will be	
have language	correct sentence	type sentences	
usage skills to	errors having	containing	
include	number,	number,	

Exit Criteria	Performance Task	Competency Expectation	Portfolio Assessment
punctuation rules, capitalization and number expressions CPS1, S6, BTC1	punctuation and capitalization errors.	punctuation and capitalization errors with 95% accuracy.	
9. Students will learn to format business documents CPS6, S4, S5, BTC9	Students will format business documents from rough draft copy using the formatting procedures taught them in class.	The following documents will be formatted according to acceptable formatting practice, with proper margins setting. 1: Personal Bus. Letter 2. Business Letter 3. Memorandums 4. Unbound Manuscripts Mailable copy	A sampling of each of the document should be included in the student's portfolio with signature or verification form to indicate that the students completed the document without the aide of notes of other help aides. See "Figure 18
10. Students will research and format an original research paper on the topic of the Use of Computers in career of their interest. CPS6, S3, S4, S5, S6, S7, BTC3	Students will key a research paper of at least three pages in length in an unbound manuscript format, to include at least two references	Document must be error free and properly formatted according to unbound manuscript formatting procedures. The research paper must reflect critical thinking skills as well as the students expository writing abilities.	This is a suggested entry in the student's portfolio.

	Performance	Competency	Portfolio
Exit Criteria	Task	Expectation	Assessment
11. At the	Students will key	Students must	Students may
conclusion of the	an end of semester	format these	choose a sample
semester, students	project from	documents with	document from
will demonstrate	rough draft or	only the use of	each type of
the knowledge of	unformatted copy	their notes or	business
business	to include	sample letters they	document to be
document	personal business	have produced	included in their
formatting	letters, business	during the course	portfolio folder.
CPS6, S7, S3,	letters, simplified	of the semester.	
BTC1, BTC9	memorandum and	These documents	
	unbound	must be mailable.	an a
	manuscripts.		
an an an Araba an Araba. An an Araba an Araba an Araba	•		
12. Student will	Student can open	Students will	
demonstrate	software program	complete all	
proficiency in the	and perform the	performance task	
use of the	following tasks:	under the	
software used in	Create a new	observation of the	
the course.	document.	teacher with	
CPS6, S4, S5,	Retrieve an	appropriate	
BTC9	already saved	evaluation sheet	
	document	completed for	
	Change all	verification.	
	boundary margins,		
	spacing and		
	indentations		
	Block text	ele transformer de la segui	
	Underline		
	Center Text		
	Uncenter text		
	Print		
13. Student will	Make corrections	Given a list of	
be able to identify	on rough draft	proofreader's	
proofreading	copy as the	symbols, identify	
symbols	document is	with 90%	
S6, BTC1	formatted	accuracy.	
		accuracy.	

· · · · · · · · · · · · · · · · · · ·			
	Performance	Commetener	Portfolio
		Competency	
Exit Criteria	Tasks	Expectations	Assessment
1. Student will be	Students will key	Student will use	Student will
able to identify and	the following	rough draft copy or	choose
apply correct	business	unformatted and	documents to
formatting for	documents:	will determine	represent
business	1. Personal and	1. The margins	advanced
correspondence	Business Letter	based on letter	document
documents and	a. Open	length	preparation
manuscripts	Punctuation	2. Produce	capabilities.
CPS7, S5, S3,	b. Mixed	mailable	Should include
BTC9	punctuation	documents based	samplings of
	c. Block Style	on teachings in the	Personal Business
	d. Modified Block,	course and judged	Letters (Typed in
	indented	mailable based on	Block, Modified
	paragraphs	correct placement	block with
	e. Modified Block,	on the page.	indented
	blocked paragraphs	(Vertically and	paragraphs)
	2. Unbound	horizontal	Business Letters
	Manuscripts	placement for	(All letter styles.
	3. Simplified	tables)	A long
	Memorandum		manuscript to
· · · · · · · · · · · · · · · · · · ·	4. Tables		include: side
			headings,
			paragraph
			headings, quoted
			material,
			enumerated
			listing and a
			separate reference
			page
			Tables that are at
			least three
			columns wide,
			centered
			vertically and
			horizontally.
			See "Figure 19
L	I		L

