

DOCUMENT RESUME

ED 316 726

CE 054 393

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TITLE Cost Analysis of Apprenticeship Programs in Florida's School Districts and Community Colleges.
INSTITUTION Florida State Univ., Tallahassee. Center for Policy Studies in Education.
SPONS AGENCY Florida State Dept. of Education, Tallahassee.
PUB DATE Dec 89
NOTE 186p.; Appendixes E through J present various legibility problems.
PUB TYPE Reports - Research/Technical (143) --
 Tests/Evaluation Instruments (160) --
 Legal/Legislative/Regulatory Materials (090)

EDRS PRICE MF01/PC08 Plus Postage.
DESCRIPTORS *Apprenticeships; *Community Colleges; *Cost Effectiveness; *Educational Finance; On the Job Training; Program Administration; *Public Schools; Secondary Education; Two Year Colleges
IDENTIFIERS *Florida

ABSTRACT

A study of Florida's apprenticeship programs was conducted to provide the State Department of Education with relevant program and cost data and also with a discussion of related program issues. Data were collected on site visits to 11 local educational agencies selected for their range of representation of institution size, program size, geographical location, institution type, and unique program characteristics or offerings. A limitation of the study was that, because Florida's funding formulas and operational reporting formats are not organized pragmatically, an accurate programmatic cost analysis is not possible. Therefore, the figures reported were only estimates. The following are among the conclusions reported: (1) in public educational agencies, more funds were attributed than expenses incurred for apprenticeship programs; (2) there is a lack of clear policies and guidelines on the functions for which the public school systems have responsibility and funding; and (3) current program structures seem to permit potential funding abuse because adequate mechanisms to assure public supervision and control of funding disbursements were not in place. (The report includes 21 tables and figures, 16 references, and 10 appendices comprising more than half of the document and containing research team itineraries for state interviews and site visits, letters and research instruments, various kinds of sample information including information on apprenticeship and on-the-job training programs, and national and state laws regarding apprenticeship.) (CML)

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COST ANALYSIS OF APPRENTICESHIP PROGRAMS IN FLORIDA'S SCHOOL DISTRICTS AND COMMUNITY COLLEGES

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EXECUTIVE SUMMARY

Purpose

The Department of Education, Division of Vocational, Adult and Community Education was directed in the 1989 General Appropriations Act to conduct a cost analysis of apprenticeship programs in proviso language, accompanying Item 534:

"From the funds appropriated in Specific Appropriation 534 for administration of vocational programs, the Department of Education shall conduct a cost analysis of apprenticeship programs and shall recommend to the President of the Senate and the Speaker of the House of Representatives by January 1, 1990, an appropriate method and level of funding." (emphasis added)

The cost analysis presented in this document was designed to provide relevant program and cost data and a discussion of related program issues to the Department of Education as one information source from which the Department will make recommendations to the Senate and the House of Representatives.

Limitations

In the State of Florida, the Department of Education's funding formulas and operational reporting formats are not organized programmatically. An accurate programmatic cost analysis is therefore impossible. The figures reported in this document are best estimates and provide ball-park figures only, because of the large margins of error. Narrative interpretation of the figures are therefore inseparable from the figures and tables themselves. It so follows that figures quoted from this report must be accompanied by the corresponding interpretive information and used in conjunction with an understanding of the overall program and funding structures of education in the State of Florida.

Methodology

The findings and conclusions of this study were based on analyses of data from twelve local educational agencies selected for their range of representation of institutional size, program size, geographical location, institutional type (school district or community college) and unique program characteristics or offerings. Five community colleges and seven school districts were selected. One college selected had no apprentices, so was dropped for the detailed analyses in Chapter IV. The remaining eleven sites were visited by a senior researcher. The research team met during the final report writing to verify all qualitative statements as supportable across all sites.

Conclusions

The following conclusions are grouped by topic: funding, program operation, funding sponsoring agencies audit of apprenticeship costs and technical points:

Funding. In public educational agencies, more funds were attributed than expenses incurred for apprenticeship programs.

1. Local educational institutions operate within the current state guidelines which allow for up to 25 hours per week (up to 50 weeks per year) per apprentice to be counted for FTE purposes.
2. The Legislature might consider creating a separate category for apprenticeship for accounting and funding purposes.
3. If the Legislature decides that the state should provide support for on-the-job training through the Department of Education, the number of hours of on-the-job training that can be counted for FTE purposes may need to be limited in ways responsive to different local and program needs.
4. If the Legislature provides a clear mandate on the goals to be achieved by school districts' and community colleges' participation in apprenticeship programs, it may be possible for the Departments of Education and Labor, without specific changes in the legislation, to develop clearer policies for the operation of the apprenticeship programs, including funding.

Program Operation. There appears to be a lack of clear policy and guidelines on the functions for which the public school systems have responsibility and, therefore, funding.

5. Florida's practice of having public education funds pay for coordination of on-the-job training may be exemplary or it may be that such coordination should not be a responsibility of public education.
6. Statutory and regulatory language is needed to spell out more clearly the roles of and relationships among the Bureau of Apprenticeship, the Department of Education, sponsors and participating employers.

Funding Sponsoring Agency. Although close cooperation between educational agencies and sponsors of apprenticeship is commendable, the researchers questioned whether adequate mechanisms were in place to assure public supervision and control of educational funds dispersed. Current program structures seem to allow potential for abuse.

7. For the protection of the State Department of Education and the local education agencies, a clear policy regarding the role and function of staff and equipment housed off-site should be developed along with a plan of supervision by the educational agency.

Audit of Apprenticeship Costs

8. The State of Florida may wish to conduct a more detailed study of expenditures given a longer time line, which could offer greater accuracy and detail to decision makers. Also it would be advisable to survey other states to see how they have handled some of the problems facing Florida's apprenticeship programs today.

Technical Points

9. The community colleges reporting system should review its policies governing the reporting of apprentices in the 1.26.03 category, state and local officials all stated that apprenticeship is as a job-preparatory program.
10. Policies regarding exemption of apprentices from paying fees should be examined for consistency and equity between school district and community college sectors.
11. The number of years of exempt status for apprentices should be clarified. Currently some school personnel interviewed thought that a two-year ceiling was placed on the exemption. No local official was found to abide by such a restriction, if it applies to apprentices.

I. INTRODUCTION

Apprenticeship dates back to the middle ages as a way to prepare skilled workers. However, the nature of the programs and the key participants in providing apprenticeship have changed throughout the years. The system has evolved into a highly formalized system with shared responsibility and leadership among federal, state and local public agencies and the private sector.

Key to the operation of the program is the belief that occupational skills can be learned best on the job under a qualified worker usually referred to as a journeyman. This then dictates that the apprentice (trainee) be a full time employee working under the direction of a journeyman who is responsible for the apprentices on-the-job training.

The apprenticeship approach to training has recognized also that it is necessary and appropriate to provide the apprentice with theoretical or technical knowledge related to the occupation which may most effectively be provided in correspondence approach. This instruction, which often includes the applications of math, science, technology and safety for the occupation has usually been considered the role of public education working with the sponsoring apprenticeship group. Federal standards require that at least 144 hours per year of related instruction be provided. However, the state apprenticeship authority and/or the sponsoring agency may require additional hours.

Essential to the apprenticeship program at the local level are indentured apprentices and apprentice program sponsors or committees. In Florida the program sponsor can be a committee, a group of employers, an employer, a group of employees or any combination thereof. It is this sponsoring group that is charged with the responsibility to run the program including adapting national and state standards for apprenticeship to the local needs for skilled craftspersons, as reviewed and authorized by the Florida Bureau of Apprenticeship. It is the sponsor who is charged with the responsibility to see that apprentices receive appropriate training by the employer or employers and that at least the minimum number of required hours of appropriate related instruction is acquired by each apprentice. Other functions within the sponsors jurisdiction include selection and indenturing apprentices, supervising apprentices, establishing training curricula and certifying when apprentices have reached journey status.

Each apprentice enters into a contractual agreement (indenture) with the employer of the sponsoring agency where the employer agrees to provide appropriate opportunities for on-the-job training under a qualified journeyman, and the apprentice agrees to work for the employer and to attend related instruction. Hours of on-the-job instruction in each phase of the occupation are a part of the indenture as well as wage rates, usually given as a percentage of the journeyman rate for each phase of the training.

Purpose of Report

Some school districts and community colleges in Florida have recently expanded their involvement in apprenticeship programs to include monitoring and supervision of on-the-job training. The institutions report both related classroom instruction and on-the-job training hours of service to apprentices for funding

purposes. This practice has led to a need for clarification of the expenses incurred by the educational institutions in providing these services and the nature of these new services.

The purpose of this report is two-fold:

1. To document the related instruction services provided by the school districts and community colleges to apprenticeship programs and the costs of providing those services, and
2. To document the on-the-job training services provided by the school districts and community colleges to apprenticeship programs and the costs of providing those services.

This report will also provide comparative analyses of the following data:

1. How the documented costs compare to revenue attributable to the programs,
2. How the costs and revenue for related instruction compare to those of on-the-job training coordination, and
3. How costs and revenues for the school districts compare to those of the community colleges.

Background Issues

During the course of interviews with state and local officials and a review of Florida Statutes and the Florida Administrative Code, the following issues arose that required clarification for state policy makers to formulate sound policies for the future.

What are the roles and functions of public education in apprenticeship programs in Florida in relation to the roles and functions of the Bureau of Apprenticeship and the apprenticeship program sponsor?

Traditionally, the provision of related instruction and its coordination with job experiences was the main role accepted by the schools. Coordination was understood to mean matching related academic competencies with the actual skills needed on the worksite for a particular occupation. Florida Statute, Chapter 446.051 encodes this traditional relationship:

1. The administration and supervision of related and supplemental instruction for apprentices, coordination of such instruction with job experiences, and selection and training of teachers and coordination for such instruction, all as approved by the registered program sponsor, shall be the responsibility of the appropriate vocational education institution.
2. The appropriate vocational education institution shall be encouraged to cooperate with and assist in the providing to any registered program sponsor facilities, equipment and supplies, and instructors' salaries for the performance of related and supplemental instruction associated with the registered program.

What is the appropriate fiscal policy structure to ensure levels of revenue generation commensurate with the operational needs of quality apprenticeship programs in the state?

While the Florida funding formulas for revenue generation do not treat apprenticeship as a funding category, there seems to be the expectation that there should be a relationship between the costs of the program and the revenues attributable to the program. Also, there is some question about the level of responsibility and financial participation that should be assumed by the various contributors to the program. To sharpen the focus, the question of the role of the school in on-the-job training must be addressed along with the level of revenue that would be appropriate for this role.

In calculating the FTE earned from registered apprenticeship programs, what are appropriate policies regarding the related instruction component and the on-the-job training component? In the absence of clear directives from the state some public educational institutions have claimed what appears to be high numbers of FTE vis-a-vis the level of effort provided to the apprentice. The policy and practice of reporting hours of related instruction is relatively straight forward and similar to other vocational education instruction; i.e. classroom-based with an instructor physically in the classroom for specified number of hours. The policy and practice of reporting on-the-job training hours is less clear. Apprentices all work a 40 hour week. Prior to the twenty-five hour per week cap initiated by the Legislature in the 1988 session, some school districts and colleges counted all forty hours an apprentice spent on the job per week for 50 weeks per year, plus the hours spent in related classroom instruction. Some districts still report this many hours, but none are receiving funding for over the current maximum of 25 hours per week, for 50 weeks per year. The question still remains: What should be the appropriate level of support provided by the State in recompense for the educational institution's contribution to on-the-job training and how should that "level" be specified? Also, if on-the-job training FTE's are to be counted based on services delivered, then another parallel question emerges: What is an adequate and reasonable ratio for the number of enrolled registered apprentices to one coordinator for on-the-job training support?

Also affecting the aggregate FTE counts is the issue of registered and "unregistered" apprentices. The figures vary quite widely between the Department of Labor and Employment Security and the Department of Education data. This is a concern for many state level officials in both departments.

Another challenging area for accounting for program expenditures and revenues (particularly in light of the registered/unregistered concern) is the state regulations regarding student school fees, the waiver and exemption of student fees, and in-kind services in exchange for the exemption of school fees.

What is the appropriate level of costs to the State relative to the contribution of other actors, including the apprenticeship program sponsor and the participating contractors?

Data relevant to this question were not captured in this study in the time frame allotted. The researchers did find in the Florida Administrative Code (38C-16.004 Standards of Apprenticeship (2)(x)), however, a clause requiring "a funding formula providing for the equitable participation of each participating employer in funding of the program" to be furnished to the Bureau of Apprenticeship. Further investigation would be necessary to (1) determine the actual operationalization of

this clause and the potential extension of this clause and (2) to establish a procedure to include participating vocational education institutions for both related instruction and on-the-job training program components.

Should the role of public education vary by program sponsor? Concurrently, should the level of funding provided from the state through the Department of Education vary by occupation or program sponsor?

This is related to the previous question. Some programs in the state provide a great deal of financial support to the sponsor, at the sponsor's request, while other programs provide very little financial support to the sponsor. At times this variable level of support accommodates varying levels of ability to pay across the state's wide range of economic and industrial conditions. At other times, this variable financial support may allow a questionable shift of financial burden off industry and onto the public institution. Such practices were known to include the use of Department of Education funds to buy equipment which were housed in union or contractor facilities and not available to other students in public facilities. It was also suspected that financial support from public education has been used to cover sponsors' training director's salaries and operating expenses of the sponsoring committee.

Sample Selection and Research Methodology

The study focused primarily on gathering descriptive and quantitative program data from a sample of twelve public education institutions providing services to apprenticeship programs in the state. The research team made an effort to place detailed data of the operations and finances of programs at these sites within the context of historic, legal and background literature pertaining to apprenticeship.

The short time frame for the study and the resources available suggested that the best way to accomplish the study was through a sampling of community colleges and school districts providing apprenticeship programs. The sampling was purposive including both community colleges and school districts with consideration given to the following factors in the selection: size of institution, size of apprenticeship program, geographical area, and programs identified as having unique characteristics or offerings. The wide diversity in the state would justify studying many more sites than was possible in the time allowed for this study.

Twelve sites were selected: seven school districts and five community colleges. The statewide data on the apprentice enrollment for the 1988-89 school year was complete for the school districts at the time of the sample selection. This, however, was not true for the community colleges. Some of the colleges reported apprentices on their supplemental vocational enrollment reporting worksheets while other colleges, who did not report apprentices separately, were known by state officials to have operating apprentice programs. There was general consensus that fewer colleges than school districts had apprenticeship programs. Therefore, the sample included more districts than colleges. The sample for the study included:

Districts

Dade County School District
Hillsborough County School District
Lake County School District
Martin County School District
Orange County School District
Polk County School District
St. Johns County School District

Colleges

Florida Community College at Jacksonville
Indian River Community College
Okaloosa-Walton Community College
Pasco Hernando Community Colleges
(selected but had no apprenticeship programs)
Seminole Community College

The researchers met with state officials and legislative staff for briefings on background issues and requirements of the study. At this time, the researchers gathered available information on the funding and cost structures of education in Florida and on the available statewide totals of registered and enrolled apprentices.

As a result of these initial meetings, the team decided to conduct a statewide survey of community colleges to request the total number of apprentices served by occupational trade (since the data were not available at the state level) in addition to selecting twelve sites in the state for in-depth site visits for interviews, data review and observations described above.

Prior to the research team's visits, district and college officials were asked to provide information on eleven questions (see Appendix B). Due to the short time span of the study it was impossible for the sites to make these data available to the study team before they arrived on site. The researchers conducted interviews with district and college officials, apprenticeship program directors and coordinators, program sponsors and apprentices. The researchers also toured the on- and off-campus facilities and attended apprenticeship classes in the evenings.

In general, site visits were conducted to seek information on apprenticeship programs as operated by the various institutions. In particular, the researchers sought information on the functions carried out by each of the main contributors in relation to the participation of the education agency. Central to the study was the concern for the financing and expenditures of the programs. While program quality was not a prime part of the study, observations, class and site visits, student interviews and review of documents and related instructional materials provided the basis for qualitative statements reported in Chapter Four. A list of persons interviewed at each site is included in Appendix B.

The quantitative data were collected at the time of the site visit. During the data processing stage, site contact persons were consulted for missing data and for data clarification. State level data were compared to self-reported data for validation whenever possible. Descriptive data from the sites on program operation are reported in Chapter Four. Cost data and comparative analyses are reported in Chapter Five. Conclusions are drawn in the final chapter, Chapter Six.

II. LEGAL BASIS OF APPRENTICESHIP

As early as 1911, states in the nation began to enact legislation promoting organized systems of apprenticeship. In 1934 the Federal Committee on Apprenticeship was established by a Presidential Executive Order for the purpose of advising the Secretary of Labor on national policy for apprenticeship. In 1937 the United States Congress passed the National Apprenticeship Act, known as the Fitzgerald Act. The National Apprenticeship Act of 1937 and its subsequent amendments provides the legal basis for apprenticeship at the federal level (See Appendix I).

At the state level, Florida's policies on apprenticeship are specified in Chapter 446.011-092 of the Florida Statutes (Appendix I). This statute provides for authorities and responsibilities of the Department of Labor and Employment Security, the State Apprenticeship Council, the Department of Education and the apprenticeship sponsors. Authorities and responsibilities of these parties as well as the relationships among them as specified in Chapter 446, F.S. are outlined below.

Structure of Apprenticeship

Federal Bureau of Apprenticeship and Training. The Federal Bureau of Apprenticeship and Training is a service-oriented organization which provides technical assistance to program sponsors and assists potential sponsors to design and implement new programs. The Federal Committee on Apprenticeship together with apprenticeship advisory committees, which are composed of national and international unions and national employer organizations, has historically advised the Bureau on national policy and relevant industry guidelines for apprenticeship programs. The Bureau, in turn, provides representatives to the state and local levels. The Bureau is also responsible for compiling and disseminating information about apprenticeship to individuals, their families, educational institutions, and labor and management.

State Bureau of Apprenticeship. The State Bureau of Apprenticeship in the Division of Labor, Employment and Training is parallel to the Federal Bureau of Apprenticeship and Training. It is the administrative and implementing arm of the Department of Labor and Employment Security on matters relating to apprenticeship and ensures that local programs meet federal and state standards for registration. The Bureau of Apprenticeship is assigned the following duties in Chapter 446, F.S.:

1. Administer the provisions of F.S. 446.011-446.092.
2. Administer the standards established by the division.
3. Register in accordance with this chapter any apprenticeship or preapprenticeship program, regardless of affiliation, which meets standards established by the division.
4. Investigate complaints concerning the failure of any registered program to meet the standards established by the division.
5. Cancel the registration of any program which fails to comply with the standards and policies of the division or which unreasonably fails or refuses to cooperate with the division in monitoring and enforcing compliance with such standards.
6. Develop and encourage apprenticeship programs.

7. Cooperate with and assist local apprenticeship sponsors in the development of their apprenticeship standards and training requirements.
8. Cooperate with and assist the Division of Vocational, Adult, and Community Education of the Department of Education and appropriate vocational education institutions in the development of viable apprenticeship and preapprenticeship programs.
9. Encourage registered apprenticeship programs to grant consideration and credit to individuals completing registered preapprenticeship programs.
10. Monitor registered apprenticeship programs to ensure that they are being operated in compliance with all applicable standards.
11. Supervise all apprenticeship programs which are registered with the division.
12. Adopt rules as required to implement the provisions of this act (F.S. 446.041 (1-12)).

The Bureau, therefore, in cooperation with Federal representatives, promotes, registers and sets standards for apprenticeship and preapprenticeship programs in Florida. The Bureau also has the duty of monitoring programs to ensure compliance with all standards. Supervision of local programs is mentioned in the penultimate point, without elaboration. The degree, nature and purpose of the supervision is not specified in statute.

State Apprenticeship Council. The State Apprenticeship Council is the equivalent of the federal council, representing both management and labor. The Council is advisory to the staff of the Division of Labor, Employment and Training of the Department of Labor and Employment Security. It has no regulatory authority. Chapter 446, F.S. states:

The purpose of the council is to advise the division on matters relating to apprenticeship. The council may not establish policy, adopt rules, or consider whether particular apprenticeship programs should be approved by the division or bureau. Only those matters contained in the notice of meeting provided by the division shall be considered by the council at council meetings (F.S. 446.045 (2)(a)).

Apprenticeship Program Sponsors. At the local level, apprenticeship programs are registered with an apprenticeship program sponsor. The sponsor may be a joint or a non-joint organization as specified in section 446.071, F.S. and defined in section 446.045, F.S. (1)(a)(b):

- 1.a. "Joint employee organization" means an apprenticeship sponsor who participates in a collective bargaining agreement and represents employees.
- b. "Nonjoint employer organization" means an apprenticeship sponsor who does not participate in a collective bargaining agreement and who represents management (F.S. 446.045(1)(a-b)).

The apprenticeship sponsor is the operating body of the apprenticeship program. Its activities are not detailed in the Florida Statutes, which states:

1. One or more local apprenticeship sponsors shall be approved in any trade or group of trades by the Division of Labor, Employment, and Training, upon a determination of need, provided the apprenticeship sponsor meets all of the standards established by the division. "Need" refers to the need of state residents for apprenticeship training. In the absence of proof to the contrary, it shall be presumed that there is a need for apprenticeship and preapprenticeship training in each county in this state.
2. A local apprenticeship sponsor may be a committee, a group of employers, an employer, or a group of employees, or any combination thereof.
3. The division has authority to grant a variance from the standards upon a showing of good cause for such variance by program sponsors in nonconstruction trades. The purpose of this provision is to recognize the unique and varying training requirements in nontraditional apprenticeable occupations and to authorize the division and bureau to adapt the standards to the needs of such programs. (F.S. 446.071 (1-3)).

The apprenticeship sponsor runs the day-to-day fiscal, administrative and instructional operations of its program. The sponsor is charged with adapting national and state standards for apprenticeship to the local needs for skilled craftspersons, as reviewed and authorized by the Florida Bureau of Apprenticeship.

The sponsor also indentures the apprentice. Legal agreements are signed between the sponsor and both the apprentice and the participating employer who is providing on-the-job training as specified in the Florida Administrative Code (Chapter 38C-16). No such formal agreement is specified, however, between the sponsor and the "appropriate vocational education agency" for services provided.

Participating Employers. Guidelines for on-the-job training are developed by the Bureau of Apprenticeship and implemented by the sponsor. The sponsor has a list of participating employers for the program, who must sign a participating employer's agreement with the program sponsor. Employers who hire apprentices or register employees in the apprenticeship program must sign an official agreement. The employers are then responsible to the sponsor (and ultimately to the Bureau) for meeting the specified guidelines for on-the-job training.

Program standards are negotiated before the program is registered. The standards include not less than 2,000 hours (excluding related instruction) of supervised work experience and training on-the-job consistent with time allocations to special skill processes as established by industry and approved for the program. The participating employer must also agree to wage provisions established for the program for both apprentices and journeypersons, the ratio of apprentices to journeypersons and all other standards of the program as listed in the Florida Administrative Code (Chapter 38C-16.004). The participating employers must also agree to a funding formula providing for the equitable participation of each participating employer in funding of the program.

The final provision in the participating employers agreement is stated in Chapter 38C-16.004 (2)(z), F.A.C.:

- (z) Provision that a contractor shall not work an apprentice in the jurisdiction of another committee until he so notifies the Bureau and all local joint apprenticeship committees if covered by a collective bargaining agreement or the Bureau and all local nonjoint committees if not covered by a collective bargaining agreement. The purpose of this notice is to provide the opportunity for a mutually agreeable, voluntary assignment of apprentices from a local committee if apprentices are available.

This provision clarifies the often confusing matter of service jurisdictions for educational institutions. The apprentice may work anywhere in the jurisdiction of the contractor, which will not match the jurisdiction of the educational institution. No matter where the apprentice goes to work, that apprentice must attend the related classroom instruction on time and regularly.

Vocational Education Institutions. Florida Statutes provide for the related instruction component, which is to be provided by vocational education institutions at the request of the sponsor.

1. The administration and supervision of related and supplemental instruction for apprentices, coordination of such instruction with job experiences, and selection and training of teachers and coordinators for such instruction, all as approved by the registered program sponsor, shall be the responsibility of the appropriate vocational education institution.
2. The appropriate vocational education institution shall be encouraged to cooperate with and assist in providing to any registered program sponsor facilities, equipment and supplies, and instructors' salaries for the performance of related and supplemental instruction associated with the registered program (F.S. 446.051).

The Statute refers to "the appropriate vocational education institution," which includes but is not limited to local school districts or community colleges. Related instruction could be provided by a non-public institution, a major contractor or worker organization. If a public institution is requested, however, the institution is "encouraged to cooperate" taking responsibility for (1) instruction, (2) coordination of instruction with job experiences, and (3) instructional staff and (4) provision of facilities, equipment, supplies and instructor salaries as requested. In practice, most of the time a public institution is the one approached for these services.

State Department of Education. The Division of Vocational, Adult and Community Education of the Department of Education is mentioned twice in Chapter 446 of the Florida Statute. The first statutory reference relates to preapprenticeship programs at the secondary school grade level. At this time, there are a few preapprenticeship programs being considered for registration. None are in operation at this time.

The second statutory reference is under the duties of the Bureau of Apprenticeship: "to cooperate with and assist the Division of Vocational, Adult and Community Education of the Department of Education and appropriate vocational

education institutions in the development of viable apprenticeship and preapprenticeship programs" (F.S. 446.041 (8)).

Clearly, in Florida, primary legal authority for apprenticeship program resides with the Department of Labor and Employment Security. The Department of Education and local education agencies act at the request of and under the direction of the Department of Labor and Employment Security and the program sponsor. The organizational structure for the traditional apprenticeship trades of construction is depicted by the Federal Department of Labor in Figure 1. Additional sample depictions are included in Appendix E.

The Perkins Vocational Education Act of 1984

The Carl D. Perkins Vocational Education Act (P.L. 93-524), enacted by Congress in 1984, called for greater coordination between apprenticeship programs and vocational education programs:

Not later than one year after the date of the enactment of the Carl D. Perkins Vocational Education Act, the Secretary of Labor and the Secretary of Education shall develop and implement a plan for greater coordination between vocational education programs and apprenticeship training programs. Linkages between such programs shall be established relating to apprentice-school programs, and preapprenticeship programs, and program evaluation and performance standards (particularly with respect to apprenticeship training and programs of related instruction). The Secretaries shall establish such other collaborative and cooperative efforts as are considered feasible and appropriate (Sec. 411e).

The ensuing agreement called for greater linkages among vocational educators, apprenticeship programs and the private sector:

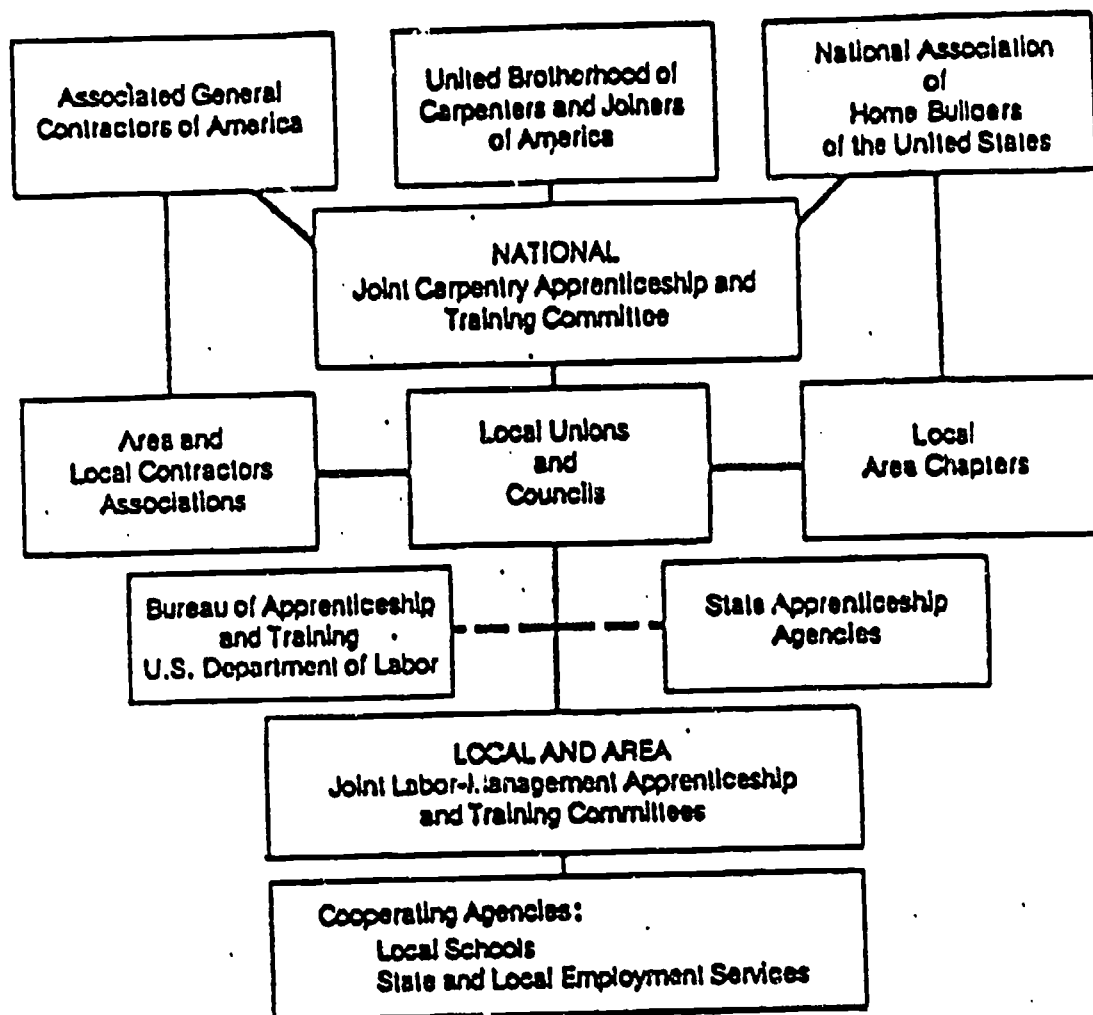
1. To improve cooperative and collaborative linkages among vocational educators, apprenticeship program administrators, and the private sector.
2. To implement a plan to promote the expansion and improvement of apprenticeship training programs and the role of Vocational Education in related instruction (NOICC, 1985, p. 1).

The legislation includes numerous references to areas of collaboration envisioned by the Act. The most significant of these are:

1. Joint planning and coordination (Title IB, 113(b)(10)).
2. Include work-site programs, such as apprenticeship, in the vocational education services and activities designed to meet the special needs and to enhance the participation of the handicapped, the disadvantaged, adults in need of training and retraining, single parents or homemakers, individuals in programs designed to eliminate sex bias or stereotyping in vocational education and criminal offenders serving in correctional institutions (Title IIA, 201(i)(1)).
3. Use education funds (to) improve the quality (of) apprenticeship education (Title IIB, 251(a)(1)).

FIGURE 1

Federal Department of Education Depiction of the Organizational Structure of Apprenticeship and Training System of the Carpentry Trade



Industry and labor work together to form apprenticeship standards in the crafts and trades and to supervise programs. The chart above is an example of how this cooperation works in the carpentry trade.

Source: Bureau of Apprenticeship (1982). Apprenticeship: Past and Present. Washington D.C.: U.S. Department of Labor, Employment and Training Administration, p. 23.

4. Use education funds for personnel to work with employers and eligible recipients to ensure that vocational programs are supportive of meeting the instructional needs of apprentices (Title IIB, 251(a)(12)).
5. Use education funds for programs designed cooperatively with employers, including apprenticeship (Title IIC, 322(b)(1)(C)(i)).
6. Use education funds for programs designed to build linkages between vocational education and private sector employers including those where secondary school students are employed on a part-time basis as registered apprentices with transition to full-time apprenticeship upon graduation (Title IIC, 322(b)(1)(D)).
7. Use education funds for programs for curriculum development, acquisition of instructional equipment and materials, personnel training, pilot projects and related services required for vocational education programs, which may include apprenticeship related training (Title IIC, 322(b)(1)(H)).
8. Use education funds for career guidance and counseling programs including opportunities to acquaint students with business, industry, the labor market, and training opportunities (Title IID, 332(b)(3), Interagency Agreement of the U.S. Department of Education and the U.S. Department of Labor).

The Act strongly encourages closer planning and development between the Departments of Labor and Education. This act also supports vocational educational institutions to be active in participating in the areas of apprentice recruitment, particularly of non-traditional profiles; apprentice counseling; personnel to work directly with employers in the private sector; program design with employers; needs for hands-on training such as equipment, materials and staff training, and so on. In Florida, no evidence was found of the development or utilization of program evaluation standards for apprentice-school programs as quoted above in P.L. 98-524, Sec. 411e.

Florida's Goals for Education

Florida is one of the nation's fastest growing states. By the year 2000, the total population is projected at fifteen million (Education for a New Decade: A Guide to Education in Florida, 1984). Labor markets are projected to change drastically, requiring more specialized, highly skilled and highly educated workers (Florida Occupational Information System, 1988). In response to these pressures, Florida Commissioner of Education has singled out various issues of concern to education in the state of Florida, among which are (1) the need for more business and community involvement and (2) the preparation of students for a competitive, global economy (Education for a New Decade: A Guide to Education in Florida, 1984). These issues are addressed through various programs which fall under the general mandate of Florida's commitment to excellence in education.

The first of these issues is addressed by the concept of partnerships. One example of this joining of the private sector and public education is the Florida Compact, a program "to reduce the number of school dropouts, improve students' vocational skills, and help students find jobs and opportunities for postsecondary education" (Education for a New Decade: A Guide to Education in Florida, 1984). Other partnership activities include The Florida Education and Industry Coalition, which is administered by the Florida Chamber of Commerce, and Private Industry Councils across Florida. These councils establish local training programs to match

the specific needs of employers. These training programs are often designed by local and state education institutions.

The Florida economy for the next two decades is predicted to have an increased demand for production workers (Longman, 1989). One type of work that will grow is that of skilled craftspersons. Apprenticeship as a model for providing the type of sophisticated training and skills needed is believed to provide an effective answer to the demand for a more skilled and better trained labor force (Longman, 1989). Apart from being relevant to the industry's needs, apprenticeship training "offers employers direct control over who teaches what and to whom" (Longman, 1989, p. 46). That the need for the support of apprenticeship training is timely is underscored by Governor Martinez's address to the Florida East Coast Chapter of the Associated General Contractors of America, Inc., at their apprenticeship graduation on July 20, 1989 of students from Indian River, St. Lucie, Martin and Palm Beach Counties who had received their instruction from Indian River Community College (Press Journal, September 3, 1989). Governor Martinez commended the Association for bringing back the "diminished" use of the idea of apprenticeship training in the construction industry. Governor Martinez further indicated that the growth in the construction industry has been a contributing factor in the recent drop in unemployment in the state, and that the state will continue to need apprenticeship training (Florida Constructor, September-October 1989, p. 9). This is significant for apprenticeship programs since over eighty percent of apprenticeship still remains in the traditional areas of the construction trades.

From the directions given by both Governor Bob Martinez and by Commissioner of Education Betty Castor, high quality apprenticeship programs could be used strategically to make great strides toward accomplishing the major goals of education in Florida.

III. EDUCATIONAL FUNDING AND COST ANALYSIS IN FLORIDA

The research team was challenged in its attempt to identify expenditures for apprenticeship as well as revenues received because apprenticeship is not identified as a program for funding, accounting or reporting purposes. Therefore, the breaking out of apprenticeship enrollments, costs and funds for community colleges and school districts was difficult. In fact, strictly speaking, it was impossible in many cases. What are reported here are estimates based on or computed from the best information available. One is cautioned against comparisons between colleges and districts.

Since funding formulas are not programmatic, program data are therefore not kept. For the school districts, funds are generated in broader categories which include both high and low cost programs. Several local officials indicated it was illogical to break out apprenticeship, a relatively low-cost program, for purposes of revenue adjustment, but not for truck driving or other high-cost program. Colleges, on the other hand, receive a total college package of revenue to be spent as the local institution sees fit. Revenues are received from the Community College Program Fund which results in an individual appropriation for each college rather than a formula distribution. College funding is based on the previous year's expenditures adjusted to the current year's appropriations plus student fees. FTE is only a factor in the workload adjustment, which may be the only avenue for estimating funds received by the college that could be attributable (in however distant a way) to a specific program.

With these shortcomings in mind, the funding and costing formulas used in this study to estimate program revenues and costs are explained in this chapter. The research team hopes the reader will bear in mind, however, that this analysis is designed to highlight issues and is in no way an audit.

