

THE HISTORY OF VOCATIONAL PREPARATORY INSTRUCTION (VPI)

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PRETEST

1. When was the first vocationally preparatory program started in Florida?
 - a) 1963
 - b) 1972
 - c) 1981
 - d) none of the above

2. Where was the first program located?
 - a) Tallahassee
 - b) Miami
 - c) Orlando
 - d) Pensacola

3. At its peak, how many programs were operating in Florida?
 - a) 82
 - b) 91
 - c) over 100
 - d) 53

4. What was the first name for vocational preparatory programs in Florida?
 - a) IMTS
 - b) SAIL
 - c) VPI
 - d) None of the above

5. The acronym "LCP" stands for which of the following?
 - a) Learning certificate program
 - b) Literacy completion point
 - c) Limited corrections progress
 - d) None of the above

6. Where are vocational preparatory instruction programs located in Florida?

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- a) High schools
 - b) Adult center
 - c) Vocational-technical schools
 - d) Community colleges
 - e) All of the above
7. What was the primary federal funding source for vocational preparatory instruction programs?
- a) Carl D. Perkins Vocational funds
 - b) Workforce Investment Act funds
 - c) Welfare to Work funds
 - d) None of the above
8. What was the purpose of the original vocational preparatory instruction model?
- a) Provide basic skills instruction to academically disadvantaged students in vocational education
 - b) Teach vocational skills to college prep students
 - c) Provide students with disabilities life skills training
 - d) None of the above
9. Which of the following is a component of a vocational preparatory instruction program?
- a) Basic academic skills instruction
 - b) Occupational Exploration/Career Assessment
 - c) Complementary Skills
 - d) VESOL
 - e) All of the above
10. What is the name of the state organization for personnel working in vocational preparatory instruction programs?
- a) Florida Association for Career and Technical Education (FACTE)
 - b) Council for Exceptional Children (CEC)
 - c) Florida Special Needs Association (FSNA)
 - d) None of the above

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HISTORICAL PERSPECTIVE OF VOCATIONAL EDUCATION

Since the colonial era when apprenticeships were used to teach skilled trades, vocational education has been a part of the American culture. The Morrill Tariff Act passed in 1862, which established land grants to colleges to teach agricultural and mechanical skills, marked the beginning of the federal government's involvement in supporting vocational education as a part of public education. Although efforts were made to involve secondary schools in vocational training and develop a balanced curriculum of the academics and practical knowledge, the vocational education system evolved separately through specialized training in trade schools.

In the 20th century, the Smith-Hughes Act of 1917 was passed which appropriated 1.7 million dollars for secondary level vocational programs. It also established a Federal Board of Education. Unfortunately, the first federal administrator of vocational education, Charles A. Prosser, influenced and encouraged the continuation of the division of vocational training from mainstream public education at the secondary level. This division continued for several decades.

However, in the late 1960s and early 1970s, questions about the effectiveness of and rationale behind this "separate and unequal" system arose. Studies done by the U.S. Department of Health, Education, and Welfare found the following (Encyclopedia of Business):

- More than half of the graduates of secondary vocational education programs did not find employment related to their specialization,
- Unemployment statistics for program graduates were not significantly lower than those of traditional graduates
- The skills taught in these programs were generally obsolete
- The programs cost 50-75% more than traditional curricula.

During that same period of time, there was a growing concern about the skills of those students (about 50% of the high school population) who did not go on to college or dropped out of public education. Factors such as military and corporate downsizing, a shrinking labor pool, rising college tuition and a new emphasis on America's ability to compete in global economy prompted reform efforts at all levels of education.

As a result of these concerns, the Manpower Administration of the federal government sponsored several research projects to study innovative approaches for vocational education. State consortiums, lead by Technical Education Research Centers (TERC), were involved in several demonstration projects.

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INDIVIDUALIZED MANPOWER TRAINING SYSTEM (IMTS) PROGRAMS

The state of Florida, along with several other states, participated in a demonstration project in 1971 called the Manpower Training System. This system utilized language and mathematics materials adopted or modified from the Individually Prescribed Instruction System (ISS) developed by the Rehabilitation Research Foundation.

As a result of their involvement in the demonstration project, Florida's Division of Vocational Education (DVE) decided to adopt the model for the state to serve academically disadvantaged students enrolled in vocational program and named it the Individualized Manpower Training System (IMTS). The first IMTS program was opened in 1972 at the Lewis M. Lively Vocational-Technical Center in Tallahassee, Florida.