Figure 13. Core Competencies-Advanced Computer Literacy

	1		
Exit Criteria	Performance Tasks	Competency Expectations	Portfolio Assessment
2. Student will	Student will key	Three timed	Verification must
key five minute	several teacher	writings must be at	be signed and
timed writings at a	selected timed	a speed of a	included in
speed of 35	writing from	minimum of 35	student portfolio.
NWPM	unfamiliar copy of	NWPM	See"
	high syllabic		Figure 17
	intensity using		1 1811 0 17
	touch typing		
	method		
	method		
2 94-1-1	<b>W</b> 71 <b>1 ·</b>	Q <sub>1</sub> 1	
3. Students can	When student is	Students will use	an a
identify commonly	given a rough dray	the correct or	
used proofreader's	unformatted	appropriate	
symbols	business	proofreader's mark	
CPS7, S6, BTC1	document, will use	to make	
	the appropriate	corrections on a	
	proofreader's	business document	
	marks to indicated	with 95% accuracy	
	needed		
	corrections.		
4. Student will be	When student is	Student will	Verification will
able to produce	given information	complete the	be completed by
form letters	for the production	merging process	teacher for
CPS7, S5, S4,	of form letters will	with 100%	inclusion in
BTC9	use the appropriate	accuracy	portfolio. See "
	software to :		Figure 20
	1. Create a data		
	base		
	2. Create original		
	document to be		
	merged		
	3. Merge letters		
	4. Print letters		
L	l		

	Performance	Competency	Portfolio
Exit Criteria	Tasks	Expectations	Assessment
5. Student will	On all documents	All copies	
demonstrate	produced by	produced by the	
knowledge of	students should	students should be	
correct application	observe correct	mailable	
of guidelines for	punctuation rules,		and a second
numbers,	number expression		
capitalization and	and capitalization		
punctuation rules	rules		and the second second second
CPS1, S6, BTC1			
			3.20 X X X
6. Student will	Student will be able	Students will	
have a knowledge	to identify and	define computer	
of database	define database	terminology as	
management	management	assigned by teacher	
systems	computer	with 95% accuracy.	an an an an Argan Araga. An an Argan
CPS6, S5, S4,	terminology.		
BTC9			
7. Student will	Student will learn:	Given a list of ten	
have basic	1. Design a data	data records,	
knowledge of	base record file	students will	
database	2. Create a new	design, create, save	
management	database file	retrieve, sort and	
software	3. Save a data base	query file with 95%	
CPS6, S5, S4, S7,	file	accuracy.	
BTC9	4. Sort records	Print	
	5. Run a query		
	6. Insert a new		х толого -
	record		
	7. Delete a record.		
	8. Print a data base		
	file		
			e de la companya de l La companya de la comp
8. Identify and	Students will be	Given a list of 10	· · · · · · · · · · · · · · · · · · ·
define the	able to identify and	electronic	
terminology related	define electronic	spreadsheet terms,	
<b>U</b>			
	and a second second Second second		
	The second se	H. M.	I

Exit Criteria	Performance Tasks	Competency Expectations	Portfolio Assessment
to electronic	spreadsheet	student will define	
spreadsheets	terminology	with 95% accuracy.	
CPS6, 7, S4, S5,			
S7, BTC9			
9. Students will	Students will	Given a problem by	
demonstrate basic	design and create,	the teacher, the	
concepts of	save, retrieve, write	student will design,	
electronic	simple	create, save,	
spreadsheet	mathematical	retrieve, write a	
software	formulas and print	simple formula	
S4,7, CPS6, CPS7,	finished	with 95% accuracy	
BTC9	spreadsheet		
10. Student will	Students will list	Students will be	
demonstrate their	twenty uses of	given a selected	
knowledge on the	computers	assignment in	
impact of		which they will	
computers in		have to list the	
society.		twenty uses of	
CPS6, S3, BTC9		computers of	
		society and provide	
		a short of	
e des de la companya		explanation for	
		each answer with	
		95% accuracy	
11. Student will	Students will	List five unethical	
understand the	research the ethical	practices of the use	
ethics of software	and unethical uses	of computer	
use.	of computer	software	la en la tradición de la composition de La composition de la c
CPS5, S8, BTC2	software and the	(Discussion)	
	financial impact		

