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ABSTRACT
                Each year the Florida Education and Training
Placement Information Program (FETPIP) conducts surveys to determine
the opinions of employers about the preparation of graduates of
vocational programs. The 1993 survey focused on eight school district
and community college occupational training areas (i.e., automotive
technology, gasoline engine mechanics, machining, business
administration and management, patient care assistant, paramedics,
medical assisting, and medical laboratory technology) and three
university-level degree disciplines (i.e., architecture, library
science, and pharmacy). Employers were selected only if they had
hired a program completer in a job related to his/her training.
Survey components were selected from the intended outcomes defined
within the core curriculum of each school district and community
college, while survey components were developed from other sources
for the university disciplines. Eleven specific surveys were
developed, covering employer hiring needs, general education and
preparation, and specific occupational preparation. Study findings,
based on a 75% response rate from the 868 firms surveyed, included
the following: (1) overall, employers indicated that they were
satisfied with the vocational education, entry-level preparation, and
work habits of their new workers, with the employers of university
graduates and paramedic and patient care assistant program completers
indicating the highest level of satisfaction; (2) employers were more
likely to be satisfied with job-related skills or "technical skills"
than with basic skills; (3) respondents were satisfied with many
basic skill areas with which they had been dissatisfied in the past,
though they continued to be dissatisfied with writing and leadership
skills. Survey instruments are appended. (KP)

FLORIDA EMPLOYER OPINION SURVEY

ANNUAL REPORT

FLORIDA EDUCATION AND TRAINING
PLACEMENT INFORMATION PROGRAM

TALLAHASSEE, FLORIDA

JUNE 1993

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"Training programs can only do so much. You can't teach motivation, initiative, and the work ethic. Many have had excellent education and training but often do not demonstrate maturity, common sense, or a strong work ethic."

... A Florida Employer

EXECUTIVE SUMMARY

This is the fifth in a series of annual employer opinion reports by the Florida Education and Training Placement Information Program (FETPIP). The first annual report focused on the general preparation of the entry-level employees who had been hired by firms known to have employed vocational program completers. The general preparation survey continued for two years along with surveys of programs targeted for review that focused on specific occupational preparation areas. This year's surveys focused on eight School District and Community College occupational training areas. For the first time, three University-level degree disciplines were included as well. As in prior years, FETPIP consulted with the Division of Vocational, Adult and Community Education (DVACE), the Division of Community Colleges (DCC), the State University System (SUS), the Florida Council on Vocational Education (FCOVE), and the Postsecondary Education Planning Commission (PEPC). The eight School District and Community College programs selected for survey were: automotive technology, gasoline engine mechanics, machining, business administration and management, patient care assistant, paramedics, medical assisting, and medical laboratory technology. The three State University System disciplines selected were: architecture, library science, and pharmacy.

Two survey tenants were followed: 1) employers were selected only if they had hired a completer or graduate in a job related to his or her training; and 2) survey components were selected from the "intended outcomes" defined within the "core" curriculum of each School District and Community College program. The State University System does not have core curriculum documents like those in School Districts and Community Colleges, therefore, survey components were developed from other materials such as State law or licensure or an established job description. Eleven specific surveys were developed to cover each program or degree area. Additionally two alternative survey formats were tried for the university-level surveys. This approach was taken to evaluate alternative methods. All surveys were separated into three parts: Part A- Employer hiring needs, Part B- General education and preparation, and Part C- Specific occupational preparation which contained elements of basic, job-related, and technical skills.

Responses in Part A, hiring needs, reflected employer needs for occupations specific to the type of business that particular firm was engaged in. As an example, automotive dealers primarily reflected needs for the specialized skills of automotive mechanics or technicians while health services employers needed health professionals such as registered nurses or various health-related technicians. In addition to this primary need for industry-specific skills, many expressed the need for various office occupations such as secretaries and specialized clerks capable of administering and managing a variety of data needs and software applications.

In Part B employers were given the opportunity to reflect on general education and training development of their new employees. Overall, employers indicated that they were satisfied with vocational education, entry-level preparation, and work habits of their new workers. The employers of university graduates and paramedic and patient care assistant completers indicated the highest level of satisfaction in this area. On the other hand, machining and business administration and management employers were least satisfied. Most employers generally indicated that they were dissatisfied with public education. This is consistent with findings from previous years.

Part C of the surveys dealt with the occupational skill preparation of new employees. This included both basic and job-specific skills. As has been the finding in prior years, employers were more likely to be satisfied with job-related skills or "technical skills" than with basic skills. However, unlike findings in previous years, respondents in this survey round were satisfied with many basic skill areas where they had been dissatisfied in the past. Employers who had hired completers and/or graduates of library science, pharmacy, paramedic, and patient care assistant programs were most satisfied with technical skills. Those hiring machining and business administration and management completers were least satisfied.

Two additional activities were completed in association with this year's employer opinion surveys. First, a survey was designed for and administered to a select group of students and employers to compare their perceptions regarding the importance of specific skills to employment. Specific skills were chosen from those identified by the U.S. Department of Labor Secretary's Commission On Achieving Necessary Skills (SCANS) as being critical to future employment. The students were also asked their feelings as to their current level of attainment for these same skills. Findings indicated that both employers and students felt that these skills were critical to successful employment. Students generally attached greater importance on many of these skills than employers did. Additionally, students seemed to feel that they had achieved competence with the basic skill areas. Second, these same employers were queried as to their hiring practices to gain information as to how employers evaluate and select potential employees. Information that was obtained indicated that employers generally use a five step process beginning with the advertisement of job openings and ending with the selection of the desired candidate. The most important steps in the process seemed to be within the area of applicant "screening" which included two areas 1) the initial employer application review and 2) the personal interview.

In summary, the employers were most satisfied with a variety of occupationally-specific training elements that their employees exhibited and less satisfied- yet satisfied for the first time- with many basic skills. Employers were particularly dissatisfied with writing and leadership skills. Although basic skills reflected levels of satisfaction within many areas, these skills continued to show lower levels of employer satisfaction across all program or discipline areas which suggests continuing weaknesses within these areas.

Activities proposed for next year include: 1) continuing the specific survey approach through consultation with established interested parties. 2) reestablishing a general survey to gauge overall Florida employer opinions possibly with employers of high school dropouts and 3) continuing efforts associated with student and employer skill expectations and comparisons.

FLORIDA EMPLOYER OPINION SURVEY
JUNE 1993
K.. ORT OUTLINE

SECTION I: INTRODUCTION

This report summarizes the results of eight School District and Community College vocational programs and three University discipline-specific surveys of employers known to have hired program completers and graduates in jobs related to their training. The students graduated or completed their studies during the 1990-91 school year. Employment was identified during the period October - December 1991. The surveys were conducted to obtain information describing employer perceptions regarding selected elements of the preparation of workers from specific vocational program or degree areas for employment.

Following this introduction, Section II of the report includes a review of the overall survey process and a summary of the survey findings for each program or discipline survey area. The survey process briefly describes this year's activities, how employers were selected, the survey instrument, and the survey mailout process. The findings part of the section reviews responses for each survey type with overall survey results in three ways: by survey response option, by overall basic skills, and by overall occupational preparation skills. The reviews point out those programs and preparation areas where employer satisfaction is particularly high or low. Additional findings obtained through follow-up activities and two additional activities are also reviewed in this section. The two additional activities conducted this survey year included a comparison of student/employer "expectations" as to the importance of select skills to employment and a review of employer hiring practices.

Sections III through X describe responses to the hiring needs, general education and preparation questions, and the overall occupational preparation areas for each of the eight School District and Community College vocational program-specific surveys. Sections XI, XII, and XIII describe similar responses for the three University System degree area surveys. Section XIV is a review of proposed future activities. Finally, appendices A - K contain copies of the survey instruments and tabulated results for each specific survey. Appendix L displays the student/employer survey instrument with aggregate summaries of employer responses and Appendix M contains the hiring practices survey instrument.

Throughout the report, results will be portrayed by the use of graphs. Graphs used in these sections reflect calculations using only "satisfied" and "dissatisfied" responses. An employer could chose one of six options to each survey question: very satisfied, satisfied, average, dissatisfied, very dissatisfied, or I don't know. "I don't know" and "average" responses were not used in the calculations. The graphs are based on a numerical assignment of "2" for each very satisfied or satisfied response and a "1" for each very dissatisfied or dissatisfied response. These assignments were tallied for each response and the total was divided by the total number of responses in each query to obtain a final "score." In this manner a score of "1.5" is the dividing point between satisfied and dissatisfied. This method has the effect of providing a more concentrated level of either employer "satisfaction" or "dissatisfaction."

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SECTION II. THE SPECIFIC SURVEYS

"I feel that the problem is the ability of the Florida graduates to apply knowledge in a practical setting. Students need more practical experience and a realistic understanding of the world of work."

... A Florida Employer

A. PROCESS

1. Background

The 1992-93 specific employer opinion survey process generally replicated procedures used since 1989-90. Its purpose was to gauge employer perceptions regarding the educational and training preparation of their employees who were trained in specified occupational areas. In prior years' activities only School District and Community College (D/CC) vocational program areas were selected for employer survey. This project year three State University System (SUS) degree areas were included in the survey process.

School District and Community College vocational survey components were selected from the intended outcomes associated with each specific program. These elements were outlined in the Vocational Course Code Standards Manual of the Division of Vocational, Adult and Community Education. In the absence of a similar guide, the University survey components were selected from either licensure requirements (Pharmacy), State law (Architecture), or a commonly accepted job description (Library Science).

Representatives of the Division of Community Colleges, the Division of Vocational, Adult and Community Education, the Postsecondary Education Planning Commission, the State University System, and the Florida Council on Vocational Education were consulted by FETPIP staff to determine those program areas for which information w desired. Through this interchange eleven specific areas were chosen for review. Once programs were determined, the core curriculum in the case of School District and Community College vocational programs or other materials in the case of University discipline areas, were analyzed to determine an array of intended outcomes for use as survey elements. Employer responses to these elements were then used as indicators of employer satisfaction with each specific program's preparation areas. Table 1 shows the eleven program areas chosen for the 1992-93 surveys.

TABLE 1

District / Community College Program Areas	University Degree Areas
Automotive Technology	Architecture
Gasoline Engine Mechanics	Library Science
Machining	Pharmacy
Business Administration & Management	
Medical Laboratory Technology	
Medical Assisting	
Patient Care Assistant	
Paramedic	

2. Employer Selection

"I need people who can handle clerical, professional, technical, and maintenance jobs by themselves. Small businesses cannot hire people to do each job."