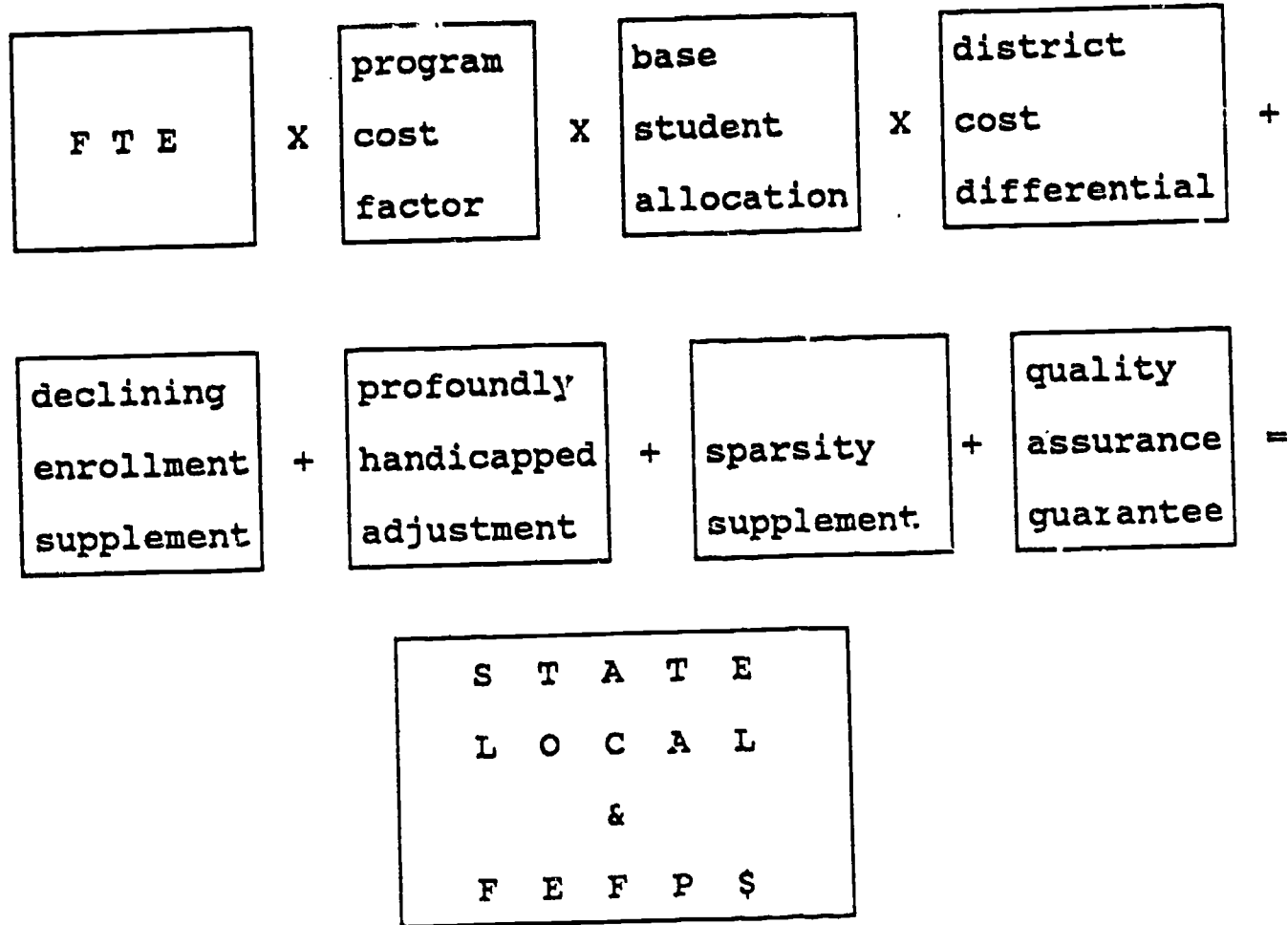
Funding Formulas for Public Schools

The information summarized here on the funding formulas for Florida school districts is based on the 1988-89 Florida Education Finance Program: Statistical Report, Florida Department of Education, MIS Series 89-04, August 1988. The funding formula for the public school districts in Florida is primarily based on full-time student equivalents (FTE's) with efforts made to recognize "(1) varying local property tax bases, (2) varying program cost factors, (3) district cost differentials, and (4) differences in per student cost for equivalent educational programs due to sparsity and dispersion of student population" (1988-89 Florida Education Finance Program: Statistical Report, p. 1). The full state FEFP formula is presented on Figure 2.

Apprenticeship programs do not have a specific cost factor but are considered under the postsecondary adult vocational education programs. No additional federal or special funding allocations are made to public educational institutions involved in apprenticeship programs. Since this study is concerned with approximating revenue generated by a single program, the declining enrollment supplement, profoundly handicapped adjustment and sparsity supplement were not used in the calculation of revenue. The quality assurance guarantee was added, since these are additional funds for all program enrollments across-the-board and therefore should be counted as programmatically available funds.

FIGURE 2

The Florida Educational Finance Program Funding Formula for School Districts



Source: 1988-89 Florida Education Finance Program: Statistical Report, Florida Department of Education, Division of Public Schools, MIS Series 89-04, August 1988, p. 1.

FTE's were calculated for both the related instruction student hours and for the on-the-job training apprentice hours. The apprentice FTE fell primarily within the industrial category 338, with a few in the home economics category 337, of the Vocational-Technical Job Preparatory Adult Program funding category. This is important to note because: (1) the program cost factor weights the FTE either at the industrial (1.548) level or home economics (1.506) level of Vocational-Technical Job Preparatory Adult Education and (2) the funds generated per FTE constitute the average cost of all the different instructional delivery programs within the categories. That is to say, the weight on the FTE for industrial represents the average cost of all the industrial programs. The cost factor, therefore, represents the average of both low and high cost programs.

The base student allocation is the same for all districts at \$ 2372.08 per weighted FTE. The cost differentials for the sampled districts in the 1988/89 school year were: Dade 1.0389, Hillsborough .9876, Lake .9721, Martin 1.0183, Orange 1.0121, Polk .9544, and St. Johns .9886. The quality assurance guarantee for the 1988/89 school year was an 8.35% increase over the previous year's value per FTE to ensure quality provision of education. Districts that did not make this increase over the previous year's allocation were awarded additional funds per FTE to bring their allocation up to this level. The districts that were awarded additional funds on the quality assurance guarantee in 1988/98 school year were: Dade \$27.52/weighted FTE, Martin \$27.72/weighted FTE, Polk \$4.43/weighted FTE and St. Johns \$3.87/weighted FTE.

Funding Formulas for Community Colleges

The information on the funding formulas for Florida community colleges summarized here was based on The Community College Program Fund (CCPF): A Summary Explanation (Florida Department of Education, Division of Community Colleges, Bureau of Financial and Business Services). The funding of an individual community college sub-program is much more difficult to estimate than of district programs. The workload adjustment procedure employed by the colleges was the only approximate measure the team found for attributing a level of revenue to apprenticeship. The FTE for the college's workload measure is not an actual FTE as is the case for the districts, but rather an assigned FTE based on an average of the previous three years. The assigned FTE is calculated for 1988/89 by averaging the 1986/87 actual FTE, the 1987/88 actual FTE and the 1988/89 FTE estimation. This assigned FTE then receives a special workload adjustment if the three-year average differs from the assigned FTE for the previous year by more than plus or minus five percent. The calculation of the additional dollars to be received for the workload adjustment is made for each instructional program area by multiplying the difference between this year's and last year's assigned FTE with the average statewide cost per FTE in that instructional program area. This formula is repeated for each program area which results in an adjustment figure by area. Then all the instructional program areas' adjustments are totaled. Seminole Community College was the only college in the sample, however, that actually received a workload adjustment.

These dollar adjustments are then added to a base allocation. The base allocation is calculated by setting a matrix of the operational expenditures by type of expenditure and instructional program area as a ratio of the total year's expenditures based on the most recent available cost analysis report data. Each ratio is, in turn, multiplied by the sum of the current year appropriation for the

Community College Program Fund plus student fee revenues, i.e. the operating funds available for the year. Funds to cover salary and price level increases, equipment replacement and library resources requirements are negotiated with the legislature. Special requests are also negotiated for improved and new programs. In short, "the current process for the Community College Program Fund results in individual appropriations for each of the colleges rather than a formula distribution of monies" (The Community College Program Fund (CCPF): A Summary Explanation, p. 4).

The community college funding system does not allow for the type of refinement feasible for the districts. The actual FTE for the year only approximates the assigned FTE awarded and does not account for the burden of a new program start-up which the college must carry before the FTE are detected in the FTE averaging formula. The funding is weighted by program area for the workload adjustment, but not for the routine funding allocation. Adjustments for the special funds requests, location cost differentials and any quality assurance guarantee monies are not standard, but are negotiated factors. So in the end, the revenue generated by a specific sub-program is very difficult to estimate except in very broad, generalized terms.

For this study, therefore, the actual FTE were multiplied by the average statewide cost without the college-by-college adjustments. This estimate might be slightly high or low depending upon the college's particular situation. The average statewide cost per FTE in the postsecondary adult vocational trade and industrial category for the 1988-89 school year was \$2,924. This dollar figure is a notable 20% less than the figure that districts receive per FTE per year (\$3,671.98, category weight times base student allocation).

Cost Analysis of Public School Programs

The state produces cost analysis reports for the districts and each school in their district each year. The report includes both school direct and indirect costs and district indirect costs per category. For apprenticeship programs the primary category of interest to this study is post-secondary adult job preparatory technical, trade and industrial (338). All apprentices were reported in category 338, except in one district, which had a few apprentices registered under post-secondary adult job preparatory home economics (337). Adjustments in the calculations were made for these apprentices accordingly.

Direct costs for the programs were calculated by the districts in terms of actual expenditures or estimates of actual expenditures. Estimations were made particularly on the breakdown of salaries and benefits for instructors between related instruction and on-the-job-training. These figures are not necessarily disaggregated in the official district reporting system and operationally the tasks are not necessarily distinct. For example, typically OJT coordinators are present on the grounds during related instruction classes to meet with instructors and apprentices to trouble shoot either related instruction or OJT problems. In the end the direct costs for instruction and on-the-job training were attributed based on district staff estimates of the percentage of time each staff spent on related instruction versus on-the-job training coordination.

Apprentice FTE's, as reported to the research team by the districts, were used in the formulas (see Figure 3). The remaining information used was taken from the cost analysis reports provided by the state (PC-3 for school-level analyses

and PC-4 for district-level analyses). The three figures--school direct, school indirect and district indirect--were then totaled to compute the total apprenticeship program cost for the districts. These calculations are as closely comparable to the community college calculations as possible. Therefore, these are the data presented in the main body of this report.

Indirect costs for the public school districts were also adjusted by using different prorations on three indirect cost sub-components: student, staff and space. The category of student indirect costs included the following line items: pupil personnel (6100), instructional media (6200), Board of Education (7100), and food service (7600, school level only). The category of staff indirect costs included: instruction and curriculum development (6300), instructional staff training (6400), general administration (7200), school administration (7300, school level only), fiscal services (7500), and central services (7700). The final category, space, proved the most problematic of the indirect cost figures. Since, the researchers were able to prorate these components separately, a special adjustment was calculated counting the space portion of the indirect school costs only for those student FTEs which used on-campus space. The school indirect space portion is comprised of three line items: facilities acquisition and construction (7400), operation of the plant (7900) and maintenance of the plant (8100). Computing indirect costs on this basis makes a large difference in the cost of the program. A similar adjustment is not possible with the college data, so comparable figures for the colleges were not calculated.

Cost Analysis of Community College Programs

The community colleges also produce cost analysis reports for each of the colleges every year. The report includes college direct and college support (indirect) costs per instructional category. For apprenticeship programs the primary category of interest is post-secondary adult vocational (job-preparatory) trade and industrial (1.26.02). All programs sampled in this study were within this category. One college was found, however, to be reporting apprentices under the post-secondary adult supplemental vocational trade and industrial category (1.26.03). This is only significant in that revenue assigned to this category, for the workload adjustment, is somewhat lower per FTE than in the 1.26.02 category. The revenue variance was not calculated for this report since general consensus was that all programs should be reported in the 1.26.02 category.

The direct program costs were calculated by the colleges themselves in terms of actual expenditures or estimates in the same way as the district cost analyses explained in the preceding section. The college indirect cost, however, was calculated differently. For each college the last available cost analysis was the 1987-88 school year. These data were used in an effort to make the calculation of the college indirect cost comparable across all colleges. Using this data as the best estimate, college support costs were totaled including:

1. executive, administrative and managerial expenditures,
2. professional and specialist expenditures,
3. other support expenditures,
4. supplies and services expenditures, and
5. depreciation costs

FIGURE 3

Formulas For Computing School And District Indirect Costs For Public School Districts

$$\begin{array}{l} \boxed{\begin{array}{l} \text{total} \\ \text{school} \\ \text{indirect} \end{array}} \times \boxed{\begin{array}{l} \text{apprentice} \\ \text{FTE} / \text{total} \\ \text{school FTE} \end{array}} = \boxed{\begin{array}{l} \text{apprenticeship} \\ \text{program} \\ \text{school} \\ \text{indirect} \end{array}} \end{array}$$

$$\begin{array}{l} \boxed{\begin{array}{l} \text{total} \\ \text{district} \\ \text{indirect} \end{array}} \times \boxed{\begin{array}{l} \text{apprentice} \\ \text{FTE} / \text{total} \\ \text{district FTE} \end{array}} = \boxed{\begin{array}{l} \text{apprenticeship} \\ \text{program} \\ \text{district} \\ \text{indirect} \end{array}} \end{array}$$

Source: Formulas used by the research team.

for each of seven categories:

1. research,
2. public service,
3. academic support,
4. student services,
5. institutional support,
6. physical plant operation and maintenance, and
7. work-study & other student assistantships.

This college-wide support cost total was divided by the total student semester hours as reported from Part 1 of the college cost analysis. This college-wide cost per student semester hour was then multiplied by thirty, which is the formula for converting student semester hours to FTE for non-credit community college programs. The reader should note that these data are one year older than other data used, taken from the 1987-88 school year rather than 1988-89.

The college program direct and college-wide support costs were then totaled to compute the total apprenticeship program cost for the colleges. These calculations are as closely comparable to the district calculations as possible.

IV. DESCRIPTION OF APPRENTICESHIP PROGRAM OPERATIONS IN FLORIDA BASED ON ELEVEN SELECTED LOCAL EDUCATIONAL INSTITUTIONS

This chapter first presents an overview of the number of apprentices in the state of Florida. Then a summary of the primarily qualitative information gathered through interviews and observations at the eleven sampled institutions is presented. The views expressed are those of persons in the field withholding interpretations and judgements of the researchers as much as possible. Chapter Five will present quantitative cost and comparative analyses. Finally, Chapter Six will provide conclusions of the research team based on all the site visits and data analyses.

The Context of Apprenticeship in Florida

Data on registered apprentices are collected separately by two agencies in Florida: the Department of Labor and Employment Security and the Department of Education. Each of these information systems are problematic in regard to obtaining timely and accurate counts of apprentices' weaknesses. First, the information system operated by the Department of Labor still functions manually. This makes data manipulation and timeliness difficult. Secondly, the Department of Education does not have a separate reporting category for apprenticeship, so no revenue, cost or unduplicated enrollment count for apprenticeship programs in districts or colleges are available. Therefore, the data must be interpreted recognizing the potential margins of error, especially for comparative use.

Department of Labor. Apprenticeship programs in Florida had approximately 6000 - 9000 registered apprentices over the twelve month period of 1988-89 school year. The number of registered apprentices at any one time fluctuates widely. From May, 1988 to May, 1989, 9002 apprentices were registered with the Department of Labor and Employment Security. In the month of May, 1988, the Department of Labor and Employment Security reported 5549 registered apprentices and in May, 1989 reported 5679 registered apprentices (counting only those listed with the Department of Education).

In September of 1988, the Department of Labor and Employment Security reported 6137 registered apprentices. Of these, eighty-three percent were in the construction trades. The construction trades are the traditional trades of apprenticeship. Florida has made a concerted effort to branch out into nontraditional trades. If this level of effort continues, the percentages of apprentices in non-construction trades may grow.

The move into nontraditional trades has included an effort to accommodate both joint and nonjoint sponsored programs in the state. This effort is clearly reflected in apprenticeship enrollment: fifty-four percent of the apprentices reported by the Department of Labor and Employment Security were apprenticed to nonjoint sponsors (See Appendix D for a complete listing of the number of registered apprentices in the traditional and nontraditional trades by joint and nonjoint sponsors and complete May 1988 registration data).

Department of Education. The apprenticeship enrollment reported by the Department of Education is within the same range as the Department of Labor. The total Department of Education enrollment figure for apprentices, however, was

difficult to estimate because the community college data could not be disaggregated for apprentice enrollments. A survey of all community colleges was therefore conducted by the research team for the 1988-89 school year apprentice enrollment data. This survey found 1,543 apprentices served in the college system in the 1988-89 school year. The data for the sample districts were taken for the 1988-89 school year. The statewide total district enrollment data for 1988-89 were not available at the time of this study. The most recent statewide figures were the 1987-88 data, showing 7,616 apprentices enrolled in school districts (reported on the Florida Department of Education, Division of Vocational, Adult and Community Education, District Program Enrollments for All Apprenticeship Levels, ESE 531, Final Class Report, 1987-88). The total number of apprentices served, therefore, would be estimated at approximately 9159. As displayed in Table 1, apprentices in Florida were served by twenty-three public educational institutions; fifteen school districts, with apprentice enrollments ranging from 1 to 1,693, and eight community colleges, with apprentice enrollments ranging from 17 to 699. Upon further investigation the researchers found that the Final Class Report of Enrollments is not an unduplicated count. Enrollment counts for adult programs are further complicated by the tendency of adults to move more freely in and out of programs and between programs. Therefore, these data would need extensive work before meaningful interpretations could be made.

Unregistered Apprentices. District and college staff reported that the approximately five to fifteen percent of the enrollment in related instruction were unregistered apprentices (no sites allowed students not seeking apprentice status to attend apprentice classes). This was explained in two ways: 1) the Department of Labor may be delayed in processing the registrations and in producing current information, 2) journeypersons with special permission from the program sponsor could attend to receive refresher studies; and 3) apprentices whose indenture status was pending apprentice qualifications such as a GED or a sponsor's probationary period were also allowed to attend. Department of Labor and Employment Security representatives thought this estimation was too low. If the statewide total of apprentices served by the Department of Education were reduced another fifteen percent, the total would be 7785 apprentices served. Without better data, this issue cannot be cleared up.

Enrollments and FTE's

Table 2 below provides a summary of apprentice enrollments, unweighted FTE for both related instruction and on-the-job training, full-time staff equivalents for both classroom instructors and on-the-job training coordinators, the number of student FTE earned for related instruction which was received in on-campus facilities, and finally the average apprentice FTE's claimed per apprentice.

Apprentice Enrollments, Registration and FTE's. The sample over-represented institutions with larger apprenticeship programs. This allowed, however, the study to cover nearly half of Florida's institutions providing services to apprenticeship programs. These programs served a total of 4,732 apprentices, approximately sixty to eighty percent of the apprentices in the entire Florida public education system. Of the unduplicated enrollment count, most, but not all, were registered apprentices. There was a five to fifteen percent margin of unregistered apprentices (self-reported figures). Upon investigation, the unregistered apprentices seemed to be primarily journeypersons returning for refresher or apprentices whose indenture application was pending with the sponsor until all requirements were met (especially proof of high school graduation or a GED) or

TABLE 1

**TOTAL STATEWIDE APPRENTICE ENROLLMENT ESTIMATE INCLUDING
SCHOOL DISTRICTS AND COMMUNITY COLLEGES**

DISTRICTS	APPRENTICE 1987-88	COLLEGES	APPRENTICE 1988-89
Broward	1,137	Daytona Beach	183
Dade	946	Florida CC @ Jax	699
Escambia	166	Indian River	147
Hillsborough	742	Okaloosa-Walton	53
Lake	58	Palm Beach	17
Lee	61	Santa Fe	41
Leon	34	Seminole	385
Martin	97	South Florida	18
Orange	1,693		
Palm Beach	1,464		
Pinellas	1		
Polk	143		
St. Johns	664		
Sarasota	302		
Suwanee	8		
Total	7,616	Total	1,543

Sources: 1. Districts 1987-88 data from Florida Department of Education, Division of Vocational, Adult and Community Education, District Program Enrollments for All Apprenticeship Levels, ESE 531, Final Class Report, 1987-88, duplicated enrolled count.
2. Colleges 1988-89 data from mail survey with telephone follow-up, unduplicated enrolled count.

TABLE 2

UNDUPLICATED ENROLLMENTS, APPRENTICE FULL-TIME EQUIVALENTS (FTE's), STAFF FULL-TIME EQUIVALENTS (FTE's), AND APPRENTICE FTEs USING SCHOOL SPACE FOR RELATED INSTRUCTION FOR ELEVEN DISTRICTS AND COLLEGES IN FLORIDA, 1988-1989

DISTRICTS and COLLEGES	UNDUPLICATED ENROLLMENTS	APPRENTICE FTE's			STAFF FTE's			APPRENTICE FTE's USING SPACE FOR REL INSTRU.	AVERAGE FTEs CLAIMED PER APPRENTICE
		Related Instruction	OJT Coordination	Total	Related Instruction	OJT Coordination	Total		
Dade County School District	1426	134.74	0	134.74	7.12	0	7.12	1.22	0.09
Martin County School District	81	12.67	56.42	69.09	1.8	6.4	8.2	12.67	0.85
Hillsborough County School District	643**	90.64	29.59	120.23	6.7	4.4*	11.1	31.72	0.19
Lake County School District	129	32.54	96.71	129.25	0.5	3.2	3.7	30.24	1.00
Orange County School District	624	151.58	709.98	861.56	13.1	18.2	31.3	89.15	1.38
Polk County School District	296	29.27	214.66	243.93	5.1	15.4	20.5	29.27	0.82
St. Johns County School District	216	26.03	69.84	95.87	4.9	2	6.9	28.03	0.45
Florida Community College at Jacksonville	699**	145.70	83.10	228.80	3.5	2*	5.5	72.85	0.33
Indian River Comm. College	180	38.16	167.34	205.50	N/A	N/A	N/A	38.16	1.14
Okaloosa-Walton Comm. College	53	22.66	0	22.66	3	0	3	22.66	0.43
Seminole Comm. College	385	64.22	420.72	484.94	4.10	9.9	14.00	64.22	1.26

* Worked for 1/2 year only.

** OJT Coordination reported for apprentices -- Hillsborough reported 67, FCC at Jacksonville reported 298, Dade County reported none and Okaloosa-Walton reported none.

Sources: Unduplicated Enrollments, Apprentice FTE's, Staff FTE's, and Apprentice FTE's Using Space for Related Instruction were 1988-89 data self-reported by school staff. Apprentice FTE's equals 900 instructional hours per year. Staff FTE's equals 980 paid instructor (or coordinator) hours per year. Unweighted FTE's Claimed per Apprentice were calculated.

until a sponsor probationary period was fulfilled.. In the latter case, when the apprentice was indentured, back credit would be awarded for past attendance in related instruction classes.

Two of the sites, Dade County School District and Okaloosa-Walton Community College, do not provide services for on-the-job training support and do not report FTE for on-the-job training. Two other sites, Hillsborough County School District and Florida Community College at Jacksonville, have only just begun to include coordination of on-the-job training as a responsibility of the educational institution. These services were not provided for the full 1988-89 year, nor were they provided to all the apprentices receiving related instruction classes from the institution. This makes the FTE for on-the-job training appear lower than for related instruction; Hillsborough claimed 75 percent of its FTE for apprentices under related instruction and FCC at Jacksonville claimed 64 percent of its FTE for apprentices under related instruction. Of the remaining seven institutions that have been supplying on-the-job training coordination for some years now, 12 to 29 percent of the total FTE claimed were reported for related instruction. Unregistered apprentices sitting in the related instruction classes are included in these enrollment and FTE figures.

When calculated, average unweighted FTE claimed per apprentice ranges from .09 in Dade County, which claim the minimum related instruction for some programs and no on-the-job training, to 1.38 in Orange County, which claim the highest levels of related instruction and on-the-job training. Four sites claimed one or more FTE per apprentice for funding purposes, two claimed just over .8 FTE per apprentice, three sites claimed from .33 to .45 FTE per apprentice, while one claimed .19 and one claimed .09. Some districts report much higher levels of FTE to cover the full 40 hours an apprentice is on the job, but realize that no state funds will be dispensed for these excess FTE.

Instructor and Coordinator FTE's. The full-time staff equivalent figures for classroom instructors and on-the-job training coordinators was the most difficult to estimate. These figures should be used quite conservatively since they are the least clean and validated figures reported here. The staff equivalent figures were based on number of hours of instructor and coordinator time estimated by district and college personnel and divided by 980 hours. The method for estimating varied by institution. The researchers felt that it was still important to get at least an approximation of the level of staffing for related instruction provision and on-the-job training coordination. The variability is quite wide, and not clearly related to the enrollment levels. The apprentice to instructor and apprentice to coordinator ratios are described later in this chapter.

Apprentice FTE's Using On-campus Space. The fourth category, "student FTE using space for instruction," is a measure of the amount of related instruction received in facilities of the educational institution. For example, Dade, Hillsborough, and Orange County School Districts provided only part of the related instruction at their own facilities (1%, 35%, 59% and 50% respectively). At Lake most of the instruction was on-campus, but some was off-campus. When the related instruction was provided off-campus, it was usually provided at joint committee or union facilities or in a few cases at large employer facilities such as Disney World. This will be described in more detail. For the other six sites, all related instruction was provided on campus.

Average FTE Hours Reported Per Apprentice. Actual number of hours of related instruction and on-the-job training coordination provided to each apprentice varies by occupation, site and year in the program. The average numbers of hours per apprentice was the closest estimate, though it is deflated relative to program requirements because all apprentices were not necessarily in the program all year (see Table 3). For related instruction, only two sites averaged less than 100 hours; four sites ranged from 100-150; four sites fell around 200; and one was nearly four hundred. For on-the-job-training, two sites claimed no hours; three claimed 250-300; three claimed 600-700; and three claimed 800-over 1,000. The only trend is that there is none. Even though a flat cap is applied to all programs equally, the sites determine their own level of services for their programs in their area.

Related Instruction

There are many differences in the way educational institutions provided related instruction. Services are provided by a public educational institutions at the request of a registered program sponsor as stipulated in the program registration approval with the Department of Labor and Employment Security. To be a registered program, the sponsor must demonstrate the responsiveness of the program to labor market needs. As the needs vary by occupational area, labor market dynamics, contractor practices and so on, programs vary to meet those needs.

Variation in the number of related instruction hours per year, the scheduling of when classes were offered, and the competencies to be covered, were not the exception but the rule. One aspect of the program did not vary by site: apprentice classes were provided to apprentices under a particular sponsor. Apprentices indentured to one sponsor were not grouped in the same class with apprentices indentured to a different sponsor, nor were apprentices, in general, grouped with non-apprentices for the related instruction. District and college staff at some sites pointed out that the classes were open. Sponsors could send journeypersons for refresher courses or non-apprentices could attend, without the direct consent of the program sponsor.

The skills of the apprentices entering the program were often very low. Many of them did not have a high school diploma, a requirement for most programs except at Indian River Community College and for programs such as child care and food services. Related instruction provided to apprentices in the classroom covers all the basic math, science and skill specific knowledge that a tradesperson will need on-the-job but that must be studied outside of the workplace. The hours for related instruction varied from three to eight hours per week for 34 to 48 weeks per year. The most common arrangements were to provide four or six hours per week, on one or two nights per week, for 36 weeks. Apprentices work full-time so instruction is provided either in the evening or on Saturdays.

Attendance at the related instruction classes was taken very seriously. Attendance was typically monitored by the on-the-job training coordinator if there was one. If the apprentice missed two classes they were contacted, three classes they were often brought up before the sponsoring committee and given severe warning and typically if they missed four classes they were expelled from the program. All committees met regularly, once a month or quarterly, and dealt with issues of apprentice selection, tracking and certification.

TABLE 3

AVERAGE NUMBER OF HOURS OF RELATED CLASSROOM INSTRUCTION AND ON-THE-JOB TRAINING COORDINATION SERVED PER APPRENTICE IN THE 1988-89 SCHOOL YEAR

DISTRICTS and COLLEGES	RELATED INSTRUCTION			ON-THE-JOB TRAINING		
	Unduplicated Apprentice Enrollments	Unweighted Apprentice FTE's	Average hrs. Served per Apprentice	Unduplicated Apprentice Enrollments	Unweighted Apprentice FTE's	Average hrs. Served per Apprentice
Dade County School District	1426	134.74	85.04	1426	0	0.00
Martin County School District	81	12.67	140.78	81	56.42	626.89
Hillsborough County School District	643	90.64	126.87	67	29.59	397.48
Lake County School District	129	32.54	227.02	129	96.71	674.72
Orange County School District	624	151.58	218.63	624	709.98	1,024.01
Polk County School District	296	29.27	89.00	296	214.66	652.68
St. Johns County School District	216	28.03	116.79	216	69.84	291.00
Florida Community College at Jacksonville	699	145.70	187.60	298	83.10	250.97
Indian River Comm. College	180	38.16	190.80	180	167.34	836.70
Okaloosa-Walton Comm. College	53	22.66	384.79	53	0	0.00
Seminole Comm. College	385	64.22	150.12	385	420.72	983.50

NOTE: Not all of the unduplicated enrollment received services all school year. Some may have dropped in or out during the year so this does not represent the total hours received per apprentice, but the average hours per apprentice claimed for related instruction and OJT.

Sources: Enrollments and FTE's self-reported (see Table 2). Average Hours per Apprentice were calculated, Apprentice FTE's times 900 divided by enrollments.

Most of the occupational apprenticeship programs are required by the apprenticeship sponsor to include between 206 and 288 hours of related classroom instruction per year. The state minimum for related classroom instruction is 144 hours per year. Only one occupational program (one of Dade County's programs) was found to offer the state minimum of 144 hours per year for related instruction. Hillsborough and St. Johns Districts and Okaloosa-Walton Community College each had a program requiring 160-170 hours per year.

The related instruction was typically staffed by part-time instructors (Dade County was the only site with full-time instructors) and overseen by the on-the-job training coordinator when one was employed (true for nine of the eleven cases). The instructors were primarily tradespersons, who worked in their trade during the day and taught apprentices once or possibly twice per week in the evenings. The districts and colleges were not able to pay the tradespersons' regular wage level for part-time teaching, so at several sites, the program sponsor supplemented the instructors' wages.

Curriculum Materials. The quality of the related instruction seemed to be very good in the classes observed. While most of the instruction used the group method of lecture and discussion, the instructional materials were adequate so that individualized instruction could be used. The instructional materials were often those prepared by the unions or the contractor's association sponsoring the program. The union or contractor association materials were often supplemented as well with manufacturer's materials and texts for basic mathematics or other special areas. In one automotive related classroom visited, there was a collection of materials produced by the school along with a collection of training materials and manuals produced by manufacturers.

Most of the students in one class worked on different job sites. To truly coordinate the related instruction with on-the-job training experiences would require being familiar with each student's work activities to arrange the classroom studies to correspond to those work experiences. No such activity was found at any of the classes visited nor presented as such by coordinators or instructors. The group instruction method was used and individualized if student remedial needs arose. Therefore, all "on-the-job training coordination" provided by the institutions was oversight of the on-the-job training standards and general feedback from employers on the program but not the coordination of specific instructional lessons with specific on-the-job practical experiences.

Theory versus hands-on instruction in the classes varied a great deal as well. This has cost implications for the programs depending on the degree to which the instruction requires both equipment and practice materials. A wide range exists in Florida. For example, at one community college there were two construction trades apprentice programs, both sponsored by non-joint committees. One contractor group requested that the program be strictly theory with no equipment required while the other one apparently moved to that community college because the college was willing to work with the sponsor to provide and equip a shop.

Instructors and coordinators at the sites visited estimated theory ranged anywhere from 10 to 100 percent of the instruction and practice, therefore, ranged from zero to 90 percent of the instruction. Most program educators and sponsor staff, however, felt that the students must receive some hands-on practice related to what they are learning from the books at the time of the learning. The level of support to the hands-on portion of the instruction is discussed below.

Facilities and Equipment. Facilities and equipment used for the related instruction varied greatly across the programs and classes visited. One traditional approach to apprenticeship training holds that the skills of the occupation are learned on the job and that related instruction should be just that, instruction in the related mathematics, science, safety and technical information needed in the occupation.

In reality, many employers prefer their apprentices to develop as many skills as possible along with the technical knowledge in related classes so that the apprentices are more productive on the job and do not require a lot of supervision or on-the-job instruction. Related training at times may be used to fill in gaps in work processes that may not be available through the apprentice's employer. Examples of work processes required for the apprenticeship program are provided in Appendix H. This is particularly true if the apprentice is indentured to a contractor which specializes in certain types of jobs in their trade, limiting apprentice's opportunities to practice other types of jobs. In addition, employers are not anxious for apprentices to attempt a skill on a job which the apprentice may do wrong several times at first, consuming expensive materials to accomplish a finished product. One could argue, as well, that trainees should be able to apply immediately what has been learned. For example, if trainees learn about a layout in sheet metal, they should be able to test their skill immediately by actually making the fitting rather than wait to encounter that experience on the job, which may not occur for months or even years.

The full range of instructional philosophies were held by apprentice sponsors and educators in Florida. When equipment was required based on the approved program guidelines, the educational institution often used the same facilities used by the district's or college's regular daytime programs if available. If not, the institution worked in collaboration with the sponsor to equip the necessary facility. For example, one community college was setting up a rather extensive laboratory for sprinkler systems using donated and purchased equipment.

All but two sites provided some level of support for equipment. In three sites, Dade and Polk County School Districts and FCC at Jacksonville, substantial amounts were paid for equipment and rentals (over \$60,000 for one year). In these cases equipment purchased with school funds was found to be housed off-campus and not available at all hours to the educational institution. Orange County School District also puts a fair amount (\$15,227) into equipment, of which some is placed in union training facilities.

On- and Off-campus Sites. The related instruction was found to be offered primarily at school's facilities (about 70 percent of the time); the remaining was provided at off-campus facilities. Nearly all of the related instruction provided off-campus was provided by the Dade, Hillsborough and Orange County School Districts to joint committee sponsored programs in the construction trades. The facilities for instruction provided off-campus were typically well equipped and supplied with standard and specialized materials. They would be equivalent to those used in any full-time preparation program. Apprentices were seen carrying out skill development tasks such as building model roof sections and cutting risers. The researchers found evidence of a great deal of hands-on work in some off-campus facilities.

On-the-Job Coordination

Appendix G contains examples of coordinator job descriptions. The tasks which they reported as taking up most of their time were to:

1. follow-up on absences,
2. counsel apprentices,
3. meet with apprentices and employers,
4. support the organization of apprenticeship programs, especially in geographic, trade and/or industrial areas where small businesses are predominant,
5. monitor the weakest link in the operational quality of apprenticeship training--the rotation of apprentices to all specified task areas on the job,
6. deliver student grades once per month to participating contractors,
7. recruit new contractors and maintain a list of licensed contractors,
8. recruit apprentices at association meetings, career fairs, and expo's.
9. attend the sponsoring apprenticeship committee meetings,
10. monitor that both related instruction and on-the-job training competences are met,
11. educate and provide consistency among all participating bodies-- Bureau of Apprenticeship, sponsor, trade associations, apprentices and the district or college,
12. coordinate evening classes and instructors,
13. coordinate equipment and materials for related instruction,
14. summons apprentices to the sponsoring committee,
15. keep detailed records on class attendance and working hours by task areas, and
16. provide general promotion, organization and information for apprenticeship programs.

The coordinators all concurred that 60 to 75 percent of their time was spent on the road, visiting job sites, contractors, apprentices and so on. The actual visitation to worksites where apprentices were working, however, varied from every other week to three times per year. The most common was monthly to quarterly.

Many models for structuring coordination of on-the-job training were found at the sites visited. Some choose to delegate this responsibility to the joint apprenticeship committee's training director. Other sites had full-time personnel to carry out the coordination of related instruction while others utilized part-time personnel. Indian River Community College contracted with the program sponsor to provide the related instruction and on-the-job training coordination. The sponsor's training director handles the entire program using the community college's facilities and funds. Regardless of what model was used, many school and college officials interviewed echoed the same sentiments: "A good coordinator is worth their weight in gold." In the same breath, there are still numerous problem areas associated with the position. Many sites are well aware of these problem areas and struggle to participate in supporting apprenticeship programs the best they can. Several problems are noted below. This is not meant to overshadow the positive work but to provide guidance for policy on what the problems can be.

Based on the philosophy that the apprenticeship program is an industry or an industry/labor program and as such should be run in its entirety by this group, some sponsors have either run the program or have negotiated with the district or college to pick up their staff on the district or college payroll to coordinate the program. This person then works out of the union or association facilities to oversee the related instruction and coordination of on-the-job training. At nearly half of the sites this was the case and most of these staff were receiving split payments or salary supplements. In one case, the college paid per apprentice served by the coordinator for up to 30 hours per week of the coordinator's time, while the coordinator's primary appointment was with the sponsor. The sponsor, in this case, picked up all the benefits, gas and travel expenses, office support, filing and duplications, and so on. In other cases, the person was on the payroll at the educational institution but received a salary supplement estimated to be about 25 percent of the person's salary. At times the benefits packages were carried by the district or college. The coordinator's loyalty and sense of identification was then often strongly with the sponsor, over the educational institution. This is of particular concern when many of these same school coordinators could relay few or no specific examples of when they had pulled an apprentice from an employer because the apprentice was not being rotated to all the various tasks. They could also not quote examples of when they had encouraged employers to rotate the student among more varied tasks on the job. Also in these, the district or college staff were less familiar with the apprenticeship program and seemed to leave supervision of the program up to the discretion of the coordinator.

There is a distinct trade-off. On the one hand, apprenticeship is a unique program, difficult to understand and difficult to manage. Someone in the role of coordinator needs to understand how apprenticeship maintains its unique character as an industry program and public education can or can not fit into the program. These persons need to be talented to interact effectively among extremely diverse populations: institutions of the public schools and colleges, the Bureau of Apprenticeship, the workers, the contractors and the sponsoring bodies. All these institutions have their own sets of missions, priorities, habits, procedures, jurisdictions and regulations. To staff such a position would not be easy. Several sites visited were putting concerted effort into training and supervising these staff and working together to seek a balance between being oriented too strongly toward one group over another. Some success was observed, though typically more work seems to be needed in this area.

On the other end of the spectrum, coordinators who work for school districts first and foremost with no prior work experience with apprenticeship, were unfamiliar with the basic rules and premises of apprenticeship. For example, a couple of coordinators claimed that their program abided by the 3:1 ratio rule, three apprentices to one journeyman on the job. When probed further, to see if this was a slip of the tongue, they reinforced their previous statement. They had turned the ratio of three journeymen to one apprentice around. The lack of familiarity with basic rules, not to mention more complex aspects of the program, shows a distinct need for better and clearer guidelines for the program for to these coordinators. It also highlighted the dangers of using coordinators who are too distant and unfamiliar with industry.

Depending on the commitment of the sponsor, coordinators were found to be more or less effective in their ability to carry out their assignments. A few coordinators were found who, backed by both joint and nonjoint sponsors, were able to influence employers rotation of apprentices on the job and remove apprentices

from employers and give them to other employers. These coordinators were also able to recommend that an employer freeze apprentice wages for one month if the apprentice was not performing on the job and recommend to the sponsoring committee that the apprentice be dropped from the program if the problem continued. These are the kinds of powers needed by the coordinator to actually do the job. These are not powers a district or college staff has. These powers may be delegated by the sponsor to the school staff person along with their coordination assignment. Authority, however, resides solely with the sponsor.

In some schools, full-time coordinators assume responsibilities that seem to include greater involvement than the statutory reference to "coordinating related instruction with on the job training" or even coordinating on-the-job training. These coordinators seem to be heavily involved with the apprentice committees, carrying out various functions: operation of committees, recruiting employers for the program sponsors or to be program sponsors, recruiting apprentices for existing programs, promotion of existing programs, and promotion of the sponsoring organization. These activities particularly dominated the coordinators' time when the sponsor was less committed to any actual interference from the coordinator with on the job activities, keeping the coordinator busy, but not providing any critical authority.