	· · · · · · · · · · · · · · · · · · ·	Competency	Portfolio
Exit Criteria	Performance	Expectation	Assessment
	Task	<b>F</b>	
1. Define	Students will	When given a list	
terminology	define and	of terms, students	
commonly used	correctly use	will define with	
in the business	business and	90% accuracy	
environment	economic		
CPS2, S3, BTC1	terminology		
	related to the		
	units covered in		
	approved text		
2. Utilize	Students will	Given several	
decision-making	demonstrate basic	scenarios students	
skills related to	steps in desion	will use basic	
their role as	making process	decision making	
consumers, wage	and apply to	steps to solve	
earners and	common	problems related	
citizens	problems related	to being a	
CPS5, 7, S8,	to a wage earner,	consumer, wage	
BTC6	citizen and a	earner or citizen.	
	consumer.		
	Q 1 111		
3. Student will	Student will		Demonstration
research ethical	choose one		of student's
issues related to	ethical issues		expository
business and	related to business and		writing skills and
economics. CPS1, S8, BTC2	economics and		critical thinking skills
CFS1, S0, D1C2	will write a short		SKIIIS
	research paper.		
	researen paper.		
5. Make simple	Student will be	Given a set of	
mathematical	able to use a	problems, students	
calculations with	calculator to do	will be expected to	
calculator on	simple	use a calculator	e Al constante de la constante de
various topics:	mathematical	and complete	
interests on loans,	calculations	assigned problems	s phone and
earnings on stock	involving finding	with 95%	

Figure 14. Core Competencies-Introduction to Business

		Competency	Portfolio
Exit Criteria	Performance	Expectation	Assessment
	Task	Expectation	Assessment
5. Make simple	Student will be	Given a set of	
mathematical			
	able to use a	problems, students	
calculations with	calculator to do	will be expected	
calculator on	simple	to use a calculator	
various topics:	mathematical	and complete	
interests on loans,	calculations	assigned problems	
earnings on stock	involving finding	with 95%	
investments,	interest on loans,	accuracy.	
simple payroll	earnings from		
calculations.	stock investments		
CPS7, S7, S6,	and simple payroll		an an Araba an Araba. An an Araba
BTC5	calculations.		
6. Identify dress	Students will	Students will be	
and appropriate	discuss	able to distinguish	
behavior for job	importance of	between	
interview	appropriate dress	appropriate and	
CPS2, S2, BTC3	in various	non-appropriate	
	business	dress in a given	
	environments	work	
		environment.	
7. Given a list of	The student will	Student rating	Student will
leadership	rate	below average (3)	include the
qualities such as	himself/herself a	will write an	leadership rating
initiative,	rating on each	improvement plan	sheet with steps
imagination,	quality using this	to correct the	for improvement
independence,	scale: 5= very	leadership quality	with time-line for
individuality,	high, 4=high,	he/she has	making needed
motivates people,	3=average, 2=low,	evaluated to be	improvements.
inspires	1=very low	deficient.	See "
confidence and			
delegates			
responsibility.			Figure 21
CPS2, S8, BTC8			
			an an an Araba Araba Araba
	L	· · · · · ·	

		Competency	Portfolio
Exit Criteria	Performance	Expectation	Assessment
	Task	Expectation	Assessment
8. Demonstrate	Students will	Identify and	
the ability to	prepare deposit	describe all facets	
maintain a	slips, checks and	of maintaining a	
checking account	check register	checking	
including a	given specific	accounts with	
fundamental	instructions.	90% accuracy.	
understanding of	Students will	Demonstrate the	
the terms	reconcile a bank	ability to: a)	
associated with	statement.	Prepare a deposit	
checking		slip; b) Maintain	
accounts.		a check register	
CPS7, S3, S5		and c) Reconcile	
		a bank statement.	
9. Identify and	Discuss terms	Identify	
understand	and definitions	necessary parts of	
opportunities for	associated with	an economic	
business	business	system and given	
ownership,	ownership	an example of	
elements and	recognize	each economic	
advantages of the	opportunities and	part.	
free enterprise	options for		
system	business		
CPS7, S3, BTC5	ownership.		