... A Florida Employer

The "universe" of employers for each survey was defined as those employers contained within the FETPIP data base who had hired a postsecondary vocational completer or graduate from subject programs or disciplines during the period October 1 through December 31, 1991 and who were contacted for occupational information. The FETPIP's 1992 employer file contained 21,418 public and private firms that had hired former students from a variety of educational training settings. Of this number 15,375 firms hired postsecondary program completers or graduates. These firms were chosen as the "universe" of employers familiar with the job preparation characteristics of completers of postsecondary vocational education programs and degree areas. From this data base all program records associated with the selected vocational programs or disciplines were extracted. These records were evaluated by FETPIP staff to determine the records that reflected training-related employment associated with each specific program area. Table 2 lists the eleven program specific survey areas. It shows the tote' number of program participants, how many of those were determined to be training-related, and the number of unique employers associated with each program area.

TABLE 2

Selected Program Areas and Associated Vocational Programs

VOCATIONAL PROGRAM AREA	PROGRAM PARTICIPANTS	TRAINING RELATED EMPLOYMENT	UNIQUE FIRMS
Dist/Com Coll Programs	4115	1163	702
Automotive Technology	239	57	64
Gas Engine Mechanic	16	3	3
Machining	76	19	24
Business Administration & Management	418	67	65
Medical Laboratory Technology	122	59	38
Patient Care Assistant	2751	704	345
Paramedics	208	186	91
Medical Assisting	195	68	72
University Programs	582	266	166
Architecture	224	44	66
Library Science	192	110	55
Pharmacy	166	112	45
OVERALL TOTALS	4697	1429	868

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3. The Survey Instrument

The instruments used for the 1992-93 project retained the same general character and format that was used during prior project years. Queries were presented in three categories.

Part A- Hiring Needs. In this section, employers were asked to identify specific occupations in which they were experiencing difficulties in finding qualified applicants.

Part B - General Preparation. In this area, respondents were asked four general questions about the general education and employability preparation of their employees. These four questions have been a part of every survey since they were initiated.

Part C - Specific Occupational Preparation. Questions from this area for the School District and Community College program areas were chosen from the intended outcomes for each specific area core program as outlined in the Vocational Course Code Standards Manual as set forth by the Division of Vocational, Adult and Community Education. Various documents such as State law, licensure requirements or job descriptions were used for the University discipline areas.

An example of each survey instrument is included in the Appendices A through K.

4. The Survey Mailout Process

An initial mailout to 868 firms occurred during the time frame of January 4th through 15th, 1993. Surveys were remailed to non-responding employers during the last week of January 1993 with a second remail the week of February 22nd, 1993. Telephone follow-ups and personal visits were used as well. Telephone contact and on-site visits were concentrated to the first three weeks of March. Response data were monitored and recorded by project staff

B. FINDINGS

"I would like to see job candidates who graduate satisfactory or very satisfactory NOT average!!!"

... A Florida Employer

In this section four common data components are summarized for all survey areas. These four common elements are 1) overall employer response, 2) employer response by question response option, 3) overall b sic skills, and 4) overall occupational preparation skills. Each area will be reviewed separately.

Graphs and tables will be the primary vehicle used to present survey data. The tables and figures within this section separate overall activities into School District and Community College (D/CC) program and University (SUS) discipline areas. Graphs used in this section are based on only "satisfied" and "dissatisfied" responses.

The graphs are based on a numerical assignment of "2" for each very satisfied or satisfied response, and a "1" for each very dissatisfied or dissatisfied response. These assignments were tallied for each response and the total was divided by the total number of responses in each query area to obtain a final "score". The employer responses of "average" and "I don't know" were not included in the calculations.

This approach provides a more concentrated level of either employer satisfaction or dissatisfaction ranging from "2.00" to "1.00". A score of "1.5" is to be considered neither satisfied nor dissatisfied. For discussion purposes scores at or above 1.75 will be considered "very satisfied" while scores at or below 1.25 to be "very dissatisfied".

Table 3 reviews response rates for each program area to show which areas had the highest and lowest response rates. Aggregate or total survey response options are examined in Table 4 to reveal the percentages each response option received. This is presented to better understand which program/employer group was most- or least- satisfied and which group reflected the most "average" and "I don't know" responses. Each program survey area is then summarized first as to basic skills (Figure 1) and then for occupational preparation areas (Figure 2).

1. Responses

"The graduate we employed was well qualified for our position. She was well versed in new technology. Thanks for doing a terrific job with our future employees."

... A Florida Employer

Through the process outlined above, eight hundred and sixty-eight firms were mailed a survey package. Six hundred and fifty employer responses were returned for a response rate of 75%. Table 3 reflects employer responses by program area.

TABLE 3
Employer Response by Program Area

VOCATIONAL PROGRAM AREA	TOTAL FIRMS	NUMBER OF RESPONSES	RESPONSE RATE
DIST/CC PROGRAMS	702	525	75%
Auto Technology	64	47	7.%
Gas Engine Mechanic	3	2	67%
Machining	24	21	88%
Business Admin &	65	42	65%
Management	91	72	79%
Paramedic			74%
Patient Care Assistant	345	257	
Medical Assisting	72	53	74%
Med Lab Technology	38	31	82%
UNIVERSITY PROGRAMS	166	125	75%
Architecture	66	50	76%
Library Science	55	44	80%
Pharmacy	45	31	69%
TOTALS	868	650	75%

Table 3 shows that Machining (88%) and Medical Laboratory Technology (82%) School District and Community College employers and the University Library Science (80%) employers had the highest response rates. Business Administration & Management (65%), Gas Engine Mechanic (67%), and Pharmacy (69%) employers reflected the lowest rates.

2. Survey Response Category Comparisons

This second comparison is presented to show program area employer responses by survey response option. An employer could choose one of six response options for each question: "very satisfied" (VS), "satisfied"(SAT), "average" (AVE), "dissatisfied"(DISSAT), "very dissatisfied" (VD), or "I don't know" (IDK). Table 4 reflects this year's employer responses with respect to the percentages each response category received within each program or degree area.

TABLE 4

SURVEY AREAS	RESPONSE OPTIONS					
	VS	SAT	AVE	DISSAT	VD	IDK
District/Comm Coll Areas	7%	26%	46%	12%	3%	6%
Automotive Technology	9%	23%	43%	17%	4%	4%
Gas Engine Mechanic	NA	3%	82%	15%	NA	NA
Machining	3%	21%	33%	18%	5%	20%
Business Admin & Management	1%	24%	41%	13%	8%	13%
Paramedic	14%	33%	39%	9%	2%	2%
Patient Care Assistant	3%	25%	50%	12%	3%	7%
Medical Assisting	8%	20%	41%	13%	4%	4%
Medical Lab Technology	11%	25%	49%	10%	<1%	5%
University Areas	17%	38%	29%	9%	2%	5%
ARCHITECTURE	10%	28%	37%	13%	4%	8%
LIBRARY SCIENCE	22%	43%	23%	7%	2%	3%
PHARMACY	20%	48%	25%	6%	1%	<1%
OVERALL	**8%**	**28%**	**43%**	**12%**	**3%**	**6%**

Table 4 shows that an average of 7% of all D/CC survey responses fell into the category of "very satisfied" while over double that or 17% of all University discipline employers were "very satisfied". The University discipline with the highest percentage of "very satisfied" responses was library science and for D/CC programs was paramedic. The two programs with the lowest percentage of "very satisfied" responses were business administration and management for D/CC programs and architecture for University degree areas. Overall, university employers reflected the most "very satisfied" responses.

The "satisfied" response option reflected 26% of all D/CC and 38% of all SUS responses. The "satisfied" response was the most chosen of the six options by University employers. Within the D/CC program areas, paramedic and medical assisting employers reflected the highest percentage of "satisfied" responses. The two program areas with the lowest percentage of "satisfied" response were gasoline engine mechanics and machining. Overall, for the SUS degree areas the library science and pharmacy employers had high percentages of "satisfied" responses.

By combining "very satisfied" and "satisfied" responses, 33% of all D/CC program area employer responses were "satisfied". Similarly, this combination resulted in 55% of all SUS employers being "satisfied". The pharmacy employers reflected the highest percentage of "satisfied" responses with a combined rate of 68%. The program area with the lowest percentage of combined "satisfied" responses, not including gas engine mechanics, was machining with 24%.

The "average" response category reflected 46% of all D/CC survey responses. The "average" response was the most chosen of the six response options by School District and Community College program area employers. The program areas with the highest number of "average" responses were patient care assistant (50%) and medical laboratory technology employers (49%). For University degree area employers the "average" response was chosen 29% of the time. Only 23% of the library science responses were "average".

A total of 12% of all D/CC survey responses were "dissatisfied". The machining program area reflected the highest percentage of "dissatisfied" responses (18%) while paramedics (9%) had the lowest percentage of "dissatisfied" responses. For the University employers only an average of 9% of responses were "dissatisfied". Pharmacy employers voiced the lowest percentage (6%) of "dissatisfied" responses.

A total of 3% of all D/CC survey responses were "very dissatisfied". Business administration and management (8%) employers had the highest percentage of "very dissatisfied" responses while less than 1% of the medical laboratory technology employer responses were "very dissatisfied". Two percent of all University employer responses were "very dissatisfied". The architecture (4%) employers had the highest percent of "very dissatisfied" responses while the pharmacy (less than 1%) employers the lowest.

Again, by combining "very dissatisfied" and "dissatisfied" responses 15% of all D/CC and 11% of all University survey responses were "dissatisfied". Using this calculation, 23% of all machining and 21% of all business administration and management combined employer responses were "dissatisfied". These two areas reflected the highest combined dissatisfied responses of all program or discipline areas. The area of pharmacy (7%) had the lowest percentage of combined "dissatisfied" response.

The "I don't know" response option reflected only 6% of the D/CC and 5% of all University survey responses. Two program areas, machining (20%) and business administration and management (13%), by far, received the highest percentage of "I don't know" responses. Note that less than 1% of the pharmacy employer responses were " I don't know".

In summary, the pharmacy discipline exhibited the highest percentage of "satisfied" responses, the least "dissatisfied" responses, and the least "I don't know" responses. The machining program area employers reflected the lowest percentage of "satisfied" responses, the most "dissatisfied" responses, and the highest percentage of "I don't know" responses. Note the majority of SUS combined employer responses (55%) were "satisfied" compared to the majority of D/CC responses being "average" (46%).

3. Overall Basic Skills

"Employees should have sufficient basic skills so they can be trained for the specific duties they are hired to perform."

... A Florida Employer

For the purposes of this Figure, basic skills include math computations, verbal and written communication skills, and employability, leadership, and interpersonal skills. The area of entrepreneurship was included as a survey item for District and Community College programs only. Figure 1 compares University and District and Community College aggregate responses for these areas.