It would appear that the role of coordinators may in some cases go beyond that which is spelled out in the statutes. The statutes do suggest that schools work to coordinate related instruction with on-the-job experiences. Coordinating the actual on-the-job experience is a step beyond this mandate. The schools, however, are requested to provide services to sponsored apprenticeship programs. If the sponsor requests coordination of the on-the-job training, then the school has the authority, through the committee, to do so. The other angle is that the state has direct authority over apprenticeship programs through the Department of Labor and Employment Security. If the state wishes to provide more funds to the program with more control over those funds, the logical and legal avenue would be through the Bureau of Apprenticeship. It is not a question of whether the functions are necessary for a quality apprenticeship program but rather whether present statutes authorize the schools to carry out these functions, and whether the schools have enough authority over those funds and responsibilities, assuming that the state wishes to pay for these functions.

Interviews with Apprentices

Many apprentices knew their coordinator well, and claimed to receive a broad range of skills on the job and in the classroom, were familiar with more contractors and employment opportunities, and were generally positive about the program and their own futures. Some apprentices interviewed highly praised the apprenticeship program because the related instruction had taught them residential construction while they worked with a commercial contractor. As a result of the program, they felt more flexibility to move to another contractor, a new location or try other jobs in the trade. Having a program coordinator housed at the school seemed to make a positive difference in the attitude of the apprentices. In a few cases, however, apprentices were unfamiliar with their "coordinator," lacked motivation to study a wide range of skills and generally were negative about their situation.

Ratios of Apprentices to Instructor and Coordinator

Apprentices-to-Instructor FTE Ratio. Apprentices attend related instruction classes for approximately three to six hours a week. One instructor FTE would be measuring general work load over any number of classes. The ratio of instructors to apprentice is sensitive to the size of population in the district, the size of the apprenticeship program enrollments, the nature of the programs and the number of related instruction hours required by the sponsor. Table 4 shows a wide range of apprentices-to-instructor ratios among the eleven sites: around 200:1 for three institutions, around 100 for a couple, and around 50 for four institutions. Okaloosa-Walton Community College was alone with 18 apprentices to one instructor FTE.

The ratios may only be understood in the context of the educational, industrial and geographic setting in which they occur. For example, Okaloosa-Walton serves a rural, low-density population. Their programs have a steady but small enrollment. Small enrollments in one program can skew this ratio significantly. For example, St. Johns has a tool and die program. This is a highly specialized skill area that may serve only five to ten apprentices per year. However, for industries trained tool-and-die makers are critical. In fact, the local chamber of commerce has highlighted this program's existence as an attraction for industries considering relocation to the area. The district staff, with the support of their chamber of commerce and the industries, believe that despite the small numbers of apprentices, this is an important program for the area's industries. But their commitment to this program is a factor in their low ratio. If more standard programs are offered, in higher population density areas, then the ratio will appear much higher.

Apprentices-to-Coordinator Ratio. As shown on Table 4, two of the eleven sites did not have on-the-job coordinators. Of the remaining nine, three had just under 20 apprentices per one coordinator FTE, three had 30 - 40, and three had 100 - 150. Most school officials and coordinators interviewed at the sites felt that one coordinator could handle between 30 to 60 apprentices. Another approach to the same issue is to consider employers. Coordinators at one site said that one coordinator could handle approximately thirty employers with up to 60 work sites. This offers the key to why some of the sites could operate 100 apprentices to only one coordinator. The colleges with over a 100:1 ratio have only one or two sponsors and operate mainly in the construction trades with relatively consolidated participating employers. St. Johns County School District has a 109:1 average coordinator-to-apprentice ratio. But, they were quick to point out that they have 80 apprentices at one sight and would not be able to maintain such a ratio if the composition of the program sponsors and participating employers were to change to a more disaggregated grouping. Another factor is geography, since most coordinators spend so much time on the road. No relationship was found between the two ratios.

Organizational Relationships

Bureau of Apprenticeship. Local education personnel believed the staff of the Bureau of Apprenticeship were supportive and actively executed duties as established in F.S. 446.041. These include the establishment and administration of apprenticeship standards, the registration of apprenticeship programs, cancellation of programs failing to meet standards established by the division, development and encouragement of apprenticeship programs, working with sponsors in the development of their training standards and training requirements, cooperating with

TABLE 4

THE AVERAGE NUMBER OF APPRENTICES TO ONE CLASSROOM INSTRUCTOR FTE AND TO ONE ON-THE-JOB TRAINING COORDINATOR FTE AS A MEASURE OF STAFF FTE WORKLOAD

DISTRICTS and COLLEGES	APPRENTICES TO ONE INSTRUCTOR FTE	APPRENTICES TO ONE COORDINATOR FTE
Dade County School District	200	N/A
Martin County School District	45	13
Hillsborough County School District	96	15
Lake County School District	258	40
Orange County School District	48	34
Polk County School District	58	19
St. Johns County School District	44	108
Florida Community College at Jacksonville	200	149
Indian River Comm. College	N/A	(100+)
Okaloosa-Walton Comm. College	18	N/A
Seminole Comm. College	94	39

Note: This table is for comparative purposes. Apprentices are part-time for related instruction, so these figures do not represent the number of apprentices one would see in a classroom, but rather staff workload.

Sources: Apprentice Enrollments divided by Staff FTE's for Related Instruction and Staff FTE's for OJT Coordination (see Table 2).

the Department of Education and the appropriate vocational institutions in the development of viable apprenticeship programs and monitoring and supervising apprenticeship programs.

School personnel appeared to know the Bureau of Apprenticeship representatives and spoke well of them. Likewise, sponsors indicated that Federal Bureau of Apprenticeship and Training representatives were in attendance in their meetings and were helpful in the establishment of the program. There was evidence that monitoring did take place. In at least one case, a program was deregistered because it did not meet standards.

One troublesome area was the lack of computerized data at the Bureau of Apprenticeship on programs and enrollments. Since one of the functions of the Bureau is to monitor the programs, up-to-date information by programs and schools would facilitate the discharge of this responsibility.

When queried regarding why a number of apprentices were not registered, a few school personnel stated that registrations of the apprentices by the Bureau of Apprenticeship was not as timely as desirable. One school district assumed a probationary period of up to six months before expecting their trainees to be registered, because, they said, they could not expect the Bureau to move any faster than that. Probationary periods are not the practice of the Bureau, in fact they are required by law to process within ninety days. The Bureau reported that the process usually took less than one month. This may or may not be a serious problem, but it was often the reason given for a number of apprentices not being registered. However, with automated records, the problem or the misnomer should clear up quickly and easily.

Sponsors. There are a variety of sponsors of apprenticeship programs. F.S. 1987 446.071 Apprenticeship Sponsors states the following:

1. One or more local apprenticeship sponsors shall be approved in any trade or group of trades by the Division of Labor, Employment, and Training, upon determination of need, provided the apprenticeship sponsor meets all of the standards established by the division.
2. A local apprenticeship sponsor may be a committee, a group of employers, an employer, or a group of employees, or any combination thereof.

The statutes would seem to make it possible for rather small employer groups to be sponsors. In some cases services provided to several programs in the same occupation have been promoted, particularly because of the need to serve joint and non-joint programs. Several schools were observed, however, that had more than one non-joint program in a single trade. If apprentice numbers are large enough this probably does not lead to inefficiencies. In other cases, it might be more efficient for the school to provide only one related instruction class in any one occupational area, open to all sponsors interested in that occupation. On the other hand, operationally this may effectively close programs in the state, since sponsors are typically very protective of their programs and for various reasons do not wish to mix their apprentices with apprentices of other sponsors.

The Florida statutes are silent on the responsibilities of sponsors or apprenticeship committees. A review of several Standards for Apprenticeship

developed by the Federal Bureau of Apprenticeship and Training spell out responsibilities in some detail. Among their duties are the following:

1. To determine need for apprentices and the facilities available for their necessary experience and training on the job.
2. To determine related instruction needed. To hear and adjust all differences which may arise in regard to the terms and conditions of Standards of Apprenticeship.
3. To approve tests for determining the apprentice's progress in manipulative skill and technical knowledge, and to cooperate with the classroom instructors in carrying out their responsibilities to the apprentice.
4. To Certify to the registration agency the names of apprentices who have satisfactorily completed the apprenticeship.

The research team reviewed sponsoring committee rosters, meeting schedules and minutes and was impressed by the uniform existence of operating committees, the regularity of the meetings held and the topics to which the members attended. The participation of the Bureau of Apprenticeship was not regular, but on special request of the sponsor to address specific needs. The participation of the district or college personnel ranged from actually selecting sponsoring committee members, setting agendas, running the meetings, writing the minutes and following up to being an invited guest with observation but no participation rights.

V. ANALYSES OF PROGRAM REVENUE AND EXPENDITURES FOR RELATED INSTRUCTION AND ON-THE-JOB TRAINING SUPERVISION AT ELEVEN LOCAL EDUCATIONAL AGENCIES IN FLORIDA

The revenue received and expenditures incurred at the eleven sites for the overall apprenticeship program is presented in Table 5. The revenue and cost figures were calculated as explained in Chapter Three. Direct and indirect costs are reported separately. Since school indirect costs are high, they were elaborated further in Tables 7 - 11. Districts' school indirect costs were then adjusted for the amount of on-campus space utilized for apprentices (see Tables 12 - 13). Similar adjustments were not possible for the colleges. Finally, Tables 14 - 18 display the comparative analyses of revenues and expenditures attributed to apprenticeship and broken down by related instruction and on-the-job training coordination for both the districts and the colleges.

Program Revenue

As explained in detail in Chapter Three, both districts' and colleges' revenues attributed to the program were calculated from FTE-based formulas. This allowed the researchers to break down revenues for both the related classroom instruction and the on-the-job training. Most of the revenue attributed to the program by the researchers falls within these two categories as seen on Table 5.

The remaining revenue category was school fees. School districts do not collect fees from apprentices. Florida Statutes allow school districts to exempt apprentices from paying fees if an equivalent amount of in-kind services are provided and documented. Community colleges are restricted from contracting in-kind services making exemption of fees for apprentices impossible. The colleges, therefore, require fees to be paid. In three of the four colleges, the fees were paid by the sponsor not the apprentice. The colleges in turn, however, contracted services from the sponsors, in effect reimbursing the assessed fees. This is apparent when the "supplies and materials" or "equipment and rentals" categories are reviewed. Florida Community College at Jacksonville and Seminole Community College's large figures in these categories reflect such payments for contracted services. Indian River Community College is a unique case in itself. All apprenticeship programs were sponsored by the Associated General Contractors (AGC). The college contracted with AGC to handle all related instruction and on-the-job training. The college keeps no line item expenditure data. In effect, therefore, none of these colleges used the fees to cover the colleges' costs for supporting apprenticeship.

Two sites, Dade County School District and Okaloosa-Walton Community College provided no on-the-job training services, reported no FTEs in this category and therefore received no revenues for on-the-job training coordination. Hillsborough School District and Florida Community College at Jacksonville alone claimed revenues for on-the-job training support lower than the revenues for related instruction. These two sites only began supporting on-the-job training in the middle of the 1988-89 year. For the coming years, therefore, revenues in this category would be expected to rise. At all the sites, then, if support to on-the-job training was provided, it was always more costly to the state than support to related instruction. As will be discussed below, expenditures for the category of on-the-job training are also high. Whether both the high revenues and expenditures result from funding formulas or from the actual need of the program, cannot be determined empirically;

determination must be made on the basis of professional and political judgements at both state and local levels.

Program Expenditures

Table 5 also displays the apprenticeship program expenditure totals for the 1988-89 school year. Direct costs were reported by the districts' and colleges' personnel based on their direct expenditures in the 1988-89 school year. Secretary salaries and benefits were also reported by several of the sites. Secretarial expenses, however, were contained in the school indirect costs as well. The self-reported secretarial expenses were therefore not included as a direct expense, since this would mean counting them twice.

Direct Costs for the Districts and Colleges. Dade County School District and Okaloosa-Walton Community College did not report any costs for on-the-job training support services. As with revenue, sites that provided coordination had substantial expenses compared to expenses for related instruction. In the two cases where this is not so, again, the institutions had only provided services for half the school year. If a full year of services had been provided, then salaries and benefits for coordinators would have been higher than those for instructors.

The "supplies and materials" and "equipment and rentals" categories reflect the expense for hands-on practice in the related instruction component of the program. The variance in the level of hands-on practice (0 - 90 %) versus theory (10 - 100%) was related to specific occupational programs and to program sponsors, not to the overall apprenticeship program for the institution. Table 6 displays the total expenses from these two columns, "supplies and materials" and "equipment and rentals", and the expense per FTE receiving related instruction. The colleges are not reported here since contracted services to the sponsor is imbedded in these categories which do not accurately reflect hands-on practice.

As can be seen from the last column on Table 6, the amount of financial support per FTE (related instruction FTE only) for equipment and supplies to support hands on skills training in the related instruction classes ranged from under \$5.00 to over \$3,000 per FTE. Lake, Orange and Hillsborough School Districts reported spending between \$175 and almost \$400 per FTE; Dade spent just over \$750; St. Johns spent just under \$1000; Martin School District and Polk spent over \$3000. In many cases the sponsors and participating employers supplied large amounts of support for equipment and materials, so this in no way reflects the total that may have been spent for this category.

Travel, the final direct expense category, was considered by the researchers to be primarily a support cost for the on-the-job training services, since consensus among coordinators was that they spent 60 to 75 percent of their time on the road. This obviously is not entirely accurate since Dade County does not support on-the-job training, yet reported some travel expenses. Also for several sites this expense was not covered by the school because the sponsor covered most of the support costs for the coordinator's job. Converted into expenditure per on-the-job training FTE, Lake spent \$5.23 per FTE; Seminole Community College and Polk and St. Johns School Districts spent around \$20 per FTE (\$19.49, \$22.02 and \$22.02 respectively); and Martin spent \$112.57 per FTE.

TABLE 5

TOTAL REVENUES AND EXPENDITURES IN DOLLARS FOR APPRENTICESHIP PROGRAMS AT ELEVEN SELECTED SCHOOL DISTRICTS
AND COMMUNITY COLLEGES IN FLORIDA, 1988-89

DISTRICTS	REVENUES				EXPENDITURES									Expenditure Totals
	Related Instruction	OJT Coordination	Tuition Fees	Revenue Totals	Direct					Indirect				
					OJT Coordination	Instruction	Supplies & Materials	Equipment & Rentals	Travel	Direct Sub-Total	School	District	Collegewide Indirect Sub-Total	
Dade	519,749	0	0	519,749	0	203,418	42,416	59,005	516	305,355	165,897	38,262	204,159	509,514
Martin	47,919	213,385	0	261,304	70,979	30,205	12,392	6,342	6,351	126,269	20,737	17,279	38,016	164,285
Hillsborough	328,701	107,307	0	436,008	73,110	106,511	21,968	13,309	0	214,898	148,661	17,375	166,036	380,934
Lake	113,892	339,157	0	453,049	77,030	8,394	5,708	0	506	91,638	182,969	32,751	215,720	307,358
Orange	563,334	2,638,577	0	3,201,911	714,694	163,226	23,498	15,227	0	916,645	934,208	180,148	1,114,356	2,031,001
Polk	102,779	753,756	0	856,535	196,837	65,612	30,054	62,220	4,726	359,449	276,292	47,665	323,957	683,406
St. Johns	101,920	253,946	0	355,866	70,616	57,235	16,770	9,371	1,556	155,548	101,397	11,234	112,631	268,179
COLLEGES														
FCC at Jacksonville	426,027	242,984	74,828	743,839	61,470	107,926	223,035*	N/A	0	169,396	N/A	N/A	430,906	823,337
Indian River	111,580	489,302	61,983	662,865	N/A	N/A	N/A	N/A	N/A	208,124	N/A	N/A	297,179	505,303
Okaloosa-Walton	66,258	0	2,880	69,138	0	5,049	111	0	0	5,160	N/A	N/A	37,107	42,267
Seminole	187,779	1,230,185	153,660	1,571,624	143,776	85,480	167,135	3,080	8,200	407,671	N/A	N/A	627,847	1,035,518

* Includes Equipment and Rentals, also.

Sources: 1. Revenues, (a) For Districts self-report Apprentice FTE's (see Table 2) were multiplied by program category 338 weight (1.548) or 337 weight (1.506) times the 1988-89 Base Student Allocation (\$2,372.08) times the 1988-89 District Cost Differentials (Dade, 1.0389; Hillsborough, 0.9876; Lake, 0.9721; Martin, 1.0183; Orange, 1.0121; Polk, 0.9544; and St. Johns, 0.9886) plus the Quality Assurance Guarantee for Dade (\$27.52), Martin (\$27.72), Polk (\$4.43) and St. Johns (\$3.87) times weighted FTE's for each site. (b) For Colleges self-reported Apprentice FTE's (see Table 2) were multiplied by the 1987-88 average statewide college cost for category 1.26.02 Postsecondary Adult Vocational Trade and Industrial (\$2,924) and Tuition Fees were self-reported by the college, for 1988-89.

2. Expenditures, Direct, were self-reported by each site.

3. Expenditures, Indirect, (a) For Districts the State Cost Analyses' (PC-4 district level, PC-3 school level) Indirect costs were totalled and multiplied by Total Apprentice FTE's over total district or school FTE's respectively. Total District and School FTE's were provided by the State (Indirect Costs (App. FTE/Total FTE)); (b) For Colleges the State Cost Analysis, Part 2, Support Costs Totals were totalled up to Depreciation and multiplied by Total Apprentice FTE's times 30 over (Support Costs (App. FTE (30)/Total Student Semester Hours)).

TABLE 6

ESTIMATED COSTS OF HANDS-ON PRACTICE FOR APPRENTICES PROVIDED IN RELATED CLASSROOM INSTRUCTION IN TOTAL DOLLARS AND DOLLARS PER APPRENTICE FTE FOR RELATED INSTRUCTION IN SELECTED DISTRICTS

DISTRICTS**	HANDS-ON EXPENSES			APPRENTICE FTE's FOR REL INSTRUC.	EXPENSE PER APPRENTICE FTE
	Supplies/ Materials*	Equipment/ Rentals	Sub-total		
Dade County School District	42,416.00	59,005.00	101,421.00	134.74	752.72
Martin County School District	12,392.00	6,342.00	18,734.00	12.67	1,478.61
Hillsborough County School District	21,958.00	13,309.00	35,277.00	90.64	389.20
Lake County School District	5,708.00	0.00	5,708.00	32.54	175.41
Orange County School District	23,498.00	15,227.00	38,725.00	151.58	255.48
Polk County School District	30,054.00	62,220.00	92,274.00	29.27	3,152.51
St. Johns County School District	16,770.00	9,371.00	26,141.00	28.03	932.61

* The Supplies and Materials Category includes supplies and materials for office support of the program as well. These figures are, therefore, somewhat inflated as a measure of hands-on expenses for related classroom instruction.

** Because two colleges included contracted services in these categories and Indian River cannot be desegregated, the community colleges cannot be calculated here.

Sources: Direct expenses and FTE's were self-reported. Hands-on Expense Per FTE was calculated, Hands-on Expense divided by Related Instruction FTE's.

The percentage of total costs attributed to direct versus indirect costs (for colleges the term "college-wide costs" is used interchangeably) ran rather low (see Table 7). Four institutions, Polk, Hillsborough, St. Johns and Dade School Districts, had 50 to 60 percent of their costs attributed to direct costs. (The rule of thumb used by the state is approximately 55 percent of costs will be direct.) One district, Martin (77%) put a very high percentage of costs into direct expenses. In the other half of the sites, direct costs ranged from 39 - 48 percent of total costs, with Okaloosa-Walton Community College particularly low with 12 percent of the cost attributable to direct expenses.

Overview of Indirect Costs. Since indirect costs were such a substantial portion of the costs, these costs were disaggregated and will be discussed to provide a general assessment of where these monies went. For the colleges, their indirect (college-wide) costs were broken down by college expenditure and prorated to apprentice student semester hours for each category of support services: administration, professional staff, support, supplies and equipment and supplies (Tables 8A and 8B). The only cost analyses available at the time of this report were for the 1987-88 school year. Therefore these are not the actual indirect costs for the school year being studied, but the best estimate the researchers could make at this time. The school districts' indirect cost items were grouped into student, staff and space support costs for both the school and for the district indirect costs. These data were broken down into dollar figures and percentages of total indirect costs on Tables 9, 10A, 10B, 11A and 11B.

Community Colleges' Indirect Costs. As seen on Table 7, all of the community colleges had very high percentages of indirect costs. These ran generally around 52 to 61 percent, except for Okaloosa-Walton whose indirect costs were 88 percent of the total program costs. Attributable indirect costs would greatly decrease, however, if adjustments could be made for the fact that program sponsors also provided support services and that apprentices spend little time on campus since much of their time is spent on the job.

Okaloosa-Walton Community College costs, direct and indirect, may be the most reflective of actual costs. The high percentage of indirect costs are a function of the school being relatively small, the program not having development costs since all their programs are using already available facilities and equipment, and apprenticeship being relatively inexpensive for their college. It claims no on-the-job training so all the FTE are using campus space, facilities and support services.

For the remaining three, Florida, Indian River and Seminole Community Colleges, some indirect support in terms of facilities for related instruction was provided which also required extra evening security. But, the FTE for on-the-job training support required no facilities. The coordinators were primarily housed off-campus and received no staff indirect expense support, used little to no office supplies, and the students made little use of other facilities on campus working full-time they are on campus after hours and engaged at work at least 40 hours per week. It is reasonable to speculate that if a more sensitive measure of attributing indirect costs were feasible, the indirect and therefore the total program costs would be reduced considerably.

Seminole Community College has basically the same arrangement as Florida and Indian River Community Colleges except that the coordinators are housed on campus, special portable facilities are being built up over time to create specialized occupational hands-on training laboratories and in the 1988-89 school year

TABLE 7

DIRECT AND INDIRECT COSTS AS PERCENTAGES OF TOTAL
EXPENDITURE FOR SCHOOL DISTRICTS AND COMMUNITY COLLEGES

1988 - 1989

Districts and Colleges	Direct Costs %	Indirect Costs %	Total Costs %
Dade County School District	60 %	40 %	100 %
Hillsborough County School District	56 %	44 %	100 %
Lake County School District	30 %	70 %	100 %
Martin County School District	77 %	23 %	100 %
Orange County School District	45 %	55 %	100 %
Polk County School District	52 %	48 %	100 %
St. John's County School District	58 %	42 %	100 %
Florida Community College at Jackson	48 %	52 %	100 %
Indian River Community College	41 %	59 %	100 %
Okaloosa-Walton Community College	12 %	88 %	100 %
Seminole Community College	39 %	61 %	100 %

Source: Calculated from the data presented on Table 5.

TABLE 8A

INDIRECT COSTS ATTRIBUTED TO APPRENTICESHIP PROGRAMS IN FOUR COMMUNITY COLLEGES INCLUDING ADMINISTRATION, PROFESSIONAL STAFF, SUPPORT SUPPLIES AND EQUIPMENT DEPRECIATION, 1988-88

COLLEGES	COLLEGEWIDE (OR INDIRECT) COSTS					TOTAL
	Adminis- tration	Professional Staff	Support Services	Supplies	Equip- ment	
Florida Com- munity College at Jacksonville	46,327.17	58,365.47	203,314.41	108,014.81	14,884.45	430,906.31
Indian River Comm. College	27,098.33	43,282.33	124,069.97	93,906.87	8,821.99	297,179.49
Okaloosa-Walton Comm. College	7,521.63	4,740.71	15,149.32	8,225.72	1,469.54	37,106.92
Seminole Comm. College	76,312.22	131,740.37	198,730.85	200,592.91	20,470.97	627,847.32

Source: State Cost Analysis is prorated for apprenticeship programs as explained for Table 5.

TABLE 8B
INDIRECT COSTS ATTRIBUTED TO APPRENTICESHIP PROGRAMS
IN FOUR COMMUNITY COLLEGES AS PERCENTAGES
OF TOTAL INDIRECT COSTS, 1987-88

COLLEGES	COLLEGEWIDE (OR INDIRECT) COSTS					TOTAL
	Adminis- tration	Professional Staff	Support Services	Supplies	Equip- ment	
Florida Com- munity College at Jacksonville	11%	14%	47%	25%	3%	100%
Indian River Comm. College	9%	14%	42%	32%	3%	100%
Okaloosa-Walton Comm. College	20%	13%	41%	22%	4%	100%
Seminole Comm. College	12%	21%	32%	32%	3%	100%

Source: Calculated from data presented on Table 8A.

apprentices were issued library cards. Apprentices were apparently encouraged to use more facilities on-campus. Not that this was not true for other sites, but Seminole was making an obvious effort on this. Therefore, the indirect cost measure attributable to apprenticeship was more apt to actually reflect actual costs to the college for the apprentices and the program.

Overall the community colleges spent approximately the same proportions of funds in specific categories. General support was the highest with 32 - 47 percent of total indirect funds, followed by supplies (22 - 32 percent), professional staff (13 - 21 percent), administration (9 - 20 percent) and finally equipment and depreciation (3 - 4 percent) as displayed on Table 8A.

School Districts' Indirect Costs. Referring again to Table 7 a wide range, from 23 to 70 percent, of all program costs were indirect expenses attributed to apprenticeship. Five of the districts showed between 40 to 55 percent, while Martin was very low with 23 percent and Lake extremely high with 70 percent, similar to the case of Okaloosa-Walton. Martin is an exceptional case, as noted by the very high figure of 77 percent of the total expenditures as direct costs, the very low figure of 55 percent of indirect being school indirect and the obviously unusually high figure of 88 percent in the school indirect space component. The researchers did not explore the factors accounting for this outlying case.

Table 9 displays school and district indirect costs as percentages of total indirect costs. The school indirect is the largest portion of indirect costs, from 81 to 90 percent, except again for Martin with 55 percent. A high degree of similarity is seen between districts on this point.

Tables 10A and 10B display a breakdown of district indirect costs by grouping cost items into apprentice (student), staff and space categories. For district indirect costs, most of those costs were for staff support (66 - 82 percent). The remainder was split between student and space support, depending on the needs of the district.

Tables 11A and 11B show the breakdown of the school indirect by apprentice, staff and space. With the exception of Martin again, 14 to 21 percent of the school indirect costs were spent on student support costs, 35 - 48 percent were spent on staff support costs, and 36 - 46 percent were spent on space support costs. The key here is that if half or more of the costs are indirect, 80 - 90 percent of which are school indirect and approximately forty percent of that is space support costs, total expenditure for apprenticeship programs is very sensitive to adjustments in the allocation of indirect school space costs. FTE claimed by most educational institutions was for the on-the-job training component, which utilized no space on campus. Of the related classroom instruction, in some cases classes were convened off-campus as well. Therefore, this a large expense attributed to the program in many cases is not actually being borne by the school.

Adjustments for space utilization, therefore, were made on the school indirect costs for the districts. This was not possible for the colleges. Because of this incomparability, non-adjusted costs were used on all other tables unless clearly marked as adjusted for space utilization. The adjustments were made by prorating the costs with the number of FTE that utilized school space for related instruction instead of the full FTE of the program. For three of the districts, all the related classroom instruction was offered on campus, so the entire number of FTE for related instruction was used. For the other districts, some or most of the classroom

TABLE 9
SCHOOL AND DISTRICT INDIRECT COSTS AS A PERCENTAGE
OF TOTAL INDIRECT COSTS, 1988-89

DISTRICTS	School Indirect % of Total Indirect	District Indirect % of Total Indirect	Total Indirect
Dade County School District	81%	19%	100%
Martin County School District	55%	45%	100%
Hillsborough County School District	90%	10%	100%
Lake County School District	85%	15%	100%
Orange County School District	84%	16%	100%
Polk County School District	85%	15%	100%
St. Johns County School District	90%	10%	100%

Source: Calculated from data presented on Table 5.

TABLE 10A

SCHOOL DISTRICTS' DISTRICT INDIRECT COSTS IN DOLLARS BY STATE CATEGORIES:
STUDENT, STAFF AND SPACE, 1988-89

DISTRICTS	DISTRICT INDIRECT COSTS			Total Cost
	Apprentice Category Cost	Staff Category Cost	Space Category Cost	
Dade County School District	5,491.83	31,268.13	1,501.59	38,261.55
Martin County School District	1,622.06	14,177.47	1,478.25	17,278.78
Hillsborough County School District	3,233.26	1,786.28	2,355.06	7,374.60
Lake County School District	3,163.66	26,271.65	3,315.54	32,750.85
Orange County School District	8,189.80	119,535.28	52,422.98	180,148.06
Polk County School District	5,441.59	35,158.71	7,065.14	47,665.44
St. Johns County School District	2,606.88	7,923.36	704.24	11,234.48

Source: State Cost Analysis data (PC-4) prorated as explained for Table 5. Apprentice Category includes pupil personnel (6100), instructional media (6200), Board of Education (7100); Staff Category includes instruction and curriculum development (6300), instructional staff training (6400), general administration (7200), fiscal services (7500), and central services (7700); and Space Category includes facilities acquisition and construction (7400), operation of the plant (7900) and maintenance of the plant (8100).

TABLE 10B

SCHOOL DISTRICTS' DISTRICT INDIRECT COSTS AS PERCENTAGES OF TOTAL DISTRICT
INDIRECT BY STATE CATEGORIES: STUDENT, STA. F AND SPACE, 1988-89

DISTRICTS	DISTRICT INDIRECT COSTS			Total %
	Apprentice Category %	Staff Category %	Space Category %	
Dade County School District	14%	82%	4%	100%
Martin County School District	9%	82%	9%	100%
Hillsborough County School District	19%	68%	13%	100%
Lake County School District	10%	80%	10%	100%
Orange County School District	5%	66%	29%	100%
Polk County School District	11%	74%	15%	100%
St. Johns County School District	23%	71%	6%	100%

Source: Calculated from data presented in Table 10A

TABLE 11A

SCHOOL DISTRICTS' SCHOOL INDIRECT COSTS IN DOLLARS BY STATE CATEGORIES:
STUDENT, STAFF AND SPACE, 1988-89

DISTRICTS	SCHOOL INDIRECT COSTS			Total Cost
	Apprentice Category Cost	Staff Category Cost	Space Category Cost	
Dade County School District	34,309.73	57,218.32	74,368.85	165,896.90
Martin County School District	1,326.96	1,263.81	18,145.82	20,736.59
Hillsborough County School District	23,868.90	71,909.73	52,882.60	148,661.23
Lake County School District	33,276.55	84,064.35	65,628.29	182,969.19
Orange County School District	132,303.34	418,346.62	383,558.25	934,208.21
Polk County School District	37,491.77	133,805.02	104,995.58	276,292.37
St. Johns County School District	19,715.65	35,258.15	46,472.99	101,396.79

Source: State Cost Analysis data (PC-3) prorated as explained for Table 5. Category items as listed for Table 10A plus school administration (7300) and food service (7600) in the student category.

TABLE 11B

SCHOOL DISTRICTS' SCHOOL INDIRECT COSTS AS PERCENTAGES OF TOTAL SCHOOL
INDIRECT BY STATE CATEGORIES: STUDENT, STAFF AND SPACE, 1988-89

DISTRICTS	SCHOOL INDIRECT COSTS			Total %
	Apprentice Category %	Staff Category %	Space Category %	
Dade County School District	21%	35%	44%	100%
Martin County School District	6%	6%	88%	100%
Hillsborough County School District	16%	48%	36%	100%
Lake County School District	18%	46%	36%	100%
Orange County School District	14%	45%	41%	100%
Polk County School District	14%	48%	38%	100%
St. Johns County School District	19%	35%	46%	100%

Source: Calculated from data presented in Table 11A.

instruction was not offered in the district's facilities. The FTE that used school facilities were estimated by the district staff and used for the adjustments presented on Tables 12A and 12B.

When the adjustments were made, the percentage of school indirect from space costs dropped from the 36 - 46 percent range to a range of 1 - 19 percent. Table 13 displays the effect on the total costs, direct and indirect, for the school districts. The expense of the apprenticeship program drops anywhere from nine to seventeen percent, averaging 13 percent reduction in cost.

Comparisons in the System

Classroom Instruction and On-the-job Training Coordination. Tables 14 displays expenditures for related instruction as percentages of revenue attributed to related instruction. For Martin, Polk and St. Johns School Districts, expenditures exceeded the revenue. The remaining sites spent from 80 to 100 percent of the revenue. Orange County School District and Okaloosa-Walton Community Colleges spent somewhat less (71% and 61% respectively).

Table 15 displays the same data for the on-the-job training component. Dade County School District and Okaloosa-Walton Community College were not active in supporting on-the-job training. The sites that were active spent less of the revenue attributed, except for Hillsborough. The range is quite wide on this measure. A couple of sites spent only 51 percent of attributed revenues. Six sites spent approximately 60 to 80 percent.

Revenue and Expenditures. The total expenditures of the educational institutions, (without making adjustments in indirect costs for space utilization) were lower than total revenues, except for Florida Community College at Jacksonville. Table 16 displays a range of expenditures from 61 to 111 percent of total revenues. Five sites spent 61 to 70 percent of revenues, two sites spent about 75 percent, and four sites spent 80 percent or more. Apprenticeship is therefore a less expensive program on the average than other technical, trade and industrial programs in these institutions. Since public education is only one out of all the actors contributing to the apprenticeship program, however, it does not follow that apprenticeship is necessarily an inexpensive method of instruction.

Related instruction expenditure again showed no trend, ranging from 11 to 98 percent of total revenues. Dade and Okaloosa-Walton provide no on-the-job training and Hillsborough and Florida Community College only began to provide on-the-job training services in the middle of the year. If these are not considered, and only sites that provide both services are, then the amount of total revenue spent on related instruction ranged from 11 to 32 percent. On-the-job training used only 26 to 62 percent of total revenue. The most notable trend is there seems to be no trend. Table 17 records how the percentages of revenues were adjusted for space utilization for related instruction and on-the-job training coordination.

The final table, Table 18, displays expenditures per apprentice FTE and per unduplicated apprentice enrollment. The expenditure per apprentice should be used with caution since the researchers have found no consistent procedure for counting unduplicated enrollments for these programs. The costs per FTE were notably consistent across all sites. Okaloosa-Walton had the lowest expenditure per FTE and Dade the highest. The researchers did not try to control for area cost differentials. There do not seem to be any grossly low expenditures; the sites are spending a fair amount of monies for the apprenticeship program.

TABLE 12A

SCHOOL DISTRICTS' SCHOOL INDIRECT COSTS IN DOLLARS ADJUSTED FOR APPRENTICE
 UTILIZATION OF SPACE BY STATE CATEGORIES: STUDENT, STAFF AND SPACE, 1988-89

DISTRICTS	ADJUSTED SCHOOL INDIRECT COSTS			Total Cost
	Apprentice Category Cost	Staff Category Cost	Space Category Cost	
Dade County School District	34,309.73	57,218.32	673.37	92,201.42
Martin County School District	1,326.1	1,263.81	3,802.76	6,393.53
Hillsborough County School District	23,868.90	71,909.73	13,951.89	109,730.52
Lake County School District	33,276.55	84,064.35	15,354.74	132,695.64
Orange County School District	132,303.34	418,346.62	39,688.72	590,338.68
Polk County School District	37,491.77	133,805.02	12,598.78	183,895.57
St. Johns County School District	19,715.65	35,258.15	13,295.56	68,269.36

Source: State Cost Analysis data (PC-3) prorated as explained as for Table 11A except the sum of the school indirect for space was multiplied by Apprentice FTE's Using Space For Related Instruction (Table 2) over the total school student FTE (provided by the State).

TABLE 12B

**SCHOOL DISTRICTS' SCHOOL INDIRECT COSTS AS PERCENTAGES OF TOTAL SCHOOL
INDIRECT ADJUSTED FOR APPRENTICE UTILIZATION OF SPACE BY STATE CATEGORIES:**

STUDENT, STAFF AND SPACE, 1988-89

DISTRICTS	ADJUSTED SCHOOL INDIRECT COSTS			Total %
	Apprentice Category %	Staff Category %	Space Category %	
Dade County School District	37%	62%	1%	100%
Martin County School District	21%	20%	59%	100%
Hillsborough County School District	22%	65%	13%	100%
Lake County School District	25%	63%	12%	100%
Orange County School District	22%	71%	7%	100%
Polk County School District	20%	73%	7%	100%
St. Johns County School District	29%	52%	19%	100%

Source: Calculated from data presented in Table 12A.

TABLE 13

PERCENTAGE OF REDUCTION IN TOTAL PROGRAM EXPENDITURE WHEN ADJUSTED FOR APPRENTICES' UTILIZATION OF SCHOOL SPACE FOR INSTRUCTION IN SEVEN SELECTED DISTRICTS, 1988-89

DISTRICTS	TOTAL PROGRAM EXPENDITURE	TOTAL ADJUSTED PROGRAM EXPENDITURE	% OF REDUCTION IN EXPENDITURE ADJUSTED FOR SPACE USE
Dade County School District	509,314	435,818	15%
Martin County School District	164,285	149,942	9%
Hillsborough County School District	380,934	342,004	10%
Lake County School District	307,358	257,085	16%
Orange County School District	2,031,001	1,687,132	17%
Polk County School District	683,406	591,010	14%
St. Johns County School District	268,179	235,051	12%

Average 13% reduction in cost

Source: Total Program Expenditure taken from Table 5. Total Adjusted Program Expenditure was calculated by adding Total Adjusted School Indirect Costs (Table 12A) plus Total District Indirect Costs plus Total Direct Costs (Table 5). Percentage of Reduction was calculated by 100 minus the (Total Adjusted Program Expenditure over Total Program Expenditure).

TABLE 14

**TOTAL EXPENDITURE FOR RELATED CLASSROOM INSTRUCTION AS A PERCENTAGE OF TOTAL REVENUES FOR RELATED
CLASSROOM INSTRUCTION FOR ELEVEN PUBLIC EDUCATION INSTITUTIONS IN FLORIDA, 1988-89**

DISTRICTS	RELATED INSTRUCTION REVENUES	RELATED INSTRUCTION EXPENDITURES					EXPENDITURE AS % OF REVENUE FOR RELATED INSTRUCTION	
		Instruction	Supplies/ Materials	Equipment & Rentals	Direct Sub - Total	Indirect or Col- legewide Costs		Total Expenditure
Dade	519,749	203,418	42,416	59,005	304,839	204,159	508,998	98%
Martin	47,919	30,205	12,392	6,342	48,939	6,972	55,911	117%
Hillsborough	328,701	106,511	21,968	13,309	141,788	125,173	266,961	81%
Lake	113,892	8,394	5,708	0	14,102	54,310	68,412	84%
Orange	563,334	163,226	23,498	15,227	201,951	196,056	398,007	71%
Polk	102,779	65,612	30,054	62,220	157,886	38,873	196,759	191%
St. Johns	101,920	57,235	16,770	9,371	83,376	32,258	115,634	113%
COLLEGES								
FCC at Jacksonville	473,678	107,926	*	*	107,926	274,401	382,327	81%
Indian River	123,090	N/A	N/A	N/A	38,647	55,184	93,831	76%
Okaloosa- Walton	69,130	5,049	111	0	5,160	37,107	42,267	61%
Seminole	208,128	85,480	*	3,080	88,560	83,145	171,705	83%

* Because contracted services are included in these categories, estimates were not possible in the time available to calculate the breakdown. These colleges' percentages are therefore deflated slightly.