The state model was designed to identify vocational students' basic skills deficiencies, develop an instructional prescription, and provide individualized instruction for the remediation of the deficiencies. The IMTS program concentrated on the basic skills of reading, language, and arithmetic. Other components of the IMTS model included employability behaviors, complementary skills, and occupational exploration (Program Guide, 1992).

Federal vocational funds were used to by the state to provide grants to schools to set up IMTS programs throughout Florida. The University of West Florida (UWF) in Pensacola was given responsibility for the administration of the IMTS program model and John Phillips was named as Project Administrator. Regional staff training workshops on the IMTS programs and its materials were conducted by UWF. Committees of state IMTS practitioners were used to help in the development of the prescribing catalog, the identification of materials for the prescribing catalog, the development pretests and post-tests, MALD's (Modular Analysis of Learning Difficulties), etc. Even before the emphasis on the integration of academics into vocational education, IMTS practitioners were involved in the development of learning modules in vocational contexts for the IMTS programs.

The unique, self-paced, prescriptive nature of learning academics proved to work successfully with academically disadvantaged students as well as students with disabilities. Attention was paid to the learning styles of the students, and materials utilizing different modalities were used to teach the basic skills concepts in the IMTS programs. Students were able to experience success in areas of basic skills that they had not experienced prior to enrolling in the IMTS programs.

The differences in the role of learning manager as opposed to teacher also worked to promote a positive relationship between the students and the IMTS staff. The individualized approach worked well for high school students, adult students, and students with disabilities. Adults students who were working and supporting

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families, as well as attending vocational programs, were able to see the relevance in the academics they were studying and were able to utilize their time in the IMTS programs to achieve their goals. Students with disabilities were able to manage their academic prescriptions in a way that worked for their individual needs and circumstances.

In 1980, the Special Needs personnel working in the IMTS programs statewide decided to form an organization. The Florida Special Needs Association (FSNA) was created so that Special Needs personnel could share ideas and information in meetings with colleagues throughout the state. Several state and regional meetings were held in conjunction with the Florida Department of Education. The association later applied for and became a division of the Florida Vocational Association (FVA), now known as the Florida Association for Career and Technical Education (FACTE). It holds a seat on the FACTE board and participates in its annual conferences.

During the 1980s, the IMTS programs grew to over 100 sites throughout Florida. These sites included high schools, adult education centers, vocational-technical schools, community colleges, correctional facilities, juvenile justice programs, community-based organizations, and Indian reservations.

In 1984, the Vocational Education Act of 1963, which had provided the funding for the IMTS grants, was renamed the Carl D. Perkins Vocational and Technical Education Act. One of the important differences in this legislation was the “set aside” funding for special populations to ensure their ability to participate in vocational education. Special populations, as defined by the legislation, included individuals with disabilities, disadvantaged individuals, single parents and homemakers, and incarcerated individuals.

Also in 1984, a milestone for vocational preparatory instruction was reached. As a response to legislative concerns for accountability, Florida established Standards of Achievement. Section 1004.91 (amended in 2006) of the standards made Vocational Preparatory Instruction available for students entering career education programs who were deficient in basic skills. The statute required that students enrolled in certificate career education programs be given an entry-level examination within the first six weeks of admission into the program. Students lacking the minimal level of basic skills required for their program would be referred to vocational preparatory instruction or adult basic education for a structured program of basic skills. The statute further stated that students who did not complete the basic skills requirements in the state curriculum frameworks for their vocational programs could not receive a Certificate of Vocational Program Completion. Students with associate, baccalaureate, or graduate level degrees, as well as students who had passed national, state, or industry license exams were exempt from the requirements. Depending on local policy, some students with disabilities could be exempted also.

Because of their success with academically disadvantaged students, many school districts designated the IMTS Programs to provide the

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basic skills instruction for vocational students required by this statute. This, as well as funding incentives from the Perkins Act, caused a significant growth in the numbers of students enrolled in IMTS Programs.

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SYSTEM FOR APPLIED INDIVIDUALIZED LEARNING (SAIL)

The Florida Department of Vocational and Continuing Education decided to review the goals and objectives of the IMTS Programs in 1989. A state committee of Special Needs personnel, under the direction of the IMTS Project Administrator, John Phillips, met and discussed possible changes to the IMTS program model. They discussed deleting “manpower” from the program name and substituting “applied learning.” As a result of that meeting, the name of the program was changed from IMTS (Individualized Manpower Training System) to SAIL (System for Applied Individualized Learning). This was done to better reflect the changes in the Carl D. Perkins Vocational and Technical Education Act. At that point in time, there were 89 SAIL programs operating statewide in adult centers, community colleges, skill centers, high schools, vocational-technical centers, Indian Reservations, and correctional institutions.