FIGURE 1
OVERALL COMPARISON OF BASIC SKILLS
UNIVERSITY AND DIST/COMM COLL EMPLOYER RATINGS

BASIC SKILL AREAS

PROGRAM SETTING
■ UNIVERSITY
□ DIST/CC

Basic Skill Area	University	Dist/CC
MATH COMPUTATION	1.89	1 5
VERBAL COMMUNICATION	1.8	1 61
WRITTEN COMMUNICATION	1.76	1 46
EMPLOYABILITY SKILLS	1.85	1 65
LEADERSHIP SKILLS	1.47	1.44
INTERPERSONAL SKILLS	1.83	1 71
ENTREPRENEURSHIP	1.19	

SATISFACTION LEVELS

2- VERY SATISFIED. 1- VERY DISSATISFIED
1.5- NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 1 COMMENTS: University program area employers reflected higher ratings in all six comparative basic skill areas. The area of math computation reflected the widest range of difference. Five of the six university basic skill areas reflected very satisfied levels of employer satisfaction. Math computation (1.89) for university employers reflected the highest level of satisfaction. Architecture (1.86), pharmacy (1.96), and business (1.71) employers were most satisfied with the math skills of their employees while patient care assistant (1.32) and automotive technology (1.45) employers were most dissatisfied. Within the area of verbal communication, the pharmacy (1.92) SUS employers and the D/CC medical laboratory technology (1.78) employers were most satisfied. Interpersonal skills reflected the highest combined level of employer satisfaction with SUS library science (1.83) and D/CC medical assisting (1.71) employers being most satisfied. One combined basic skill area, leadership skills, reflected overall employer dissatisfaction. The D/CC machining (1.33) and SUS specific survey architecture (1.47) employers were most dissatisfied with their employee's leadership skills. Overall, the majority of basic skills reflected a level of satisfaction for each survey area. This is not consistent with prior year survey results where employers have been dissatisfied with most basic skill preparation areas. Except for math computation, relative levels of satisfaction for each educational level are similar; i.e., employability skills rank high for the SUS and D/CC groups, leadership skills low for both.

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4. Overall Occupational Skills

"Actual technical skills are satisfactory, while basic skills still need work."

... A Florida Employer

There were over one hundred and fifty separate occupational preparation areas covered within the eleven different employer surveys. Figure 2 is a composite look at the area of occupational preparation for the eleven program specific surveys.

FIGURE 2
EMPLOYER SATISFACTION LEVELS WITH
OVERALL JOB-RELATED OR TECHNICAL SKILLS

ALL PROGRAM AREAS

Program Area	Satisfaction Level
ARCHITECTURE	1.67
LIBRARY SCIENCE	1.98
PHARMACY	1.96
AUTOMOTIVE TECHNOLOGY	1.61
GAS ENGINE MECHANIC	1.44
MACHINING	1.55
BUSINESS ADMIN & MNGMT	1.56
PARAMEDIC	1.82
PATIENT CARE ASSISTANT	1.68
MED LAB TECHNOLOGY	1.81
MEDICAL ASSISTING	1.78

SATISFACTION LEVELS
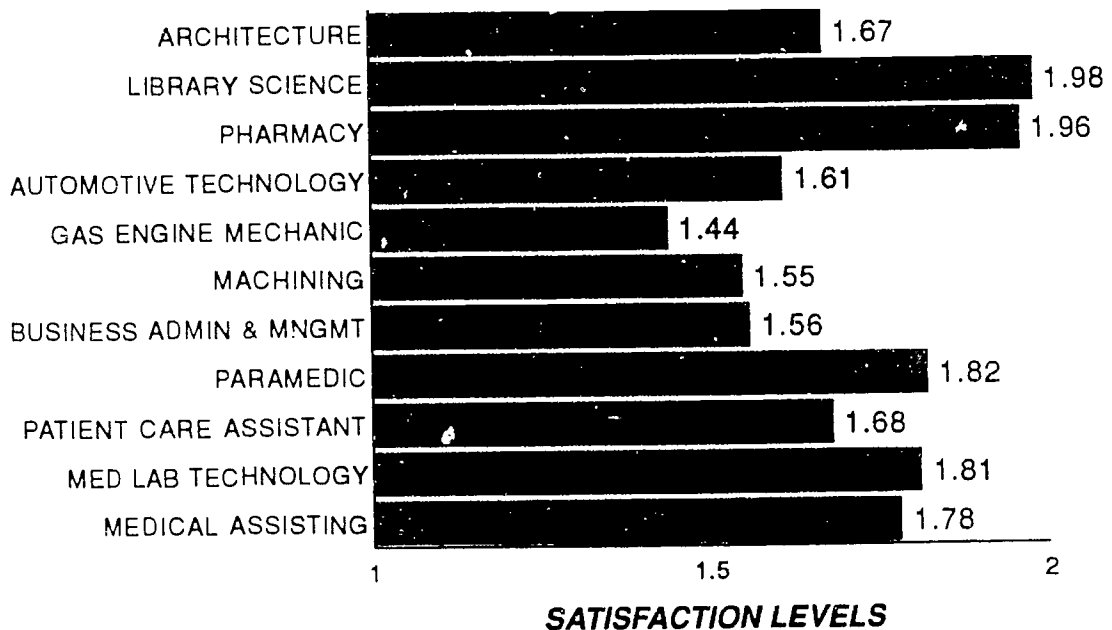
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 2 COMMENTS: Ten of the eleven program-specific surveys reflected employer satisfaction with the overall occupational preparation of their employees. Only the gasoline engine mechanics (1.44) program area reflected dissatisfaction with employee occupational preparation. However, this area included only three employers two of whom responded. Five program or discipline areas: library science, pharmacy, paramedic, medical laboratory technology, and medical assisting, all reflected high levels of satisfaction concerning job-related or technical skills. The areas where employer satisfaction were the lowest were machining, business administration and management, and automotive technology.

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C. ADDITIONAL FINDINGS

"I feel programs should be available to employees who must work during the day. Many want to continue their education but can't find courses convenient to their needs. I usually do OJT for these people."

... A Florida Employer

1. Follow-up Activities

Follow-up activities replicated prior year procedures. Activities consisted of survey remails to non-respondents, telephone contact, and on-site employer visits. The following narrative summarizes the findings and insights gained through those activities.

a. Survey Remails

An initial survey mailout to 868 employers was sent during the week of January 13th, 1992. Two survey remails during the weeks of January 26th and February 22nd were sent to non-respondents. The initial mailout of surveys generated the highest percentage of total responses. It produced 279 or 43% of the total of 650 employer responses. The first remail generated 197 responses or 30% of the total while the final remail along with phone and on-site visits produced an additional 174 responses or 27% of the 650 total employer responses.

b. Employer Visits

Seventeen employers were visited to obtain a completed employer opinion survey and to collect additional information associated with that firm's hiring practices. Findings associated with hiring practices are covered further on in Section II of this report. Employer contacts were concentrated to the program or degree areas of pharmacy, business administration and management, paramedic, and automotive technology where response rates were lowest. Visits were concentrated to the Central Florida areas of Orlando, Tampa, and St. Petersburg. Nine of the seventeen firms visited were large firms that employed over 500 people. The rest were medium to small size firms employing from 17 to approximately 150 people.

c. Employer Telephone Contacts

Telephone calls were made with the assistance of two FETPIP staff members to 137 employers over a three week period of March. Contacts were concentrated to those program areas that had the lowest response rates. All non-respondents from medical assisting, pharmacy, automotive technology, and business administration and management areas were called resulting in an additional 41 responses or an additional response rate of 30%.

Three major difficulties were encountered by staff in making telephone contact: 1) finding an appropriate and willing person to respond to the survey, 2) finding a person with the immediate time to complete the survey and, 3) finding a person able to associate the survey request with vocational program completers within their employ. The first two in combination resulted in the majority of employers requesting that the Project remail or FAX them another survey. This produced a limited number of additional responses. The third frequently resulted in the response "I don't know" concerning the specific vocational questions. Telephone responses were consistent with mail and on-site responses described within this report.

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The FAX process offered an immediate opportunity to present survey materials and information to employers. This also allowed employers the availability to respond by FAX, although a larger portion of the employers chose to mail their returns in. However, while many requested the FAX, few used it to respond.

2. Employer Comments

Two areas for general employer input or comment were included on each survey. The first area was an open ended option to add any current or future job titles or occupational areas where the employer felt additional applicants were needed. The other offered the employer an opportunity to add any additional comments, suggestions, or recommendations. The vast majority of employers left each area blank. When they did respond the most common response in the first area was for a specific type of training needed within that particular industry. For instance, health field employers often requested specialists in the areas of occupational, speech, and physical therapy. Additionally, many employers requested a need for employees versed in computer skills with particular training in various software applications such as Wordperfect, Lotus, SAS, or CADD. The second employer comment area produced the many employer quotes seen throughout the report. These direct comments are offered throughout the report to reflect the feelings of responding employers.

D. ADDITIONAL ACTIVITIES

"A positive attitude towards work and perhaps a rudimentary knowledge of business economics and operations is needed by employees."

... A Florida Employer

This portion of the report provides student and employer responses as to how important or critical a select group of skills are to one's employment. Students were also asked to rate their attainment level in terms of the same group of skills. This section also looks at employer feedback on a variety of questions pertaining to their company's hiring procedures and practices.

1. STUDENT / EMPLOYER "EXPECTATIONS" COMPARISON

a. Background

In previous annual reports in this series, employers consistently lauded the attainment of specific occupational skills of their employees while decrying their general abilities in calculating and communicating. In an attempt to better focus on specific weaknesses with respect to general abilities, staff tried to identify specific basic skill requirements as well as performance levels. Initial efforts included an examination of skills profiles that had been researched in Michigan as well as those developed by the U.S. Secretary of Labor's Commission on Achieving Necessary Skills (the so-called "SCANS" skills).

The previous reports described several efforts directed to employers in prioritizing particular skills and skill levels. This proved difficult as employers tended to identify all skill areas as critical to the success of an employee. They also stressed high levels of attainment for each. In last year's report (Florida Employer Opinion Survey Annual Report, June 1992), a small sample of secondary vocational students were independently asked to rate the importance of specific skills areas identified in a skills profile. Both students and employers rated the importance of specific skill areas similarly. However, students' overall perceptions reflected that they thought that basic skill attainment was not as critical as employers felt they were.