Source: Revenues from Related Instruction was taken from Table 5 and calculated for the Colleges by multiplying Tuition Fees by (Apprentice FTE's for Related Instruction over Total Apprentice FTE's) (Table 2) and adding this to the Revenues for Related Instruction. (Table 5).
Direct costs were taken from Table 5. Indirect Costs were taken from Table 5 and multiplied by (Apprentice FTE's for Related Instruction over Total Apprentice FTE's) (Table 2).
Expenditure for Related Instruction was then divided by Revenue for Related Instruction.

TABLE 15

TOTAL EXPENDITURE FOR ON-THE-JOB TRAINING COORDINATION AS A PERCENTAGE OF TOTAL REVENUES FOR ON-THE-JOB TRAINING FOR ELEVEN PUBLIC EDUCATION INSTITUTIONS IN FLORIDA, 1988-89

DISTRICTS	REVENUES	EXPENDITURES				EXPENDITURE AS % OF REVENUE FOR OJT COORDINATION	
	Revenue of OJT	OJT Coordination	Travel	Sub-Total	District Indirect or College-Wide Cost		Total Expenditure
Dade	0	0	0	0	0	0	0%
Martin	213,385	70,979	6,351	77,330	31,044	108,374	51%
Hillsborough	107,307	73,110	0	73,110	40,863	113,973	106%
Lake	330,157	77,030	506	77,536	161,410	238,946	70%
Orange	2,638,577	714,694	0	714,694	918,300	1,632,994	62%
Polk	753,756	196,837	4,726	201,563	285,084	486,647	65%
St. Johns	253,946	70,616	1,556	72,172	80,373	152,545	60%
COLLEGE							
FCC at Jacksonville	270,161	61,470	0	61,470	156,505	217,975	81%
Indian River	539,775	N/A	N/A	169,477	241,995	411,472	76%
Okaloosa-Walton	0	0	0	0	0	0	0%
Seminole	1,363,496	143,776	8,200	151,976	544,702	696,678	51%

Source: Data were calculated as explained for Table 14 only applied to the on-the-job training coordination instead of related instruction.

TABLE 16

APPRENTICESHIP EXPENDITURES AS A PERCENTAGE OF APPRENTICESHIP REVENUES FOR
 RELATED INSTRUCTION, ON-THE-JOB TRAINING COORDINATION AND TOTAL IN ELEVEN
 PUBLIC EDUCATIONAL INSTITUTIONS IN FLORIDA, 1988-89.

DISTRICTS	TOTAL EXPEN- DITURE AS % OF TOTAL REVENUES	RELATED INSTUCTION EXPENDITURE AS A % OF		OJT COORDINATION EXPENDITURE AS A % OF	
		Total Revenues	Related Instruction Revenues	Total OJT Revenues	OJT Coordination Revenues
Dade	98%	98%	98%	0%	0%
Martin	63%	21%	117%	41%	51%
Hillsborough	87%	61%	81%	26%	106%
Lake	68%	15%	84%	53%	70%
Orange	63%	12%	71%	51%	62%
Polk	80%	23%	191%	57%	65%
St. Johns	75%	32%	113%	43%	60%
COLLEGES					
FCC at Jacksonville	111%	51%	81%	29%	81%
Indian River	75%	14%	76%	62%	76%
Okaloosa- Walton	61%	61%	61%	0%	0%
Seminole	66%	11%	83%	44%	51%
Districts Adjusted for Space					
Dade	84%	84%	84%	0%	0%
Martin	57%	20%	111%	37%	45%
Hillsborough	78%	54%	72%	24%	97%
Lake	57%	12%	49%	44%	59%
Orange	53%	11%	60%	42%	51%
Polk	69%	22%	180%	47%	54%
St. Johns	66%	30%	104%	36%	51%

Source: Calculated from Revenues and Expenditures in Tables 5, 14 and 15 and adjusted using Adjusted Expenditures reported in Table 13.

TABLE 17

TOTAL EXPENDITURES FOR RELATED INSTRUCTION AND ON-THE-JOB TRAINING
 COORDINATION FOR SEVEN SCHOOL DISTRICTS WITH SCHOOL INDIRECT COSTS
 ADJUSTED FOR THE FTE USING SPACE AT THE SCHOOL FOR RELATED INSTRUCTION

DISTRICTS	RELATED INSTRUCTION			ON-THE-JOB TRAINING			ADJUSTED TOTAL EXPENDI- TURE
	Direct Costs	Adjusted Indirect Costs	Adjusted Total Expenditure	Direct Costs	Adjusted Indirect Costs	Adjusted Total Expenditure	
Dade	304,839	130,463	435,302	0	0	0	435,302*
Martin	48,939	4,341	53,280	77,330	19,332	96,662	149,942
Hillsborough	141,788	95,824	237,612	73,110	31,282	104,392	342,004
Lake	14,102	41,653	55,755	77,536	123,282	201,330	257,085
Orange	201,951	135,557	337,508	714,694	634,930	1,349,624	1,687,132
Polk	157,886	27,786	185,672	201,563	203,775	405,338	591,010
St. Johns	83,376	22,770	106,146	72,172	56,733	128,905	235,051

* Not counting \$316 for travel

Source: Direct Costs were taken from Table 5. Adjusted Indirect Costs were taken from Table 12A, prorating using
 Apprentice FTEs for Related Instruction over Total Apprentice FTE's and Apprentice FTE's for On-the-Job
 Training Coordination over Total Apprentice FTE's.

TABLE 18

AVERAGE EXPENDITURE PER APPRENTICE FTE AND PER APPRENTICE ENROLLED FOR
RELATED INSTRUCTION, ON-THE-JOB TRAINING COORDINATION AND TOTALS FOR ELEVEN
PUBLIC EDUCATIONAL INSTITUTIONS IN FLORIDA, 1988-89

DISTRICTS	RELATED INSTRUCTION EXPENDITURE PER FTE	OJT EXPENDITURE PER FTE	TOTAL EXPENDITURE PER FTE	RELATED INSTRUCTION EXPENDITURE PER APPREN- TICE SERVED	OJT COORDIN- ATION EXPEN- DITURE PER APPREN- TICE SERVED	TOTAL EXPEN- TURE PER APPRENTICE SERVED
Dade	3,778	0	3,781	357	0	357
Martin	4,413	1,921	2,378	690	1,338	2,028
Hillsborough*	2,945	3,852	3,168	415	1,701	592
Lake	2,102	2,471	2,378	530	1,852	2,383
Orange	2,626	2,300	2,357	638	2,617	3,255
Polk	6,722	2,287	2,802	665	1,644	2,309
St. John's	4,125	2,184	2,740	535	706	1,242
COLLEGES						
FCC at Jacksonville*	2,624	2,623	3,599	547	731	1,178
Indian River	2,459	2,459	2,459	521	2,286	2,807
Okaloosa- Walton	1,865	0	1,865	797	0	797
Seminole*	2,674	1,656	2,135	446	1,810	2,690
DISTRICTS ADJUSTED FOR SPACE						
DISTRICTS						
Dade	3,231	0	3,235	305	0	306
Martin	4,205	1,719	2,170	658	1,193	1,851
Hillsborough	2,621	3,628	2,845	370	1,558	532
Lake	1,713	2,082	1,989	432	1,561	1,993
Orange	2,227	1,931	1,958	541	2,163	2,704
Polk	6,343	1,888	2,423	627	1,369	1,997
St. Johns	3,767	1,648	2,402	491	597	1,088

* Total Expenditure figures are not the sum of Related Instruction and On-The-Job Training expenditure figures because not all apprentices reported for On-The-Job Training and/or because contracted services expenses were not included in the Related Instruction and On-The-Job Training figures.

Source: Calculated from Expenditures reported in Tables 5, 14 and 15 and Apprentice FTE's and Enrollments reported in Table 2 and adjusted using Adjusted Expenditures reported in Table 13.

VI. CONCLUSIONS

The following conclusions are grouped by topic: funding, program operation, funding sponsoring agencies audit of apprenticeship costs and technical points. Each conclusion is discussed in terms of alternative approaches to addressing the problem or condition identified with some rationale and possible consequences.

Funding. Under the present legislation and funding formulas, more funds are generated for apprenticeship programs than expenses incurred.

1. *Statutory language allows up to 25 hours per week up to 50 weeks per year per apprentice to be claimed for FTE's. Current practices in local educational institutions were found to operate within these guidelines.*

Discussion. Questions have been asked relative to whether there is correct interpretation of the statutes concerning the degree to which public education is to be involved in on-the-job training of apprentices which has been specifically the domain of industry. Questions have also been raised as to whether there has been abuse of the present system and whether there has been equitable distribution of educational funds among local education agencies and program sponsors. The legislature needs to clarify its intentions regarding support of on-the-job training services currently provided by the school districts and community colleges (see point 3 below).

2. *State funding formulas do not treat apprenticeship as a separate category. The current category includes cooperative education, for which the school arranges and supervises on-the-job training. Legislation might consider creating a separate category for apprenticeship for accounting and funding purposes.*

Discussion. Making apprenticeship a separate category might be resisted in order to avoid modifying a system of funding that was put into place after considerable thought and work. It would appear, however, to be a reasonable alternative in that apprenticeship is unique from other programs in three essential ways: (1) another agency, the Bureau of Apprenticeship, has prime responsibility for these programs, (2) apprentices are full-time employees, and (3) apprentices work under an indenture to an employer or committee.

There would seem to be strong arguments for this approach since it would provide information on the program that would give the Department of Education and the Florida Legislature data necessary to account for funds allocated to the program.

3. *If the Legislature intends to support on-the-job training through the Department of Education, the number of hours of on-the-job training that can be counted for FTE purposes may need to be limited in ways responsive to different local and program needs.*

Discussion. An attempt needs to be made to maintain flexibility in the formula since apprenticeship programs are served in different ways in various

districts and community colleges and various occupations. It would seem highly desirable not to lump apprenticeship and cooperative education together if this change in allowable hours is made and an independent apprenticeship category is created. If a separate category were made, the program weights per FTE for both categories--the apprenticeship category and district category 338 or college category 1.26.02--would have to be reassessed. The number of hours of on-the-job training reported for FTE may also be allowed to vary by occupational program and by site, as is the case for related instruction.

4. *If the legislature provides a clear mandate on the goals to be achieved by school districts and community colleges' participation in apprenticeship programs, it may be possible for the Departments of Education and Labor, without specific changes in the legislation, to develop clearer policies for the operation of the apprenticeship programs, including funding policies.*

Discussion. In order to do this there would need to be a clear mandate from the legislature on the goals to be achieved that would be clear to all parties: the Bureau of Apprenticeship, apprenticeship sponsoring committees, employers, and unions as well as school districts and community colleges. The next two points elaborate on this.

Program Operation. There appears to be a lack of a clear policy or guidelines on the functions for which the school systems should be responsible and funded.

5. *Florida's practice of having public education funds pay for coordination of on-the-job training may be exemplary or it may be that such coordination should not be a responsibility of public education.*

Discussion. The language in the Florida law specifies coordination as "coordination of such (classroom, related) instruction with job experiences" (F.S. 446.051) ensuring articulation of related instruction with on-the-job training. This function is carried out through specifically developed curriculum for each occupational trade and does not involve school personnel visiting work sites. Current coordination practices of the school personnel have no basis in law. It would appear also that particularly when coordinators are housed off of the school site that there is the suspicion at the very least that they may be carrying out duties of the sponsoring agency, not entirely a function of the educational institution. Guidelines should include, but not be limited to, such areas as whether a coordinator funded through state education funds should: recruit participating employers or potential program sponsors, conduct sponsor committee meetings, keep sponsoring committee meeting minutes, keep the indenture records on apprentices, do work-site visitations, monitor the records of on-the-job training hours by work processes and maintain offices off school grounds.

6. *Statutory and regulatory language is needed to specify more clearly the roles of and relationships among the Bureau of Apprenticeship, the Department of Education, and participating employers.*

Discussion. The above task might be accomplished through the leadership of the Florida Department of Education. It may be difficult with this arrangement, however, to arrive at consensus among the various persons and

agencies involved. It may therefore be more desirable to engage in a collaborative effort between the Department of Labor and Employment Security and the Department of Education to design policies which specify necessary legal authorities, contractual arrangements and program financing. All parties should keep in mind that documented, legal authority should accompany assigned programmatic and financial responsibility. Also, adequate documentation should be required to demonstrate how programmatic and financial responsibilities of different agencies fit together to make a viable program.

Funding Sponsoring Agencies. Several of the educational agencies visited spoke with pride of very friendly and close cooperative relationships with sponsors. This is obviously commendable. Team members had some concern, however, whether adequate mechanisms were in place to assure that educational funds were spent under public supervision and control. Staff paid by the school but housed off campus were not clearly under the supervision of the school. This is not to suggest that there was evidence of abuse but to suggest that there appeared to be the potential for question and possible abuse.

7. *For the protection of the State Department of Education and the local education agencies a clear policy regarding the role and function of staff housed off site should be developed along with a plan of supervision by the educational agency.*

Discussion. In cases where the educational agency is providing funds to an apprenticeship sponsor for the funding of related instruction or on-the-job training coordination, it would seem advisable to develop a formal contract delineating how the funds will be spent and how the contract will be supervised by the educational agency.

Audit of Apprenticeship Costs. This study tried to accurately describe apprenticeship program revenues and expenditures for public educational institutions. Though this report provides a solid basis for assessing next steps in design of appropriate legislation and policy, it may not provide the accuracy or detail that decision makers wish to make final decisions concerning these programs.

8. *The Department of Education may wish to conduct a more detailed study of expenditures given a longer time line. Also, it would be advisable to survey other states to see how they have handled some of the problems facing apprenticeship programs today.*

Discussion. A joint program review with the Department of Labor and the Department of Education might provide a better basis from which to delineate necessary responsibilities, authorities, contracts, and funding and expenditure levels. A preferable approach may also be to recommend that state auditors perform an audit of apprentice programs in the state.

Technical Points

9. *The community colleges reporting system should review its policies governing the reporting of apprentices in the 1.26.03 category, state and local officials all stated that apprenticeship is as a job-preparatory program.*

10. *Policies regarding exemption of apprentices from paying fees should be examined for consistency and equity between school district and community college sectors.*
11. *The number of years of exempt status for apprentices should be clarified. Currently some school personnel interviewed thought that a two-year ceiling was placed on the exemption. No local official was found to abide by such a restriction, if it applies to apprentices.*

REFERENCES

- Bureau of Apprenticeship (1982). Apprenticeship: Past and Present. Washington, D.C.: United States Department of Labor, Employment and Training Administration, p.17.
- Bureau of Apprenticeship (1987, Amended). Florida Law Regarding Apprentices Under Chapter 446 Florida Statutes. Washington, D.C.: United States Department of Labor, Employment and Training.
- Florida Department of Education. Blueprint for Career Preparation. Tallahassee, Florida.
- Florida Department of Education. Education for a New Decade. A New Century: A Guide to Education in Florida. Tallahassee, Florida.
- Florida Department of Education. (1988, August). Florida Education Finance Program: Statistical Report. (MIS Series 89-04), Tallahassee, Florida: Division of Public Schools.
- Florida Department of Education. The Community College Program Fund (CCPF): A Summary Explanation. Tallahassee, Florida.
- Florida Occupational Information System News, 10 (3).
- Florida TaxWatch. (1989). New directions for Florida education: A report to the governor, cabinet, Florida legislature and Florida taxpayers. Tallahassee, Florida.
- Glover, Robert W. (1983, November 15). Prepared Statement of Robert W. Glover, Director, Center for the Study of Human Resources, University of Texas at Austin. Washington, D.C.: House of Representatives, Subcommittee on Employment Opportunities, Committee on Education and Labor.
- House of Representatives. (1984). Carl D. Perkins vocational education act (Report No. 98-1129).
- Longman, Phillip. (1989, September). Need skilled labor? Try and apprentice. Florida Trend, 32 (5).
- Maier, Art. (1989, September 3). Construction apprentices given studies. Press Journal.
- National Occupational Information Coordinating Committee. (1985). Interagency agreement of the United States Department of Education and the United States Department of Labor to promote apprenticeship programs as required by Public Law 98-524. Washington, D.C.: National Occupational Information Coordinating Committee.
- Oversight hearing on the national apprenticeship training act. (1983, November 15). Washington, D.C.: House of Representatives, Subcommittee on Employment Opportunities, Committee on Education and Labor.

The National Apprenticeship Program. (1982b). Washington, D.C.: United States
Department of Labor.

United States Department of Labor. Florida Administrative Code. 13, 453-464

APPENDIX A

**Research Team Itineraries for State
Interviews and Site Visits**

ITINERARY FOR STATE LEVEL INTERVIEWS

Research Team

Dr. Carolyn Herrington, Principle Investigator

Dr. Nadine Mandolang, Project Director

Dr. Merle Strong, Consultant

Wed., Sept. 27
3:30

Dr. Carolyn Herrington, Dr. Nadine Mandolang
Research Team Meeting
312 Stone Building
Florida State University

Thurs., Sept. 28
9:30

Dr. Richard Ray
Division of Vocational Education
Florida Education Center
(488-0484)

10:30

Mr. Bob Howell, Director
Division of Vocational, Adult and Community Education,
Florida Education Center
(488-8961)

1:00

Dr. Paul Parker, Bureau Chief
Bureau of Programs Support Services,
Florida Education Center
(488-0555)

2:30

Mr. David Lyan, Staff Director
Education Sub-Committee,
House of Representatives
(488-6204)

Mr. Dale Hickman, Staff Director
Education Sub-Committee,
Florida Senate

Fri., Sept. 29
2:00

Mr. Bill Harris, Chief
Bureau of Apprenticeship
Florida Department of Labor
(Center for Policy in Education)

**ANALYSIS OF COST OF THE ADMINISTRATION AND OPERATION OF APPRENTICESHIP
PROGRAMS AND RELATED INSTRUCTION IN FLORIDA SCHOOL DISTRICTS AND
COMMUNITY COLLEGES**

Site Visit Itinerary

Research Team

Dr. Carolyn Herrington

Dr. Merle Strong

Dr. Nadine Mandolang

Dr. Robert Sorensen

Wed., Oct. 18

1:00 - 5:00

**Dr. Carolyn Herrington, Dr. Nadine Mandolang, Dr. Merle Strong and
Dr. Robert Sorensen**
Orange County School District
Meetings Arranged by:
**Mr. Joe Stephens, Associate Superintendent of Vocational, Adult,
and Community Education**

SUNCOM 329-1223
(409)-272-1223

Thurs., Oct. 19

8:00 - 12:00

Dr. Nadine Mandolang and Dr. Merle Strong
Orange County School District
Off Campus Training Sites And
Sponsor Offices

1:00 - 5:00

Seminole County College
Meetings Arranged by:
Suzanne Tesinsky, Occupational Dean

SUNCOM 353-1531

7:00 - 9:00

Seminole Community College
Apprenticeship Class Observations

Fri., Oct. 20

8:00 - 12:00

Dr. Nadine Mandolang and Dr. Merle Strong
Seminole Community College Sponsor Offices

**ANALYSIS OF COST OF THE ADMINISTRATION AND OPERATION OF APPRENTICESHIP
PROGRAMS AND RELATED INSTRUCTION IN FLORIDA SCHOOL DISTRICTS AND
COMMUNITY COLLEGES**

Mon., Oct 30
1:00 - 5:00

Dr. Carolyn Herrington and Dr. Robert Sorensen
Dade County School District
Meetings Arranged by:
Mr. Burt Watkins, Supervisor of Adult, Trade and Industrial
Education and Apprenticeship Training
Office of Vocational, Adult, Career and Community Education

SUNCOM 432-1843
(305)-995-1843

7:00 - 9:00

Dade County School District
Apprenticeship Class Observations

Tues., Oct. 31
8:00 - 11:00

Dr. Robert Sorensen
Dade County School System
Off Campus Training Sites And Sponsor Offices

Wed., Nov. 1
9:00 - 5:00

Dr. Nadine Mandolang and Dr. Robert Sorensen
Martin County School District
District Meetings and off campus Training Sites
Meetings Arranged by:
Dr. Carl Miller, Director of Vocational, Adult and Community
Education

SUNCOM 241-1256
(407)-287-6400 ext. 256

Thurs., Nov. 2
9:30 - 12:00

Dr. Nadine Mandolang and Dr. Robert Sorensen
Florida Community College at Jacksonville
Meeting Arranged by:
Dr. John P. Cosby, Associate Vice President of Instruction

SUNCOM 864-3109
(904)-632-3109

1:00 - 5:00

FCC at Jacksonville
Off-campus Training Sites And Sponsor Offices

7:00 - 9:00

FCC at Jacksonville
Apprenticeship Class Observation

**ANALYSIS OF COST OF THE ADMINISTRATION AND OPERATION OF APPRENTICESHIP
PROGRAMS AND RELATED INSTRUCTION IN FLORIDA SCHOOL DISTRICTS AND
COMMUNITY COLLEGES**

Wed., Nov. 1
1:00 - 5:00

Dr. Merle Strong
Lake County School District
Meetings Arranged by:
Mr. Buddy Jones, Business Dean
Vocational Technical Center

(904)-357-8222

7:00 - 9:00

Lake County School District
Apprenticeship Class Observations

Thurs., Nov. 2
9:00 - 3:00

Dr. Merle Strong
Polk County School District
Meetings Arranged by:
Mr. Ron Jefferies, Assistant Superintendent of Vocational
Education

SUNCOM 541-2101
(813)-534-2101

4:00 - 9:00

Hillsborough County School District
Initial Introductory Meeting and Class Observations
Meetings Arranged by:
Mr. Earl Lennard,
Assistant Superintendent of Vocational Technical and Adult
Education
(813)-272-4221

Fri., Nov. 3
9:00 - 12:00

Dr. Carolyn Herrington and Dr. Merle Strong
Hillsborough County School District
County Office and Vocational Technical Center

1:00 - 3:00

Hillsborough County School District
Off-Campus Training Sites and Sponsor Offices

**ANALYSIS OF COST OF THE ADMINISTRATION AND OPERATION OF APPRENTICESHIP
PROGRAMS AND RELATED INSTRUCTION IN FLORIDA SCHOOL DISTRICTS AND
COMMUNITY COLLEGES**

Tues., Nov. 7

**Dr. Nadine Mandolang
Okaloosa-Walton Community College
Meetings Arranged by:
Mr. Gale Kaltz, Chairman of Industrial and Technical

(904) 729-5320**

Wed., Nov 8

**Dr. Nadine Mandolang
Indian River Community College
Meetings Arranged by:
Dr. Tom Deal, Vice President of Instructional Services

(407) 468-4704**

**Thurs., Nov. 9
8:00 - 12:00**

**Dr. Nadine Mandolang
St. Johns County School District
Meetings Arranged by:
Mr. Ralph Upton, Director of Vocational and Adult Education

(904) 824-4401**

1:00 - 3:00

**St. John's County School District
Off-campus Training Sites And Sponsor Offices**

Thurs., Nov. 9

8:00-8:00 pm

**Research Team, Writing Session
Dr. Nadine Mandolang and Dr. Merle Strong
Lakeland, Florida
Final Analysis and Writing Review**

APPENDIX B

Letters and Research Instruments

- B1. Letter of Introduction**
Enclosure: Action Plan (not included here)
- B2. Follow-up Data Request Letter**
Enclosure: Data and Information Request Form
- B3. Data Request Letter to Community Colleges Not Sampled**
Enclosure: Instrument



Center for Policy Studies in Education
Tallahassee, Florida 32306-5000

October 9, 1989

Mr. Otis A. Mason
Superintendent
St. Johns County School District
40 Orange Street
St. Augustine, FL 32084

Dear Mr. Mason:

The 1989 Florida Legislature directed the Department of Education to "conduct a cost analysis of apprenticeship programs and recommend to the President of the Senate and the Speaker of the House of Representatives by January 1, 1990 an appropriate method and level of funding for apprenticeship programs based on that analysis. The cost analysis shall identify program costs for school districts and community colleges separately."

As part of the legislative mandate, the Department of Education, Division of Vocational, Adult, and Community Education has requested that the FSU Center for Policy Studies in Education undertake an analysis of costs of the administration and operation of apprenticeship programs and related instruction in Florida school districts and community colleges. Your district has been selected as one of the sites for this study.

You will find a copy of the study's Action Plan enclosed. If you have any questions regarding this study, please address them to Dr. Nadine Mandolang, Project Director. She will be calling you shortly to request a contact person for your district with whom to arrange requests for data, on-site visits, follow-up on data gaps and general questions.

I am not unaware of the effort that will be required from your staff. I thank you in advance for your help. However, I am confident this study will help to produce a clear, detailed and fair understanding of apprenticeship programs in Florida.

I appreciate all the support you provide.

Sincerely,

Carolyn Herrington
Associate Director

CH/nmj
Enclosure



Center for Policy Studies in Education
Tallahassee, Florida 32306-5000

October 16, 1989

James L. Schott
Superintendent
Orange County Schools
P.O. Box 271
Orlando, FL 32802

Dear Dr. Schott:

This is a follow-up to our letter of October 9, 1989 introducing the cost study of the administration and operation of apprenticeship programs and related instruction in Florida school districts and community colleges. I wanted to bring to your attention the data that will be needed from your district.

Enclosed is a description of the data that are requested in conjunction with this study. Since uniform recording structures are not used by all sites, please include any necessary explanations of your specific data structure including operational definitions, measurement procedures and any other information the research team will need to interpret the data. Please submit these data to me by mail. I will call to arrange a realistic submission date for your district. We may also arrange for a site visit to conduct interviews, discuss these data and fill in data gaps.

This study is under significant time pressures. The Center has been asked to complete the study in eleven weeks. I am not unaware of the extra efforts this requires of you and your staff. I will make every effort to facilitate smooth data collection. Please feel free to call me with any difficulties, questions or concerns you may have.

Again, the Center does appreciate your efforts. Please feel free to call at any time.

Sincerely,

Nadine Mandolang, Ph.D.
Project Director

/slb
Enclosures

cc: Vocational Director

**ANALYSIS OF COSTS OF THE ADMINISTRATION AND OPERATION OF
APPRENTICESHIP PROGRAMS AND RELATED INSTRUCTION IN
FLORIDA SCHOOL DISTRICTS AND COMMUNITY COLLEGES**

DATA AND INFORMATION REQUEST FORM

THE FOLLOWING DATA SHOULD BE GATHERED AND PRESENTED IN WRITING TO :

**Dr. Nadine Mandolang B-211
Center for Policy Studies in Education
Florida State University
Tallahassee, Florida 32306
SUNCOM 284-5042
(904) 644-5042**

NAME OF SCHOOL DISTRICT OR COMMUNITY COLLEGE

NAME _____

ADDRESS _____

PHONE _____

PERSON COMPLETING DATA _____

**THE CENTER FOR POLICY STUDIES IN EDUCATION
FLORIDA STATE UNIVERSITY**

1. Please provide a list of unduplicated apprentice enrollments by apprenticeable occupation for 1988-89. If available by quarters or semesters, this would be preferable.
2. Indicate by apprenticeable occupation the number of apprentices who are registered with the Bureau of Apprenticeship.
3. Provide the name of the program sponsor for each occupation, the organizational structure of sponsorship, rosters of all apprenticeship committees, a schedule of meetings for the 1988-89, and a sample set of minutes for each committee.
4. List the hours of related instruction provided for each apprenticeable occupation for 1988-89.
5. List services other than related instruction provided for each apprenticeable occupation for 1988-89.
6. Please indicate by apprenticeable occupation the number of FTE hours claimed for (a) related instruction (b) OJT, and (c) other for 1988-89. Indicate how FTE hours were calculated.
7. Please provide information on program management and operation, broken down by (a) administrative or supervisory, (b) instructional and (c) other positions. It should include a list of positions, titles, percent of time spent on apprenticeship by each person, and time assignments of functions carried out (make sure apprenticeship course loads and case loads are clear). Also include a job description for each person.
8. Please provide a separate statement on public school or community college personnel housed off campus relative to services provided and rationale for off campus sites.
9. Please provide expenditures for apprenticeship for the 1988-89 year. Your format will be acceptable but should include the following:
 - Administrative and supervisory positions by title and costs assigned including salary and fringe benefits.
 - Instructional positions and costs assigned including salary and fringe benefits.
 - Other personnel assigned to apprenticeship functions and costs including salary and fringe benefits.
 - List other costs assigned to apprenticeship including materials, equipment, travel, etc.

10. Please provide all monies received for apprenticeship for 1988-89.

FTEs for related instruction	_____
FTEs for on-the-job training	_____
Trust Funds	_____
Tuition	_____
Industry training contracts	_____
Fees	_____
Other	_____

In addition, please indicate direct or in-kind support in lieu of tuition for each apprenticeable occupation where tuition was not charged.

11. A number of organizations are involved in apprenticeship, including the Federal Bureau of Apprenticeship and Training, the State Bureau of Apprenticeship, public education, unions, employers, and employer organizations. Please provide guidelines, statements of principle, handbooks or other materials that reflect your institution's role within an overall framework of apprenticeship programs.

Thank you for your efforts in gathering these data for the study.



Center for Policy Studies in Education
Tallahassee, Florida 32306-5000

October 18, 1989

Robert L. McSpadden
President
Gulf Coast Community College
5230 West Highway 98
Panama City, FL 32401

Dear Dr. McSpadden:

The Center for Policy Studies in Education at Florida State University has been requested by the Florida Department of Education to conduct a legislatively-mandated study. This study will analyze the cost of the administration and operation of apprenticeship programs and related instruction in Florida school districts and community colleges. The study will be conducted this fall.

The Center has selected a sample of several districts and colleges for detailed data collection purposes. Your college has not been selected. However, in order to complete the study, the Center needs to collect some basic enrollment data not available from the State Board of Community Colleges. I am asking that you please provide unduplicated total apprentice enrollments by apprenticed, occupational program for 1988/89. The Center will need these data as soon as possible but no later than November 1, 1989.

If you are able to provide these data, please submit them to the Center for Policy Studies in Education B-211, Florida State University, 312-F Stone Building, Tallahassee, Florida 32306. If you have any questions about or difficulties with this request, please feel free to call, (904) 644-5042.

I appreciate your cooperation in submitting these data.

Sincerely,

Nadine Mandolay, Ph.D.
Project Director

/bip
Enclosures

cc: Reports Coordinator

312 Stone Building • (904) 644-5042

APPENDIX C
Persons Interviewed by Site

APPENDIX C

Persons Interviewed by Site

DISTRICTS

1. Dade County School District

Burt Watkins, Supervisor, Adult, Trade and Industrial and
Apprenticeship Training Contact Person for this study
Fred C. Schollmeyer, Trade and Industrial Division Chairperson
Terry M. Underwood, Trade and Industrial Department Chairperson
Mark Kernoy, Director of Training, ACRA - Local 725 Education
Committee
Paul H. Cyman, Training Coordinator, South Florida Carpenters Joint
Apprenticeship Training Trust Fund
Thomas A. Flynn, Apprenticeship District Program Manager, Bureau
of Apprenticeship Division of Labor, State of Florida

2. Hillsborough County School District

John B. Faulkenberry, Coordinator, Apprenticeship Training, Contact
Person for this study
Earl Lennard, Assistant Superintendent
James E. Carr, Assistant Director, Adult Vocational Part-time
Programs
Gerald Smith, ICE
Clark Gottchalk, Supervisor of Accounts Control
Bob Hanson, Senior Accounts Analyst
Phillip Humphrey, Coordinator
Wayne Tintera, ABC Electrical Apprentice
Steve Whidden, ABC Electrical Apprentice
William Odem, Electrical Apprentice 4th Year
Mark Reynolds, Electrical, 1st. Year
Jay Herrin, Electrical, 1st. Year
Chris Graebell, Electrical 1st Year

3. Lake County School District

Buddy Jones, Business Dean, Lake County Area Vocational Technical
Center, Contact Person for this study
Maxine Felts, Interim Director, Lake County Area Vocational
Technical Center
Roland Best, Assistant Director, Evening Program Coordinator
Dale Pennington, Coordinator of Culinary Arts Apprenticeship
Program
Juanita Smalley, Coordinator, Lake Child Care Apprenticeship
Program
Ken Bragg, County Director of Vocational Education

4. Martin County School District

Carl Miller, Director of Vocational Education, Contact Person for this study
Richard Mikuska, Vocational Resource Instructor
Dwight Foster, Executive Director, Association of Building Contractors Institute
John Carvelli, ICE Coordinator
Brian Willis, ICE Coordinator
R.R. "Dick" Mikuska, Vocational Resource Instructor

5. Orange County School District

Doug Knoblett, Director of Post-Secondary Vocational, Adult and Community Education
Chester F. Dalton, Assistant Director, Mid-Florida Technical Institute
Joe Stephens, Associate Superintendent for Vocational Adult and Community Education
Bob Clark, Director, Mid-Florida Technical Institute
John Houlihan, Apprenticeship Program Coordinator for Carpentry Programs
Shirley Cockriel, Apprenticeship Program Coordinator for Carpentry Program
Bob Kurr, Apprenticeship Program Coordinator for FEAT
Jim Sullivan, Apprenticeship Program Coordinator for Central Florida Electrical Joint Apprenticeship Training Program
Dan Moore, Business Manager, Mid-Florida Technical Institute
Valerie Shelton, Coordinator of the Chef's Apprenticeship Program
Doris Stanley, Secretary for Apprenticeship Programs

6. Polk County School District

Bill Hampton, Director, Ridge Vocational Technical Center, Contact Person for this study
Carl Ray, Apprentice Coordinator, Assistant Director, Ridge Vocational Technical Center
Ken James, Assistant Director, Ridge Vocational Technical Center
Wayne Wheeler, Retired Assistant Director, Ridge Vocational Technical Center
Ralph Heimrick, Apprenticeship Coordinator
Marynelle Gilley, Apprenticeship Coordinator
Dan Matlock, Apprenticeship Coordinator

7. St. John's School District

Ruth McCrary, Business Manager
Ralph Upton, Director, Vocational, Technical and Adult Education
Jerry Bois, Coordinator of Culinary Arts
Tak Bower, Division Head Culinary Arts Program
Ray Wires, Principal of Evening Division
Bernie Masters, Principal, Putnam County Campus
Steve Hand, Principal of Day Division

COLLEGES

8. Florida Community College at Jacksonville

Jon P. Cosby, Associate Vice President for Instruction, Contact Person for this study
Ronald Richards, Director, Geis Marine Center, Florida Community College
Laura L. Laseman, Training Director, Northeast Florida Builders Association
Al Herndon, Apprenticeship District Program Manager, Bureau of Apprenticeship, State of Florida, Jacksonville
Carmel R. Morris, Vice President and Co-owner, Allstate Electrical Contractors, Inc., Apprenticeship Participating Employer and member of the National Apprenticeship Task Force
Leon Dorsett, Program Manager, Trade and Industrial Services
Jack Spears, Vice-President for Finance

9. Indian River Community College

Thomas C. Deal, Vice President, Instructional Services, Contact Person for this study
Art Cohen, Association of General Contractors

10. Okaloosa-Walton Community College

Gail Kaltz, Department Chair, Industrial Education

11. Pasco Hernando Community College

Henry Albertson, Assistant Dean of Vocational Education

12. Seminole Community College

Suzanne Tesinsky, Dean, Vocational-Technical Education, Contact Person for this study
Keith Samuels, Vice-President for Instruction
Suzanne Tesinsky, Dean, Vocational-Technical Education
A. Norris Miner, Dean, Institutional Analysis and Research
Trent Loveday, ICE-ABC Coordinator
Preston Allyn, ICE-ABC Coordinator
Brian Satterlee, Director of Technical and Industrial Programs
Dianne Lewis, ICE-FAST, Vocational-Technical Education
Jan Radlowsky, ICE-FAST, Vocational Technical Education
W. Guy, FAST
Pat Walker, ABC
Mark Wiley, ABC

STATE

David Armstrong, Education Policy Analyst, Division of Community
Colleges
Lavan Dukes, Supervisor, Management Information Services
Bill Harris, Chief, Bureau of Apprenticeship
Steve Harvey, President, Vocational Education Area Center
Directors Association
Launy Larson, Assistant Director, Vocational Division, DOE
Erin McColskey, Educational Policy Director Division of Community
Colleges
Paul Parker, Bureau Chief, Program Support & Services
Richard Ray, Staff Director, Vocational Division, DOE
Lee Roberts, Deputy Director, Administrative & Support Services,
Division of Public Schools
Harry Rudy, Bureau Chief, Information Services, Division of
Community Colleges
Rick Watson, Lobbyist, ABC
Lee P. Young, Administrator, Financial Planning and Analysis,
Division of Community Colleges

APPENDIX D

**Apprentices Registered with the Department of Labor and Employment Security for
May 1988-May 1989 and for September, 1988**



MEMORANDUM

DEPARTMENT OF LABOR AND EMPLOYMENT SECURITY

Date June 2, 1989
To Robert D. "Skip" Johnston, Director, Labor, Employment and Training
From Bill Harris, ^{BH} Chief, Bureau of Apprenticeship
Subject Bureau's Monthly Activity for May, 1989

	FY May 87-88	FY May 88-89
I. <u>Year to Date Figures</u>		
A. Total Programs	304	318
B. Total Participants	8522	9002
C. Total Training Actions	5495	5673
1) New Indentures	3110	3057
2) Completions	642	769
3) Cancellations	1743	1847
	May 1988	May 1989
II. <u>Training Actions Within Month</u>		
A. Total Training Actions	502	551
1) New Indentures	92	215
2) Completions	215	237
3) Cancellations	195	99
	May 1988	May 1989
III. <u>Monthly Status Figures</u>		
A. Total Active Apprentices	6137	6386
1) Participating Females	286	311
2) Participating Minorities	952	854
3) Vo-ed Linkage	5549	5679
B. Registered Apprenticeship Programs	285	293
C. Total Pre-Apprentices Registered	100	161
D. Total Trainees Registered	75	61