In 1990, the Carl D. Perkins Vocational and Applied Technical Education Act Amendments removed the “set asides” for special populations. This legislation also included limited English proficient students and students in non-traditional programs, as well as disadvantaged students and students with disabilities, in the definition of “special populations.” SAIL labs, with technical assistance from Tallahassee, began to incorporate materials and services for limited English proficient students.

Even though the amendments remained focused on providing access to vocational education for special populations, the legislation had an impact on the SAIL programs utilizing “set aside” funding to help serve those students. Some schools used this legislation as an opportunity to redistribute their Perkins funds to other areas of vocational education.

However, the 1990 amendments also created the tech-prep program and explicitly mandated that vocational programs fully integrate vocational and academic education. Additionally, the 1991 Secretary’s Commission on Achieving Necessary Skills (SCANS) report addressed the need for schools to develop a new set of competencies and foundation skills to be taught in an integrated manner that reflected workplace contexts. The 1991 update of the Blueprint for Career Preparation emphasized the critical importance of making Florida’s educational core curriculum of basic skills relevant to the workplace. The concept of integration was further supported by the 1994 School-to-Work Opportunities Act. Because of these new mandates, SAIL programs were in a pivotal position to be an integral part of the integration of academics into vocational programs.

During this time, Special Needs personnel from the SAIL Programs and Career Development personnel from the public school sector found they were dealing with many of the same issues. They decided it would be helpful to collaborate on these new mandates, as well as the existing federal laws impacting individuals with disabilities

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(Individual with Disabilities Education Act (IDEA), the Developmental Disabilities Assistance and Bill of Rights Act, and the Americans with Disabilities Act (ADA) and the Federal Rehabilitation Act, Section 504). The two organizations representing these educators, the Florida Special Needs Association (FSNA) and the Florida Federation Division on Career Development and Transition (FFDCDT) worked together to sponsor a joint conference. The conference, "Visions," was held in February, 1994 at the Radisson Hotel in Orlando, Florida, to address these issues.

Weeks prior to the conference (on January 25, 1994), representatives from FSNA and the FFDCDT, as well as representatives from the Florida Department of Education, attended a meeting of the Florida Cabinet. It was in this meeting that Governor Lawton Chiles signed the first resolution recognizing the work of the two organizations and declaring February 21-25, 1994 (the week of the "Visions" Conference) as "Special Needs Week." Since then, the "Visions" Conference has remained a yearly event, providing a wealth of information to educators on support services, career development, and transition services for special needs populations.

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VOCATIONAL PREPARATORY INSTRUCTION (VPI)

In 1997, the Florida Senate passed a piece of legislation that changed things drastically in the SAIL labs. Senate Bill 1688 was passed to increase accountability and performance in adult and vocational programs. The following year, Senate Bill 1124, the Workforce Development Implementation Act, was passed that set up the Workforce Development Implementation System (WDIS). This system kept track of the data schools had to generate in order to obtain funding.

As a response to this new system of accountability, vocational preparatory instruction (SAIL) was moved under adult general education and the curriculum framework was divided into four courses with three literacy completion points (LCPs). These literacy completion points indicated the attainment of functional literacy in the basic skills of reading, mathematics, and language required for completion of a career/technical program. An LCP is achieved when a student masters the basic skills grade levels required for completion of the career/technical certificate program for his/her program (FDOE, 1998). Although documenting student progress was an integral part of the SAIL operation, it now became critical for funding. Full-time Equivalencies (FTEs) based on student enrollment for funding from the state were now replaced by LCPs. Literacy Completion Points were used to receive funding from Adult Education Section 231 funds.

In fiscal year 1999-2000, the System for Applied Individualized Learning (SAIL) was again renamed. The new name, Vocational Preparatory Instruction (VPI), was a better fit with the terminology in Senate Bill 1688. It also was clearer and easier for legislators, educators and students in recognizing the purpose of the program, which was to help students attain the academic and workforce readiness skills at the level of functional literacy required by their career/ vocational programs or higher. During this period of time (2000-2003), there were over 100 VPI programs listed in the state directory in community colleges, adult centers, high schools, Indian reservations, and technical/vocational-technical centers.