These results suggested that there might be some differences in the perceptions of students and employers concerning requirements for the world of work. Therefore, this year's activities included a similar effort. This one was directed to comparing student perceptions regarding the importance of specific basic skills as well as their feelings as to their level of attaining the skills to employer perceptions. The effort was directed to determining if there was a "mismatch" of student and employer expectations.

b. Strategy

The United States Secretary of Labor's Commission on Achieving Necessary Skills or SCANS researched and defined a series of seventeen educational foundation skills and twenty workplace competencies that were considered necessary to be competitive and successful in the world of work. SCANS activities also included surveying a number of employers nationally within a select group of industries to evaluate how critical they felt these thirty-seven skills were to specific occupations within their employ.

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Using the SCANS research, this project used a survey to be completed by both employers and students to compare their "expectations" as to the criticality of SCANS skills to future employment. The strategy chosen was to contact employers who hired and were familiar with the same occupational areas in which student's from the same location were being prepared. Subsequently, 5 employers covering 14 occupational areas along with 86 students from 3 educational settings were asked to evaluate how important or critical the SCANS skills were to employment. Students were also asked to indicate the skill level they felt they had currently attained with respect to each of the 37 skills. Students and employers were given a brief verbal description of the skill definitions and an opportunity to discuss any problems in understanding the topics. Student and employer responses were collected and analyzed for a comparison of any differences in their "perceptions".

The listing below reflects the make-up of employer and student contacts and their areas of concentration for the student/employer surveys.

Employer Types and Occupational Categories
A Southwest Florida Hospital
    Professional/ Technical Occupations
A Southwest Florida County Commission
    Service/Maintenance Positions
    Office/Clerical Positions
    Technical/Professional Positions
    Professionals
    Official/Administrative Positions
A Westcentral Florida School Board
    Clerical/Professional Positions
    Support Service Positions
A Westcentral Retail Merchandise Chain
    Store Managers
    Hourly Store Staff
    Pharmacists
An Eastcentral High Technology Manufacturer
    Exempt/Professional Positions
    Non-exempt/Operator Positions
    Technical Positions

Student Type and Location
A Southwest Fla. VoTec Center
    15 Medical Assisting Stude ts
    14 LPN Students
An Eastcentral Community College
    11 Computer Programming &
        Analysis Students
    3 Office Technology Students
    2 Electronic Engineering Graduates
A Westcentral Fla. High School
    14 First year DCT Students
    9 Second year DCT Students
A Northcentral Florida High School
    18 Beginning Typing Students

c. The Survey Instrument
The SCANS skills profile consisted of two main areas- **20 workplace competencies** and **17 foundation skills**. The 20 competencies were further defined into five skill areas: **resources, interpersonal, information, systems, and technology.** The 17 foundation skills were subdivided into three categories: **basic skills, thinking skills, and personal qualities.** A facsimile of the survey instruments are attached in Appendix L.

d. Findings

Table 5 summarizes employer and student responses to the 37 SCANS skills. As a means of analysis, all responses for each skill were averaged to obtain a final score for each category. Scores ranged from approaching "5" and being considered highly to extremely critical, important, or skilled to those slightly higher than "2" as being somewhat to moderately critical. Four scores are presented for each of the 37 survey items: 1) criticality of these skills to employment as perceived by employers, 2) importance of these skills to the students' futur employment as perceived by the student, 3) the student's perception of their current skill level attainment for these skills, and 4) the published SCANS national ratings obtained from SCANS research publications. Table 5 consists of scores for the 20 workplace competencies and 17 foundation skills.

TABLE 5
STUDENT/EMPLOYER PERCEPTIONS CONCERNING
WORKPLACE COMPETENCIES AND FOUNDATION SKILLS

	IMPORTANCE TO STUDENTS	CRITICALITY TO EMPLOYER	STUDENT SKILLS RATING
COMPETENCIES (3.35)	4.25	3.53	3.54
Resources (3.01)	4.23	3.11	3.54
(C1) ALLOCATES TIME (4.19)	4.49	4.21	3.59
(C2) ALLOCATES MONEY (2.21)	3.99	2.71	3.27
(C3) ALLOCATES MATERIAL/FACILITY RESOURCES (2.82)	4.15	2.43	3.66
(C4) ALLOCATES HUMAN RESOURCES (2.82)	4.28	3.07	3.64
Information (3.55)	4.48	3.86	3.71
(C5) ACQUIRES & EVALUATES INFORMATION (3.59)	4.49	3.93	3.84
(C6) ORGANIZES & MAINTAINS INFORMATION (3.61)	4.59	3.86	3.76
(C7) INTERPRETS & COMMUNICATES INFORMATION (4.00)	4.71	4.29	3.89
(C8) USES COMPUTERS TO PROCESS INFORMATION (3.00)	4.11	3.16	3.36
Interpersonal (3.80)	4.33	3.89	3.86
(C9) PARTICIPATES AS A MEMBER OF A TEAM (4.24)	4.36	4.29	4.08
(C10) TEACHES OTHERS (3.67)	4.13	3.57	3.75
(C11) SERVES CLIENTS/CUSTOMERS (4.15)	4.50	4.50	3.97
(C12) EXERCISES LEADERSHIP (3.61)	4.26	3.21	3.64
(C13) NEGOTIATES TO ARRIVE AT A DECISION (3.39)	4.32	3.14	3.95
(C14) WORKS WITH CULTURAL DIVERSITY (3.72)	4.33	4.29	3.79
Systems (3.41)	4.27	3.62	3.48
(C15) UNDERSTANDS SYSTEMS (3.77)	4.48	3.71	3.79
(C16) MONITORS & CORRECTS PERFORMANCE (3.35)	4.40	3.79	3.64
(C17) IMPROVES & DESIGNS SYSTEMS (3.11)	3.93	3.21	3.01
Technology (2.98)	3.97	3.13	3.11
(C18) SELECTS TECHNOLOGY (2.89)	3.93	2.86	2.96
(C19) APPLIES TECHNOLOGY TO TASK (3.35)	4.12	3.43	3.39
(C20) MAINTAINS & TROUBLESHOOTS TECHNOLOGY(2.70)	3.83	2.86	2.99
FOUNDATION SKILLS (4.02)	4.65	4.48	4.23
Basic Skills (3.92)	4.68	4.55	4.31
(F1) READING (4.32)	4.76	4.79	4.49
(F2) WRITING (3.87)	4.64	4.36	4.31
(F3) ARITHMETIC (3.61)	4.53	4.71	4.26
(F4) MATHEMATICS (2.75)	4.56	4.36	4.19
(F5) LISTENING (4.61)	4.89	4.79	4.43
(F6) SPEAKING (4.33)	4.72	4.50	4.20
Thinking Skills (3.79)	4.56	4.14	4.10
(F7) CREATIVE THINKING (3.40)	4.41	4.00	3.99
(F8) DECISION MAKING (4.01)	4.67	4.00	4.06
(F9) PROBLEM SOLVING (4.20)	4.64	4.21	4.10
(F10) SEEING THROUGH THE MIND'S EYE(3.26)	4.42	3.50	3.91
(F11) KNOWING HOW TO LEARN (4.01)	4.60	4.50	4.31
(F12) REASONING (3.87)	4.64	4.57	4.25
Personal Qualities (4.34)	4.72	4.75	4.28
(F13) RESPONSIBILITY (4.71)	4.78	4.79	4.41
(F14) SELF ESTEEM (4.11)	4.69	4.64	4.06
(F15) SOCIAL (4.17)	4.57	4.57	4.17
(F16) SELF-MANAGEMENT (4.12)	4.72	4.71	4.19
(F17) INTEGRITY/HONESTY (4.61)	4.85	4.93	4.60
COMPETENCIES & FOUNDATION SKILLS TOTALS (3.69)	4.45	4.00	3.89

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Three general conclusions can be reached from the results shown in Table 5: 1) overall, students (4.45 vs. 4.00) felt that the skills were more important or critical to their future employment than employers felt them to be, 2) that foundation skills (4.57) were felt to be more critical for employment than workplace competencies (3.89) by both students and employers, and 3) students and employers both felt similarly concerning the importance or lack of importance for many of the foundation skills and workplace competencies.

Specifically, students (4.25) felt workplace competencies to be highly critical while employers (3.52) felt them to be moderately critical for employment. Both students (4.65) and employers (4.48) viewed foundation skills to be highly critical elements necessary for successful employment. Within the area of workplace competencies, students felt that information skills (4.48), specifically the ability to interpret and communicate information (4.71), and interpersonal skills (4.32), specifically the ability to serve clients or customers (4.50), were most important to their future employment. Employers identically felt that interpersonal (3.89) and information (3.86) skills were most critical for their employees to maintain. Further, employers felt that serving their clients or customers (4.50), along with the employee's ability to interpret and communicate information (4.29), were most critical to possess within these categories.

In reviewi g foundation skills, both employers (4.75) and students (4.72) felt that personal qualities, particularly the areas of integrity/honesty and responsibility, were highly critical to successful employment.

Students indicated that they were highly skilled within the area of foundation skills (4.23) and moderately skilled concerning workplace competencies (3.54). Students felt they were also highly skilled in the foundation skills of listening (4.43) and responsibility (4.41) and within the workplace competency of participating as a team member (4.08).

In summary, students seemed very aware of the criticality of these skills to their future employment. They additionally felt quite confident in the level of current skills they possessed. Each group of students, ranging from the North Florida beginning typing class to Central Florida Community College students demonstrated confidence with their skill level attainment.

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2. EMPLOYER HIRING PRACTICES

a. Background/Strategy

This section of the report summarizes employer responses pertaining to hiring practices. In conjunction with follow-up activities associated with the Employer Opinion Survey, seventeen employers were asked to complete a hiring practices survey. Employer opinion survey results have often shown that employers were happy with some employee skill preparation areas while upset with others. This survey information was intended to gauge how employers evaluate the education and training background of potential employees.

b. Survey Sample

Sixteen of the seventeen employers that were contacted completed the hiring practices survey. Five of the firms were involved in the health services area. Of the remaining 11 firms, 4 were involved with retail trade, 4 others with governmental services, 2 were in general business services and 1 manufactured high technology products. Eight of the sixteen responding employers were considered large employers in that they employed more than 500 employees. Four of the employers were considered medium sized as they employed more than 100 yet less than 500 employees. The remaining four employers were considered small in that they employed less than 100 employees. All of the firms were located in or near the Central Florida cities of Orlando, Tampa, and St. Petersburg.

c. Survey Instrument

The survey instrument contained eight survey areas: 1) Hiring needs, 2) Source of notification of job openings, 3) General hiring procedures, 4) Application forms, 5) Review or screening procedures, 6) Entry or application tests, 7) Additional screening criteria or minimum standards, and 8) Verification procedures. A facsimile of the survey instrument is attached in Appendix M.

d. Findings

All firms used variations of the same five step hiring process of 1) advertisement, 2) application, 3) initial review, 4) personal interview, and 5) selection. Highlights of these variations are outlined below.