/vm

cc: Apprenticeship Field Offices
Bob Arnold
DLET Bureau Chiefs
Delores Zell
Fred Fredette
George Belcher

**Number of Apprentices Registered with the Department of Labor by Traditional and Non-Traditional Trades, Occupation, and Union and Non-Union Sponsor
September, 1988**

TRADITIONAL TRADES

<u>TRADES</u>	<u># OF UNION APPRENTICES</u>	<u># OF NON-UNION APPRENTICES</u>
Carpenter	375	229
Electrician	656	1382
Plumber	284	196
Pipefitter	75	80
Sprinkler Fitter	80	177
Painter	110	16
Millwright	16	0
Lather	23	1
Bricklayer	54	5
Operating Engineer	50	5
Sheet Metal	183	87
Ironworker	121	0
Tile Setter/Layer	42	1
Plasterer	18	2
Heating, A/C & Refrigeration Mech.	215	300
Cement Mason	3	0
Asbestos Worker/Insulation Worker	54	35
Roofer	63	0
Drywall Finisher	12	0
Glazier	20	26
Piledriver	17	0

TRADITIONAL TRADES

<u>TRADES</u>	<u># OF UNION APPRENTICES</u>	<u># OF NON-UNION APPRENTICES</u>
Electrician, Industrial	4	15
Electrician, Substation	0	8
Cabinet Maker	0	12
Floor Layer	0	2
Construction Equipment Mechanic	0	11
Welding	5	0
Metal Fabrication	3	0
TOTAL	<u>2483</u>	<u>2590</u>

NON TRADITIONAL TRADES

<u>TRADES</u>	<u># OF UNION APPRENTICES</u>	<u># OF NON-UNION APPRENTICES</u>
Cook	8	299
Butcher	1	0
Upholsterer	3	0
Auto Mechanic	10	26
Auto Body Repairman	2	0
Maintenance Mechanic	5	17
Protective Signal Repairer	1	0
Waste Water Treatment Plant Operator	2	0
Pressman	7	0
Web Press Operator	7	0
Electronic Prod. Line Maintenance Mech.	4	0
Electrical Repairer	4	0
Machine Repairer, Maintenance	1	8
Fire Fighter	249	25
Fire Medic	1	73
Fire Fighter, Crash, Fire & Rescue	4	0
Pump Servicer(Irrigation Servicer)	4	0
Electronic Technician	3	0
Line Erector(Lineman)	5	81
Tool and Die Maker	0	41
Machinist	0	6

NON TRADITIONAL TRADES

<u>TRADES</u>	<u># OF UNION APPRENTICES</u>	<u># OF NON-UNION APPRENTICES</u>
Baker	0	2
Child Care Development Specialist	0	46
Vending Machine Mechanic	0	1
Diesel Mechanic	0	58
Plant Maintenance Mechanic	0	6
Radiator Mechanic	0	1
Line Maintainer	0	3
Fuel Injection Service	0	1
Meter Worker	0	2
Mold Maker, Plastic Molding	0	6
Furniture Finisher	0	1
Bindary Worker	0	1
Material Coordinator	0	3
Instrument Technician	0	7
Electric Meter Repairer	0	2
Dental Lab Technician	0	4
Shoe Repairer	0	2
Electrical Repairer (Apparatus Tech.)	0	1
Electrician, Marine	0	3
Horticulturist	0	11
Gunsmith	0	1
Electric Service Repairer	0	1

NON TRADITIONAL TRADES

<u>TRADES</u>	<u># OF UNION APPRENTICES</u>	<u># OF NON-UNION APPRENTICES</u>
Press Operator, Heavy Duty (Flexographic)	0	2
Machinist, Marine Engine	0	2
TOTAL	<u><u>321</u></u>	<u><u>743</u></u>

Source: Department of Labor, Bureau of Apprenticeship

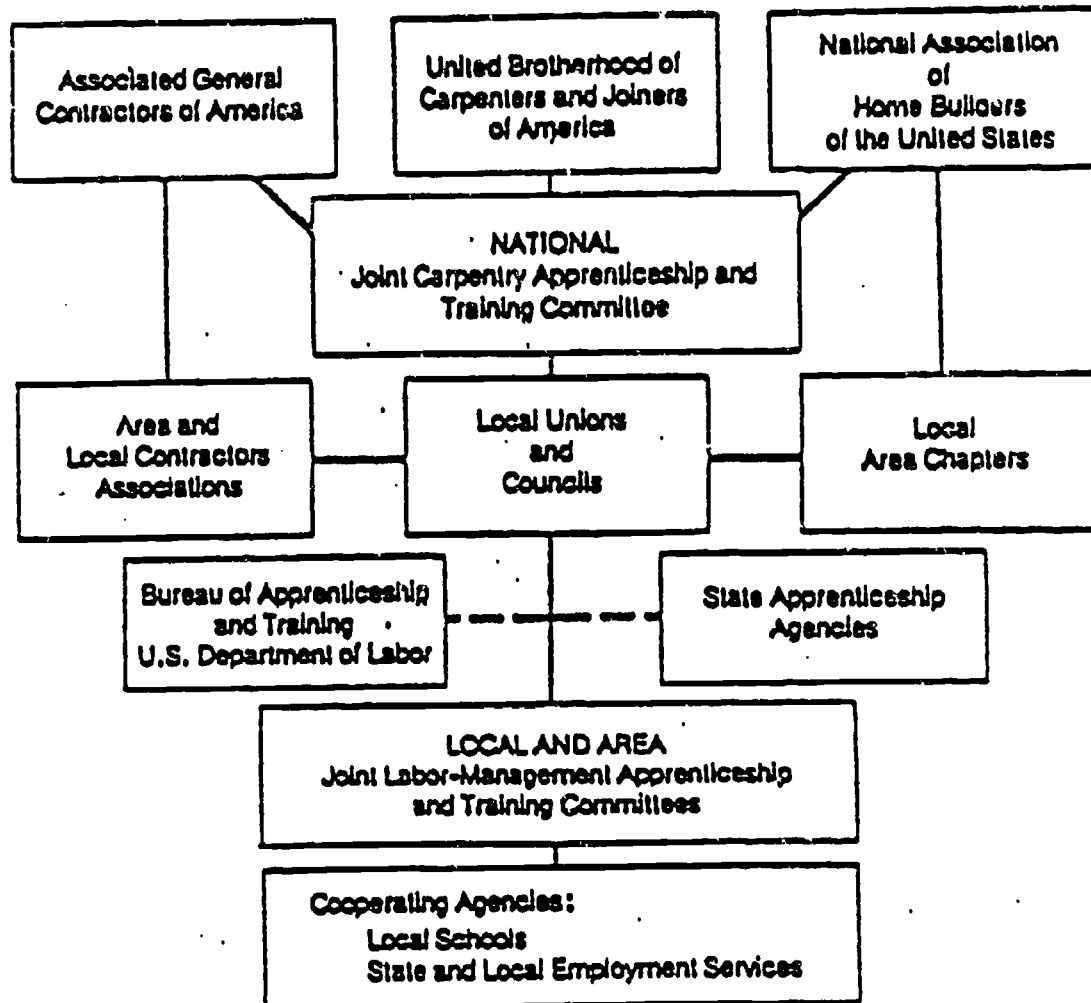
Traditional Trades Total: 5,073
Non Traditional Trades Total: 1,064
Non-union Total: 2,804
Union Total: 3,333
Grand Total: 6,137

APPENDIX E

Sample Depictions of Organizational Structures of the Overall Apprenticeship Programs and of the Public Educational Institutions Component of the Program

- E1. Federal Department of Education**
- E2. Florida Community College at Jacksonville**
- E3. Hillsborough County School District**

**Federal Department of Education Depiction of the
Organizational Structure of Apprenticeship and Training
System of the Carpentry Trade**



Industry and labor work together to form apprenticeship standards in the crafts and trades and to supervise programs. The chart above is an example of how this cooperation works in the carpentry trade.

Source: Bureau of Apprenticeship (1982). Apprenticeship: Past and Present. Washington D.C.: U.S. Department of Labor, Employment and Training Administration, p. 23.

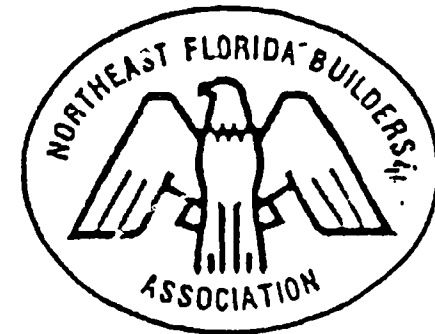
1989 TRAINING ORGANIZATIONAL CHART

Hire
the
Apprentice...

It's
good
business!

Northeast Florida Builders Association
Board of Directors

Northeast Florida Builders Association
Executive Committee



Executive Apprentice Committee.

Robert Gibbs (781-4440), Chairman
 Tim Colvin (276-2729)
 Paul Dawkins (354-4709)
 Palmer Hall (442-8820)
 David VanDerHorst (391-6476)
 Kenneth Knabb (255-6309)
 Jonny Moore (739-2700)
 Dwight Parks (395-0531)
 Paul Nichols (289-1736)
 Gary Pender (354-7048)

ICE TRAINING SERVICES

Laura Laseman, Director
 Leigh Neux
 Charlotte Williams
 Shawn Johnson
 Robert Russell
 Edward Gonzalez
 Vanessa Colvin
 (725-4355)

Carpentry Committee

Palmer Hall, Chairman
 David VanDerHorst, Vice-Chairman
 Tom Brown
 Paul Dawkins
 Paul Nichols
 Leigh Broward, alternate
 Alec Lawson, alternate
 Glen Harrell, alternate
 Curist Brown, alternate

Electrical Committee

Tim Colvin, Chairman
 Jonny Moore, Vice-Chairman
 Max Bass
 Fred Munson
 Randy M. Fries
 Lam Filzen, alternate
 Bobby Hinson, alternate
 Russell Butler, alternate
 Virgil Adams, alternate
 Bill Thompson, alternate
 E. L. "Buzz" Lea, Jr., alternate
 Wayne Meares, alternate

Plumbing Committee

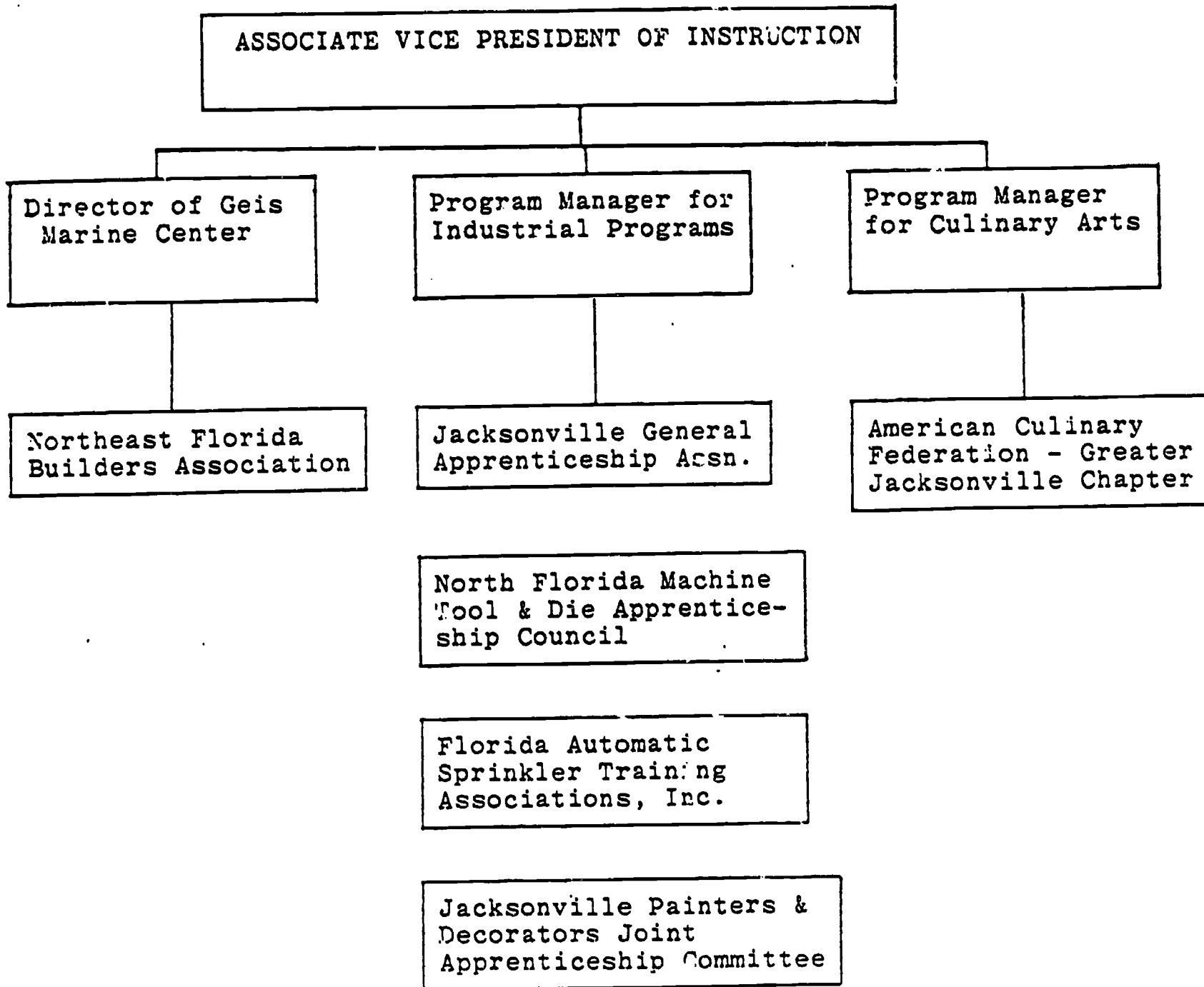
Gary Pender, Chairman
 Kenneth Knabb, Vice-Chairman
 Jim Mangrum
 E. E. "Scotty" Scott
 Bob Matthews
 Sam Helms, alternate
 David Gray, alternate
 Ted Benedict, alternate

HAR/SM Committee

Dwight Parks, Chairman
 Keith Paul, Vice-Chairman
 Jim Hammock
 Jim Griffin
 Jack Suckland
 Hal Kelly, alternate
 Billy Rogers, alternate
 Robert Gibbs, alternate
 Janie Ade, alternate
 Joe Madden, alternate
 Tom Reager, alternate

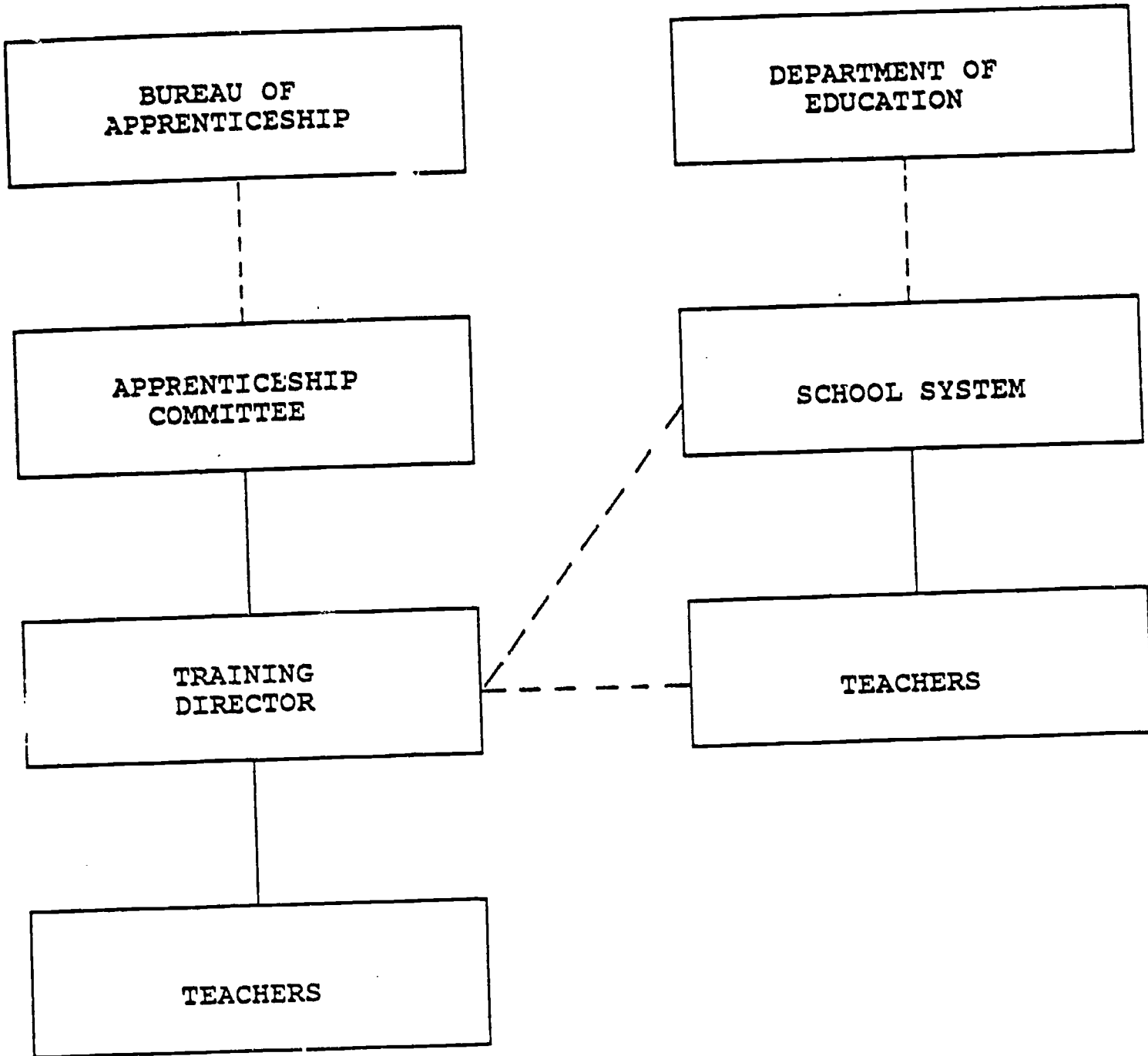
Community College at Jacksonville
 Florida
 32

E2
Florida
Community College at Jacksonville



#3

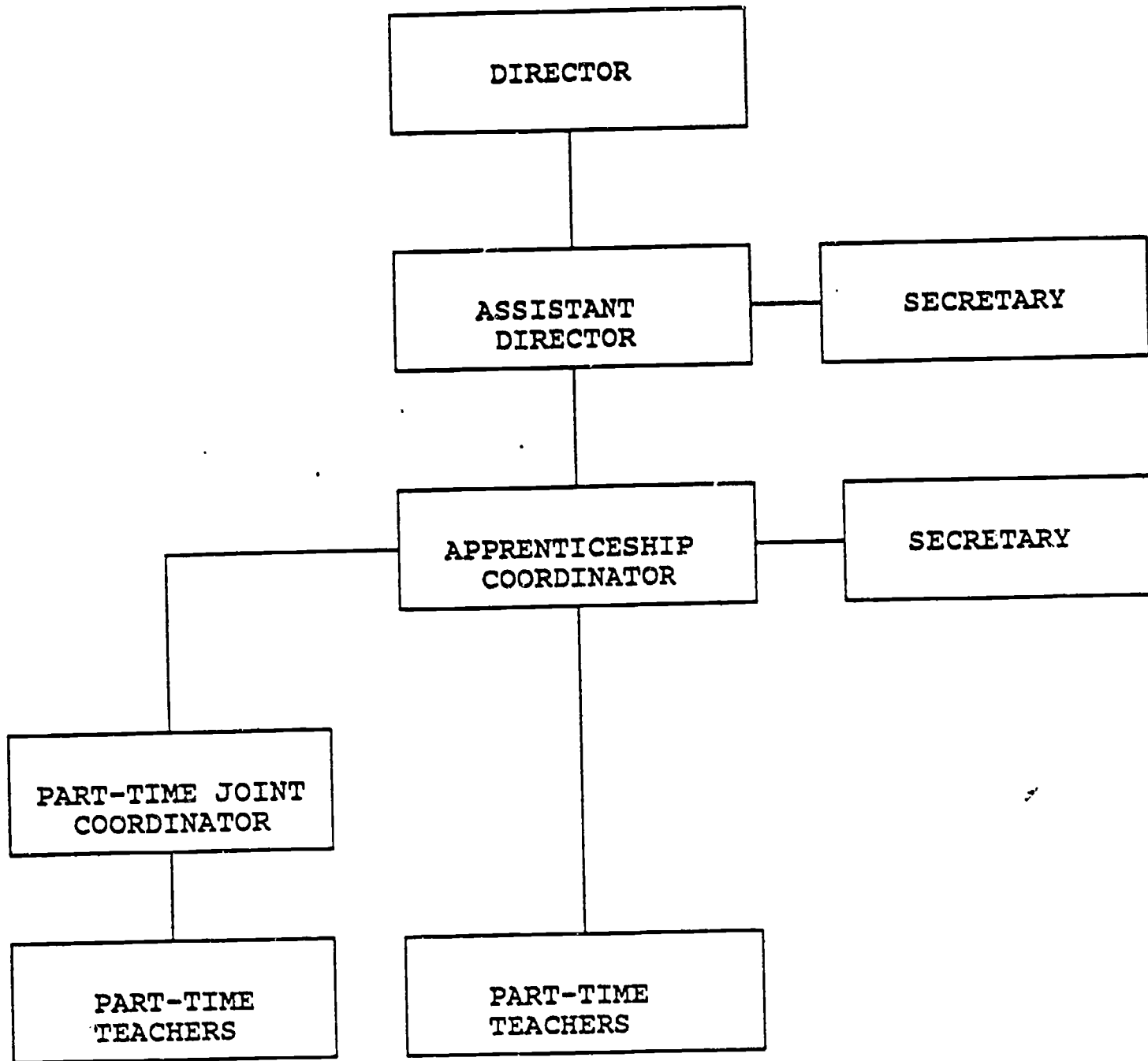
E3
Hillsborough
County School District



E3
Hillsborough
County School District

#7

PROGRAM MANAGEMENT AND OPERATIONS



APPENDIX F

Sample Information on Apprenticeship Programs Provided to Apprentices

- F1. Florida Community College at Jacksonville
- F2. Martin County School District
- F3. Associations of Builders and Contractors Institute, Inc.

WHAT ARE THE QUALIFICATIONS FOR APPRENTICE APPLICANTS?

Applicants must be at least 18 years old. However, if an applicant has graduated from a high school vocational education program in the trade for which he or she is applying, the age requirement may be lowered to 16, based upon the employer's recommendation and approval of the trades committee.

Applicants must be high school graduates or have a G.E.D., or be 18 years old and graduating from high school by July 1st of the year they apply. Applicants must be physically able to perform the work of the trade.

Applicants must provide for their own transportation to and from the employer's place of business and/or job site, as well as to the facility where classes are held.

Each applicant will be interviewed by the proper trade committee and evaluated for selection. Apprentices are selected based on attitude, aptitude, and qualifications for the trade.

The recruitment, selection, training and employment of apprentices during their apprenticeship shall be without discrimination regarding race, color, religion, national origin or sex.

HOW LONG IS THE TRAINING PROGRAM?

The apprentice training program is four years.

CAN AN APPRENTICE BE ADVANCED IN LESS THAN FOUR YEARS?

Credit may be granted for verified work experience and/or training, based on employer recommendation and employer and trade committee approval.

HOW MAY A CONTRACTOR HIRE AN APPRENTICE?

Contractors should call the Northeast Florida Builders Association Training Department at 725-4355, to hire apprentices from the approved selection list.



PLEASE ADD MY NAME TO YOUR MAILING LIST!

- I would like to apply for the apprenticeship program in March.
- I am unemployed, currently seeking job placement.
- I am an employer, interested in "grandfathering" in my employee(s).
- I am an employer, interested in hiring an apprentice.
- Other _____

NAME (PLEASE PRINT)

STREET or P.O. BOX

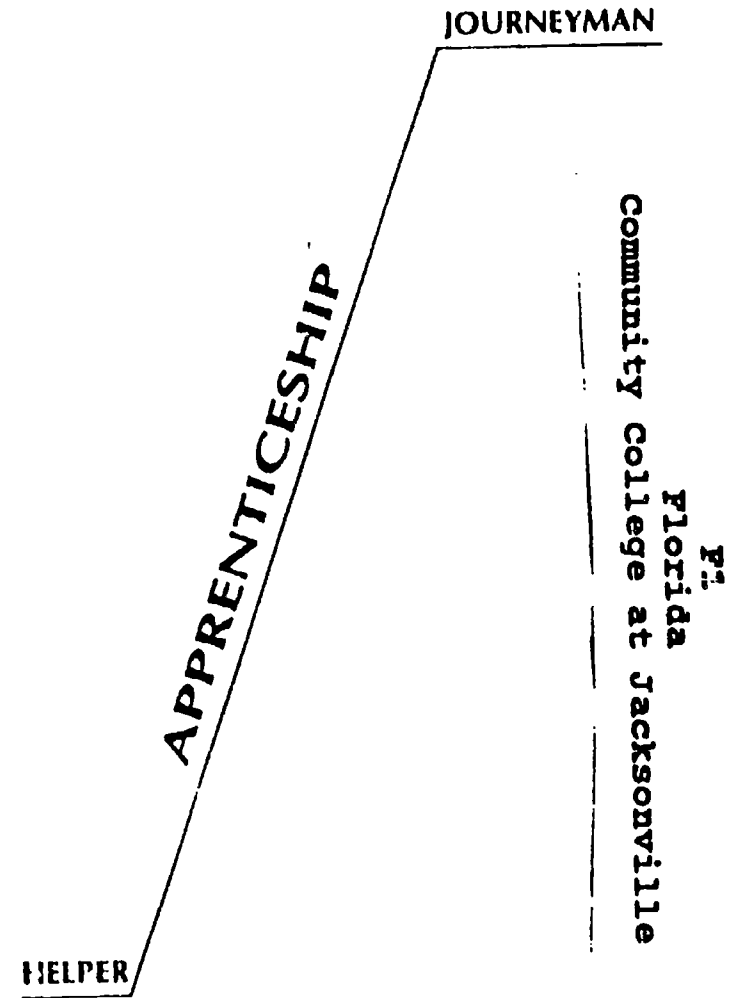
CITY

STATE

ZIP CODE

Please clip and send to NEFBA Training Division, P.O. Box 17339, Jacksonville, Florida 32245.

CONSTRUCTION TRADES CAREER TRAINING



The path to the future.

Northeast Florida Builders Association
 2002 Southside Boulevard
 Jacksonville, Florida 32216
 Phone (904) 725-4355

THE BUILDING INDUSTRY

The building industry is one of Northeast Florida's largest, most important industries, employing thousands of skilled workers. The industry offers exciting career opportunities since there is a constant demand for skilled workers in the construction trades.

THE NORTHEAST FLORIDA BUILDERS ASSOCIATION

The Northeast Florida Builders Association is the largest local construction industry organization in the country, serving the industry for more than 45 years. Association membership consists of builders, developers, subcontractors, suppliers, and service providers, and is affiliated with the Florida Home Builders Association and the National Association of Home Builders. Association members have a vast network of local, state and national resources at their disposal. Apprenticeship training is one of the many services available to Association members.

THE BUILDING TRADES

The building trades are those involved in the construction and maintenance of any shelter, be it residential, commercial or industrial.

APPRENTICESHIP

Most careers in the building trades begin with service as an apprentice. Apprenticeship is a prescribed period of on-the-job-training supplemented with related classroom instruction.

Upon successful completion of training, an apprentice is qualified as a skilled journeyman in the trade and will earn journeyman wages.

WHAT TRADES ARE REGISTERED IN THE ASSOCIATION PROGRAM?

The program currently trains apprentices in five building trades: Carpentry, Electrical, Sheet Metal, Plumbing, and Heating, Air Conditioning & Refrigeration.

WHO MAY USE ASSOCIATION APPRENTICES?

Any licensed contractor who is a member of the Association may agree to become a Participating Employer.

WHO OVERSEES THE APPRENTICE PROGRAM?

Individual trades committees, made up of five participating contractors, develop curricula, handle problems with apprentices, make selections and see that the program is run smoothly.

The Executive Committee, made up of two representatives from each of the trades committees and two builder members, sets general policies for the entire program.

The Association Training Department is staffed by the Training Director and a Training Coordinator, who administer the program.

IS THE PROGRAM APPROVED AND MONITORED BY THE FLORIDA DIVISION OF LABOR?

Yes, a representative from the Florida Bureau of Apprenticeship regularly attends meetings and applicant selection interviews of the trades committees.

IS THE PROGRAM APPROVED FOR VETERANS ADMINISTRATION BENEFITS AND TO MEET THE REQUIREMENTS FOR DAVIS-BACON (FEDERAL) JOBS?

Yes, it is.

IS THERE A RATIO REQUIREMENT?

Yes, the present ratio required is as follows: A contractor may have one apprentice for the shop and one for every three journeymen thereafter. In other words, a contractor must have four journeymen to have two apprentices, seven journeymen to have three apprentices, etc.

WHEN ARE SELECTIONS MADE FOR THE APPRENTICE PROGRAM?

Applications are taken in March of each year.

All applicants completing the necessary paperwork are interviewed in April and May, and selections are made from among those interviewed.

CAN A CONTRACTOR ENROLL EXISTING EMPLOYEES INTO THE PROGRAM?

If a contractor has not previously participated in the program, he may "grandfather in" any of his existing employees. This is a one-time only privilege allowed by the State. Successive apprentices must be hired from the list of selected applicants.

WHERE AND WHEN ARE CLASSES HELD?

Classes are held at an approved educational facility from September through April, two nights per week: either Monday/Wednesday or Tuesday/Thursday, from 7 - 10 p.m.

WHAT IS AN APPRENTICE PAID?

First year apprentices start at 35% of established journeyman's wages and increase 5% after six months, 10% after one year, and 5% each six months thereafter. On Davis-Bacon jobs, the apprentice must be paid his proper percentage rate applied to the prevailing wage determined for that particular job, or the Association wage rate, whichever is higher.

IS THE APPRENTICE PAID FOR CLASSROOM ATTENDANCE?

No, apprentices are not paid for attendance.

WHEN IS THE CONTRACTOR BILLED?

Apprentice tuition is billed on July 1st, or in the case of "grandfathered" apprentices, at the time indentured.

IS THERE ANY COST TO THE APPRENTICE?

Yes, the apprentice pays a small registration fee and buys his or her own books.

The Martin County Carpentry Program

Your key to:

- High Income Earning Potential
- Increased Job Security
- High Demand Marketable Skills
- Professional Accomplishment



FOR MORE INFORMATION CONTACT:

Martin County
Vocational, Adult and
Community Education

287-6400

extension 345

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ERIC EQUAL OPPORTUNITY AGENCY

VICA

Students enrolled in the Carpentry Job Training Program are encouraged to participate in VICA-Vocational Industrial Clubs of America. The organization sponsors skill and leadership contests in carpentry and a number of other occupational areas. VICA adds another dimension to classroom and on-the-job training; it enables students to fine-tune their skills through competition at the local, regional, state, national, and international levels. Martin County has a distinguished record of competition, with many of our students receiving medals at the state and national level.



Carpentry



P2
Martin
County School District

JOB TRAINING FOR THE 90'S

Martin County
Vocational, Adult and
Community Education

118

Comprehensive Training

Today's competitive job market pays a premium for well-trained, highly-skilled craftsmen in the field of carpentry. Through this three year program, Martin County VACE will teach you Carpentry "from the ground up." A combination of on-the-job and class room training is geared to cover all aspects of the trade, from entry level to journeyman competency. These are just some of the many skills you will acquire:

- Occupational Safety
- Fundamentals of Carpentry
- Concrete Form Construction
- Rough Framing
- Exterior Finishing
- Interior Finishing
- Blueprint Reading
- Use of Tools and Equipment
- Occupational Math

Earn While You Learn

The Martin County VACE Carpentry Apprenticeship program is offered in cooperation with the Associations of Builders and Contractors, Inc. (A.B.C.I.). The program is your first step in building a solid career as a journeyman carpenter, because it combines high paying employment with training in the construction industry's latest technology. Residential and Commercial Construction is a leading industry in South Florida, with the demand for highly skilled professional carpenters always on the rise.



Special Advantages

REASONABLE COST

The current yearly class fee is \$320.00, plus \$50.00 for books and materials. This comprehensive training costs less than six cents an hour.

EMPLOYMENT SUPPORT SERVICES

Through the Martin County VACE Carpentry Apprenticeship Program, an Industrial Cooperative Education (ICE) Coordinator will help place you in a carpentry job with one of the many leading construction firms on the Treasure Coast. If you are currently employed in carpentry, the ICE Coordinator will meet with you and your employer to explain the scope

ACADEMIC SUPPORT SERVICES

A high school diploma or equivalency is required by the time of program completion. Academic tutoring in basic skills and G.E.D. Preparation classes are available free of charge.

TRADE RECOGNITION

The Carpentry Apprenticeship program is state registered and approved for veterans. Certificates are awarded upon successful completion of the program.



PROVIDING:
*Education & Apprenticeship
For The Industry*

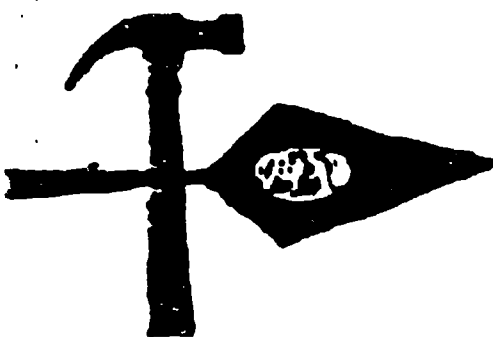
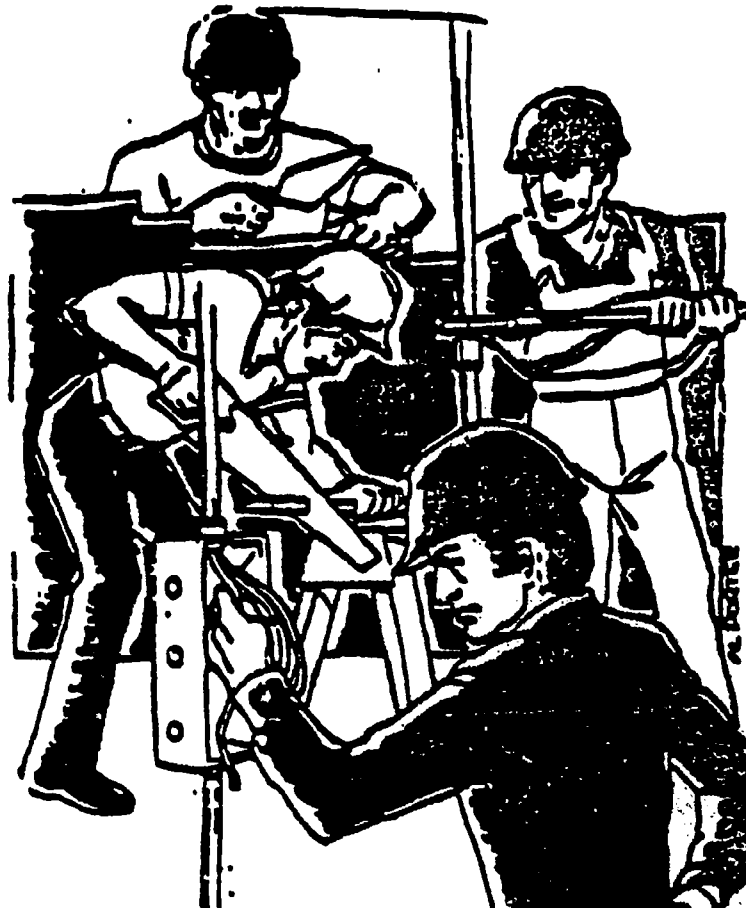
4700 N.W. 2nd Avenue
Suite 301
Boca Raton, Florida 33431

Jack Rogers, President
Ronald Wooster, Vice President
Dan Rogers, Secretary
Michael Katulka, Treasurer
Dwight L. Foster, Executive Director

Boca: (305) 994-2640
WPB: 659-2866
Brow: (305) 421-6503
Dade: 949-4129

APPRENTICESHIP AND TRAINING

BREANE WELLS
508 E. QUINN ST.
MIAMI, FLA. 33133
407-287-3400 Ext. 257



PROSPECTIVE APPRENTICE



121 & BUILDING

LBA
THE LATIN BUILDERS
ASSOC. OF DADE COUNTY

FASTA
FLORIDA AUTOMATIC
SPRINKLER TRAINING ASSOC

ERIC
TCBA
Treasure Coast
Builders Association

E.C.F.
Electrical Council
of Florida

HBCA
Home Builders &
Contractors Association
of Palm Beach County

F.A.E.C.
Florida Association of
Electrical Contractors

ABC
Associated Builders
& Contractors

FABA
Florida Atlantic
Builders Association

BASF
Builders Association
of South Florida

OVERVIEW
OF
ASSOCIATIONS OF BUILDERS AND CONTRACTORS INSTITUTE, INC.

The Associations of Builders and Contractors Institute, Inc. is representative of The Treasure Coast Builders Association (TCBA), The Home Builders and Contractors Association of Palm Beach County (HBCA), The Gold Coast Chapter of Associated Builders and Contractors (ABC), The Florida Atlantic Builders Association (FABA), The Builders Association of South Florida (BASF), The Electrical Council of Fla., (E.C.F.), Florida Association of Electrical Contractors (FAEC), The Latin Builders Association of Dade County (LBA) and the Florida Automatic Sprinkler Training Association (FASTA).

These associations represent a total membership of over 7000 individual companies involved in the construction industry.

These associations, as well as the Institute, are affiliated with their state and national organizations.

The A.B.C.I. is a separate entity. It is a non-profit corporation with the task of providing total trades training for the building industry since 1975.

The educational programs of A.B.C.I. are operated through its' Board of Directors and education and training committees whose members are trades individuals and representatives of their building trade.

We obtain and maintain training objectives through programs that are planned, managed and constantly supervised.

The A.B.C.I. offers the employers a means to train the work force and it offers the individual a means to correctly learn a skilled trade and progress within the construction industry.

The educational programs of the Associations of Builders and Contractors Institute range from pre-employment training to contractor courses



PROVIDING:
*Education & Apprenticeship
For The Industry*

Jack Rogers, President
Ronald Wooster, Vice President
Dan Rogers, Secretary
Michael Katulka, Treasurer
Dwight L. Foster, Executive Director

CONGRATULATIONS.....

ON YOUR CHOICE OF THE CONSTRUCTION TRADES FOR YOUR VOCATION.
The best of luck to you as you enter this field.