The most recent change to the VPI program occurred in fiscal year 2004-2005. In an effort to provide motivation and support to vocational students whose academic levels were below 6.0 grade level, new curriculum frameworks were developed and added to the VPI model. The new frameworks, Pre-VPI, emphasized the basic academic skills of reading, language, mathematics, and study/reference skills.

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SUMMARY

In its thirty-four year history in Florida, Vocational Preparatory Instruction (VPI), regardless of its name, has had a significant impact on vocational students throughout the state. This system of individualized, self-paced, prescriptive instruction still works remarkably well with high school students, adult students, ESOL students, and students with disabilities who are academically deficient in the academic areas needed for their career/vocational program.

Vocational Preparatory Instruction has evolved from stressing just the basic skills of reading, language, and mathematics to additionally covering the academic skills of science, social studies, and advanced mathematics, as needed. The original components are still included in the program, such as Complementary Skills. Occupational Exploration is now called Career Assessment and Employability Behaviors is now Workforce Readiness Skills. SCANS competencies, basic computer literacy and ELCATE (English Literacy for Career and Technical Education) are all components that have been added to the original model. ELCATE was known as VESOL prior to fiscal year 2004-2005.

However, the essential elements of the program remain the same:

- Interview
- Diagnose
- Prescribe
- Manage
- Evaluate

Because of these elements, the program has remained viable and effective. The personalized approach through the interview, where a unique and special relationship is established between the student and learning manager, is critical to the program. So many of the students referred to VPI programs have not experienced success in the past with academics for a variety of reasons. These students, regardless of their ages or circumstances, need the positive reinforcement of knowing that someone believes in their ability to be successful.

They also need to know that their time will not be wasted—that the academic skills they are learning are necessary and relevant to their goals. This is achieved through the diagnosis of academic skills, as well as learning styles, and the prescription that is generated. These show the student what is needed to achieve the skills required by their programs.

Students, especially adult students, like to be involved in the management of their programs. With the self-paced nature of the learning environment, students are only in competition with themselves. Students function with a great deal of independence in the learning lab, locating materials, and completing their

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assignments. The learning manager monitors the progress of the students and provides encouragement and assistance. Having a prescription with a concrete list of specific assignments makes it possible for students to know what is expected and manage their time accordingly to achieve their goals.

The constant evaluation of student progress and curriculum is what keeps the program viable and effective. If students are not progressing on the prescription, the learning manager knows to intervene to determine the cause. If needed materials are not available, the learning manager knows to develop or purchase them or ask for technical assistance from the state. If students from a career/vocational program are not being successful in specific areas of their program, the learning manager knows to work with the career/vocational instructor to determine what is needed to help solve the problem. Student success benefits everyone.

Regardless of the impact of legislative changes on the educational requirements for career/vocational programs, Vocational Preparatory Instruction has continued to “reinvent” itself to meet the challenges, while staying grounded in the essential elements that makes it work. That is why it is just as relevant and necessary today, if not more so, than it was in 1972--- when the first program in Florida was started.

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POST-TEST

1. Where was the first IMTS lab located?
 - a) Miami-Dade Community College
 - b) Lively Vocational-Technical College
 - c) West Palm Beach Adult Center
 - d) Lawtey Correctional Institution

2. How did the IMTS program start in Florida?
 - a) legislative act
 - b) federal demonstration project
 - c) private grant
 - d) None of the above

3. In the beginning, who had responsibility for the development and supervision of the IMTS project?
 - a) Florida Department of Education
 - b) University of Central Florida
 - c) University of West Florida
 - d) None of the above

4. What major changes in Carl Perkins funding were created by the 1990 amendments?
 - a) Tech prep funding
 - b) ESOL students included in special populations
 - c) "Set asides" removed
 - d) Mandated the integration of academics with vocational education
 - e) All of the above

5. What did the Florida Standards of Achievement require of vocational programs?
 - a) Vocational students had to be given basic skills tests within six week of entering a vocational program
 - b) Students lacking in basic skills required by their program were referred to vocational preparatory instruction or adult basic education

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- c) Students could not receive a vocational certificate of program completion without satisfying the basic skills requirements for their program
- d) All of the above
- e) None of the above
6. List the five essential elements of Vocational Preparatory Instruction Programs.
7. What is the significance of a Literacy Completion Point (LCP)?
- a) Charts student progress
- b) Marks academic levels of student
- c) Required for funding
- d) None of the above
8. The VPI Framework is divided into four courses with how many LCP's?
- a) 5
- b) 8
- c) 3
- d) 12
9. When was the Florida Special Needs Association (FSNA) started?
- a) 1972
- b) 1980
- c) 1989
- d) 1994
10. Name the eight components of a VPI Program.