		Competency	Portfolio
Exit Criteria	Performance	Expectations	Assessment
	Task		
1. Student will	Students will	Student can	
understand the	answer selected	substantiate case	
accounting	cases for critical	decisions based on	
environment,	thinking at the end	ethical practices	
ethics and	of each chapter.	of the accounting	
communications		profession. (The	
CPS2, S8, BTC1,		student's decision	
BTC2, BTC4,		about whether a	
AFS2		case is ethical is	
	and the second sec	not assessed on	
	the second se	right or wrongs of	
		an answer, as long	
		as the answer does	an An Anna Anna Anna Anna Anna Anna Anna
n an an Anna a Anna an Anna an		not violate a law.	
		Student is to	
		demonstrate	
		critical thinking	
		skills. Students	
		are also expected	
		to verbally	
, se transforma de la composición de la La composición de la c		articulate their	
		thoughts in	
		organized manner.	
2. Student will	Correct	Students are	Verification
describe and apply	accounting	expected to be	should be entered
accounting	principles are	able to identify	in the students
principles and	applied to all	principles and	portfolio,
concepts for the	problems	concepts with	indicating that
forms of business	completed during	100% accuracy.	students can
ownership	the course.		identify
covered in	Students are		accounting
Beginning	expected to		concepts and
Accounting:	identify and		principles. See
Sole	describe specific		"Figure 22
proprietorship,	accounting	· · · · · · · · · · · · · · · · · · ·	

Figure 15.	Specialization	Competencies	Accounting	and Finance
1 15ul 0 15.	Specialization	Competeneites	riceounting	and I mane

Exit Criteria	Performance Task	Competency Expectations	Portfolio Assessment		
Partnership and Corporation CPS7, S3, BTC6, AFS1, AFS2, AFS6	principles and concepts as problems are worked and discussed.				
3. Students will be able to complete the Accounting Cycle for a Sole proprietorship, Partnership and Corporation, both manually and using automated equipment. CPS6, 7, S5, S3, BTC9, AFS1, AFS2, AFS4	Student will complete a Reinforcement Activity, that demonstrates a complete cycle for each form of business ownership	<ol> <li>Student will complete an audit test over the completed Reinforcement Activities with 95% accuracy.</li> <li>The Reinforcement Activities will graded on the proper formatting and documentation of accounting data</li> </ol>	All three Reinforcement Activitiesmanual and automated will be included in the students portfolio with a written report by the student, evaluating the differences in the three forms of ownership and how the manual problem differ from completing an automated problem.		
4. Student will be able to identify accounting terminology S6, BTC1, AFS2	Students will identify and define accounting terms as they are introduced .	At the end of each chapter, students will define accounting terms with 100% accuracy.			
5. Students will know Cash Management procedures (CPC Standards) CPS7, S5, S4, BTC9, BTC5,	Student will prepare: 1. Bank Reconciliation (manually and using automated software)	Students will complete performance tasks with 95% accuracy			

		Compotonov	Portfolio
Exit Criteria	Performance	<b>Competency</b>	Assessment
Exit Criteria	Task	Expectations	Assessment
AFS2, AFS3	2. Establish and	n en la contra de la En la contra de la c	
	maintain Petty		
	Cash and change		
	accounts.		
	3. Identify Cash		
	control techniques		
	and cash flow		
	concepts.		
		lingen til som en s Bennammen som en som	
6. Students will	Students will	Students will	Formally entered
be able to use a	learn:	complete an	Reinforcement
computer to	1. Enter data in a	accounting cycle	Activities will be
maintain	computer using	for a sole	used to
accounting	accounting	proprietorship,	demonstrate
records. (CPC	software.	partnership and	student
Standards)CPS6,	2. Student will	corporation with	competency in
7, S4, S5, BTC9,	follow software	95% accuracy	this area.
BTC5, AFS2,	procedures for		
AFS4	entering		
	accounting data		
	3. Students will		
	print accounting		
	data		
7. Describe and	Complete payroll	Students are	Teacher will
apply basic	problem that	expected to make	include
payroll theory and	include:	entries with 100%	verification that
procedures	1. Calculating	accuracy	the students have
including	weekly employee		a basic knowledge
withholding and	wages and		of payroll
tax reporting.	overtime pay.		procedures.
CPS7, S6,	3. Using		Problems should
S4,BTC9,AFS2,	employee		be included in
AFS5	withholding charts		portfolio
$\left\{ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	to determine		demonstrating
	federal withhold		student can:'
	deductions, state	taning Maring and Anata Anataning Anataning Anataning Anataning Anataning A	• Compute
	withholding		gross and net