The Associations of Builders and Contractors Institute, Inc. (ABCI) sponsors the apprenticeship program. It is made up of representatives from nine builders associations: The Gold Coast Chapter of Associated Builders and Contractors, Inc., The Florida Atlantic Builders Association, The Home Builders and Contractors Association of Palm Beach County, The Builders Association of South Florida, The Treasure Coast Builders Association, The Electrical Council of Florida, Florida Association of Electrical Contractors, The Latin Builders Association of Dade County, and the Florida Automatic Sprinkler Training Association.

The purpose of this non-profit corporation is to provide quality construction education and apprenticeship programs for contractors in our operational areas, and to train individuals interested in making construction a career.

Our programs are group-non-joint registered apprenticeship programs. They include work experience plus night related instruction. The programs are registered with the Bureau of Apprenticeship of the State of Florida. In order that you are registered with the Bureau, it is necessary that they receive an indenturement form signed by you and a committee representative.

Each of the trade educational programs of the Associations of Builders and Contractors Institute has a craft committee made up of contractors from their particular area. It is this committee which make decisions regarding the program. All problems and complaints are brought before the committee. If, at any time you wish to speak with the committee, it is necessary that you contact the Associations of Builders and Contractors Institute office so that you will be placed on the agenda for the next meeting.

We hope that you find your journey interesting and rewarding. Please do not hesitate to call us for any reason.

Sincerely,



Dwight L. Foster
Executive Director

DLF:dg

WHAT DO I HAVE TO DO TO BECOME AN APPRENTICE?

Applicants for apprenticeship must normally be at least 18 years of age. They shall satisfy the committee that they have the ability and aptitude to master the rudiments of the craft and have sufficient education to complete satisfactorily the required related instruction.

Applicants for apprenticeship shall be physically capable of performing the work of the craft. Line erectors program upper age is 37 years.

It is mandatory that an apprentice has dependable transportation.

All applicants who satisfactorily complete an approved pre-apprenticeship program in the craft will be afforded full opportunity for admission to the apprenticeship program.

HOW LONG WILL I BE AN APPRENTICE?

The term of apprentice is dictated by industry standards consisting of reasonable continuous employment and a minimum of 160 hours of related instruction for each calendar year.

The committee will evaluate all claims of previous experience and shall give credit for such experience to be subtracted from the designated apprenticeship term up to one year maximum.

WHAT IS THE PROBATIONARY PERIOD?

Apprentices shall be subject to a probationary period which shall not exceed 90 days of reasonable continuous employment with a participating employer and related training activity. During the probationary period, the apprenticeship agreement may be cancelled by the committee upon request of any party involved for due cause, such as lack of progress or lack of interest, etc.

After the probationary period, the agreement may be cancelled by the committee after adequate cause has been shown, and all parties to the agreement have had an opportunity to be heard. The Bureau of Apprenticeship and Training shall be notified of all cancellations and completions.

V.A. APPROVED

If you are eligible to receive Veterans Educational Assistance, ABCI's program are veterans approved.

WHAT TRADE EDUCATION DO I RECEIVE?

ABCI's related training consists of 160 hours per year in your trade.

You will have to attend class two nights a week -- 2.5 hours each night.

During the apprenticeship program, the instruction is geared to teach you the technical aspects of the trade from entry level to journeyman.

WHAT ARE MY ATTENDANCE REQUIREMENTS?

You must attend the related instruction classes. Failure to do so could result in your termination from the training program.

WHAT HAPPENS UPON COMPLETION OF THE APPRENTICESHIP PROGRAM?

Upon completion of the apprenticeship program, you are awarded an Apprenticeship Completion Certificate from the State Bureau of Apprenticeship and ABCI.

WHAT ARE MY HOURLY WAGES?

Each year the trade committee conducts a wage survey to determine the average wage rate of the journeyman for your trade.

Apprentices will be paid on a minimum progressive percentage based on the wage survey and your time in the program.

The progression is at six-month intervals of 5% each period for the term of the apprenticeship program.

Your employer can pay more but not less than your time interval in the trade.

You are evaluated for these increases by both work record and school record.

WHO DO I WORK FOR?

You work for your employer. ABCI administers the training programs for the trade employers in our programs. ABCI will assist you in staying employed.

WHAT DO I DO TO ENTER THE APPRENTICESHIP PROGRAM?

1. Complete the entire application and send to ABCI with the required items stated on the application.
2. If you are now working in the trade, talk with your employer about joining the program.
3. To be in our training programs, it is necessary to be sponsored by an employer. We will assist you in this area if necessary.
4. A participating employer approval letter will be provided for change of employers.

WILL I BE NOTIFIED?

After receipt of your application, you will be notified of the next action required to get into the ABCI training programs.

CONTACT:

Boca Raton - 994-2640
Dade County - 949-4129
Martin County - 287-6100

Broward County: - 421-6503
Palm Beach County - 659-2866

APPRENTICE GUIDELINES

ASSOCIATIONS OF BUILDERS & CONTRACTORS INSTITUTE, INC.

I. RELATED TRAINING

- A. Absences - Each apprentice is permitted only three unexcused absences per class year. Excused absences include illnesses and emergencies--which must be cleared through the A.B.C.I. office in order to be excused. The committee will receive absentee reports from each instructor following class and will determine which absences may be excused. Three consecutive absences will result in termination. You may call in your excused absences to A.B.C.I. offices at 994-2640, 659-2866, 421-6503 or 949-4129.
- B. Tardiness - Not tolerated. Three tardies = one absence.
- C. Schedule - The schedule will follow the training facility's calendar. Students will attend two nights per week from 7:00 to 9:30 P.M. Anyone leaving the class after the break without an excuse, will be counted absent for the entire class.
- D. Conduct - Apprenticeship is adult education. As such, the committee anticipates no discipline problems. If problems arise, they will be dealt with immediately and finally. All school rules must be followed as stated in the facility's student handbook.
- E. Instructor - The trade instructor is a representative of the trade committee; and as such, is directly responsible for the apprenticeship class during the sessions.

II. EMPLOYMENT

- A. Monthly Work Records - Must be submitted monthly. If you are a veteran, submit the computer card with your work record. Getting work record sheets is your responsibility.
- B. Termination or Lay-off - If you are fired or laid-off, contact the A.B.C.I. office immediately. It is the director's responsibility to assist the apprentice in staying employed. Any change in employers must be cleared through the director.
- C. Quitting a job - apprentices are "indentured" to the Board of Directors. Change in employment form a sponsoring contractor must be obtained from the Executive Apprenticeship Committee. Once a contractor pays for your schooling you must remain with him unless unemployed. If you contact a prospective employer, you must inform him that he will have to pick up your full sponsorship for the year. The trade committee will determine whether to suspend an apprentice for jumping from employer to employer. Job stability is a must; however, this does not mean that you must work under intolerable conditions. Contact the director if such conditions arise. A change of employer letter is part of your packet.

PROGRAM SUMMARY

1. State registered and Veterans approved apprenticeship program.
2. Program requires on the job training and related classroom instruction.
3. Apprentices is responsible to ABCI for:
 - a. Monthly work records to instructor/coordinator.
 - b. Notification of change of address or phone number.
 - c. Using the established change of employer process. (Appx. A)
 - d. Providing required items for application. (#4)
 - e. Having required text books for class.
 - f. On time class attendance.
 - g. Conduct becoming to ABCI program.

(Failure to comply could result in termination from program.)

4. You must provide the following items with your application:
 - a. Birth Certificate or Florida drivers licenses showing birth date.
 - b. Transcript of education. GED or high school diploma.
 - c. Two reference letters. (personal or employer)
 - d. Veterans eligible for educational benefits - DD214.
 - e. Applicants not working in trade must take FSES trade aptitude test. (ABCI will set this up)
5. Submit application along with all items listed in #4.

IMPORTANT NOTE

Keep this guide in a place where you can refer to it occasionally. Please notify the office anytime you change your mailing address or telephone number. It is important that you read and understand the program, if you have questions contact ABCI or your coordinator.

REQUIRED PRIOR TO
EMPLOYER CHANGE

A



Associations of Builders & Contractors Institute:
Apprenticeship Action Committee

Subj: Participating Employee Letter of Concurance
Apprentice Change of Employers.

Instructions to Apprentice:

Important:

This letter must be completed by your current employer and your new employer and then returned to the A.B.C.I. office. This action must be completed prior to your change of employers.

COMPLETE:

Name: _____
 First, Last

Address: _____

Current Employer:

To: Apprenticeship Action Committee.

From: Employer: _____

Company: _____

I concur with the change of employers for _____
(apprentice name)

I would like a refund or credit of the remaining tuition.

Signature: _____

Date: _____

New Participating Employers:

To: Apprenticeship Action Committee:

From: Employer: _____

Company: _____

I would like _____ to work for
(apprentice name)

my company and I agree with the full sponsorship of this apprentice.

Signature: _____

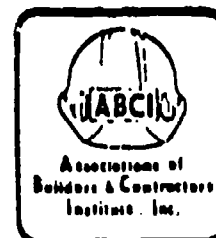
Date: _____

Committee Action:

Concur : _____

Date: _____

APPLICATION FOR APPRENTICESHIP
 IN THE
 ASSOCIATIONS OF BUILDERS AND CONTRACTORS INSTITUTE, INC.



A.O. # _____

PLEASE PRINT

DATE _____

APPLICATION FOR:

CURRENT EMPLOYER _____

_____ ELECTRICAL

ADDRESS _____

_____ CARPENTRY

CONTACT PERSON _____

_____ FIRE SPRINKLER

PHONE _____

_____ OTHER

NAME _____ SOCIAL SECURITY # _____

ADDRESS _____ CITY _____ ZIP _____

PHONE _____ AGE _____ DATE OF BIRTH _____

HEIGHT _____ WEIGHT _____ GENERAL PHYSICAL CONDITION _____

NOTE ANY PHYSICAL HANDICAPS _____

HAVE YOU EVER SERVED IN THE ARMED FORCES? _____ BRANCH _____

SCHOOL GRADE COMPLETED 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 (CIRCLE HIGHEST)

NAME OF SCHOOL _____ ADDRESS _____

RELATED VOCATIONAL COURSES COMPLETED _____

USE BACK OF FORM TO LIST EXPERIENCE IN CONSTRUCTION TRADES AND OTHER WORK

BEFORE THIS APPLICATION CAN BE CONSIDERED, YOU MUST PROVIDE THE DOCUMENTS LISTED IN PROGRAM SUMMARY. ALL DOCUMENTS MUST BE SUBMITTED WITHIN 30 DAYS.

TO COMPLY WITH TITLE 29 CFR PART 30, AND THE CIVIL RIGHTS ACT OF 1964, THE COMMITTEE REQUESTS THE FOLLOWING INFORMATION:

SPANISH AMERICAN _____ BLACK _____ WHITE _____ AMERICAN INDIAN _____

ORIENTAL _____ OTHER _____ MALE _____ FEMALE _____

UPON RECEIPT OF THIS COMPLETED APPLICATION ACCOMPANIED WITH THE REQUIRED FORMS, THE APPLICANT WILL BE NOTIFIED IN REGARDS TO THE NEXT ACTION TO BE TAKEN.

APPRENTICE'S STATEMENT

I HEREBY CERTIFY THAT I HAVE RECEIVED A COPY OF THIS GUIDELINE AND UNDERSTAND MY RESPONSIBILITIES COMPLETELY. SHOULD I FAIL TO COMPLY WITH ANY OR ALL GUIDELINES, I REALIZE THAT I MAY BE TERMINATED FROM MY APPRENTICESHIP. I DESIRE MY COMPLETED APPLICATION TO BE CONSIDERED FOR MY ACCEPTANCE INTO THE TRADE PROGRAM INDICATED.

DATE _____

129

SIGNATURE OF APPRENTICE _____

APPENDIX G

Samples of On-the-job Training Coordinator Job Descriptions

- G1. Hillsborough County School District**
- G2. Lake County School District**
- G3. Martin County School District**
- G4. Orange County School District**
- G5. Polk County School District**
- G6. Seminole Community College**

**G1
Hillsborough
County School District**

JOB DESCRIPTIONS

Title: Instructional Coordinator, Part-Time

Responsibility: To assist in preparing apprentices for trade related employment not available in post-secondary schools.

Reports to: Coordinator, Part-Time Programs

Coordinates the training of apprentices registered in apprenticeship classes.

Primary Duties:

1. Assist instructors in acquiring curriculum support material.
2. Attend apprenticeship committee meetings.
3. Coordinate use of training equipment with day schools.
4. Disseminate vocational program information.
5. Visit job sites in jurisdictional area.
6. Assist apprenticeship committees in providing effective related training for apprentices.
7. Monitor classes.
8. Maintain and submit reports and records as required.

Title: Coordinator, I.C.T.

Responsibility: To assist in preparing apprentices for trade related employment not available in post-secondary schools.

Reports To: Coordinator, Part-Time Programs

Coordinates the training of apprentices registered in apprenticeship classes.

Primary Duties:

1. Maintain work processes for each apprentice.
2. Attend apprenticeship committee meetings.
3. Coordinate use of training equipment with day schools.
4. Control apprentices' attendance.
5. Visit job sites in jurisdictional area.
6. Assist in curriculum development.
7. Monitor classes.
8. Coordinate industrial education placement service activities.

**G2
Lake
County School District
APPRENTICESHIP PROGRAM**

JOB DESCRIPTION

Instructor/Coordinator

1. Initiate and/or review all paper-work for the Apprenticeship Program.
2. Attend all Apprenticeship Committee meetings.
3. Coordinate all Apprenticeship Committee meeting with Apprenticeship District Program Manager.
4. Coordinate related instruction classes.
5. Make periodic visits to participating centers.
6. Make periodic evaluation of the Apprenticeship Program and the Apprentice's progress.

Instructor #2

1. Visit a portion of the apprentices monthly.
2. Assist with designing materials and showing apprentices how to use them on the job site.
3. Make periodic evaluation of each apprentice's progress.
4. Check and verify apprentices' attendance records.

Instructor #3

1. Visit a portion of the apprentices monthly.
2. Assist with designing materials and showing apprentices how to use them on the job site.
3. Make periodic evaluation of each apprentice's progress.
4. Check and verify apprentices' attendance records.

Clerical Assistant

1. Assist with all paper-work
2. Typing
3. Filing Records
4. Assist with communications (Office calls and written)
5. Check and update apprentices' records

**G3
Martin
County School District
Description of I.C.E. Tasks**

**SERVICES OTHER THAN RELATED INSTRUCTION
PROVIDED FOR EACH APPRENTICEABLE OCCUPATION**

Besides related instruction, Martin County V.A.C.E. provides a comprehensive educational delivery system for all apprentices involved in our programs. The following illustrates the types of services available and are delivered to apprentices through the V.A.C.E. delivery system.

1. **Testing** - The test of Adult Basic Education TABE is given to each apprentice enrolled in the programs and a profile is developed on each apprentice.
2. **Industrial Cooperative Education (I.C.E.)** - The Industrial Cooperative Education component is an intricate component in the total apprentice delivery system. I.C.E. Coordinators work in conjunction with employers and apprentices to assure that competencies being addressed in related courses study are addressed during the apprentices time on-the-job. Additionally students progress in related classroom activities are discussed and reviewed with the employers by the I.C.E. Coordinator and progress is noted on the student's cooperative education file folder.
3. **Employment** - Services for apprentices are provided through Martin County V.A.C.E. Employment can be identified in two major categories:
 - A. **Initial Placement** - The new apprentice is found initial employment with a local sponsoring contractor by the I.C.E. Coordinator and progress monitored by same.
 - B. **Reassignment** - On many occasions due to work slow downs and/or job sight locations, the I.C.E. Coordinator in cooperation with participating employers will reassign an apprentice to a new firm.
4. **Academic Remediation** - Utilizing the results of the TABE test, the V.A.C.E. Counseling staff will identify academic areas in need of remediation to assist the apprentice in upgrading academic skills and/or completing one's high school diploma and/or G.E.D.
5. **Clerical Services** - Maintenance of apprentice work records, progress notations and initial typing of handouts, tests, and curriculum are done through our clerical staff and is provided to the apprentice program.
6. **Record Keeping** - In addition to the normal employment records etc., bookkeeping services are provided to the apprentice programs to maintain accurate cost accounting of FTE generation, sale of text books and supplies, and the initial registration activity.

G4
Orange
County School District
JOB DESCRIPTION

APPRENTICESHIP COORDINATOR

Organizational Relationship, Objectives and Functions:

The (Apprenticeship) Coordinator promotes training for their respective crafts by establishing lines of communication between trainees, sponsoring companies, instructors, supervisors and advisory committees within the labor organization(s) and the Orange County Public Schools. He reports to the Director of Mid-Florida Technical Institute.

Typical Duties:

1. Attend meetings and conventions pertaining to apprenticeship programs
2. Provide information to the public regarding opportunities available through apprenticeship
3. Comply with laws and regulations governing apprenticeship (Federal and State)
4. Abide by contracts and bargaining agreements
5. Cooperate with local educational agencies to provide the best possible training for the apprentices
6. Accept and screen applicants for the Apprenticeship Committee
7. Indenture apprentices upon recommendation of Committee
8. Orientation of apprentices
9. Assist in conducting and coordinating apprenticeship contests
10. Plan graduation ceremonies
11. Keep abreast of trends and changes in the industry (advisory committee)
12. Recommend to Director (MFT) qualified part-time instructors
13. Establish master schedule of related classes for program
14. Monitor related classes on a weekly basis
15. Register apprentices with the local education agency
16. Counsel with apprentices regarding their program performance
17. Develop and maintain inventory control
18. Maintain records to document apprentice training
19. Develop and upgrade instructional materials in conjunction with local and international guidelines
20. Assist in job placement commensurate with program status (job rotation to insure demonstration of all skill competencies)
21. Observe apprentices' performance status on the job as well as related instruction
22. Assure compliance with approved apprenticeship standards (training plans)
23. Prepare, monitor and expend training budget (equipment, supplies, maintenance, books, payroll, bids, etc.)
24. Consult with employers, foremen, stewards and journeymen re: progress of apprentices (evaluation reports)
25. Other duties as assigned

Qualifications: ..minimum

High School Diploma or equivalent

Six (6) years experience in the discipline area

State of Florida Vocational Teaching Certificate

**G5
Polk
County School District**

Job Description for Apprenticeship Coordinator

1. Maintain all records on apprentices for reporting to the BAT, the DOE, Polk County Schools, and Ridge Vo-Tech Center.
 2. Recruit new apprentices and provide an awareness of the goals and benefits to the industrial community of the apprenticeship program
 3. Develop curriculum
 4. Schedule and attend all advisory meetings
 5. Provide input to the advisory committee in their assessment of the educational needs of the apprentice
 6. Assist industry and the advisory committee in facilitating solutions to any problems that may exist with the apprentice on-the-job and in related training
 7. Provide related instruction to the apprentice and coordinate instructional activities to insure that all educational needs for the apprentice are met
 8. Assist the advisory committee in meeting affirmative action requirements
 9. Perform other duties as assigned by the administrative staff
- jobappr

SEMINOLE COMMUNITY COLLEGEINDUSTRIAL COORDINATOR EDUCATIONJOB DESCRIPTIONSTUDENT/INSTRUCTIONAL RESPONSIBILITIES

Personal visitation of students at job site/employer site (60) days.
 Visitation of participating employers.
 Monitoring classes/students/instructors.
 Recruit new participating employers.
 Recruitment of students & employees.
 Program orientation & presentation
 Student manual preparation.
 Attendance reports to employers.
 Develop supplemental classes by assisting committee in same.
 Students progress and grade report to employers.
 Attend program local meetings and Trades Committee meetings.
 Planning of program/committee meetings with local chairman regarding students.
 Schedule and obtain guest speakers in accordance with curriculum for program levels.
 Plan and coordinate graduation and awards ceremonies.
 Schedule and obtain Core evaluations for students having academic difficulties.
 Public Relations - Guest Speaking - Program Update
 Coordinate and obtain certified instructors for special required classes, i.e., O.S.H.A., First Aid, etc.
 Obtain tools and equipment for training labs.
 Scheduling classes/coordinating classrooms.
 Assist local committee in obtaining instructors for classes.
 Report and record student tests scores.
 Conduct quarterly instructors meetings and weekly meetings prior to classes to address immediate problems.
 Establish and maintain a personal link of communication between student/employer/and external agencies.
 Assist student and employer in achieving established educational training goals.
 Assist local committee in preparation, administration and evaluation "By-Pass" exams.
 Student counseling.

RECORD KEEPING - S.C.C. ADMINISTRATIVE RESPONSIBILITIES

Pre-Registration & Registration

- Preparing & submitting for programs BUDGET requirements.
- Assisting local committee in agenda preparation.
- Scheduling maintenance for operable training lab/facilities.
- Assist in development of competency task requirements for levels and maintain students records of same.
- Assist S.C.C. in development, retention, and growth of the program and students.
- Daily coordinator's log. Maintain and submit monthly.
- Monthly evaluations of students from instructors.
- Student insurance forms - S.C.C. and emergency.
- Coordinator's visitation contact forms.
- Prepare and secure Employer Training Plan Agreements.
- Memo's and bulletins/calendars of events.
- Time sheets, mileage sheets, and travel forms.

EXTERNAL AGENCIES - RESPONSIBILITIES (Name external agency on blank line)

- Pre-registration & registration requirements. _____
- Curriculum revisions. _____
- Attendance and job locations of students. _____
- O. J. T.'s. _____
- Attend meetings - Area interest meetings. _____
- Judging and student participation in trade/programs competition skills on local and state levels. _____
- Instructors student evaluation _____
- Employers student evaluations. _____
- State indenture forms. _____
- Student veteran requirement forms. _____
- Report student test scores. _____
- Notification by certified mail to student for notification of appearance before local committee. _____
- Coordinate with other associations. _____
- Coordinate with other programs. _____
- State coordinators meetings. _____
- State instructor's meetings. _____
- Reporting to committee on status of classes, class attendance, work process reports (O.J.T.'s) _____
- Maintain current "Standards of Training." _____
- Act as liaison for the student and employer in solving classroom related problems. _____

COORDINATOR'S NAME: _____

TRADE: _____

ASSOCIATION AND/OR EXTERNAL AGENCY: _____

COORDINATOR'S IMMEDIATE SUPERVISOR: _____

FOR: SEMINOLE COMMUNITY COLLEGE

FOR: EXTERNAL AGENCY/ASSOCIATION: _____

APPENDIX H

Samples Apprentice Records Kept By the On-the-Job Training Coordinator

- H1. Florida Community College at Jacksonville**
- H2. Hillsborough County School District**
- H3. Indian River Community College**
- H4. Polk County School District**
- H5. Seminole Community College**
- H6. St. Johns County School District**

H1
Florida
Community College at Jacksonville

Guidelines for the Completion of Time Logs
for Apprenticeship COOP Coordinators

Please consider the following guidelines when completing your weekly time logs.

1. Logs should be turned in monthly for each week and for each class.
2. Log entries should be made daily and each log entry should have a beginning and ending time accompanied by a brief description of the activity performed.
3. Activities should include, when appropriate, job sites or locations and names of apprentices and/or employers visited.
4. Hours should be totaled on a daily basis and indicated on the bottom of the log sheet.
5. Apprenticeship COOP coordinators are allocated one hour per week per student. For example, if 30 students are in a class, then the coordinator(s) is (are) allocated a total of 30 hours per week.
6. Each course is scheduled for 16 weeks and the grand total number of hours paid for the course cannot exceed 16 times the number of students enrolled in the course.
7. The person submitting the log must sign the log verifying that the log information is correct.

The following types of activities are appropriate for time logs. Time spent:

1. visiting apprentices
2. traveling from site to site
3. visiting employers
4. counseling with apprentices
5. visiting with apprentice supervisors or peers
6. visiting with instructors or class
7. attending apprenticeship advisory committee meetings
8. completing and maintaining records on apprentices
9. arranging appointments with apprentices or employers
10. developing new jobs for apprentices
11. meeting with apprenticeship representatives

The following types of activities are not appropriate for time logs. Time spent:

1. going to initial work site or returning from last work site
2. recruiting apprentices
3. teaching related training class

This information is not all inclusive and if you have any questions or need clarification on any items, please call

APPRENTICE ELECTRICIAN WEEKLY - MONTHLY REPORT

MONTH OF _____ 19 _____

APPRENTICE NAME _____ YEAR _____

ADDRESS _____										PHONE _____				RATE _____				
DATE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	TOTAL

JOB _____ COMPANY _____ GRADE _____

JOURNEYMAN'S SIGNATURE & LOCAL UNION # _____

JOB _____ COMPANY _____ GRADE _____

JOURNEYMAN'S SIGNATURE & LOCAL UNION # _____

JOB _____ COMPANY _____ GRADE _____

JOURNEYMAN'S SIGNATURE & LOCAL UNION # _____

JOB _____ COMPANY _____ GRADE _____

JOURNEYMAN'S SIGNATURE & LOCAL UNION # _____

JOB _____ COMPANY _____ GRADE _____

JOURNEYMAN'S SIGNATURE & LOCAL UNION # _____

TOTAL | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____

USE LETTERS TO GRADE WORK REPORTS: "A" EXCEPTIONAL, "B" ABOVE AVERAGE, "C" AVERAGE, "D" UNSATISFACTORY, "E" COMPLETELY UNSATISFACTORY

PLEASE MAKE COMMENTS (IF ANY) ON THE REVERSE SIDE.



THIS REPORT MUST BE IN THE DIRECTOR'S OFFICE BETWEEN THE 1st. AND THE 15th. OF EACH MONTH TO RECEIVE CREDIT FOR HOURS WORKED.

WORK PROCESS CODE

- A. Residential Wiring; Romex, Door Bell Systems
 - B. Installation of Wires and Cables up to 600 V
 - C. Installation of Wires and Cables over 600 V
 - D. Conduit & EMT up to and including 2"
 - E. Conduit & EMT over 2"
 - F. Motor installation and motor control
 - G. Grounding; Cadwelding, Plates, Electrodes, Lighting Rods
 - H. Specialized Wiring Systems; Intercom, Closed Circuit TV and Radio, Capacitors, MI cable, Fire Alarms, etc.
 - I. Blueprint, Layout, Design
 - J. Arc Welding, Gas Welding and Cutting
 - K. Refrigeration, Heating, Pneumatic, Solid State Control
 - L. Transformers; Settings, Connection, Cooling, etc.
 - M. Underground Wiring Systems; Duct Banks, Direct Burial, Manhole, etc.
 - N. Lighting fixtures, Receptacles, Switches, etc.
 - O. Approved Vacation (80 hours per year maximum and during non-school periods only)
 - P. Approved Military Leave (80 hours per year maximum and during non-school periods only)
 - Q. Other (Explain on the front of form)
-

THE INFORMATION ON THE REVERSE SIDE IS TRUE AND THE JOURNEYMAN'S SIGNATURE AND GRADE ARE AUTHENTIC.

142

Apprentice's Signature _____

EVALUATION REPORT

Jacksonville Sheet Metal Workers
Name of Organization

Apprentice's name here
Student's Name

NATIONAL SHEET METAL
Employer

NATIONAL SHOP
Job Location

	Excellent	Very Good	Good	Poor	Unsatisfactory	COMMENTS
Job Attendance	X					
Job Attitude	X					
Work Performance	X					
Initiative	X					
Works with Others	X					

John T. Kilmartin
Signature

9-30-89
Date

CO-OP COORDINATOR'S TIME LOG

WEEK OF: 7-31-89 thru 8-5-89

Coordinator's name here

ORGANIZATION: JACKSONVILLE SHEET METAL WORKERS JAC

I verify that the information herein recorded is accurate.

AGENCY REP: _____
SIGNATURE

MONDAY 31	TUESDAY 1st	WEDNESDAY 2nd	THURSDAY 3rd	FRIDAY 4th
<p>8:00 - 12:00 pm</p> <p>Visited Ferber Sheet Metal met with Shop owner George Ferber and Instructor Robert Wicker</p> <p>Counseled with Apprentice Ken McLeod & John Croft & Mark Peacock</p> <p>14</p>	<p>8:00 - 12:00 pm</p> <p>Visited Ford Shop talked to shop foreman Doug Morris and Apprentice Derrick Thornton</p>	<p>8:00 - 12:00 pm</p> <p>Visited Baptist Hospital Job site met with Mr. Crews Foreman for Ray's Sheet Metal and Apprentice Anthony Managult</p>	<p>8:00 - 12:00 pm</p> <p>Visited new Jail Job with Foreman Walter Marker and counseled with Mike Anderson & John Edenfield</p>	<p>14</p>
TOTAL HRS: 4	TOTAL HRS: 4	TOTAL HRS: 4	TOTAL HRS: 4	TOTAL HRS:

CO-OP COORDINATOR'S TIME LOG

WEEK OF: 7-31-89 thru 8-5-89

Coordinator's name here

ORGANIZATION: JACKSONVILLE SHEET METAL WORKERS JAC

I verify that the information herein recorded is accurate.

AGENCY REP: _____
SIGNATURE

MONDAY 31st	TUESDAY 1st	WEDNESDAY 2nd	THURSDAY 3rd	FRIDAY 4th
	<p>9:00 - 12:00 noon</p> <p>Registered Apprentices and typed Indenture Agreements on new Apprentices</p>	<p>9:00 - 12:30 pm</p> <p>Process weekly records and reports</p> <p>1:00 - 5:30 pm</p> <p>worked on coming school year records and setting up class rooms</p>	<p>9:00 - 3:30 pm</p> <p>File reports work on financial report & Type</p> <p>Lunch 12:00-12:30 pm</p>	<p>147</p>
TOTAL HRS:	TOTAL HRS: 3	TOTAL HRS: 8	TOTAL HRS: 6	TOTAL HRS:

**H2
Hillsborough
County School District
COMMERCIAL PLUMBING I
TASK PERFORMANCE LIST**

STUDENT NAME _____
 DATE STARTED _____ DATE COMPLETED _____
 TRAINING COORDINATOR _____
 TRAINING SPONSOR _____

			DATE COMPLETED
0100	Safety and First Aid.....	_____	
0101	Demonstrate the ability to work safely.....	_____	
0102	Demonstrate the ability to keep a clean, orderly, and safe work area.....	_____	
0103	Operate a fire extinguisher.....	_____	
0104	Qualify in and apply basic first aid procedures..	_____	
0105	Demonstrate safe use of hand and power tools.....	_____	
0106	Recognize and identify common safety hazards.....	_____	
0200	Industry Orientation.....	_____	
0201	Interpret the importance of the construction industry to the national economy.....	_____	
0202	Identify the employment opportunities in the con- struction industry.....	_____	
0300	Shop Practices.....	_____	
0301	Identify hand tools.....	_____	
0302	Select correct tool according to job.....	_____	
0303	Demonstrate safe and proper use and care of hand tools.....	_____	
0304	Identify power tools.....	_____	
0305	Select the correct power tool according to the job.....	_____	
0306	Demonstrate safe and proper use and care of power tools.....	_____	
0307	Identify special tools.....	_____	
0308	Select the correct special tool according to the job.....	_____	

- 0309 Demonstrate safe and proper use and care of special tools..... _____
- 0310 Demonstrate safe and proper use and care of special tools requiring OSHA certification _____
- 0400 Basic Mathematics..... _____
- 0401 Read and interpret measuring devices (rules and tapes..... _____
- 0402 Add 100 addition combinations..... _____
- 0403 Add two-digits numbers..... _____
- 0404 Add three-digit numbers..... _____
- 0405 Subtract 100 subtraction combinations..... _____
- 0406 Subtract two, three, and four-digit numbers..... _____
- 0407 Solve one-digit divisor problems..... _____
- 0408 Solve two-digit divisor problems..... _____
- 0409 Solve two and three-digit divisor problems..... _____
- 0410 Solve multiplication facts..... _____
- 0411 Multiply by a one-digit factor..... _____
- 0412 Multiply by a two-digit factor..... _____
- 0413 Identify parts of a fraction..... _____
- 0414 Identify fractional parts..... _____
- 0415 Solve fractional word problems..... _____
- 0416 Classify types of fractions..... _____
- 0417 Illustrate equivalent fractions..... _____
- 0418 Convert fractions..... _____
- 0419 Reduce fractions..... _____
- 0420 Solve decimal notations..... _____
- 0421 Solve number word problems..... _____
- 0422 Round to nearest whole number..... _____
- 0423 Add decimals..... _____

0424	Subtract decimals.....	_____
0425	Multiply decimals.....	_____
0426	Divide a decimal by a decimal.....	_____
0427	Divide a whole number by a decimal.....	_____
0428	Write fractions as decimals and percents.....	_____
0429	Write percents as fractions and decimals.....	_____
0430	Solve percent problems.....	_____
0431	Find percent of a number.....	_____
0432	Compute board feet.....	_____
0433	Compute cost of materials.....	_____
0434	Calculate amount of wire mesh for a job.....	_____
0435	Solve basic ratio and proportion problems.....	_____
0436	Operate simple hand-held calculators.....	_____
0437	Convert board feet to linear feet and vice-versa.	_____
0438	Read, interpret, and apply metric conversion tables.....	_____
0500	Basic Blueprint Reading.....	_____
0501	Read architect's scale using quarter scale or $1/4" = 1'$	_____
0502	Read architect's scale using eighth scale or $1/8" = 1'$	_____
0503	Read architect's scale using full scale or $12" = 1'$	_____
0504	Read architect's scale using half scale or $6" = 1'$	_____
0505	Read architect's scale using one-fourth scale or $3" = 1'$	_____
0506	Read architect's scale using one-eighth scale or $1\ 1/2" = 1'$	_____
0507	Read engineers scale using scale of $1" = 1'$	_____
0508	Read engineer's scale using scale of $1" = 30'$	_____
0509	Read engineer's scale using scale of $1" = 50'$	_____

- 0510 Identify architectural elevations....._____
- 0511 Identify architectural schedules....._____
- 0512 Identify lines and symbols....._____
- 0513 Identify mechanical symbols....._____
- 0514 Identify electrical symbols....._____
- 0515 Identify topographic symbols....._____
- 0600 Demonstrate Proficiency in Joining Pipe....._____
- 0601 Wipe a clay pipe joint....._____
- 0602 Join clay pipe with a pipe coupling....._____
- 0603 Join cast-iron pipe to clay sewer pipe....._____
- 0604 Cut concrete pipe....._____
- 0605 Join plastic pipe using the adapter-solvent cement
method....._____
- 0606 Bend steel pipe with a heavy-duty bending tool..._____
- 0607 Bend steel pipe with a chain vise and torch....._____
- 0608 Cut steel pipe with a one-wheel steel pipe cutter_____
- 0609 Cut steel pipe with a four-wheel steel pipe cutter_____
- 0610 Join plastic pipe to steel pipe....._____
- 0611 Thread steel pipe with an adjustable diestock...._____
- 0612 Thread steel pipe with a nonadjustable diestock.._____
- 0613 Thread steel pipe with a power-driven vise stand._____

MONTHLY TRAINING REPORT

APPRENTICE NAME _____

YEAR 1 2 3 4

TRADE PAINTERS

CONTRACTOR _____

MONTH _____

HOME ADDRESS _____

ACTIVITIES	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F
SITE PREPARTION																				
BRUSH & ROLL																				
ENAMEL TRIM EXT.																				
STAIN & VARNISH																				
PRESSURE CLEAN																				
MASONRY PREP.																				
LADDER WORK																				
STAGE WORK																				
WALLPAPERING																				
MISC.																				
TOTAL																				

H3
Indian River
Community College

152

CONTRACTOR (SUPERVISOR) _____

153

H4
Polk
County School District

INDIVIDUAL APPRENTICE FILE CHECK SHEET

- ___ 1. Copy of Apprenticeship Agreement
- ___ 2. Copy of Action Report for indentures
- ___ 3. School application
- ___ 4. Interview records
- ___ 5. Signed statement that apprentice read affirmative action statement as outlined in Title 29, Part 30.11 of Federal Regulations, Page 20770
- ___ 6. Copy of Work Processes from Standard
- ___ 7. Copy of Related Study Processes from Standards to be dated and initialled as tasks are completed
- ___ 8. Original Apprenticeship Agreement when it is returned from the Bureau
- ___ 9. Indenture card sent from Bureau
- ___ 10. All Monthly Work Records
- ___ 11. Proof of instruction: Test answer sheets, certificate of completions from industry, schools, etc.
- ___ 12. Summary of apprentice's Monthly Work Records and Related Study (computerized)
- ___ 13. All Action Reports concerning apprentice other than indenture or drops
- ___ 14. Copy of withdrawal form dropping apprentice
- ___ 15. Copy of letter sent to apprentice for drop
- ___ 16. Action Report for withdrawal from apprenticeship
- ___ 17. Other records particular to a specific program: (example: Driver's license, physician's report)
- ___ 18. Certificate of completion
- ___ 19. Vocational Completer/Leaver Followup form on completers only

Procedures for Maintaining Apprenticeship Records
(Revised July 7, 1989)

PROCEDURE FOR INTAKE OF APPRENTICES

The papers required that should be complete before enrollment at RVTC into the apprenticeship program takes place are as follows:

1. A completed RVTC application
2. An apprenticeship agreement and action report completed and ready to be sent to the Bureau with xerox copies in the apprentice's individual file.
3. A signed statement that the apprentice read the affirmative action statement and the standards.
4. The completed rating sheet from the initial interview and any other proof of requirements.
5. An apprentice file checksheet should be stapled to the outside of the file.
6. A schedule of work processes.
7. A schedule of related instruction should be in the file so that you can initial tasks on the date they are completed.

When you have these documents ready, take the file folder to Ms. Gilley to be approved. She will keep only the yellow copy of the school application.

In critical FTE periods, the application will be accepted on the condition that in a brief period of time the intake documents will be complete.

PRO2

RECORDS THAT SHOULD BE MAINTAINED ON EACH APPRENTICE

Records that should be maintained on each apprentice are listed on the Individual Apprentice File Check Sheet that is to be stapled on the outside of the apprentice file.

All records are to be kept for five years after a student withdraws or completes the program. Therefore, when you withdraw a student from the program, turn the complete apprentice file into Ms. Gilley.

PROCEDURES FOR WITHDRAWING AN APPRENTICE
FROM APPRENTICESHIP TRAINING

If at all possible, bring the apprentice before your committee to solve problems and hold the apprentice in the program.

Prepare a drop slip with the drop slip date the date you start the drop process. The effect date of withdrawal will be 10 days from the date of the drop slip.

Give one copy of the drop slip to Ms. Gilley. Place the carbon copy in the apprentice's file. Ms. Gilley will prepare a drop letter for your signature to be mailed to the apprentice notifying him of the action being taken. This is mandated by law. Keep a xerox copy of the letter and place in the apprentices file.