1. Application procedures

Each firm required a completed job application. Typical applications requested personal, educational, employment, personal references and "other pertinent" information. Each application also contained a section requesting applicant "certification" as to the validity of the provided information. This section typically requested the applicants "permission" to verify any information included on the application and requested that the employer be released from any liabilities potentially associated with these actions. Once an application is completed, information provided by an applicant is generally contrasted to "bottom line" entry requirements. Qualified applicants are then separated from those deemed unqualified.

2. "Screening" or "Winnowing" Procedures

Each employer acknowledged that many more workers apply than job openings exist. This creates a need to narrow down the number of job "candidates" for available openings. An initial screening is used to analyze application elements along with "other pertinent" information. This screening is used to verify which applicants meet certain job description requirements and among those who was best qualified. Fourteen of the sixteen firms used existing staff to "screen" applications. The other two firms used outside services to perform this initial screening. One used the Florida Job Service, the other a private employment agency. From a smaller grouping of "qualified" applicants a second phase of screening, if necessary, takes place. All firms conducted some form of personal interviews to finally select an employee(s). The personal interview supplemented tangible items obtained from the application process with intangibles qualities such as general personality, drive, stability, and appearance to further assist in selecting employees.

3. Testing

Testing along with "other" information included on an application exhibited the widest range of options. Fifteen of the sixteen firms used some form of testing in their hiring practices.
Employer testing included items to asress reading, computation, and typing (for office/clerical positions). They also included honesty or integrity testing and stress testing. In one case the testing included the performance of actual job duties such as overhauling a carburetor. One employer used Rorshach image evaluation to assist in determining employment stability. Employers generally required health testing which could include a physical, specific lifting functions or blood and/or urinalysis testing. In all cases, the amount and extent of testing was directly related to budget availability for these tasks.

4. Verification of Credentials

Items contained within the job application were the primary elements used to evaluate job applicants. Fourteen of the sixteen firms stated that credentials were often if not always confirmed before offering a candidate a position.

5. Probationary period

Most firms outlined a probationary employment period of from three to nine months with the understanding that an employee was hired at the discretion of the employer and could be fired for "unsatisfactory" work performance at any time. These statements were often included in the "certification or signature" area of the application. Many firms also noted continued three to six month evaluation period intervals associated with "satisfactory" employment and salary increases.

SECTION III. AUTOMOTIVE TECHNOLOGY

"Communication skills need to be improved! A lot of customers do not understand the repair because it was not explained to them properly!"

... A Florida Employer

A. RESPONSES

There were 64 employers identified within the FETPIP data base as having hired a training-related completer within the program area of automotive technology. Of those, 47 employers or 73% responded to the survey request.

B. HIRING NEEDS

The first question requested that employers identify those automotive services occupations in which they were experiencing difficulty finding qualified applicants. Occupations were selected from those automotive technology program areas presented in the Vocational Education Program Course Standards Manual. There were twenty-four occupational areas listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as was appropriate. Figure 3 shows the seven areas where Florida automotive technology employer's felt the most need for additional qualified applicants.

FIGURE 3
EMPLOYER HIRING NEEDS
AUTOMOTIVE TECHNOLOGY

AREAS OF NEED

NUMBER OF OCCURRENCES

MOST FREQUENT RESPONSES
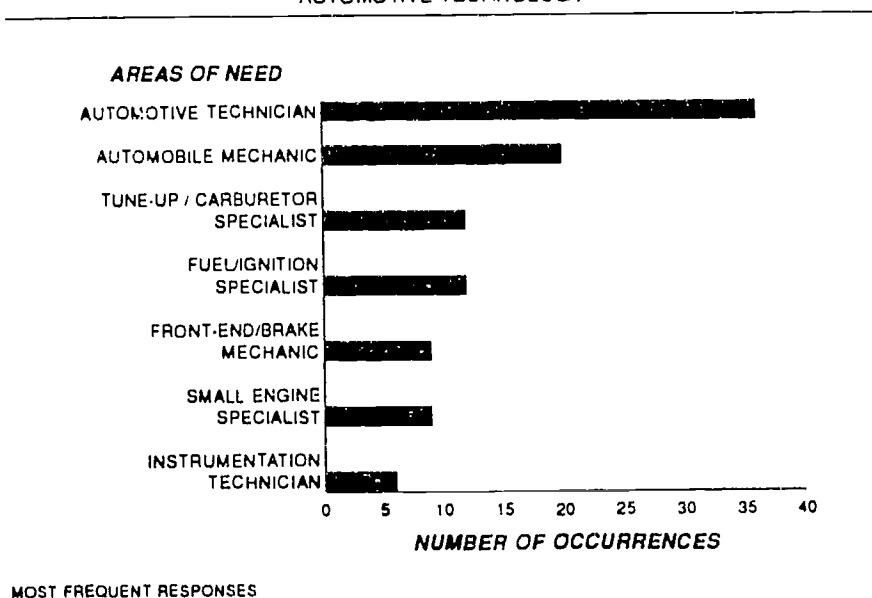
FIGURE 3 COMMENTS: Employers expressed the most difficulty in finding employees skilled as automotive technicians or mechanics. Other areas of need were repair specialists dealing with tune up and carburation, fuel and ignition, small engines, front-end and brake. and instrumentation. All other areas reflected little need for additional applicants.

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C. GENERAL EDUCATION/PREPARATION QUESTIONS

"Verbal and wri 'en communication are areas of constant concern."

... A Florida Employer

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and the work habits of their employees. Figure 4 is a graphic presentation of those four areas and their calculated levels of satisfaction from the general opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied". Those scores at or above "1.75" should be considered "quite satisfied ".

FIGURE 4
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

SURVEY QUESTIONS

PUBLIC EDUCATION — 1.35

VOCATIONAL EDUCATION — 1.58

ENTRY-LEVEL PREP — 1.7

EMPLOYEE WORK HABITS — 1.69

1   1.5   2

SATISFACTION LEVELS
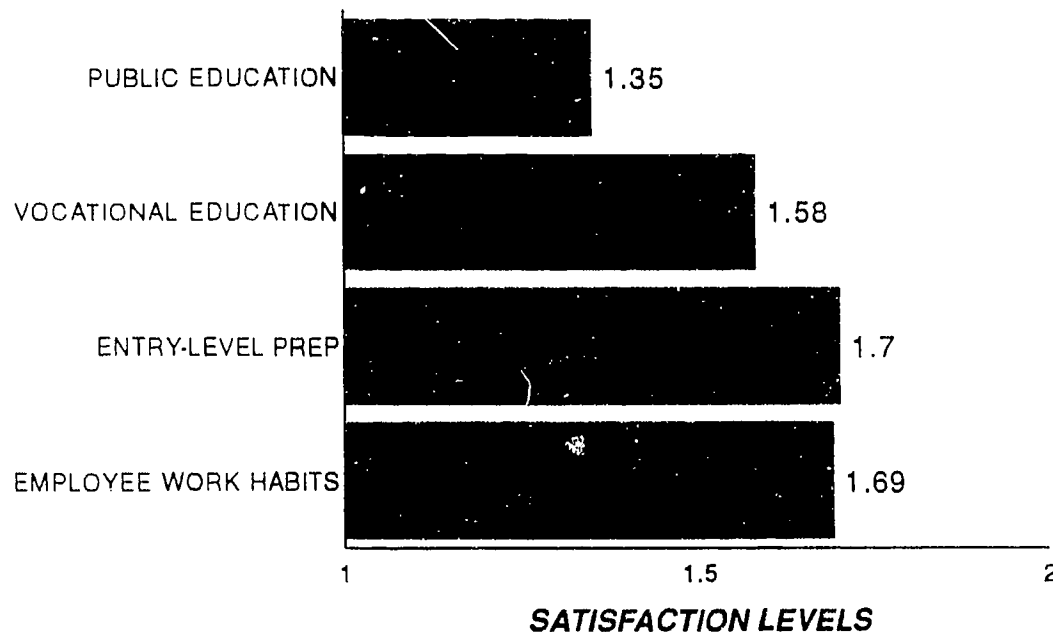
2= VERY SATISFIED: 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 4 COMMENTS: Responses indicated that automotive technology employers were satisfied with vocational education (1.58), entry-level preparation (1.70), and employee work habits (1.69). They were dissatisfied with public education (1.35). This pattern of response is consistent with findings in the following sections and with prior year survey results.

D. OVERALL OCCUPATIONAL PREPARATION

The overall level of employer satisfaction for automotive technology occupational preparation was 1.60 or satisfied. There were 14 survey components within the area of work force preparation, Part C, of the automotive technology survey. These questions were separated into two groups: basic skills and job-related or technical skills. These groups depicted various knowledge or preparation areas contained within the automotive technology curriculum as defined by the Vocational Education Program Course Standards Manual. These areas with their specific internal components are displayed graphically in Figures 5, and 6.

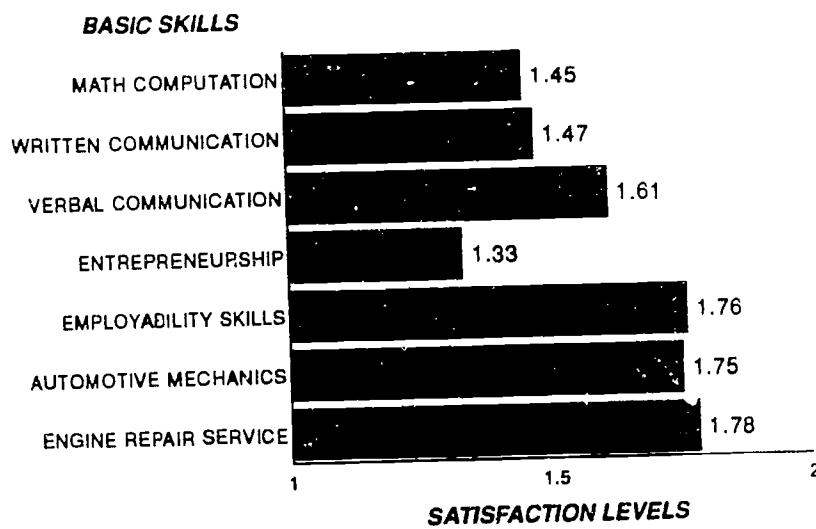1. **Basic Skills** - The overall satisfaction level for basic skills preparation was 1.59, or satisfied. Figure 5 looks at seven basic skill preparation areas including math, verbal, and written skills, employability skills, and entrepreneurship along with the knowledge areas of automotive mechanics and engine repair service.