		Competency	Portfolio
Exit Criteria	Performance	Expectations	Assessment
	Task		1일 (1996년) 1977년 1971년 - 1971년 1971년 - 1971년 -
	deductions, FICA		pay
	deductions and		• Complete
	other payroll		employee time
	deduction		card
	4 Calculate net		• Prepare
	pay for		employee
	employees.		earning
	5. Maintain		records
	employee earning		• Record
	records		information in
	6. Make entries to		employee
	record employer's		record
	payroll tax		• Prepare
1983년 1988년 2013년 1983년 1987년 - 1983년 1983년 1983년 - 1983년 1 1983년 - 1983년 1 1983년 1983년	obligations.	2012년2년년 1월(21년) 1월 1일 2012년 - 1월 12년 1월	payroll
	10. Make entries		checks.
	to record the		
	payment for the		
	employers payroll		
	tax obligations.		

# APPENDIX C: Samples of Portfolio Verifications

# Figure 16. Technique Check Sheet

# TECHNIQUE CHECK SHEET

# Beginning Keyboarding/Computer Literacy

You will periodically be observed to determine whether correct typing techniques have been learned while in this course. The following rating will be used:

4 points (Excellent); 3 points (Good); 2 points (Average); 1 point (Acceptable)

Student Name

Period Date

4	3	2	1	0
			-	
	4	4 3	4 3 2	

65

\*You can receive only a 4 or a 0.

Teacher comments:

Areas needing improvements:

Total points earned:\_\_\_\_\_Grade:\_\_\_\_

# Figure 17. Timed Writing Verification Form

# TIMED WRITING VERIFICATION FORM

Directions: Please attach this to your timed writing to be evaluated and checked for speed and accurracy.

Student Name		I I I	Period	Date
_	 	 		

 Timed Writing page number\_\_\_\_\_, Section\_\_\_\_Length: \_\_\_\_3 mins. \_\_\_5 mins.

Total words typed:

Total errors \_\_\_\_\_ X 2 (words deducted for each error)

NWAM \_\_\_\_\_

Tmed writing verified by:\_\_\_\_

Date:

# Figure 18. Portfolio Samples

# PORTFOLIO CHECK SHEET

# Beginning Keyboarding/Computer Literacy

Directions: The following document must be included in your portfolio folder.

Stud	ent Name		F	Period	Date	
		n an	ан 1			
,	Documents			Completed	Verified	
1 .	Personal Business Letter					
÷	Business letter		× .	· · ·		
н К. А.	Simplified memorandum					
	Unbound Manuscript					

# Figure 19. Advanced Document Verification

# PORTFOLIO CHECK SHEET

Directions: The following documents must be included in your student portfolio:

Student Name			Period Date
	- ,		

Documents	Completed	Verified
Personal Business Letters		
Block Style		
Modified block with indented paragraphs		
Modified block with blocked paragraphs		
Business Letters		
Block Style		
Modified Block Style, with indented paragraphs		
Modified Block Style, with blocked paragraphs		
Long Manuscript, must show side headings,		
paragraph headings, quoted material, enumerated		
listing and a separate reference page. Your original		
report may be used as documentation.l		
Tables with three columns centered vertically and		
horizontally.		
Resume		

Figure 20. Form Letter Production

# FORM LETER PRODUCTION VERIFICATION

Directions: Complete	the following informatio	n and attach to your form let	ter production
packet.			
Student Name		PeriodDate	
Assignment:	Date started	Completion date	
Describe the steps use	d to set-up the document	to be merged:	
Did you have to use n	otes to complete this proj	ect?	
What steps will you u	se to retain the informatio	on learned in this unit?	