Within that 10-day period, you prepare an action report ready to be sent on the 10th day. That same day, bring the dead file including a xerox copy of that action report to Ms. Gilley.

Mark your attendance book with the withdrawal code from the drop slip (ex. W31).

If you will follow this procedure accurately, the withdrawal process should run smoothly for you and the administrative office.

PRO4

APPRENTICESHIP FILES TO BE MAINTAINED

1. Florida Student Register Attendance Roster
2. Action Report File
3. Individual File on each apprentice
4. Participating employer file
5. Blank forms file containing routine forms
6. Advisory meeting minutes file
7. Florida law file on apprenticeship
8. Program standards file
9. Your personal travel records and/or class schedule and visitation forms
10. Affirmative action file showing action you took with your committee to meet the plan
11. Related instruction by year
12. Schedule of trade processes by year
13. Apprenticeship committee list
14. Apprentice coordinator itineraries

PRO5

862.381.018

Seminole

Community College

Estimated
 Maximum
OJT HOURS
 500

A. Plan Readings and Interpretation	500
1. Reading shop drawings.	
2. Symbols and abbreviations.	
3. Familiarization of NFPA's #13, 14, 20 and 24.	
B. Care of Tools, Materials and Equipment	600
1. Identifying materials, grades and types of pipe, fittings, valves, hose and equipment and sprinkler heads.	
2. Use and operation of trade tools.	
3. Maintaining and servicing of tools and equipment.	
C. Preparation of Tools, Material and Equipment	500
1. Selection of pipe, fittings, hangers and devices for rough and distribution and finish work.	
2. Loading of required materials and equipment.	
3. Unloading of materials and equipment at job-site using safety precautions and care in not damaging materials or equipment.	
4. Set up and use of rigging, scaffolding and mechanical lifts and platforms.	
D. Pipe Cutting, Threading, Reaming and Welding	1000
1. Use of hand cutters.	
2. Use of dies and reamer.	
3. Set up and operation of power threading machines.	
4. Operation of power drills.	
5. Operation of torch and welder.	
E. Installation of Underground Piping and Accessories	500
1. Installation of cast iron pipe and fittings.	
2. Installation of plastic pipe fittings.	
3. Installation of valves, post indicators and hydrants.	
4. Rodding and thrust block installation.	
5. Valve pit installation.	
6. Flushing and testing of underground piping.	
F. Dry Pipe Systems - Same as C.	300
G. Wet Pipe systems	1500
1. Distribution of system.	
2. Installation of feed main and cross main, grooved, screwed and welded.	
3. Branch line installation on exposed systems.	
4. Branch line installation for concealed piping with drop nipples.	
5. Hanger types and installation.	
6. Trimming of valves including Siamese connection installation.	
7. Set up and testing of system.	
H. Standpipe Systems	300
1. Distribution of the system.	
2. Pipe installation.	
3. Cabinet installation.	
4. Installation of hose, hose VA's, nozzles and accessories.	
5. Testing procedures.	
I. Special Hazard Installation	200
1. Installation OF deluge, pre-action and fire sprinkler systems.	
J. Installation of Fire Pumps and Accessories	200
1. Setting of fire pumps and jockey pumps.	
2. Alignment of fire pump and driver.	
3. Trimming of fire pump, jockey pump and controllers.	
4. Start up and testing of fire pumps and equipment.	
K. Maintenance and Repair	400
1. Fabrication and installation of pipe on job site.	
2. Care in cutting and patching of walls and ceilings.	
3. Repair and replacement of system components.	
4. Restoring system to service.	
5. Notifying owner, fire dept., insurance company of impairment to system.	

Social Security No. _____

A.B.C.I.

**MONTHLY WORK RECORD
FOR
PIPEFITTER APPRENTICE F.A.S.T.
862.381.018**

Date: _____

By: _____

YOUR EMPLOYER:

9) Name _____

10) Address _____

11) City/Zip _____

12) Phone # _____

13) Veteran yes _____ no _____

YOUR:

1) Name _____

2) Address _____

3) City /Zip _____

4) Phone # _____

5) Wage/hour _____

6) Work For: _____ month _____ year

7) Days: _____ worked _____ missed

8) Classes: _____ attended _____ missed

MAJOR WORK PROCESSES	HOURS TO DATE																															TOTAL HOURS	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		31
Plan Readings & Interpretation																																	
Care of Tools, Materials, Equip.																																	
Prep. of Tools, Materials, Equip.																																	
Pipe Cutting, Thread Reaming, Welding																																	
Inst. Underground Piping-Accessories																																	
Dry Pipe Systems																																	
Wet Pipe Systems																																	
Standpipe Systems																																	
Spec. Hazard Installation																																	
Inst. Fire Pumps & Accessories																																	
Maintenance & Repair																																	

I certify the time shown above as true and accurate:

I certify that the work performed was:
_____ Satisfactory _____ Unsatisfactory

MONTHLY TOTAL _____

(signature of supervisor)

H6
St. John's
School District

APPRENTICE NAME: _____
FIRST LAST

I.D. NO.: _____ MONTH OCTOBER YEAR 89

PLACE OF EMPLOYMENT: _____

OBJECTIVE CODES		MONTH TOTAL
CODE	WORK PROCESSES	
A	CORE ORGANIZATION	
B	RELATED TASK PERFORMANCE	
C	VEGETABLE & FRUIT PREPARATION	
D	BREAKFAST COOKERY	
E	SANDWICH PREPARATION	
F	USE AND CONVERSION OF CONVENIENCE	
G	STOCKS & SOUPS	
H	SAUCE COOKERY	
I	GARDEMANGER SECTION	
J	GARNISHING & PREPARATION	
K	AROMATICS OF THE KITCHEN	
L	HOT HORS D OEUVRES & CANAPES	
M	PASTA & RICE COOKERY COMPLETE POTATO COOKERY	
N	FRYING METHODS	
O	MEAT COOKERY	
P	FISH COOKERY	
TOTAL HOURS WORKED		

FIRST WEEK		DATE FROM							DATE TO							DAILY HOURS	
	DATE	A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	
SUN	10/1/89																
MON	10/2/89																
TUE	10/3/89																
WED	10/4/89																
THU	10/5/89																
FRI	10/6/89																
SAT	10/7/89																

SECOND WEEK		DATE FROM							DATE TO							DAILY HOURS	
	DATE	A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	
SUN	10/8/89																
MON	10/9/89																
TUE	10/10/89																
WED	10/11/89																
THU	10/12/89																
FRI	10/13/89																
SAT	10/14/89																
TOTAL																	

THIRD WEEK		DATE FROM							DATE TO							DAILY HOURS	
	DATE	A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	
SUN	10/15/89																
MON	10/16/89																
TUE	10/17/89																
WED	10/18/89																
THU	10/19/89																
FRI	10/20/89																
SAT	10/21/89																
TOTAL																	

FOURTH WEEK		DATE FROM							DATE TO							DAILY HOURS	
	DATE	A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	
SUN	10/22/89																
MON	10/23/89																
TUE	10/24/89																
WED	10/25/89																
THU	10/26/89																
FRI	10/27/89																
SAT	10/28/89																
TOTAL																	

FIFTH WEEK		DATE FROM							DATE TO							DAILY HOURS	
	DATE	A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	
SUN	10/29/89																
MON	10/30/89																
TUE	10/31/89																
WED																	
THU																	
FRI																	
SAT																	
TOTAL																	

CHECKED AND CERTIFIED BY: _____
NAME

TITLE _____



EMPLOYEE'S MONTHLY REPORT OF WORK

Employee/Student Name _____ S.S.# _____
 School: St. Augustine Technical Center Program _____
 Employer _____
 Job Title _____ Report for the month of _____

Hourly Record of Work by Days INDICATE HOURS WORKED PER DAY

WEEK OF	SUN	MON	TUE	WED	THR	FRI	SAT	TOTAL HOURS	COMMENTS
1 OCT 89	1	2	3	4	5	6	7		
8 OCT 89	8	9	10	11	12	13	14		
15 OCT 89	15	16	17	18	19	20	21		
22 OCT 89	22	23	24	25	26	27	28		
29 OCT 89	29	30	31	X	X	X	X		

Signature of Employee/Student _____

Verified by Supervisor _____

This form is to be turned in no later than the 3rd of each month for the preceding month to:

Instructor _____
 ST. AUGUSTINE TECHNICAL CENTER
 Collins Ave. at Del Monte Dr.
 St. Augustitne, FL 32084

St. Augustine Technical Center
EMPLOYER EVALUATION FORM

EMPLOYEE'S NAME: _____
 S.S. #: _____
 PROGRAM: _____
 MONTH OF: _____

To the employer: To assist you in training the above employee so that he/she will become more valuable, please complete this form. Place a check in the spaces to the right of each characteristic which best expresses your evaluation of the employee and return this report. You are urged to offer comments and suggestions on ways you feel we can better assist this employee.

RATING FACTORS	Outstanding	Acceptable	Needs Improvement	Not Acceptable
1. QUALITY OF WORK. Turns out work that meets standards established by business/industry, and takes pride in work.				
2. PRODUCTIVITY. Produces a quantity of work that meets business/industry standards.				
3. RELIABILITY. Attends regularly and contacts supervisor when absent for approved reason. Is on time and ready for work.				
4. DEPENDABILITY. Can be counted on to stick with a job until it is done.				
5. WORK ORGANIZATION. Thinks through all assignments; assembles the needed materials and equipment before starting a job. Handles the work in order of priority; everything is left in good condition or put neatly away at the end of each day.				
6. ATTITUDE. Responds well to work assignments. Accepts constructive criticism. Is tactful and works cooperatively with fellow workers and supervisor.				
7. JUDGMENT IN SEEKING HELP. Knows when to ask questions or seek help to avoid making mistakes or wasting time and materials.				
8. PERSONAL DEVELOPMENT. Applies personal and professional skills necessary to success in chosen occupational field.				
9. INTEGRITY. Is honest in dealings with others and respects their rights and property.				
10. INITIATIVE. Works independently of outside influence or control. Finds other work when assigned job is completed.				

Comments and suggestions for improvement: _____

Signature of Employer: _____

Please feel free to call me at 824-4401, Extension _____.

This employee is performing _____ work in class at this time.

Instructor: _____

St. Augustine Technical Center
Collins Ave. at Del Monte Dr.
St. Augustine, FL 32084



APPENDIX I

National and State Law Regarding Apprentices

- I1. The National Apprenticeship Act
- I2. Chapter 446 Florida Statutes As Amended 1987
- I3. Florida Administrative Code

THE NATIONAL APPRENTICESHIP ACT
(50 Stat. 663; 29 U.S.C. 50)

To enable the Department of Labor to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of apprentices and to cooperate with the States in the promotion of such standards.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the Secretary of Labor is hereby authorized and directed to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of apprentices, to extend the application of such standards by encouraging the inclusion thereof in contracts of apprenticeship, to bring together employers and labor for the formulation of programs of apprenticeship, to cooperate with State agencies engaged in the formulation and promotion of standards of apprenticeship, and to cooperate with the National Youth Administration and with the Office of Education of the Department of the Interior in accordance with section 6 of the Act of February 23, 1917 (39 Stat. 932), as amended by Executive Order Numbered 6166, June 10, 1933, issued pursuant to an Act of June 30, 1932 (47 Stat. 414), as amended.

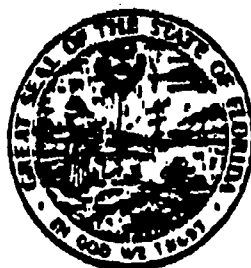
Sec. 2. The Secretary of Labor may publish information relating to existing and proposed labor standards of apprenticeship, and may appoint national advisory committees to serve without compensation. Such committees shall include representatives of employers, representatives of labor, educators, and officers of other executive departments, with the consent of the head of any such department.

Sec. 3. On and after the effective date of this Act the National Youth Administration shall be relieved of direct responsibility for the promotion of labor standards of apprenticeship as heretofore conducted through the division of apprentice training and shall transfer all records and papers relating to such activities to the custody of the Department of Labor. The Secretary of Labor is authorized to appoint such employees as he may from time to time find necessary for the administration of this Act, with regard to existing laws applicable to the appointment and compensation of employees of the United States: *Provided, however,* That he may appoint persons now employed in division of apprentice training of the National Youth Administration upon certification by the Civil Service Commission of their qualifications after nonassembled examinations.

Sec. 4. This Act shall take effect on July 1, 1937, or as soon thereafter as it shall be approved.

Approved, August 16, 1937.

Source: Bureau of Apprenticeship (1982). *Apprenticeship: Past and Present*. Washington D.C.: U.S. Department of Labor, Employment and Training Administration, p. 17.



**FLORIDA LAW
REGARDING
APPRENTICES
UNDER
CHAPTER 448
FLORIDA
STATUTES**



As Amended 1987

ADMINISTERED BY:

DEPARTMENT OF LABOR AND EMPLOYMENT SECURITY
Division of Labor, Employment and Training
Bureau of Apprenticeship

CHAPTER 446

JOB TRAINING

- 446.011 Declaration of legislative intent with respect to apprenticeship training.
- 446.021 Definitions of terms used in ss. 446.011-446.092.
- 446.032 General duties of division with respect to apprenticeship training.
- 446.041 Apprenticeship program, duties of division.
- 446.045 State Apprenticeship Council.
- 446.051 Related instruction for apprentices.
- 446.052 Preapprenticeship program.
- 446.061 Expenditures.
- 446.071 Apprenticeship sponsors.
- 446.075 Federal and state cooperation.
- 446.081 Limitation.
- 446.091 On-the-job training program.
- 446.092 Criteria for apprenticeship occupations.
- 446.20 Administration of responsibilities under the federal Job Training Partnership Act.
- 446.40 Rural Manpower Services Act; short title.
- 446.41 Legislative intent with respect to rural manpower training and development; establishment of Rural Manpower Services Program.
- 446.42 General purpose of Rural Manpower Services Program.
- 446.43 Scope and coverage of Rural Manpower Services Program.
- 446.44 Duties of Rural Manpower Services Program.

446.011 Declaration of legislative intent with respect to apprenticeship training.—

(1) It is the intent of the State of Florida to provide educational opportunities for its young people so that they can be trained for trades, occupations, and professions suited to their abilities. It is the intent of this act to promote the mode of training known as apprenticeship in occupations throughout industry in the state that require physical manipulative skills. By broadening job training opportunities and providing for increased coordination between public school academic programs, vocational programs, and registered apprenticeship programs, the young people of the state will benefit from the valuable training opportunities developed when on-the-job training is combined with academic-related classroom experiences. This act is intended to develop the apparent potentials in apprenticeship training by assisting in the establishment of preapprenticeship programs in the public school system and elsewhere and by expanding presently registered programs as well as promoting new registered programs in jobs that lend themselves to apprenticeship training.

(2) It is the intent of the Legislature that the Division of Labor, Employment, and Training of the Department of Labor and Employment Security have responsibility for the development of the apprenticeship and preapprenticeship uniform minimum standards for the apprenticeable trades and that the Division of Vocational, Adult, and Community Education of the Department of Education have responsibility for assisting district school boards and community college district boards of

trustees in developing preapprenticeship programs in compliance with the standards established by the Division of Labor, Employment, and Training.

(3) It is the further intent of this act that the Division of Labor, Employment, and Training ensure the quality training through the adoption and enforcement of uniform minimum standards and that the Bureau of Apprenticeship of the Division of Labor promote, register, monitor, and service apprenticeship and training programs and ensure that such programs adhere to the standards.

(4) It is the intent of the Legislature that this act not require the use of apprentices on construction projects financed by the state or any county, municipality, town or township, public authority, special district, municipal service taxing unit, or other agency of state or local government. Notwithstanding this intent, whenever any government or agency of government employs, of its own choice, apprentices or employs contractors who employ apprentices, the behavior of the government and the contractors employed by the government shall be governed by the provisions of this act.

*History.—*s. 1, ch. 22034, 1947; s. 11, ch. 25035, 1949; s. 1, ch. 28037, 1953; s. 1, ch. 63-152; ss. 17, 35, ch. 69-108; s. 1, ch. 72-113; s. 53, ch. 73-338; s. 23, ch. 79-7; s. 1, ch. 79-367; s. 284, ch. 81-254; s. 1, ch. 82-52; s. 18, ch. 83-174; s. 1, ch. 85-75.

*Note.—*Former s. 446.06.

446.021 Definitions of terms used in ss. 446.011-446.092.—As used in ss. 446.011-446.092, the following words and terms shall have the following meanings unless the context clearly indicates otherwise:

(1) "Preapprentice" means any person 16 years of age or over engaged in any course of instruction in the public school system or elsewhere, which course is registered as a preapprenticeship program with the Division of Labor, Employment, and Training of the Department of Labor and Employment Security.

(2) "Apprentice" means a person at least 16 years of age who is engaged in learning a recognized skill or trade through actual work experience under the supervision of journeymen craftsmen, which training should be combined with properly coordinated studies of related technical and supplementary subjects and who has entered into a written agreement, hereinafter called an apprentice agreement, with a registered apprenticeship sponsor who may be either an employer, an association of employers, or a local joint apprenticeship committee.

(3) "Trainee" means a person at least 16 years of age who is engaged in learning a specific skill, trade, or occupation within a formalized, on-the-job training program.

(4) "Journeyman" means a person working in an apprenticeable occupation who has successfully completed a registered apprenticeship program or who has worked the number of years required by established industry practices for the particular trade or occupation.

(5) "Preapprenticeship program" means an organized course of instruction in the public school system or elsewhere, which course is designed to prepare a person 16 years of age or older to become an apprentice and which course is approved by and registered with

the Bureau of Apprenticeship of the Division of Labor, Employment, and Training and sponsored by a registered apprenticeship program.

(6) "Apprenticeship program" means an organized course of instruction, registered and approved by the division, which course shall contain all terms and conditions for the qualifications, recruitment, selection, employment, and training of apprentices including such matters as the requirements for a written apprenticeship agreement.

(7) "On-the-job training program" means a formalized system of job processes which may be augmented by related instruction that provides the experience and knowledge necessary to meet the training objective of learning a specific skill, trade, or occupation. Such training program shall be at least 6 months and not more than 2 years in duration and shall be registered with the division.

(8) "Uniform minimum preapprenticeship standards" means the minimum requirements established uniformly for each craft under which a preapprenticeship program is administered and includes standards of admission, training goals, training objectives, curriculum outlines, objective standards to measure successful completion of the preapprenticeship program, and the percentage of credit that may be given to preapprenticeship graduates upon acceptance into the apprenticeship program.

(9) "Related instruction" means an organized and systematic form of instruction designed to provide the apprentice with knowledge of the theoretical subjects related to a specific trade or occupation.

(10) "Cancellation" means the deregistration of an apprenticeship program or the termination of an apprenticeship agreement.

(11) "Jurisdiction" means the specific geographical area for which a particular program is registered.

(12) "Division" means the Division of Labor, Employment, and Training of the Department of Labor and Employment Security.

(13) "Director" means the director of the Division of Labor, Employment, and Training.

History.—s. 2, ch. 22834, 1947; s. 1, ch. 83-153; s. 2, ch. 72-113; s. 54, ch. 73-338; s. 32, ch. 79-7; s. 2, ch. 79-367; s. 18, ch. 83-174.

Note.—Former s. 446.07.

446.032 General duties of division with respect to apprenticeship training.—The Division of Labor, Employment, and Training shall:

(1) Establish uniform minimum standards and policies governing apprentice programs and agreements. Such standards and policies shall govern the terms and conditions of the apprentice's employment and training, including the quality training of the apprentice with respect to, but not limited to, such matters as ratios of apprentices to journeymen, safety, related instruction, and on-the-job training; but such standards and policies shall not include rules, standards, or guidelines that require the use of apprentices and job trainees on state, county, or municipal contracts. The division may adopt rules as necessary to carry out such standards and policies.

(2) Establish by rule procedures to be utilized by the State Apprenticeship Council in accordance with the provisions of s. 446.045.

(3) Establish a Bureau of Apprenticeship pursuant to the instructions of the Secretary of Labor and Employment Security.

History.—s. 2, ch. 82-62; s. 1, ch. 82-55; s. 20, ch. 83-174.

446.041 Apprenticeship program, duties of division.—The Division of Labor, Employment, and Training shall:

(1) Administer the provisions of ss. 446.011-446.092.

(2) Administer the standards established by the division.

(3) Register in accordance with this chapter any apprenticeship or preapprenticeship program, regardless of affiliation, which meets standards established by the division.

(4) Investigate complaints concerning the failure of any registered program to meet the standards established by the division.

(5) Cancel the registration of any program which fails to comply with the standards and policies of the division or which unreasonably fails or refuses to cooperate with the division in monitoring and enforcing compliance with such standards.

(6) Develop and encourage apprenticeship programs.

(7) Cooperate with and assist local apprenticeship sponsors in the development of their apprenticeship standards and training requirements.

(8) Cooperate with and assist the Division of Vocational, Adult, and Community Education of the Department of Education and appropriate vocational education institutions in the development of viable apprenticeship and preapprenticeship programs.

(9) Encourage registered apprenticeship programs to grant consideration and credit to individuals completing registered preapprenticeship programs.

(10) Monitor registered apprenticeship programs to ensure that they are being operated in compliance with all applicable standards.

(11) Supervise all apprenticeship programs which are registered with the division.

(12) Adopt rules as required to implement the provisions of this act.

History.—s. 4, ch. 22834, 1947; s. 3, ch. 28037, 1953; s. 1, ch. 83-153; s. 19, ch. 83-400; ss. 17, 25, ch. 89-106; s. 168, ch. 71-377; s. 3, ch. 72-113; s. 1, ch. 73-263; s. 56, ch. 73-338; s. 1, ch. 77-174; s. 11, ch. 78-96; s. 32, ch. 79-7; s. 4, ch. 79-367; s. 21, ch. 83-174; s. 5, ch. 85-75.

Note.—Former s. 446.08.

446.045 State Apprenticeship Council.—

(1) For the purposes of this section:

(a) "Joint employee organization" means an apprenticeship sponsor who participates in a collective bargaining agreement and represents employees.

(b) "Nonjoint employer organization" means an apprenticeship sponsor who does not participate in a collective bargaining agreement and who represents management.

(2)(a) There is created a State Apprenticeship Council to be composed of 12 members, which shall be advisory to the Division of Labor, Employment, and Training of the Department of Labor and Employment Security. The purpose of the council shall be to advise the division on matters relating to apprenticeship. In no event shall

the council establish policy, promulgate rules, or consider whether particular apprenticeship programs should be approved by the division or bureau. Meetings of the council shall be subject to the provisions of chapter 286, and only those matters contained in the notice of meeting provided by the division pursuant thereto shall be considered by the council.

(b) The division director or his designee shall be ex officio chairman of the State Apprenticeship Council, except that he shall have voting power in cases of tie votes. The administrator of industrial education of the Department of Education shall be appointed a nonvoting member of the council. The Governor shall appoint two three-member committees for the purpose of nominating candidates for appointment to the council. One nominating committee shall be composed of joint employee organization representatives, and the other nominating committee shall be composed of nonjoint employer organization representatives. The joint employee organization nominating committee shall submit to the Governor the names of three persons for each vacancy occurring among the joint employee organization members on the council, and the nonjoint employer organization nominating committee likewise shall submit to the Governor the names of three persons for each vacancy occurring among the nonjoint employer organization members on the council. The Governor shall appoint to the council five members representing joint employee organizations and five members representing nonjoint employer organizations from the candidates nominated for each position by the respective nominating committees. Each member shall represent industries which have registered apprenticeship programs or in which a need for apprenticeship programs has been demonstrated; the terms of the members shall run concurrently with the Governor's term of office.

(c) The council shall meet in a government office building twice a year. In addition, the council shall meet at the call of the chairman for special meetings when justified by the circumstances. However, the council members representing the joint employee organizations and the council members representing the nonjoint employer organizations shall meet separately twice a year.

(d) Each council member is accountable to the Governor for the proper performance of the duties of the member's office. The Governor shall cause to be investigated any complaint or unfavorable report received concerning the actions of the council or any member and shall take appropriate action thereon. The Governor may remove any member from office for malfeasance, misfeasance, neglect of duty, incompetence, permanent inability to perform official duties, pleading guilty or nolo contendere to a felony, or being found guilty of a felony.

(e) Each member of the council shall serve at his own expense, but shall be entitled to per diem and travel expenses.

(3) The State Apprenticeship Council is repealed on October 1, 1988, and shall be revised by the Legislature pursuant to the Sundown Act.

History.—s. 1, 2, ch. 82-55; s. 22, ch. 83-174; s. 69, ch. 85-81.
cf.—s. 11 §11 Sundown Act.

s. 446.032 Division of Labor, Employment, and Training to establish council procedures.

446.051 Related instruction for apprentices.—

(1) The administration and supervision of related and supplemental instruction for apprentices, coordination of such instruction with job experiences, and selection and training of teachers and coordinators for such instruction, all as approved by the registered program sponsor, shall be the responsibility of the appropriate vocational education institution.

(2) The appropriate vocational education institution shall be encouraged to cooperate with and assist in providing to any registered program sponsor facilities, equipment and supplies, and instructors' salaries for the performance of related and supplemental instruction associated with the registered program.

History.—s. 5, ch. 23834, 1947; s. 4, ch. 23837, 1953; s. 1, ch. 63-163; ss. 15, 17, 35, ch. 69-106; s. 5, ch. 79-387.

Note.—Former s. 446.10.

446.052 Preapprenticeship program.—

(1) There is created and established a preapprenticeship education program, as defined in s. 446.021.

(2) The Division of Vocational, Adult, and Community Education of the Department of Education, under regulations established by the State Board of Education, is authorized to administer the provisions of ss. 446.011-446.792 that relate to preapprenticeship programs in cooperation with district school boards and community college district boards of trustees. District school boards, community college district boards of trustees, and registered program sponsors shall cooperate in developing and establishing programs that include vocational instruction and general education courses required to obtain a high school diploma.

(3) The Division of Vocational, Adult, and Community Education, the district school boards, the community college district boards of trustees, and the Division of Labor, Employment, and Training shall work together with existing registered apprenticeship programs so that individuals completing such preapprenticeship programs may be able to receive credit towards completing a registered apprenticeship program.

(4) Veterans who have received discharges other than dishonorable discharges shall, if qualified, receive the same priorities given to registered apprentices.

History.—s. 4, ch. 72-113; s. 57, ch. 73-328; s. 6, ch. 79-387; s. 285, ch. 81-259; s. 23, ch. 83-174; s. 18, ch. 84-114; s. 6, ch. 85-75.

446.061 Expenditures.—The Division of Labor, Employment, and Training shall make necessary expenditures from the appropriation provided by law for personal services, travel, printing, equipment, office space, and supplies as provided by law.

History.—s. 6, ch. 23834, 1947; s. 1, ch. 57-1; s. 1, ch. 63-153; ss. 17, 35, ch. 69-106; s. 1, ch. 73-283; s. 1, ch. 77-174; s. 24, ch. 83-174.

Note.—Former s. 446.11.

446.071 Apprenticeship sponsors.—

(1) One or more local apprenticeship sponsors shall be approved in any trade or group of trades by the Division of Labor, Employment, and Training, upon a determination of need, provided the apprenticeship sponsor meets all of the standards established by the division. "Need" refers to the need of state residents for apprenticeship training. In the absence of proof to the contrary, it shall be presumed that there is need for apprentice-

ship and preapprenticeship training in each county in this state.

(2) A local apprenticeship sponsor may be a committee, a group of employers, an employer, or a group of employees, or any combination thereof.

(3) The division has authority to grant a variance from the standards upon a showing of good cause for such variance by program sponsors in nonconstruction trades. The purpose of this provision is to recognize the unique and varying training requirements in nontraditional apprenticeable occupations and to authorize the division and bureau to adapt the standards to the needs of such programs.

History.—s. 7, ch. 23904, 1947; s. 1, ch. 63-153; ss. 17, 35, ch. 69-106; s. 5, ch. 73-113; s. 59, ch. 73-328; s. 1, ch. 77-182; s. 7, ch. 79-397; s. 25, ch. 83-174.
Note.—Former s. 446.12.

446.075 Federal and state cooperation.—The Division of Labor, Employment, and Training of the Department of Labor and Employment Security is authorized to make and enter into contracts with the United States Department of Labor, and to assume such other functions and duties as are necessary for the division to serve as registration agent for federal apprenticeship registration purposes, except that the division shall not enforce any federal apprenticeship requirement unless the division first adopts such requirement as a rule. All rules promulgated and administrative hearings afforded by the division because of this section shall be in accordance with the requirements of chapter 120.

History.—s. 1, ch. 77-182; s. 33, ch. 79-7; s. 8, ch. 79-397; s. 25, ch. 83-174.

446.081 Limitation.—

(1) Nothing in ss. 446.011-446.092 or in any apprentice agreement approved under those sections shall operate to invalidate any apprenticeship provision in any collective agreement between employers and employees setting up higher apprenticeship standards.

(2) No person shall institute any action for the enforcement of any apprentice agreement, or for damages for the breach of any apprentice agreement, made under ss. 446.011-446.092, unless he has first exhausted all administrative remedies provided by this section.

(3) Any person aggrieved by any determination or act of the division shall have the right to an administrative hearing.

History.—s. 8, ch. 23904, 1947; s. 5, ch. 28037, 1963; s. 1, ch. 63-153; s. 1, ch. 69-267; s. 1, ch. 73-283; s. 120, ch. 73-333; s. 1, ch. 77-174; s. 11, ch. 79-95; s. 27, ch. 83-174.

Note.—Former s. 446.13.

446.091 On-the-job training program.—All provisions of ss. 446.011-446.092 relating to apprenticeship and preapprenticeship, including, but not limited to, programs, agreements, standards, administration, procedures, definitions, expenditures, local committees, power and duties, limitations, grievances, ratios of apprentices and job trainees to journeymen on state, county, and municipal contracts, and functions of the Division of Labor, Employment, and Training shall be appropriately adapted and made applicable to a program of on-the-job training hereby authorized for persons other than apprentices.

History.—s. 2, ch. 63-153; ss. 17, 35, ch. 69-106; s. 1, ch. 73-283; s. 59, ch. 73-328; s. 1, ch. 77-174; s. 28, ch. 83-174; s. 76, ch. 83-218.

446.092 Criteria for apprenticeship occupations.—

An apprenticeable occupation is a skilled trade which possesses all of the following characteristics:

(1) It is customarily learned in a practical way through a structured, systematic program of on-the-job, supervised training.

(2) It is commonly recognized throughout the industry or recognized with a positive view towards changing technology.

(3) It involves manual, mechanical, or technical skills and knowledge which require a minimum of 2,000 hours of work and training, which hours are excluded from the time spent at related instruction.

(4) It requires related instruction to supplement on-the-job training. Such instruction may be given in a classroom or through correspondence courses.

(5) It involves the development of skill sufficiently broad to be applicable in like occupations throughout an industry, rather than of restricted application to the products or services of any one company.

(6) It does not fall into any of the following categories:

(a) Selling, retailing, or similar occupations in the distributive field.

(b) Managerial occupations.

(c) Professional and scientific vocations for which entrance requirements customarily require an academic degree.

History.—s. 9, ch. 79-397; s. 77, ch. 83-218.

446.20 Administration of responsibilities under the federal Job Training Partnership Act.—

(1) The Department of Labor and Employment Security is responsible for carrying out the duties and responsibilities assigned by the Governor under the Job Training Partnership Act, Pub. L. No. 97-300.

(2) The State Job Training Coordinating Council, which is hereby created, as provided by Pub. L. No. 97-300, shall have the responsibilities as assigned by the Governor pursuant to the Job Training Partnership Act. Such responsibilities shall include reviewing the duties and responsibilities of the Department of Labor and Employment Security pursuant to this section. The State Job Training Coordinating Council is repealed October 1, 1990, and shall be reviewed by the Legislature pursuant to the Sunset Act.

(3) The director of the Division of Labor, Employment, and Training may, upon delegation from the Secretary of Labor and Employment Security, sign contracts, grants, and other instruments on behalf of the Governor as necessary to execute the functions assigned to the Governor under the Job Training Partnership Act.

(4) The director of the Division of Labor, Employment, and Training shall be the authority, upon delegation from the Secretary of Labor and Employment Security, to make rules for the administration of this act.

(5) The Division of Labor, Employment, and Training may assume such duties as are delegated to it by the United States Government and its agencies for the purpose of obtaining federal funding to carry out the purposes of the Job Training Partnership Act in this state.

(6) The assignment of powers and duties to the Division of Labor, Employment, and Training shall not be construed to limit the authority and responsibility of the Secretary of Labor and Employment Security as provided in s. 20.05(1)(a).

History.—s. 44, 45, ch. 83-174; s. 70, ch. 85-81.
 cf.—s. 11.811 Suncoast Act.

446.40 Rural Manpower Services Act; short title.— Sections 446.40—446.44 shall be cited as the "Rural Manpower Services Act."

History.—s. 1, ch. 72-398.
 Note.—Former s. 450.40.

446.41 Legislative intent with respect to rural manpower training and development; establishment of Rural Manpower Services Program.—In order that the state may achieve its full economic and social potential, consideration must be given to rural manpower training and development to enable its rural citizens as well as urban citizens to develop their maximum capacities and participate productively in our society. It is, therefore, the policy of the state to make available those services needed to assist individuals and communities in rural areas to improve their quality of life. It is with a great sense of urgency that a Rural Manpower Services Program is established within the Division of Labor, Employment, and Training of the Department of Labor and Employment Security to provide equal access to all manpower training programs available to rural as well as urban areas.

History.—s. 2, ch. 72-398; s. 1, ch. 73-283; s. 1, ch. 77-174; s. 45, ch. 79-7; s. 42, ch. 83-174.
 Note.—Former s. 450.41.

446.42 General purpose of Rural Manpower Services Program.—A trained labor force is an essential ingredient for industrial as well as agricultural growth. Therefore, it shall be the general responsibility of the Rural Manpower Services Program to provide rural business and potential rural businesses with the employment and manpower training services and resources necessary to train and retain Florida's rural work force.

History.—s. 3, ch. 72-398.
 Note.—Former s. 450.42.

446.43 Scope and coverage of Rural Manpower Services Program.—The scope of the area to be covered by the Rural Manpower Services Program will include all counties of the state not classified as standard metropolitan statistical areas (SMSA) by the United States Department of Labor Manpower Administration. Florida's designated SMSA labor areas include: Broward, Dade, Duval, Escambia, Hillsborough, Pinellas, Leon, Orange, and Palm Beach Counties.

History.—s. 4, ch. 72-398.
 Note.—Former s. 450.43.

446.44 Duties of Rural Manpower Services Program.—It shall be the direct responsibility of the Rural Manpower Services Program to promote and deliver all employment and manpower services and resources to the rural undeveloped and underdeveloped counties of the state in an effort to:

(1) Slow down out-migration of untrained rural residents to the state's overcrowded large metropolitan centers.

(2) Assist the department's Economic Development Division in attracting light, pollution-free industry to the rural counties.

(3) Improve the economic status of the impoverished rural residents.

(4) Provide present and new industry with the manpower training resources necessary for them to train the untrained rural work force toward gainful employment.

(5) Develop rural manpower programs which will be evaluated, planned, and implemented through communications and planning with appropriate:

(a) Departments of state and federal governments.

(b) Divisions, bureaus, or sections of the Department of Commerce.

(c) Agencies and organizations of the public and private sectors at the state, regional, and local levels.

History.—s. 5, ch. 72-398; s. 1, ch. 73-283; s. 1, ch. 77-174.
 Note.—Former s. 450.44.

**CHAPTER 38C-16
APPRENTICESHIP PROGRAMS**

38C-16.001	Purpose and Scope.
38C-16.002	Definitions.
38C-16.003	Eligibility and Procedure for Bureau Registration.
38C-16.004	Standards of Apprenticeship.
38C-16.005	Apprenticeship Agreement.
38C-16.006	Deregistration of Bureau Registered Program.
38C-16.007	Hearings.
38C-16.008	Complaints.
38C-16.009	Reinstatement of Program Registration.
38C-16.010	Preapprenticeship Programs.

38C-16.001 Purpose and Scope.

(1) Section 466.031(2), Florida Statutes, authorizes and directs the Division of Labor to formulate and promote the furtherance of labor standards necessary to safeguard the welfare and wages of apprentices and to extend the application of such standards by requiring the inclusion thereof in contracts of apprenticeship.

(2) The purpose of this chapter is to set forth labor standards to safeguard the welfare and wages of apprentices and to extend the application of such standards by prescribing policies and procedures concerning the registration of acceptable apprenticeship programs with the State of Florida, Department of Labor and Employment Security, Division of Labor, Bureau of Apprenticeship. These labor standards and procedures cover the registration, cancellation and deregistration of apprenticeship programs and of apprenticeship agreements; and matters relating thereto.

Specific Authority 446.031(2) FS. Law Implemented 446.031(2) FS. History—New 6-9-81, Formerly 38C-16.01.

38C-16.002 Definitions. As used in this part:

(1) "Registrant" or "Sponsor" means any person, association, committee, or organization in whose name or title the program is or is to be registered, irrespective of whether such entity is an employer.

(2) "Employer" means a signatory party to a collective bargaining agreement or signatory to a participating employer agreement with the program sponsor which will be registered with the Bureau of Apprenticeship.

(3) "Apprenticeship Agreement" means a written agreement between an apprentice and either his employer or an apprenticeship committee acting as agent for employer(s) which agreement contains the terms and conditions of the employment and training of the apprentice.

(4) "Joint-Apprenticeship Committee" means a committee, composed of an equal number of representatives of employers and employees, which has been established by an employer or group of employers and a bona fide collective bargaining agent or agents to conduct, operate, or administer an apprenticeship program and enter into

apprenticeship agreement with apprentices selected for employment under the particular program.

(5) "Nonjoint Apprenticeship Sponsor" means an apprenticeship sponsor who does not participate in a bona fide collective bargaining agreement; it includes an individual nonjoint sponsor (apprenticeship program sponsored by one employer without the participation of a union) and a group nonjoint sponsor (apprenticeship program sponsored by two or more employers without the participation of a union).

(6) "Registration of an Apprenticeship Program" means the acceptance and recording of such program by the Bureau as meeting the basic standards and requirements of the Division for approval of such program. Approval is evidenced by a certificate or other written indicia.

(7) "Registration of an Apprenticeship Agreement" means the acceptance and recording thereof by the Bureau as evidence of the participation of the apprentice in a particular registered apprenticeship program.