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Appendix A

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STUDENT PERFORMANCE STANDARDS

Occupational Area: Instructional Support Services
Program Title: Vocational Preparatory Instruction (VPI),
Comprehensive
Postsecondary Number: S990001
Course Number: S990041
CIP Number: 1532.010503

Literacy Completion Points A, B and/or C

CAREER ASSESSMENT

01.0 IDENTIFY VOCATIONAL INTEREST AND APTITUDE IN MAKING CAREER CHOICES--The student will be able to:

- 01.01 Assess his/her learning style.
- 01.02 Assess his/her occupational interest and aptitudes.
- 01.03 Relate individual interest to specific occupational areas.
- 01.04 Explore occupational careers and goals in various clusters.
- 01.05 Establish educational and career goals.

BASIC SKILLS: READING

02.0 DEMONSTRATE BASIC READING CATEGORY SKILLS AND SUBSKILLS APPROPRIATE TO THE VOCATIONAL JOB PREPARATORY PROGRAM--The student will be able to:

- 02.01 Identify synonyms. **W II.3**
- 02.02 Identify antonyms. **W II.3**
- 02.03 Identify homonyms. **W II.3**
- 02.04 Identify affixes. **W II.3**
- 02.05 Interpret the meaning of words in context. **R I.1.2**
- 02.06 Analyze passage details. **R I.2.1**

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- 02.07 Interpret the feelings, motives, or traits of characters in a passage. **R I.2.2, I.2.5**
- 02.08 Identify the main idea. **R I.2.1**
- 02.09 Identify cause-and-effect relationships. **R I.2.2, I.2.5**
- 02.10 Interpret structural techniques of writing. **R I.2.1**
- 02.11 Differentiate between various forms of writing such as facts/opinion/fiction. **R I.2.3**

BASIC SKILLS: LANGUAGE

- 03.0 DEMONSTRATE BASIC LANGUAGE CATEGORY SKILLS AND SUBSKILLS APPROPRIATE TO THE VOCATIONAL PREPARATORY PROGRAM--The student will be able to:
 - 03.01 Demonstrate proper usage of punctuation. **W II.1.3**
 - 03.02 Identify the correct use of capital letters. **W II.1.3**
 - 03.03 Demonstrate proper usage of troublesome words. **W II.1.3**
 - 03.04 Demonstrate proper usage of common and proper nouns, pronouns, singular and plural forms. **W II.1.3**
 - 03.05 Distinguish a complete sentence from sentence fragments and run-on sentences. **W II.1.2, II.1.3**
 - 03.06 Demonstrate the correct use of various sentence types. **W II.1.2, II.1.3**
 - 03.07 Demonstrate the proper usage of adjectives and adverbs. **W II.1.3**
 - 03.08 Demonstrate the proper usage of regular and irregular verbs. **W II.1.3**
 - 03.09 Demonstrate the ability to spell words correctly. **W II.1.3**
 - 03.10 Demonstrate the proper use of other parts of speech. **W II.1.3**
 - 03.11 Demonstrate appropriate word and syllable stress and intonation. **LVS III.3.1**
 - 03.12 Demonstrate the use of multi-media communication tools. **LVS III.3.3, L IV.2.4, W II.2.4**
 - 03.13 Develop the ability to ask and respond to questions appropriately. **LVS III.3.2**
 - 03.14 Distinguish between personal and professional language. **LVS III.3.4**
 - 03.15 Demonstrate proper paragraph formation. **W II.1.2**

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BASIC SKILLS: MATHEMATICS

- 04.0 DEMONSTRATE BASIC MATHEMATICS SKILLS AND SUBSKILLS APPROPRIATE TO THE VOCATIONAL PREPARATORY PROGRAM--The student will be able to:
- 04.01 Change words to numbers. **M I.1.1**
 - 04.02 Identify place value. **M I.1.4**
 - 04.03 Demonstrate the ability to round numbers. **M 4.1**
 - 04.04 Perform basic operations with whole numbers. **M I.1.4**
 - 04.05 Perform basic operations with common fractions. **M I.1.4**
 - 04.06 Perform basic operations with decimals. **M I.1.4**
 - 04.07 Identify mathematics symbols and geometric forms. **M III.1.1**
 - 04.08 Perform basic operations with percentages. **M I.3.1**
 - 04.09 Interpret basic charts, graphs and tables. **M V.1.1**
 - 04.10 Perform basic map reading techniques. **M IV.1.1**
 - 04.11 Use conversion procedures in both standard and metric systems. **M II.2.1, II.2.2**
 - 04.12 Apply concepts of measurements. **M II.1.1, II.2.3**
 - 04.13 Perform basic operations with signed numbers. **M IV.1.2**
 - 04.14 Demonstrate the ability to solve algebraic equations. **M IV.2.1, IV.2.2**
 - 04.15 Apply basic geometric concepts. **M III.1.1**
 - 04.16 Demonstrate problem-solving techniques. **M I.3.1, I.2.3**