FIGURE 5
EMPLOYER SATISFACTION LEVELS WITH
INTENDED PROGRAM OUTCOMES

BASIC SKILLS

	Satisfaction Level
MATH COMPUTATION	1.45
WRITTEN COMMUNICATION	1.47
VERBAL COMMUNICATION	1.61
ENTREPRENEURSHIP	1.33
EMPLOYABILITY SKILLS	1.76
AUTOMOTIVE MECHANICS	1.75
ENGINE REPAIR SERVICE	1.78

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 5 COMMENTS: The three basic job-related or technical areas of employability skills (1.76), automotive mechanics (1.75), and engine repair service (1.78) reflected high levels of satisfaction. Three of the four general basic skills; math computation (1.45), written communication (1.47), and entrepreneurship (1.33) reflected levels of employer dissatisfaction.

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2. Job-related or Associated Skills

"Employees need additional analytic skills to fix today's cars and trucks."

... A Florida Employer

The overall score for job-related and associated skills was 1.60 or satisfied. Figure 6 shows responses for seven specific components associated with the automotive technology program.

FIGURE 6
EMPLOYER SATISFACTION LEVELS WITH
INTENDED PROGRAM OUTCOMES

JOB-RELATED SKILLS

ELECTRICAL COMPONENTS — 1.52

STEERING/WHEEL SYSTEMS — 1.7

BRAKE SYSTEMS — 1.85

COOLING, AC, HEATING — 1.67

ENGINE PERFORMANCE — 1.46

TRANS-AXLE & AUTOMATIC TRANSMISSION SERVICE — 1.45

MANUAL DRIVE TRAINS AND AXLES — 1.58

1   1.5   2

SATISFACTION LEVELS
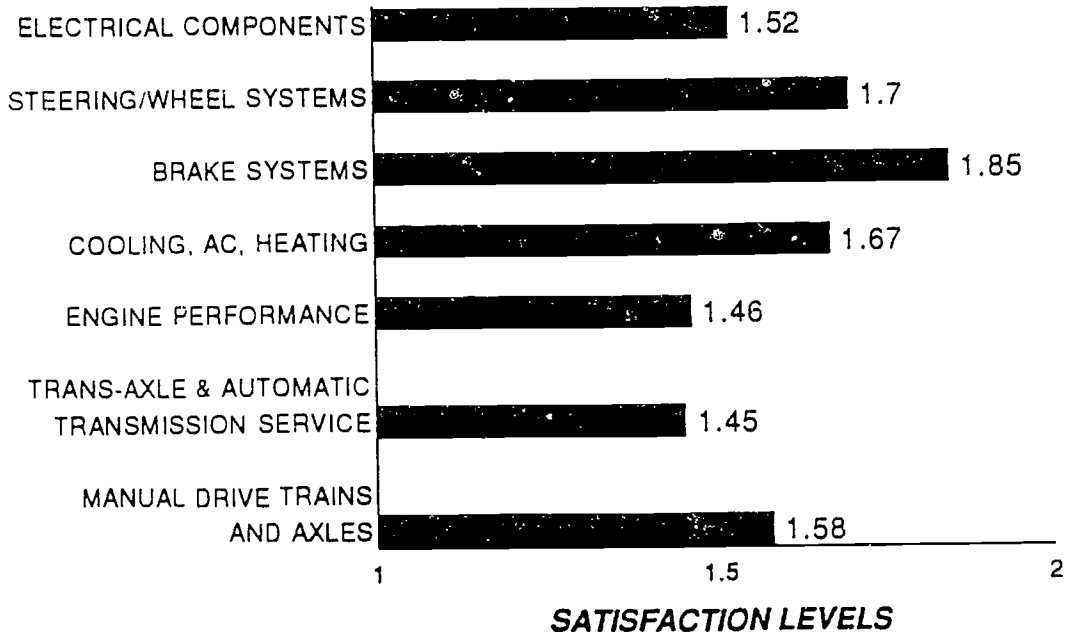
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 6 COMMENTS: Five of the seven elements in this inquiry area showed levels of employer satisfaction. Rating particularly high were the employees' ability to service automotive brake systems (1.85). The two areas where employers reflected levels of dissatisfaction with the employee services of trans-axle and automatic transmissions (1.45) and engine performance (1.46).

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SECTION IV. GASOLINE ENGINE MECHANIC

"I have yet to interview a single prospect that has any marketable skills!!! Most applicants can't function in basic reading, writing, and math!!!

...A Florida Employer

A. RESPONSES

Only three employers statewide were identified as having hired a training related completer within the program area of gasoline engine mechanic. Of these, 2 or 67% responded to the survey request. With opinions of only two employers, responses cannot be assumed to represent the state of gasoline engine mechanics in Florida. However, the opinions are offered here as they may suggest a need to further examine the program from the employer's perspective.

B. HIRING NEEDS

This first question requested that employers identify those gasoline engine mechanic occupations in which they were experiencing difficulties in finding qualified applicants. Occupations were selected from those related program areas presented in the Vocational Education Program Course Standards Manual. There were twenty-four occupational areas listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as were appropriate. Figure 7 shows the four occupations where Florida employer's identified need.

FIGURE 7
EMPLOYER HIRING NEEDS
GASOLINE ENGINE MECHANICS

AREAS OF NEED
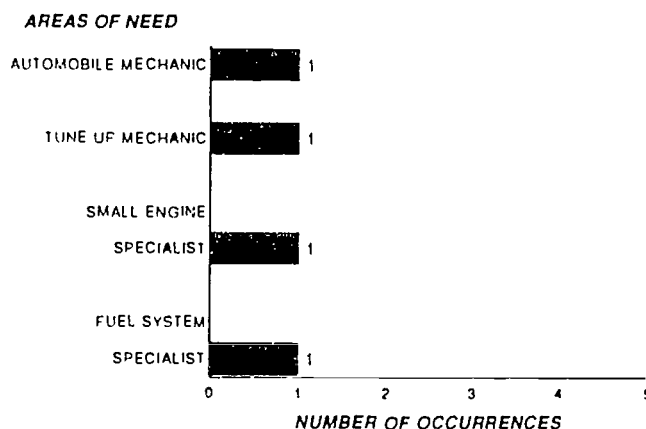
2. VERY SATISFIED 1. VERY DISSATISFIED
1.5- NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 7 COMMENTS: Only four occupations were reflected as areas where additional qualified applicants were needed.

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C. GENERAL EDUCATION/PREPARATION QUESTIONS

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and the work habits of their employees. Figure 9 is a graphic presentation of those four areas and their calculated levels of satisfaction from the gasoline engine mechanic opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 8
GENERAL PUBLIC EDUCATION
AND PREPAPATION QUESTIONS

SURVEY QUESTIONS

PUBLIC EDUCATION — 1

VOCATIONAL EDUCATION — 1

ENTRY-LEVEL PREP — 1.5

EMPLOYEE WORK HABITS — 1.5

0   0.5   1   1.5   2

SATISFACTION LEVELS

2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED
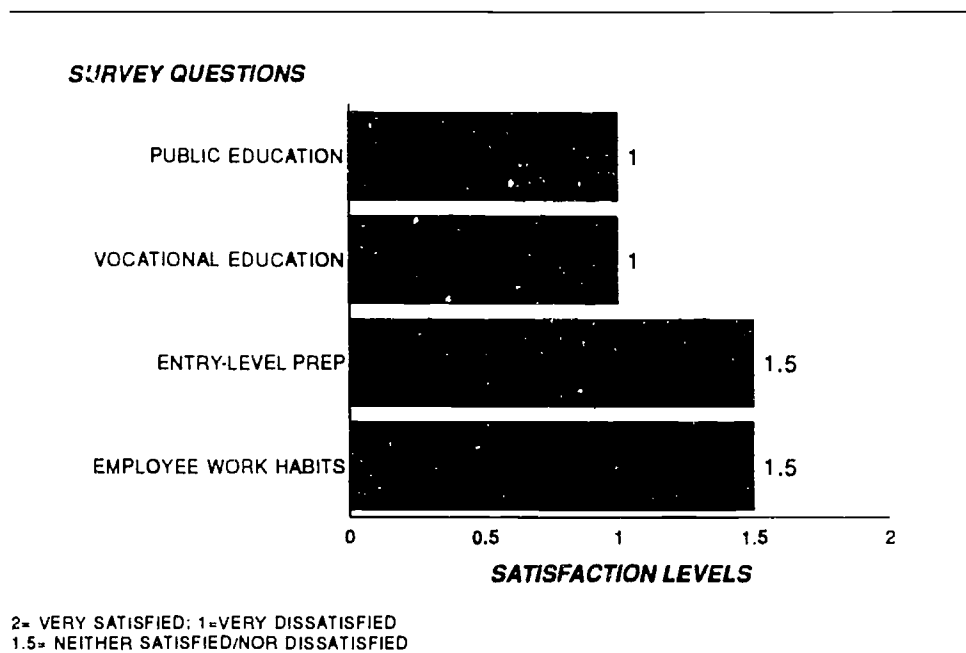
FIGURE 8 COMMENTS: Responses indicated that employers were very dissatisfied with both public education (1.00) and vocational education (1.00). Employers were neither satisfied nor dissatisfied with entry-level preparation (1.50), or employee work habits (1.50). Dissatisfaction with public education and the neither satisfied nor dissatisfied with entry-level preparation, and work habits are somewhat consistent with prior years' employer response. Their overall opinion of vocation education is different than prior year responses. However, their opinion of vocational education is consistent with their skill-level opinions! It is felt that the small number of employers (3) and responses (2) associated with this program area are directly responsible for response variances reflected in this section of the report.

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D. OVERALL OCCUPATIONAL PREPARATION

There were 18 survey components within the work force preparation section of the gasoline engine mechanic survey. These questions were separated into two groupings: basic skills and technical or job-related skills. Each of these included a series of questions depicting various knowledge or preparation areas contained within the gasoline engine mechanic curriculum. These two areas with their specific internal components are displayed graphically in Figures 9 and 10.

1. Basic Skills - The overall satisfaction level for basic skills preparation was 1.21, or quite dissatisfied. Figure 10 depicts seven basic skill components and their reflected employer responses.