(8) "Established Journeyman Hourly Rate" means the average of the hourly rates paid to all journeymen, as defined by Section 446.021(4), Florida Statutes, by all participating employers in an apprenticeship program.

(9) "Journeyman" means a person working in an apprenticeable occupation who has successfully completed a registered apprenticeship program or who has worked the number of years required by established industry practices for the particular trade or occupation.

(10) "Established Industry Practices" means the number of years of training required by the majority of registered program standards for the particular trade or occupation.

Specific Authority 446.031(2) FS. Law Implemented 446.021 FS. History—New 6-9-81, Formerly 38C-16.02.

38C-16.003 Eligibility and Procedure for Bureau Registration.

(1) No apprenticeship program or agreement shall be eligible for Bureau registration unless it is in conformity with the applicable provisions of Chapter 446, Florida Statutes and the training is in an apprenticeable occupation.

(a) Prior to the registration of any apprenticeship sponsor, all of the standards established by the Division of Labor shall be met.

(b) The Bureau shall cooperate with and give all possible assistance to employers, associations, committees and other organizations that request registration of an apprenticeship program.

(c) There shall be a presumption that there is a need for apprenticeship training in each county in Florida unless proven to the contrary.

(2) Reasonable assurance of employment opportunities for training purposes necessary for completion of the contemplated program by individual apprentices shall be demonstrated prior to registration of a program by the Bureau. The number and size (number of employees) of employers committed to support the program will

be considered in making this determination.

(3) Apprentices must be individually registered under a registered program. Such registration shall be effected by filing copies of each apprenticeship agreement with the Bureau.

(4) The Bureau must be promptly notified through the appropriate field office of the cancellation, suspension, or termination of any apprenticeship agreement, with cause for same, and of apprenticeship completions.

(5) Approved apprenticeship programs shall be accorded registration, evidenced by a certificate of registration.

(6) Any modification(s) or change(s) to registered standards shall be promptly submitted to the Bureau through the appropriate field office, and if approved, shall be recorded and acknowledged as an amendment to such standards.

(7) The certificate of registration for an approved program will be made in the name of the program sponsor and must be renewed every three (3) years.

(8) The request for registration, together with all documents and data required by this chapter, shall be submitted in five copies.

(9) Under a program proposed for registration by an employer or employers' association, where the standards, collective bargaining agreement, or other instrument, provides for participation by a union in any manner in the operation of the substantive matters of the apprenticeship program, and such participation is exercised, written acknowledgment of union agreement or "no objection" to the registration is required. Where no such participation is evidenced and practiced, the employer or employers' association shall simultaneously furnish to the union local, if any, which is the recognized or certified collective bargaining agent of the employees to be trained, a copy of its application for registration and of the apprenticeship program. In addition, upon receipt of the application and apprenticeship program, the Bureau shall promptly send by certified mail to such union local another copy of the application and of the apprenticeship program together with a notice that union comments will be accepted for thirty (30) days after the date of the agency transmittal.

(10) Where the employees to be trained have no collective bargaining agent, an apprenticeship program may be proposed for registration by an employer or group of employers.

(11) An apprenticeship program may be registered in one or more occupations simultaneously or individually with the provision that the program sponsor shall, within sixty (60) days of registration, be actively training apprentices on the job in each occupation for which registration is granted.

(12) Each occupation for which a program sponsor holds registration shall be subject to cancellation if no active training of apprentices on the job has occurred within one consecutive ninety (90) day period.

(13) Notwithstanding the foregoing

requirements and procedures, apprenticeship programs and standards of sponsoring entities in other than the building and construction industry formed on a multi-state basis and registered pursuant to all requirements of Title 29 CFR, Section 29, by any federally recognized state apprenticeship agency/council or by the Bureau of Apprenticeship and Training of the U. S. Department of Labor shall be afforded approval reciprocity by the Florida Bureau of Apprenticeship if such reciprocity is requested by the sponsoring entity and if a determination of need has been made as provided by Section 446.071, Florida Statutes, as amended.

Specific Authority 446.031(2) FS. Law Implemented 446.031, 446.041, 446.052, 446.071, 446.075 FS. History—New 6-9-81, Formerly 38C-16.03.

38C-16.004 Standards of Apprenticeship. The following standards are prescribed for an apprenticeship program:

(1) The program must be an organized, written plan embodying the terms and conditions of employment, training, and supervision of one or more apprentices in an apprenticeable occupation, as defined in this chapter, and subscribed to by a sponsor who has undertaken to carry out the apprentice training program.

(2) The standards must contain provisions concerning the following:

(a) The employment and training of the apprentice in a skilled trade;

(b) A term of apprenticeship, not less than 2,000 hours of work and training, which hours are excluded from the time spent at related instruction, and which shall be consistent with training requirements as established by industry practice;

(c) An outline of the work processes in which the apprentice will receive supervised work experience and training on the job, and the allocation of the approximate time to be spent in each major process;

(d) Provision for organized related and supplemental instruction in technical subjects related to the trade. A minimum of 144 hours for each year of apprenticeship is required. Such instruction may be given in a classroom, through trade, industrial, or approved correspondence courses of equivalent value approved by the Bureau;

(e) Wage Provisions —

1. A progressively increasing schedule of wage rates to be paid the apprentice, consistent with the skill acquired, which shall be expressed in percentages of the established journeyman hourly rate. The rates represent the minimum for each incremental period of apprenticeship. The established journeyman hourly rate applicable among all participating employers shall be stated in dollars and cents.

2. The entry apprentice wage rate shall be no less than 35 percent of the established journeyman hourly rate paid by all participating employers in the program. Provided, however, that in no event shall the apprentice wage rate be less than the minimum wage prescribed for the Fair Labor

Standards Act.

3. No apprentice shall receive an hourly wage less than the percentage for the incremental period in which he is serving applied to the established journeyman rate.

4. The established journeyman hourly rate provided for by the standards shall be reviewed and adjusted annually.

5. The minimum hourly apprentice wage rate paid during the last incremental period of apprenticeship shall be not less than 75 percent of the established journeyman wage rate.

6. This subsection governing apprentice wages shall not be interpreted or construed in a manner that would cause a conflict with applicable federal law or regulations. The minimum entry apprentice wage rate and the minimum apprentice wage rate during the last incremental period of apprenticeship shall be reviewed periodically by the Division of Labor and amended when determined necessary.

(f) Periodic review and evaluation of the apprentice's progress in job performance and related instruction, and the maintenance of appropriate progress records;

(g) The ratio of apprentices to journeymen consistent with proper supervision, training, and continuity of employment or applicable provisions in collective bargaining agreements, but in a ratio of not more than one apprentice to the employer in each apprenticeable occupation, and one apprentice for each three journeymen thereafter. It shall be the responsibility of the committee to ensure that the allowable ratio of apprentices to journeymen is consistently maintained in the program as a whole, by each participating employer, and on the job site;

(h) A probationary period reasonable in relation to the full apprenticeship term, with full credit for such period toward completion of apprenticeship;

(i) Adequate and safe equipment facilities for training and supervision, and safety training for apprentices on the job and in related instruction;

(j) The required minimum qualifications for persons entering an apprenticeship program;

(k) The placement of an apprentice under an apprenticeship agreement. The agreement shall directly, or by reference, incorporate the standards of the program as part of the agreement;

(l) Grant of advance standing or credit for previously acquired experience, training, skills, or aptitude for all applicants equally, with commensurate wages for any accorded progression step;

(m) Transfer of employer's training obligation through the committee, if one exists and as warranted, to another employer, with full credit to the apprentice for satisfactory time and training earned;

(n) Assurance of qualified training personnel;

(o) Recognition for successful completion of apprenticeship evidenced by an appropriate certificate;

(p) Identification of the registration agency;

(q) Provision for the registration, cancellation and deregistration of the program; and requirement

for the prompt submission of any modification or amendment thereto;

(r) Provision for registration of apprenticeship agreements, modifications, and amendments; notice to the Bureau of persons who have successfully completed apprenticeship programs; and notice of cancellations, suspensions and terminations of apprenticeship agreements and causes therefor;

(s) Authority for the termination of an apprenticeship agreement during the probationary period by either party without stated cause;

(t) Provision for not less than five days' notice to apprentice of any proposed adverse action and cause therefor with stated opportunity to apprentice during such period for corrective action, unless other acceptable procedures are provided for in the collective bargaining agreement;

(u) Provision for a grievance procedure, and the name and address of the appropriate authority under the program to receive, process and make disposition of, complaints;

(v) Recording and maintenance of all records concerning apprenticeship as may be required by state or federal law;

(w) Provision for a participating employer's agreement —

1. Each participating employer shall sign a participating employer's agreement with the program sponsor accepting the funding formula and all other requirements of the program standards, unless otherwise provided for in a collective bargaining agreement;

2. The program sponsor shall notify the Bureau on a current basis who its participating employers are and shall notify the Bureau of any change in the status of each participating employer. Where the program sponsor uses a participating employers' agreement, a copy of same and the cancellation thereof, being furnished to the Bureau will satisfy the requirements of this subsection;

(x) A funding formula providing for the equitable participation of each participating employer in funding of the program;

(y) All apprenticeship standards must contain articles necessary to comply with Federal laws, regulations, and rules pertaining to apprenticeship;

(z) Provision that a contractor shall not work an apprentice in the jurisdiction of another committee until he so notifies the Bureau and all local joint apprenticeship committees if covered by a collective bargaining agreement or the Bureau and all local nonjoint committees if not covered by a collective bargaining agreement. The purpose of this notice is to provide the opportunity for a mutually agreeable, voluntary assignment of apprentices from a local committee if apprentices are available. This provision shall not be construed as relieving a contractor of his diligent effort requirements as provided in Section 446.101, F. S., and Chapter 38C-19, Florida Administrative Code.

Specific Authority 446.031 FS. Law Implemented 446.041, 446.075 FS. History—New 6-9-81, Amended 7-10-83, Formerly 38C-16.04.

Editorial Note: Paragraphs (2)(e)2. and 5. of this rule

have been held invalid. See annotation *Validity*, below.

ANNOTATIONS

Standing to challenge

Content of Rule 8C-16.05 (2)(c)2. and 5. [now Rule 38C-16.004], concerning apprenticeship programs in building trades, was such that homebuilders' association clearly had legitimate associational interest on behalf of substantial number of its members to challenge rule's operation; district court's restriction on association's standing was excessively narrow construction of F. S. A. § 120.56(1), and resulted in restricted public access to administrative processes established in Administrative Procedure Act. Florida Homebuilders Association v. Department of Labor and Employment Security, 412 So. 2d 351 (1982).

Validity

Phrases in Rule 8C-16.05 (2)(c)2. and 5. [now Rule 38C-16.004], relating to minimum apprentice wage rates and providing for different percentage rates where established in collective bargaining agreements, rendered rule invalid exercise of legislative authority, because they provided for nonuniform application of rule in violation of F. S. A. §§ 446.031(2) and 446.041(2)(a)2. Department of Labor and Employment Security, Division of Labor v. Florida Home Builders Association, App., (1st) 417 So. 2d 746 (1982).

38C-16.005 Apprenticeship Agreement. The apprenticeship agreement shall contain:

(1) Names and signatures of the contracting parties (apprentice, and the program registrant or employer), and the signature of a parent or guardian if the apprentice is a minor;

(2) The date of birth of apprentice;

(3) Name and address of the program registrant and registration agency;

(4) A statement of the trade or craft which the apprentice is to be taught, and the beginning date and term (duration) of apprenticeship;

(5) A statement showing:

(a) The number of hours to be spent by the apprentice in work on the job;

(b) The number of hours to be spent in related and supplemental instruction which is required to be not less than 144 hours per year;

(6) Statements providing:

(a) For a specific period of probation during which the apprenticeship agreement may be terminated by either party to the agreement upon written notice to the registration agency;

(b) That, after the probationary period, the agreement may be suspended, cancelled, or terminated for good cause, with due notice to the apprentice and a reasonable opportunity for corrective action, and with written notice to the apprentice and said agency of the final action taken;

(7) A reference incorporating, as part of the agreement, the standards of the apprenticeship program as it exists on the date of the agreement and as it may be amended during the period of the agreement;

(8) A statement that the apprentice will be accorded equal opportunity in all phases of apprenticeship employment and training without discrimination because of race, color, religion, national origin or sex;

(9) A statement that if an employer is unable to fulfill his obligation under his apprenticeship agreement, the agreement may, with consent of the apprentice and committee if one exists, be transferred to another employer under a registered program with written notice of the transfer to the registration agency and with full credit to the apprentice for satisfactory time and training earned;

(10) Name and address of the appropriate authority, if any, designated under the program to receive, process and make disposition of controversies or differences arising out of the apprenticeship agreement when the controversies or differences cannot be adjusted locally or resolved in accordance with the established trade procedure or applicable collective bargaining provisions;

(11) A statement that in the event the registration of the program has been cancelled or revoked, the apprentice will be notified within 15 days of the event.

Specific Authority 446.031(2) FS. Law Implemented 446.041, 446.071, 446.092 FS. History—New 6-9-81, Formerly 38C-16.05.

38C-16.006 Deregistration of Bureau Registered Program. Deregistration of a program may be effected either upon the voluntary action of the registrant by a request for cancellation of the registration or upon notice by the Bureau to the registrant stating cause, and instituting formal deregistration proceedings in accordance with the provisions of this chapter.

(1) Request by registrant. The Chief may cancel the registration of an apprenticeship program by a written acknowledgement of such request stating, but not limited to, the following:

(a) The registration is cancelled at registrant's request, and giving the effective date of such cancellation;

(b) That, within 15 workdays of the date of the acknowledgement, the registrant must notify all apprentices of such cancellation and the effective date; that such cancellation automatically deprives the apprentice of his individual registration.

(2) Deregistration by Bureau.

(a) Deregistration proceedings may be undertaken when the apprenticeship program is not conducted, operated, or administered in accordance with the registered standards or the requirements of this chapter.

(b) Where it appears the program is not being operated in accordance with the registered standards or with the requirements of this chapter, the apprenticeship representative shall notify the Chief, and the Chief shall so notify the program registrant in writing.

(c) The notice shall be sent by registered or certified mail, return receipt requested, shall state the deficiency(s) and remedy(s) required and shall state that the program will be deregistered for cause unless corrective action is taken within 30 days.

(d) During the period for correction, the registrant shall be assisted in every reasonable way by the Bureau.

(e) If the required action is not taken within the allotted time, the Chief shall send a notice to the registrant by registered or certified mail, return receipt requested, stating the following:

1. This notice is sent pursuant to this subsection;
2. That certain deficiencies were called to registrant's attention and remedial actions requested;

3. Based upon the stated cause, the program will be deregistered, unless within 15 workdays of receipt of this notice the registrant requests a hearing;

4. If a hearing is not requested by the registrant, the program will be automatically deregistered.

(f) If the registrant requests a hearing, the Bureau shall notify the Division. The Division Director shall conduct the hearing or request that the Division of Administrative Hearings conduct the hearing as provided in Chapter 120, Florida Statutes. In either case, the Administration Commission model rules of procedure shall be used.

(g) Based upon the evidence presented at the hearing, the hearing officer may recommend and the Division Director, within his discretion may allow the registrant a reasonable time to achieve voluntary corrective action.

(h) Every order of deregistration shall contain a provision that the registrant shall, within 15 workdays of the effective date of the order, notify all registered apprentices of the deregistration of the program, the effective date, and that such action automatically deprives the apprentice of his individual registration.

Specific Authority 446.031(2) FS. Law Implemented 446.041(2) FS. History—New 6-9-81, Formerly 38C-16.06.

38C-16.007 Hearings.

(1) Upon denial by the Bureau of request for approval of an apprenticeship program, the applicant shall have the opportunity for a public hearing on the said denial. Notice of denial by the Bureau shall be by registered or certified mail, return receipt requested. A request for hearing shall be made (postmarked) within fifteen (15) work days of receipt of the notice of denial. Hearings shall either be conducted by the Division Director or, upon request of the Division Director, by a hearing officer assigned from the Department of Administration, Division of Administrative Hearings, as provided in Chapter 120, Florida Statutes. In either case, the Administration Commission model rules of procedure shall govern.

(2) Deregistration hearings shall either be conducted by the Division Director, or, upon request of the Division Director, by a hearing officer assigned from the Department of Administration, Division of Administrative Hearings, as provided in Chapter 120, Florida Statutes. In either case, the Administration Commission model rules of procedure shall govern.
Specific Authority 446.031(2) FS. Law Implemented 446.041(2), 446.071, 446.081(3) FS. History—New

6-9-81, Formerly 38C-16.07.

38C-16.008 Complaints.

(1) Any controversy or difference arising under an apprenticeship agreement or under the registered apprenticeship or preapprenticeship standards, which cannot be resolved locally, or which is not covered by a collective bargaining agreement, may be submitted by an apprentice or other affected person, or by the authorized representative of either, to the Bureau for review. Matters covered by a collective bargaining agreement, however, shall be submitted and processed in accordance with the procedures therein provided.

(2) The complaint shall be in writing, signed by the complainant and be submitted within 60 days of receipt of the local decision or within 60 days of the date it becomes apparent that a decision at the local level cannot be reached. The complaint shall set forth the specific problem including a statement of all relevant facts and circumstances. Copies of all pertinent documents and correspondence shall accompany the complaint.

(3) The Chief or his designee shall review the complaint and all available pertinent information and shall conduct such investigation as may be necessary to make a decision on the complaint. A request by an affected party for a hearing on the complaint shall be granted or denied within 15 days of receipt by the Bureau in Tallahassee. Hearings shall be conducted in accordance with the Administration Commission model rules of procedure.

Specific Authority 446.031(2) FS. Law Implemented 446.041(2), 120.57 FS. History—New 6-9-81, Formerly 38C-16.08.

38C-16.009 Reinstatement of Program Registration. Any apprenticeship program deregistered pursuant to this chapter may be reinstated upon presentation of adequate evidence that the apprenticeship program is operating in accordance with this chapter. Such evidence shall be presented to the Chief if the registrant had not requested a hearing or to the Director if an order of deregistration was entered pursuant to a hearing.
Specific Authority 446.031(2) FS. Law Implemented 446.041(2) FS. History—New 6-9-81, Formerly 38C-16.09.

38C-16.010 Preapprenticeship Programs.

(1) The sponsor of an apprenticeship program shall give primary consideration for admission to persons who complete the sponsor's preapprenticeship program.

(2) The preapprenticeship graduates who enter an apprenticeship program may be exempted from repeating any related course of instruction equal to the time period of their preapprenticeship if the graduate passes a competency examination.
Specific Authority 446.031(2) FS. Law Implemented 446.052 FS. History—New 6-9-81, Formerly 38C-16.10.

**CHAPTER 38C-17
ON-THE-JOB TRAINING PROGRAMS**

- 38C-17.001 Purpose and Scope.
38C-17.002 Definitions.

38C-17.001 Purpose and Scope.

(1) Section 446, Florida Statutes, authorizes and directs the Division of Labor to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of trainees and to extend the application of such standards by encouraging the inclusion thereof in contracts of on-the-job training.

(2) The purpose of this chapter is to set forth labor standards to safeguard the welfare of trainees and to extend the application of such standards by prescribing policies and procedures concerning the registration of acceptable on-the-job training programs with the State of Florida, Department of Labor and Employment Security, Division of Labor, Bureau of Apprenticeship. These labor standards and procedures cover the registration, cancellation and deregistration of on-the-job training programs and of training agreements; and matters relating thereto.

Specific Authority 446.031(2) FS. Law Implemented 446.031 FS. History—New 6-18-81, Formerly 38C-17.001.

38C-17.002 Definitions. As used in this part:

- (1) "Division" means the Division of Labor, State of Florida, Department of Labor and Employment Security.
- (2) "Director" means the Director of the Division of Labor.
- (3) "Bureau" means the Bureau of Apprenticeship, Division of Labor.
- (4) "Chief" means the Chief of the Bureau of Apprenticeship.
- (5) "Employer" means a signatory party to a collective bargaining agreement or signatory to a participating employer agreement with the program sponsor which will be registered with the Bureau of Apprenticeship.
- (6) "Training Agreement" means a written agreement between a trainee and either his

employer or a training committee acting as agent for employer(s) which agreement contains the terms and conditions of the employment of training of the trainee.

(7) "Joint Training Committee" means a committee or subcommittee, composed of an equal number of representatives of employers and employees, which has been established by an employer or group of employers and a bona fide collective bargaining agent or agents to conduct, operate, or administer an on-the-job training program and enter into training agreement with trainees selected for employment under the particular program.

(8) "Nonjoint Training Sponsor" means an on-the-job training program sponsor who does not participate in a bona fide collective bargaining agreement; it includes an individual nonjoint sponsor (on-the-job training program sponsored by an employer without the participation of a union) or a group nonjoint sponsor (on-the-job training program sponsored by two or more employers without the participation of a union).

(9) "Registration of an On-the-job Training Program" means the acceptance and recording of such program by the Bureau as meeting the basic standards and requirements of the Division for approval of such program. Approval is evidenced by a certificate or other written initials.

(10) "Registration of a Training Agreement" means the acceptance and recording thereof by the Bureau as evidence of the participation of the trainee in a particular registered on-the-job training program.

(11) "Related Instruction" means an organized and systematic form of instruction designed to provide the trainee with knowledge of the theoretical and technical subjects related to this occupation.

(12) "Cancellation" means the deregistration of an on-the-job training program or the termination of a training agreement.

Specific Authority 446.031(2) FS. Law Implemented 446.031 FS. History—New 6-18-81, Formerly 38C-17.02.

**CHAPTER 38C-19
RULES REGARDING REQUIREMENTS
FOR RATIOS OF APPRENTICES OR
TRAINEES TO JOURNEYMEN ON STATE,
COUNTY OR MUNICIPAL CONTRACTS**

(Formerly 8AA-4, 8C-19)

38C-19.001	Purpose.
38C-19.002	Definitions.
38C-19.003	Apprentice and Trainee Employment Requirements.
38C-19.004	Diligent Effort.
38C-19.005	Civil Penalty; Procedure.

38C-19.001 Purpose. This regulation is promulgated to implement the requirements of Section 446.101, Florida Statutes, by adopting requirements to safeguard the welfare of apprentices and trainees; requiring inclusion of these requirements in state, county and municipal contracts; and the formulation of programs of apprenticeship and job training.

Specific Authority 446.031(2) FS. Law Implemented 446.101 FS. History—New 9-14-73, Formerly 8C-19.01, Formerly 38C-19.01.

38C-19.002 Definitions.

(1) "State agency" means the State of Florida and any executive departments, administrative agencies or instrumentalities of the State, including any corporation in which all or substantially all of the stock is beneficially owned by the State or by any of the foregoing departments, agencies or instrumentalities.

(2) "Administrative agency" means any agency considered a State agency under Section 120.57 Florida Statutes.

(3) "Instrumentality of the State" means any board, commission, department, division, bureau, section, council, authority or officer that derives its existence and authority from the Constitution or the legislature of the State of Florida.

Specific Authority 446.031(2) FS. Law Implemented 446.101 FS. History—New 9-14-73, Formerly 8C-19.02, Formerly 38C-19.02.

38C-19.003 Apprentice and Trainee Employment Requirements.

(1) Each and every contract between a contractor and a State agency, county, or municipality in excess of \$25,000 shall contain the following or equivalent clauses, and each State agency, county, or municipality concerned shall include the clauses, or provide for their inclusion in each such contract, provided, however, that all contracts for the construction, repair, or maintenance of public roads or highways, not to include contracts for the construction of bridges on public roads and highways and contracts for electrical lighting and traffic control devices on public roads, highways, and bridges are exempted:

(a) The contractor shall hire for the performance of the contract a number of apprentices or trainees in each occupation at least equal to the whole number obtained, disregarding any remainder, by dividing five (5) into the average

number of journeymen in that occupation to be employed in the performance of the contract.

(b) The contractor, when feasible and except when the number of apprentices or trainees to be hired is less than four, will ensure that 25 percent of such apprentices or trainees are in their first year of training. Feasibility here involves a consideration of the availability of training opportunities for first-year apprentices or trainees, the hazardous nature of the work for beginning workers, and excessive unemployment of apprentices or trainees in their second or subsequent years of training.

(c) The contractor will employ, during the performance of the contract, the number of apprentices or trainees necessary to meet requirements of Subparagraphs 446.101(3)(a) 1. and 2. However, on-the-job training programs shall only be established in nonapprenticeable trades or occupations to meet the requirements of Section 446.101, Florida Statutes.

(d) The contractor shall return records of employment by trade of the number of apprentices or trainees, and the number of journeymen and the wages paid, and hours of work of, such persons on a form as prescribed by the Bureau at three (3) month intervals. Such three (3) month reports shall specify the number of apprentices or trainees by year of training. Submission (at three (3) month intervals) of duplicate copies of forms submitted to the United States Department of Labor in lieu of the form prescribed by the Bureau shall be sufficient for compliance with this requirement.

(e) The contractor shall supply to the Bureau at three (3) month intervals, a statement describing steps toward making a diligent effort and containing a breakdown by craft of hours worked and wages paid for first-year apprentices or trainees, other apprentices or trainees, and journeymen, if during the reporting period the contractor did not hire the required ratio of apprentices or trainees to journeymen.

(f) The contractor shall insert in any subcontract under this contract the requirements contained in Section 446.101(3), Florida Statutes.

Specific Authority 446.031(2) FS. Law Implemented 446.101(3) FS. History—New 9-14-73, Amended 2-25-77, Formerly 8C-19.03, Formerly 38C-19.03.

38C-19.004 Diligent Effort.

(1) The contractor shall be considered to have made a diligent effort and will receive a certificate of compliance if the Bureau determines that either:

(a) The contractor will employ on his project a number of apprentices or trainees by craft as required by the contract clauses at least equal to the ratio established in accordance with Section 446.101(3), Florida Statutes;

(b) The contractor will employ, on all of his public work combined in the labor market area of this project, an average number of apprentices or trainees by craft or occupation as required by the contract clauses at least equal to the ratio established in accordance with Section 446.101(3), Florida Statutes; or

(c) Before commencement of work on the project, the contractor, if covered by a collective bargaining agreement, gave written notice to all joint apprenticeship committees and to the Bureau of Apprenticeship, or the contractor, if not covered by a collective bargaining agreement, gave written notice to the Bureau of Apprenticeship and to all nonjoint apprenticeship sponsors in the labor market area. Notices shall at least include the information required by Section 446.101(4)(c) 2., Florida Statutes, to wit: the contractor's name and address, the job site address, the value of the contract, the expected starting and completion dates, the estimated average number of employees in each occupation to be employed over the duration of the contract, and a statement of the contractor's willingness to employ a number of apprentices and trainees at least equal to the ratios established in accordance with Section 446.101(3)(a) 1., Florida Statutes.

(2) Failure by the contractor to employ all qualified applicants referred to him from registered apprenticeship or on-the-job training programs, at least up to the number of such apprentices or trainees required by Section 446.101(3), Florida Statutes, shall result in revocation of the certificate by the Bureau.

Specific Authority 446.031(2) FS. Law Implemented 446.101(4), (5) FS. History—New 2-25-77, Formerly 8C-19.04, Formerly 38C-19.04.

38C-19.005 Civil Penalty, Procedure.

(1) The Bureau shall investigate complaints against any contractor who allegedly breaches the terms of the required contract clauses required by Section 446.101(3), Florida Statutes, or fails to satisfy the requirements of Section 446.101(4), Florida Statutes.

(2) Upon completion of its investigation the Bureau shall report its findings to the Director with

a recommendation as to whether or not its investigation supports a finding of noncompliance.

(3) If the Director determines that the facts support a finding of noncompliance, he shall notify the contractor in writing of his intent to enter an order assessing a civil penalty in a specified amount not to exceed five (5) percent of the contract amount for violation of Section 446.101, Florida Statutes, unless within fifteen (15) work days of receipt of the notice, the contractor requests a hearing. If a request for a hearing is not made, the Director shall issue a final order assessing the proposed civil penalty.

(4) If a request for a hearing is made (postmarked) by the contractor within the allotted fifteen (15) work day period, the Director shall request that a hearing be convened in accordance with the requirements of the Administrative Procedure Act, Chapter 120, Florida Statutes. Within his discretion, the Director shall either personally conduct the hearing or request a hearing officer from the Division of Administrative Hearings. The Director will issue a final order based on the evidence adduced at the hearing, and in consideration of the hearing officer's findings of fact and recommended order, if any.

(5) In assessing civil penalties, the Division shall consider all pertinent facts and circumstances surrounding the violation, including, but not necessarily limited to, the following criteria:

(a) Whether the violation is a first or repeated offense;

(b) The degree or seriousness of noncompliance;

(c) The demonstrated willingness, or absence thereof, by the contractor to come into compliance.

Specific Authority 446.031(2) FS. Law Implemented 446.101(5) FS. History—New 9-14-73, Formerly 8C-19.04, Amended 2-25-77, Formerly 8C-19.05, Formerly 38C-19.05.

CHAPTER 38C-20
STATE APPRENTICESHIP COUNCIL

38C-20.001	Name, Authority and Responsibilities.
38C-20.002	Composition of Membership and Length of Service on the Council.
38C-20.003	Officers and Their Functions.
38C-20.004	Meetings.
38C-20.005	Amendments.

38C-20.001 Name, Authority and Responsibilities.

(1) The name of the council shall be the Florida State Apprenticeship Council, hereafter referred to as "the Council". The Council is composed of two Sub-Councils which are the Joint and Nonjoint. The Joint Sub-Council represents employee organizations which are apprenticeship sponsors and participate in a collective bargaining agreement. The Nonjoint Sub-Council represents employer organizations which are apprenticeship sponsors and do not participate in a collective bargaining agreement. The Joint Sub-Council represents employees and the Nonjoint Sub-Council represents management. These rules shall be applicable to the Sub-Councils and to the Council.

(2) The Council is created by Section 446.04, Florida Statutes.

(3) The Council shall advise the Division of Labor of the Department of Labor and Employment Security on matters relating to apprenticeship and provide for representation of both employees and management on the Council.

(4) The Council shall have those duties and responsibilities as provided in Chapter 446, Florida Statutes, as amended.

(5) The Division of Labor shall provide staff support for the Council. The Division of Labor shall be responsible for notifications to members and interested parties of the time and place of meetings, as well as making arrangements for a suitable meeting place and necessary equipment and materials. Staff shall summarize the proceedings of each Council meeting and present a complete, accurate, and thorough copy of these records as approved by the chairman, to each of the Council members within four weeks after each meeting. At least one regular staff member other than the Chief of the Bureau of Apprenticeship shall be present at each meeting of the Council and Sub-Councils.

Specific Authority 446.031 FS. Law Implemented 446.045 FS. History—New 5-5-83, Formerly 38C-20.01.

38C-20.002 Composition of Membership and Length of Service on the Council.

(1) The Council shall be composed of 12 members: ten who are appointed by the Governor in accordance with Chapter 446, Florida Statutes; the Administrator of Industrial Education of the Department of Education; and the Director of the Division of Labor. The Director of the Division of Labor shall be ex officio chairman of the Council except that he shall have voting power in cases of tie

votes. The Administrator of Industrial Education of the Department of Education shall be appointed a nonvoting member of the Council. The Governor shall appoint five members representing joint employee organizations and five members representing nonjoint employer organizations. A member's appointment shall run concurrently with the Governor's term of office.

(2) The Chairman shall contact any member of the Council who is not present at one regular Council meeting to notify him that he shall be subject to removal if he misses the next consecutive meeting. The Chairman shall provide written notification to the Secretary of the Department of Labor and Employment Security requesting that the member be replaced on the Council after he has missed the second consecutive meeting.

(3) Any vacancy on the Council shall be filled by the Governor in accordance with the procedures established in 38C-20.002(1), and shall be for the remainder of the unexpired term.

Specific Authority 446.031 FS. Law Implemented 446.045 FS. History—New 5-5-83, Formerly 38C-20.02.

38C-20.003 Officers and Their Functions.

(1) Chairman — The Director of the Division of Labor shall serve as Chairman of the Council. The Chairman shall have the responsibilities of convening meetings, calling special meetings when justified by the circumstances, appointing committees and subcommittees, appointing chairpersons and membership for committees and subcommittees, receiving all proposed agenda items, selecting agenda items, finalizing the official agenda, voting power in the full Council in cases of tie votes, and approving all expenditures made by the Council.

(2) Vice-Chairman — The Vice-Chairman shall be appointed by the Chairman, as needed, on a rotating basis from joint and nonjoint members and will preside over Council meetings in the absence of the Chairman. The Vice-Chairman shall have voting privileges when acting as Chairman for one vote only but shall not have voting power in a tie vote.

(3) Education Representative — The Administrator of Industrial Education of the Department of Education shall represent vocational education, participate in Council discussions, and have no vote on Council issues.

(4) Executive Secretary — The Chief of the Bureau of Apprenticeship shall serve as the Executive Secretary to the Council. The Executive Secretary is not a member of the Council and does not have a vote on Council issues. The Executive Secretary shall be responsible for maintaining the records of each meeting, participating in Council discussions, and providing updates on general activities of Apprenticeship.

(5) Bureau of Apprenticeship and Training (BAT) State Director — The Federal Bureau of Apprenticeship and Training (BATF) State Director will function in an advisory capacity with no vote on Council and Sub-Council issues.

Specific Authority 446.031 FS. Law Implemented 446.045 FS. History—New 5-5-83, Formerly 38C-20.03.

38C-20.004 Meetings.

(1) Meetings of the Council shall be subject to the provisions of Chapter 286, Florida Statutes, and only those matters contained in the notice of meeting provided by the Division of Labor pursuant thereto shall be considered by the Council. The Council shall meet in a government building twice a year in months to be determined by the Chairman as practicable. In addition, the Council shall meet at the call of the Chairman for special meetings when justified by the circumstances. Council members representing the joint employee organizations and Council members representing the nonjoint employer organizations shall meet separately twice a year.

(2) All members will be notified in writing of the exact date, time, place, and purpose of the meeting at least 14 calendar days in advance. If the Chairman determines that a special meeting is necessary for an emergency situation, the requirement for 14 calendar days notice may be waived. The Council may recommend a place and time for meetings.

(3) Agendas will be prepared as follows:

(a) An agenda of all meetings of the Council and, where possible, of the "called" meetings will be distributed to the Council members at least seven calendar days in advance of the meeting.

(b) Issue papers will be developed on each proposed agenda item and will indicate whether or not the issue should be voted on by Council. The issue paper will be developed in accordance with the criteria indicated on LES Form DLA-3 "Florida Apprenticeship Council Agenda Item," effective October, 1982, and must provide appropriate information to clarify the issue.

(c) All proposed agenda items and issue papers must be submitted to the Chairman two weeks prior to the Council meeting. The Chairman shall determine the appropriateness of the proposed agenda items or issues and select items and issues to be placed on the official agenda. Agenda items and issue papers received after the two weeks agenda publication deadline as stated in the notice to Council members shall not appear on the agenda for the upcoming meeting. These issues may be

considered for the agenda for the next meeting and if the Chairman determines that a late issue is an emergency situation, he may modify the agenda in accordance with Section 120.53(1)(d), Florida Statutes, to include the item, or a special meeting may be called.

(d) The Council will discuss only listed agenda items as selected from those which have been received by the Chairman of the Council prior to the agenda publication deadline. The chairman may recognize citizens attending Council meetings for comments on Council issues.

(e) The public should submit their proposed agenda items and issues for deliberations to duly appointed Council members including the Chairman of the Council, for consideration as agenda items. Council members will submit these items from the public to the Chairman by the designated agenda publication deadline.

(f) A quorum for all regular and called meetings of the Council shall exist when a majority of the Council members are present. Thus, for the separate joint and nonjoint meetings, at least three appointed members shall be present. For the combined Council meetings, at least six appointed members, three from each, shall be present.

(5) The conclusion on a question shall be determined by a majority vote of Council members in attendance. This conclusion shall be considered the final recommendation of the Council. The minority may state its opposition to the conclusion in the form of a report to the Chairman and the Council.

(6) In matters not covered by these rules, Robert's Rules of Order shall govern the procedures of the Council, Joint Councils, and any appointed committees.

Specific Authority 446.031 FS. Law Implemented 446.045 FS. History—New 5-5-83, Formerly 38C-20.04.

38C-20.005 Amendments. These rules may be amended or repealed by the Division of Labor. Recommendations for changes may be submitted to the Chairman. Rules, amendments, and repeals of rules shall be done in accordance with Chapter 446, Florida Statutes, and Chapter 120, Florida Statutes.

Specific Authority 446.031 FS. Law Implemented 446.045 FS. History—New 5-5-83, Formerly 38C-20.05.

APPENDIX J

About the Research Team and List of Contact Persons at the Eleven Selected Institutions

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About the Research Team and List of Contact Persons at the Eleven Selected Institutes

The research team consisted of four professional educational policy analysts with experience in educational policy research, cost analysis and the management and funding of apprenticeship programs throughout the United States.

Dr. Carolyn Herrington, Principle Investigator

Associate Director and Chief Executive Officer
Center for Policy Studies in Education
Florida State University

Former Director Policy and Planning
Florida Postsecondary Education Planning Commission
State of Florida

Dr. Nadine H. Mandolang, Project Director

Consultant, Educational Policy Analyst
Center for Policy Studies in Education

Formerly Consultant, Educational Policy Analyst
United State Agency for International Development
Indonesian Ministry of Education and Culture
Division of Vocational Education

Dr. Merle E. Strong, Consultant

Professor
Department of Educational Administration, and
Director
Vocational Studies Center
University of Wisconsin-Madison

Formerly served in the
U.S. Department of Education
Vocational and Technical Division

Dr. Robert P. Sorensen, Consultant

Associate Director
Vocational Studies Center
University of Wisconsin-Madison

Formerly State Director
Wisconsin Technical College System
and President
National State Directors of Vocational Education

LIST OF CONTACT PERSONS AT THE ELEVEN SELECTED
INSTITUTIONS

Dade County School District
Burt Watkins
Supervisor
Adult, Trade, and Apprenticeship Training
1450 N.E. 2nd Avenue Room 842
Miami, FL 33132

Florida Community College at Jacksonville
Jon Cosby
Associate Vice-President for Instruction
501 West State Street
Jacksonville, FL 32202

Hillsborough County School District
John Faulkenberry
Coordinator of Apprenticeship Training
Evening School Office
Irvin Technical School
2010 East Hillsborough Avenue
Tampa, FL 33610

Indian River Community College
Thomas Deal
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Lake County School District
Buddy Jones
Business Dean
Vocational Technical Center
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Martin County School District
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Gail Kaltz
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Polk County School District
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Director
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Seminole Community College
Suzanne Tensinsky
Director
Vocational, Technical Education
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