STUDY AND REFERENCE SKILLS

- 05.0 DEMONSTRATE BASIC STUDY AND REFERENCE SKILLS AND SUBSKILLS APPROPRIATE TO THE VOCATIONAL PREPARATORY PROGRAM--The student will be able to:
- 05.01 Request oral and written directions. **R I.1.1, LVS III.1.1, LVS III.1.3**
 - 05.02 Follow oral and written directions. **R I.1.1, LVS III.1.1, LVS III.1.3**
 - 05.03 Identify and use a variety of resources and reference materials. **R I.2.6**

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05.04 Interpret graphs, charts, diagrams, maps and tables. **RI.1.2**

05.05 Develop note-taking skills. **RI.1.4**

05.06 Develop test-taking skills. **RI.2.7, I.2.8**

05.07 Develop study skills. **RI.2.6**

WORKFORCE READINESS SKILLS

06.0 DEMONSTRATE ACCEPTABLE JOB ACQUISITION/JOB RETENTION SKILLS--The instruction in employability skills is based on individual need and may include, but is not limited to the following. The student will be able to:

06.01 Prepare a personal data sheet.

06.02 Prepare a resume.

06.03 Identify job announcement sources.

06.04 Prepare a cover letter.

06.05 Demonstrate the ability to correctly complete an employment application.

06.06 Demonstrate appropriate interviewing techniques.

06.07 Prepare for applicable employment tests.

06.08 Demonstrate the ability to complete work-related documents.

06.09 Demonstrate an understanding of appropriate job behaviors.

06.10 Interpret company policies and procedures.

06.11 Demonstrate knowledge of resignation procedures

COMPLEMENTARY SKILLS

07.0 DEMONSTRATE AWARENESS OF COMPLEMENTARY SKILLS--The instruction in complementary skills is based on individual need and may include, but is not limited to the following. The student will be able to:

07.01 Identify sources of community services agencies.

07.02 Demonstrate consumer awareness.

07.03 Identify principles of business organization and management.

07.04 Practice health maintenance skills.

07.05 Demonstrate knowledge of responsible citizenship.

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- 07.06 Demonstrate a basic understanding of the governmental structure.
- 07.07 Recognize fraudulent practices.
- 07.08 Demonstrate cultural and environmental awareness.

SCANS COMPETENCIES

- 08.0 DEMONSTRATE ACCEPTABLE SCANS BEHAVIORS -- The instruction in workforce readiness skills is based on individual need and may include, but is not limited to the following. The student will be able to:
 - 08.01 Identify, organize and use resources appropriately.
 - 08.02 Work with each other cooperatively and productively.
 - 08.03 Acquire and use information.
 - 08.04 Understand social, organizational, and technological systems.
 - 08.05 Work with a variety of tools and equipment.

BASIC COMPUTER LITERACY

- 09.0 DEMONSTRATE BASIC COMPUTER LITERACY SKILLS AND SUBSKILLS APPROPRIATE TO THE VOCATIONAL JOB PREPARATORY PROGRAM--The instruction in basic computer literacy is based on individual need and may include, but is not limited to the following. The student will be able to:
 - 09.01 Define computer terms.
 - 09.02 List practical applications of the computer in the workplace.
 - 09.03 Develop proficiency in keyboarding.
 - 09.04 Demonstrate an understanding of operating systems.
 - 09.05 Demonstrate an understanding of software applications.
 - 09.06 Develop Internet/network literacy.