FIGURE 9
EMPLOYER SATISFACTION LEVELS
WITH INTENDED PROGRAM OUTCOMES

BASIC SKILLS

	Satisfaction Level
MATH COMPUTATION	1
CUSTOMER SERVICE	1
TOOLS & EQUIPMENT	1.5
ENTREPRENEURSHIP	1
EMPLOYABILITY SKILLS	1
SAFETY RULES/PROCESS	2
RECORDING/REPORTING	1

SATISFACTION LEVELS
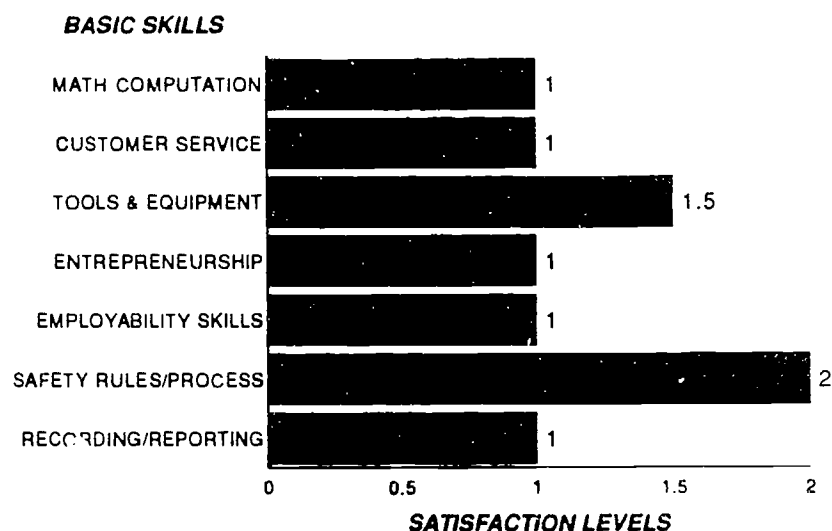
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 9 COMMENTS: Only two of the seven basic skills portrayed, 1) the employees' use and identification of appropriate tools and equipment (1.50) and 2) their application of safety rules and procedures (2.00) did not reflect a level of employer dissatisfaction. These responses should be viewed with caution due to the small number of employers that were involved.

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2. Technical or Job-related Skills

The overall score for this area was 1.50 indicating that employers were neither satisfied nor dissatisfied with all of these skills. Figure 10 reflects responses to eleven technical or job-related skill areas for gasoline engine mechanics.

FIGURE 10
EMPLOYER SATISFACTION LEVELS WITH INTENDED PROGRAM OUTCOMES

JOB-RELATED SKILLS

IGNITION SYSTEMS	1.5
FUEL SYSTEMS	1.5
LUBRICATION SYSTEMS	1.5
ENGINE CONTROLS	1.5
COOLING & EXHAUST	1.5
ELECTRICAL SYSTEMS	1.5
STARTING SYSTEMS	1.5
INTERIOR ENGINE PARTS	1.5
POWER TRANSFER SYSTEMS	1.5
TWO-STROKE ENGINES	1.5
FOUR-STROKE ENGINES	1.5

1   1.5   2

SATISFACTION LEVELS
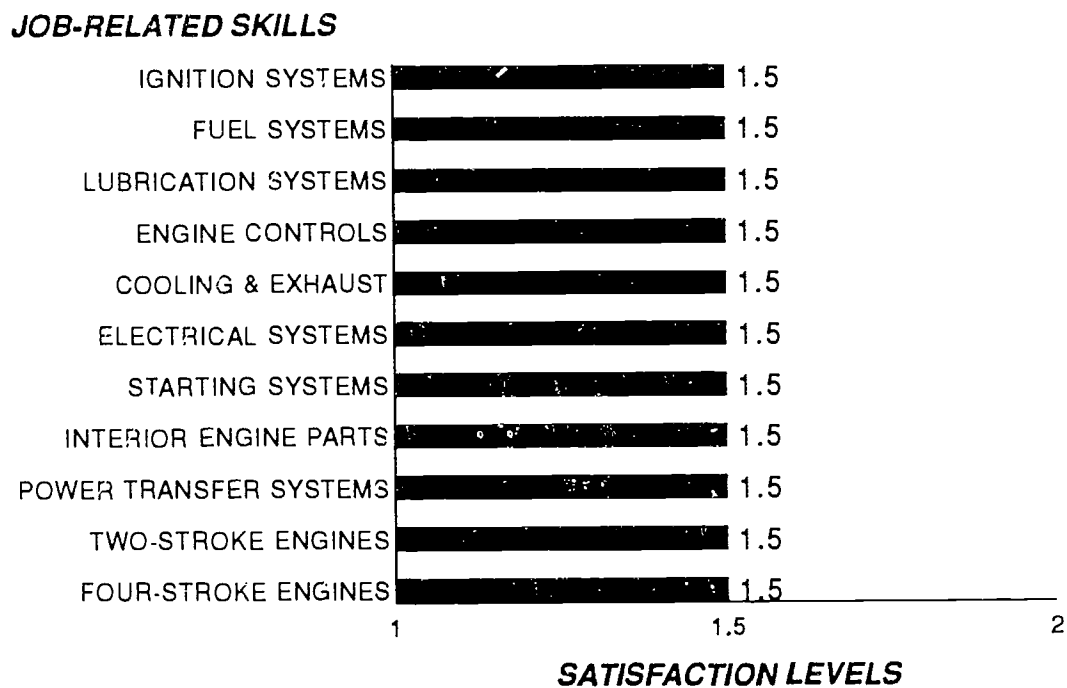
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 10 COMMENTS: All technical skill components reflected that employers were neither satisfied nor dissatisfied with these eleven skills. Again, these responses should be viewed with caution due to the small number of employers that were involved.

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SECTION V. MACHINING

"Employees need to have a basic understanding of new technology related to things like tool holders, inserts, end mills, drills, etc!!!

... A Florida Employer

A. RESPONSES

Twenty-four employers were identified as having hired a training-related completer within the program area of machining. Of these, 88% or 21 responded to the survey request.

B. HIRING NEEDS

This first inquiry requested that employers identify those machining occupations in which they were experiencing difficulties in finding qualified applicants. As with other surveys, occupations were selected from those related program areas presented in the <u>Vocational Education Program Course Standards Manual.</u> There were 24 machining related occupations listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as were appropriate. Figure 11 shows six areas where Florida machining employer's identified a need for additional qualified applicants.

FIGURE 11
EMPLOYER HIRING NEEDS
MACHINING

AREAS OF NEED
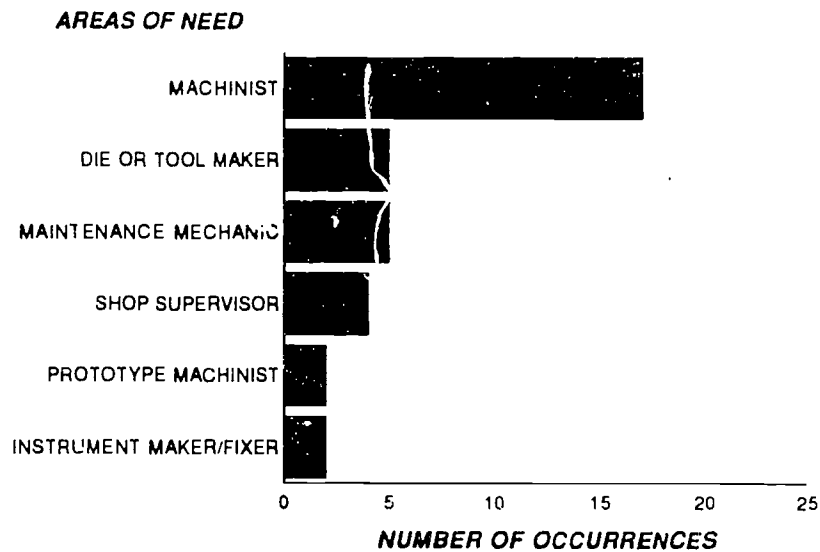
MOST FREQUENT RESPONSES

FIGURE 11 COMMENTS: Employers had the most difficulty finding qualified machinists. They additionally mentioned a need for tool or die makers, maintenance mechanics, and shop supervisors. They had comparatively little difficulty with any other positions.

28

C. GENERAL EDUCATION/PREPARATION QUESTIONS

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and work habits of their employees. Figure 12 is a graphic presentation of those four areas and their calculated levels of satisfaction from the machining opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 12
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

SURVEY QUESTIONS

PUBLIC EDUCATION	1.45
VOCATIONAL EDUCATION	1.45
ENTRY-LEVEL PREP	1.5
EMPLOYEE WORK HABITS	1.45

1   1.5   2

SATISFACTION LEVELS
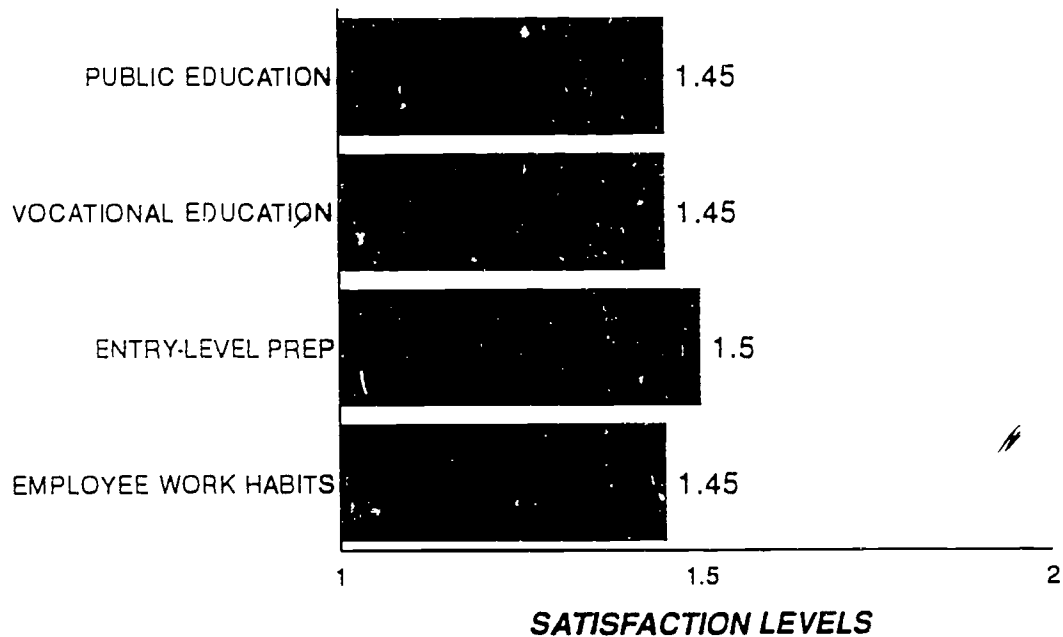
2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 12 COMMENTS: Responses indicated that employers were not satisfied with any of these survey areas. The dissatisfied responses concerning vocational education and employee work habits are not consistent with other findings from prior surveys. In almost all cases the areas of vocational education, entry-level preparation, and employee work habits generated satisfied employer ratings. Note that these ratings are consistent with the gas engine mechanic employer responses.