Project completion verified by \_\_\_\_\_Date\_\_

# Figure 21. Leadership Evaluation

# LEADERSHIP EVALUATION SHEET

Student name		 a data Alar		Period	Da	ite
		 	* <b>,</b>			· .

Directions: Review the list of leadership qualities and rate yourself according to the following scale: 5-very high; 4: high, 3-average; 2-low; and 1-very low.

1. Initiative (begin and complete taks as directed in a timely manner)

- 2. Imagination (Analyzes problems for best solution)
  - \_3. Independence (Can complete tasks without the aid of other--make independent decisions.
- 4. Individuality(Realizes your uniqueness and the contribution can make to the organization)
- \_\_\_\_5. Motivates others(Can encourage classmates and friends to put forth their best efforts)
- \_\_\_\_\_6. Can delegate responsibility (Assign task to others to complete, based on their abilities)

Student evaluation of leadership abilities:

What are your areas of leadership weakness(s)? (Scored less than a 3)

Use the reverse side to continue to list your weakness(s). Write a plan for improvement.

Figure 22. Identifying Accounting Concepts

# ACCOUNTING CONCEPTS

Directions: Identify the following Accounting Concepts by writing the answer in the blank. You may not use any notes or textbook to answer the questions

1. Changes in financial information are reported for a specific period of time in the form of financial statements.

2. Financial statements contain all information necessary to understand a business' financial condition.

3. Financial information is recorded and reported separately from the owner's personal financial information.

4. The same accounting procedures are followed in the same way in each accounting period.

5. Financial statements are prepared with the expectation that a business will remain in operation indefinitely.

6. The actual amount paid for merchandise or other items bought is recorded.

7. Revenue from business activities and expenses associated with earning that revenue are recorded in the same accounting period.

8. Business activities creating dollar amounts large enough to affect business decisions should be recorded and reported as separate items in accounting records and financial statements.

9. A source document is prepared for each transaction.

10. Revenue is recorded at the time good or services are sold.

\_\_\_\_\_11. Business transactions are stated in numbers that have common values--common unit of measurement.

Score Verified by

### Bibliography

- Agee, Janice Lowen & Chohen, Jeffrey (Eds.). (1992) Second to none: a vision of the new California high school. Sacramento: California Department of Education.
- Bunn, Phyllis. (1993) Use of performance standards in marketing education. Business Education Forum, 38-40.
- California State Board of Education. (1994). Model Curriculum Standards, Grades Nine through Twelve, Sacramento: California State Department of Education.
- Carnevale, Anthony Patrick. (1991). <u>America and the economy</u>. San Francisco: Jossey-Bass, Inc. Publishers.
- Haney, Walter. (1989) Searching for alternatives to standardized tests: whys, whats and whithers. Phi Delta Kappan. 683-687.
- Inger, Morton. (1993). Authentic assessment in secondary education (number 6) New York, New York: Teachers College, Columbia University, Institute on Education and the Economy.
- Madaus, George & Haney, Walter. <u>The fractured marketplace for standardized testing</u>, Berkeley, CA: National Commission on Testing and Public Policy, forthcoming.
- Marzano, Robert J. & et tal. (1992). Toward a comprehensive model of assessment, Mid-Continent Regional Education Lab, Aurora, Co. (ERIC Document Reproduction Service No. ED. 356217)
- Newmann, Fred M. (1991). Linking restructuring to authentic student achievement. <u>Phi</u> <u>Delta Kappan</u>. 458-463.
- Paulson, F. S., Paulson, P. R., & Meyer, C. A. (1991) "What makes a portfolio or portfolio?" Educational Leadership, 48, No. 5, 60-63.
- Pucel, David J. (1989). <u>Performance-based instructional design</u>. New York: McGraw-Hill Publishing Company
- Sheets, Robert G. (1992) Building a world-class front-line workforce: the need for occupational skill standards in state workforce preparation programs. (EQW catalog number: WP06)

- Valencia, S. W. & Calfree, R. "The development and use of literacy portfolios for students, classes, and teachers." <u>Applied Measurement in Education</u>, 4, No. 4, 333-345.
- U. S. Department of Labor. (1991) Secretary's Commission on Achieving Necessary Skills, What work requires of schools--A SCANS Report for American 2000. Washington, D. C.: author.