SCIENCE SKILLS

- 10.0 DEMONSTRATE BASIC SCIENCE SKILLS AND SUBSKILLS APPROPRIATE TO THE VOCATIONAL JOB PREPARATORY PROGRAM--The instruction in science competencies is based

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on individual need and may include, but is not limited to the following. The student will be able to:

- 10.01 Use the scientific method to solve problems.
- 10.02 Relate career opportunities to the sciences.
- 10.03 Describe how the life sciences interact with technology and society.
- 10.04 Describe cell function and structure in healthy and diseased tissue.
- 10.05 Identify and describe the functions of major human systems.
- 10.06 Identify the earth's structure and describe the forces that cause change.
- 10.07 Differentiate between and list examples of chemical and physical change.
- 10.08 Identify various methods of measuring time.
- 10.09 Describe the interrelationships of force, work, energy and motion.
- 10.10 Identify the simple machine components of complex machines.
- 10.11 Identify the laws of motion.
- 10.12 Describe the basic characteristics of the three states of matter.
- 10.13 Demonstrate knowledge of the periodic table.
- 10.14 Define the properties of light and sound.
- 10.15 Explain the differences between weight and mass, speed and velocity, and forces and motion.
- 10.16 Explain conservation of mass.
- 10.17 Apply the mole concept.
- 10.18 Describe Newton's laws of motion and gravitation.
- 10.19 Apply the First and Second Laws of Thermodynamics.
- 10.20 Apply Joule's Law and Ohm's Law in problem solving.

SOCIAL STUDIES SKILLS

- 11.0 DEMONSTRATE BASIC SOCIAL STUDIES SKILLS AND SUBSKILLS APPROPRIATE TO THE VOCATIONAL JOB PREPARATORY PROGRAM--The instruction in social studies competencies is based on individual need and may include, but is not limited to the following. The student will be able to:

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- 11.01 Demonstrate a basic understanding of the contemporary social issues that affect American political, economic and social systems.
- 11.02 Explain the basic economic system.
- 11.03 Describe how resources are allocated and income is distributed through the operation of supply and demand and through governmental policies.
- 11.04 Describe relationships among employment, inflation, and monetary and fiscal policy and the importance of these relationships for economic stability and growth.
- 11.05 Recognize the relationship of government, labor, and competition to the free enterprise system.
- 11.06 Describe current and historic events from the perspective of diverse cultural and ethnic groups.
- 11.07 Apply processes of critical and creative thinking to analyze the effects of major American traditions (political, economic, and social) on historical patterns of development in the United States.
- 11.08 Recognize the relationship of government, labor and competition to the free enterprise system.
- 11.09 Demonstrate knowledge and proficiency in the use of maps and globes.
- 11.10 Describe the relationship between the individual and society.
- 11.11 Describe the check and balance system of the three branches of government.
- 11.12 Describe the major domestic and foreign problems facing our nation today.
- 11.13 Describe the importance of participation in community service and civic improvement in political activities.
- 11.14 Demonstrate a basic understanding of the American legal, political and economic systems and traditions.
- 11.15 Describe basic criminal law terms, criminal offenses and classifications of crimes.
- 11.16 Describe the nature of the law in a free society and the constitutional rights and safeguards of the individual.
- 11.17 Describe the differences between inherited and acquired behaviors.
- 11.18 Distinguish between normal and abnormal behavior.
- 11.19 Use appropriate vocabulary, geographical, reference/study, and critical thinking and decision-making skills.

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ADVANCED MATH

- 12.0 DEMONSTRATE ADVANCED MATH SKILLS AND SUBSKILLS APPROPRIATE TO THE VOCATIONAL JOB PREPARATORY PROGRAM--The instruction in advanced math competencies is based on individual need and may include, but is not limited to the following. The student will be able to:
- 12.01 Apply principles of algebra to technically related problems.
M IV.1.1, IV.1.2
 - 12.02 Apply principles of geometry/analytic geometry to technically related problems. **M III.3.1**
 - 12.03 Apply principles of trigonometry to technically related problems. **N/A**
 - 12.04 Apply principles of calculus to technically related problems. **N/A**
 - 12.05 Demonstrate ability to operate a scientific calculator.
M I.3.3

VESOL

- 13.0 DEMONSTRATE VESOL SKILLS AND SUBSKILLS APPROPRIATE TO THE VOCATIONAL JOB PREPARATORY PROGRAM--The instruction in VESOL literacy is based on individual need and may include, but is not limited to the following. The student will be able to:
- 13.1 Demonstrate proficiency in listening components of the English language.
 - 13.2 Demonstrate proficiency in oral components of the English language.
 - 13.3 Demonstrate proficiency in reading components of the English language.
 - 13.4 Demonstrate proficiency in writing components of the English language.
 - 13.5 Develop the ability to ask and respond to questions.
 - 13.6 Demonstrate ability to follow directions, both oral and written.
 - 13.7 Demonstrate an awareness of the diversity of cultures.
 - 13.8 Demonstrate knowledge of responsible citizenship.
 - 13.9 Demonstrate appropriate workplace behaviors.

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Appendix B

Curriculum Framework

Program Title:	Pre-Vocational Preparatory Instruction (Pre-VPI)	
Program Type:	Adult General Education	
Occupational Area:	Instructional Support Services	
Components:	N/A	
	<u>Secondary</u>	<u>PSAV</u>
Program Numbers:	S990000	
CIP Number:	1532010504	
Grade Level:		30, 31
Length:	Variable, non-credit	
Certification:	ANY FIELD WHEN CERT REFLECTS BACHELOR OR HIGHER G WITH BACHELOR/HIGHER DEGREE	
Facility Code:	271	

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- I. **PURPOSE:** The purpose of this program is to prepare students, with basic skills levels below 6.0, for academic, technical, and personal success. This program strives to inspire and motivate students to become productive, self-sufficient members of society. The VPI system is based upon the assessed needs of the individual and the academic and employability requirements related to Florida's comprehensive Career Education programs. It provides:
- 1) Career assessment designed to assist persons with special needs in identifying career interests, temperament, aptitudes, and learning styles.
 - 2) Individualized basic skills related instruction to educationally disadvantaged students (including individuals with Limited English Proficiency) whose basic skills deficiencies may prevent success in vocational job preparatory programs or prevent completion of licensure vocational job preparatory programs of their choice.
 - 3) Employability behavior instruction for job acquisition and job retention.
 - 4) Secretary's Commission on Achieving Necessary Skills (SCANS) competency training.

The program encompasses a combination of the following instructional components:

- A. CAREER ASSESSMENT AND/OR REFERRAL
- B. BASIC SKILLS RELATED INSTRUCTION
 - 1) Reading
 - 2) Language
 - 3) Mathematics
 - 4) Study and Reference Skills
- C. WORKFORCE READINESS SKILLS (offered under postsecondary program number 9900070)
- D. COMPLEMENTARY (LIFE) SKILLS
- E. SCANS
- F. BASIC COMPUTER LITERACY

II. **PROGRAM STRUCTURE**: Program procedures encompass the following:

- 1. Interviewing and goal setting.
- 2. Diagnosis of learning difficulties: basic skills assessment is performed for each student by personnel trained in VPI concepts and program procedures to identify needs in each of the instructional components. The basic skills assessment instruments are listed in Rule 6A-10.040, FAC.
- 3. Prescribing individualized instruction.
- 4. Managing learning activities.
- 5. Evaluating student progress.

III. **SPECIAL NOTE**: The Pre-VPI program is a non-graded system.

Laboratory Activities: The program is characterized by open entry/open exit, self-paced instructional modules, flexible schedules, and performance-based evaluation. As a result, a variety of multimedia resources are used in the VPI laboratory setting. Equipment used may include computers, tape recorders, cassette players, videos, CD-ROMs, interactive videos, voice synthesizers, integrated work stations, screen magnifiers, talking books, "Visipitch," etc.

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Adult students with disabilities must self-identify and request such services. Students with disabilities may need accommodations in such

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areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

- IV. **INTENDED OUTCOMES**: After successfully completing appropriate course(s) for each literacy completion point of this program, the student will be able to perform the following:
- 01.0 Identify interest and aptitude in making career choices.
 - 02.0 Demonstrate basic reading skills.
 - 03.0 Demonstrate basic language skills.
 - 04.0 Demonstrate basic mathematics skills.
 - 05.0 Demonstrate study and reference skills.
 - 06.0 Practice job acquisition and job retention skills.
 - 07.0 Demonstrate awareness of complementary (life) skills.
 - 08.0 Apply SCANS competencies.
 - 09.0 Demonstrate basic computer literacy.

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Appendix C

Pretest Answers

1. b
2. a
3. c
4. a
5. b
6. e
7. a
8. a
9. e
10. c

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Appendix D

Post-test Answers

1. b
2. b
3. c
4. e
5. d
6. Interview, Diagnose, Prescribe, Manage, Evaluate
7. c
8. c
9. b
10. Basic skills of reading, language and mathematics
Academic skills of science, social studies, and advanced mathematics
Complementary Skills
Occupational Exploration/Career Assessment
Employability Behavior/Workforce Readiness Skills
SCANS competencies
Basic computer literacy
VESOL

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