D. OVERALL OCCUPATIONAL PREPARATION

"Today CNC (computer numeric control) training is a must!!! In this area that field of knowledge is lacking!!!"

... A Florida Employer

There were 20 survey components within the work force preparation section of machining survey. These questions were separated into two general areas: basic skills and technical or job-related skill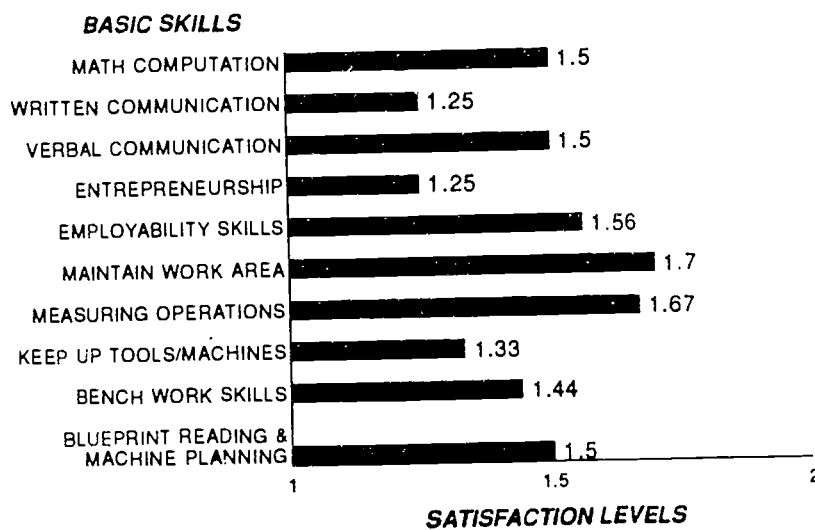s. Each of these included a series of questions depicting various knowledge or preparation areas contained within the machining curriculum. These two areas with their specific internal components are displayed graphically in Figures 13 and 14.

1. **Basic Skills** - The overall satisfaction level for the ten basic skills was 1.47, or slightly dissatisfied. Figure 13 looks at these ten basic skills and their respective employer responses.

FIGURE 13
EMPLOYER SATISFACTION LEVELS
WITH INTENDED PROGRAM OUTCOMES

BASIC SKILLS

Skill	Level
MATH COMPUTATION	1.5
WRITTEN COMMUNICATION	1.25
VERBAL COMMUNICATION	1.5
ENTREPRENEURSHIP	1.25
EMPLOYABILITY SKILLS	1.56
MAINTAIN WORK AREA	1.7
MEASURING OPERATIONS	1.67
KEEP UP TOOLS/MACHINES	1.33
BENCH WORK SKILLS	1.44
BLUEPRINT READING & MACHINE PLANNING	1.5

SATISFACTION LEVELS

2= VERY SATISFIED, 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 13 COMMENTS: Machining employers were satisfied with only three of the listed basic skill areas: the employees' proficiency to maintain their immediate work area (1.70), their performance at measuring operations (1.67), and overall employability skills (1.56). Three areas: math computations, verbal communication, and blueprint reading and machine planning reflected that employers were neither satisfied nor dissatisfied with these employee skills. The four remaining basic skill areas: written communication (1.25), entrepreneurship (1.25), performing maintenance on tools and machines (1.33) and bench work skills (1.44) all registered levels of employer dissatisfaction.

2. Technical or Job-related Skills

"For our business an employee needs training in fiberglass work. Experience in auto body repair would help."

... A Florida Employer

The overall score for technical job related skills was 1.56 or satisfied. Figure 14 shows responses for the ten machine operation skills.

FIGURE 14
EMPLOYER SATISFACTION LEVELS WITH JOB-RELATED OR TECHNICAL SKILLS

MACHINE OPERATION SKILLS

Skill	Satisfaction Level
POWER SAWS	1.67
PEDESTAL GRINDERS	1.75
DRILL PRESSES	1.89
LATHES	1.67
MILLING MACHINES	1.5
GRINDING MACHINES	1.38
TOOL MACHINE & CUTTERS	1.44
EDM MACHINES	1.5
HEAT THREAT FURNACES	1.33
COMPUTERIZED NUMERIC CONTROL SKILLS	1.5

SATISFACTION LEVELS
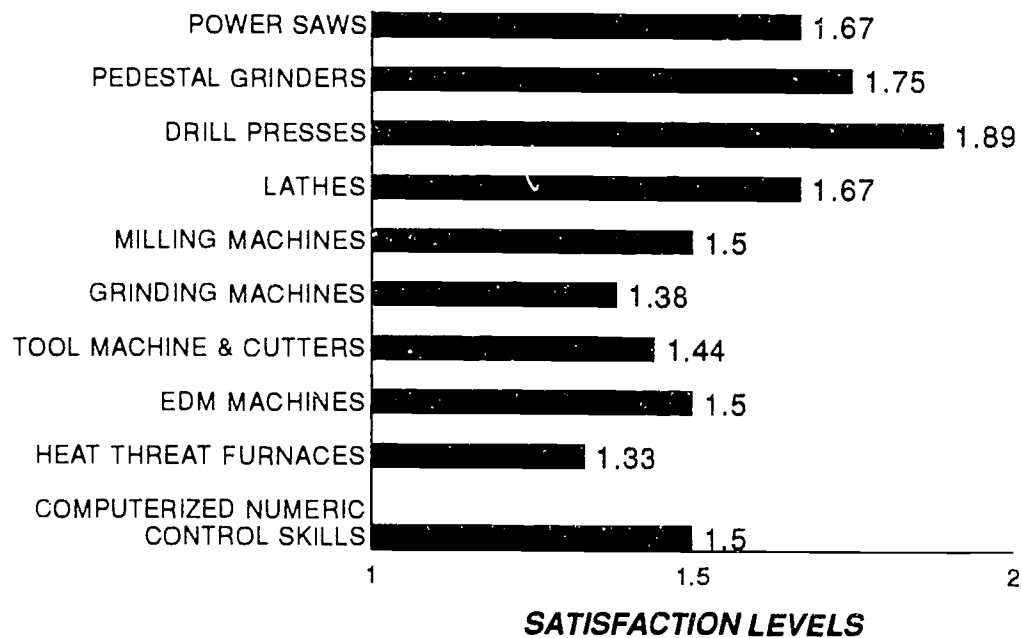
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 14 COMMENTS: Four machine operation skills reflected levels of employer satisfaction. The skill areas with the highest levels of satisfaction were the setting up and operation of drill presses (1.89) and pedestal grinders (1.75). Three machine operation areas reflected employer dissatisfaction: heat threat furnaces (1.33), grinding machines (1.38), and tool machines and cutters (1.44).

SECTION VI. BUSINESS ADMINISTRATION & MANAGEMENT

"Employees need to understand what business is, and what profitability and customer relations are."
... A Florida Employer

A. RESPONSES
Sixty-five employers were identified as having hired a training related completer within the program area of business administration and management. Of those, 42 or 65% responded to the survey request.

B. HIRING NEEDS
This first inquiry requested that employers identify those business-related occupations in which they were experiencing difficulties in finding qualified applicants. Occupations were selected from those related program areas presented in the Vocational Education Program Course Standards Manual. There were 24 occupations listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as were appropriate. Figure 15 shows 8 areas where business employers identified the most need for additional applicants.

FIGURE 15
EMPLOYER HIRING NEEDS
BUSINESS ADMINISTRATION & MANAGEMENT

AREAS OF NEED

NUMBER OF OCCURRENCES

MOST FREQUENT RESPONSES

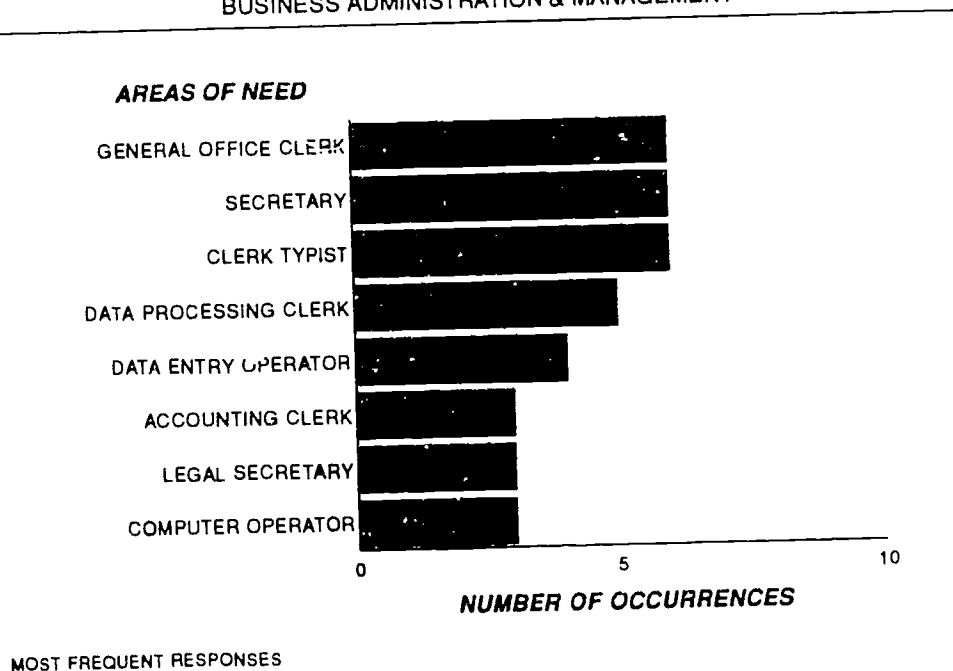FIGURE 15 COMMENTS: General office clerk, secretary, and clerk typist were the occupations in which business employers reflected the most difficulty in finding qualified applicants. Additionally, data processing clerks, data entry operators, accounting clerks, legal secretaries, and computer operators were needed. Employers reflected little difficulty with any of the other occupations listed.

32   37

C. GENERAL EDUCATION/PREPARATION QUESTIONS

"As an employer I feel employees should be able to read and follow directions. They also need to be able to communicate ideas and concepts verbally and in writing."

...A Florida Employer

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and the work habits of their employees. Figure 16 is a graphic presentation of those four areas and their calculated levels of satisfaction from the business administration and management opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 16
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

SURVEY QUESTIONS

PUBLIC EDUCATION 1.41

VOCATIONAL EDUCATION 1.47

ENTRY-LEVEL PREP 1.56

EMPLOYEE WORK HABITS 1.69

1   1.5   2

SATISFACTION LEVELS
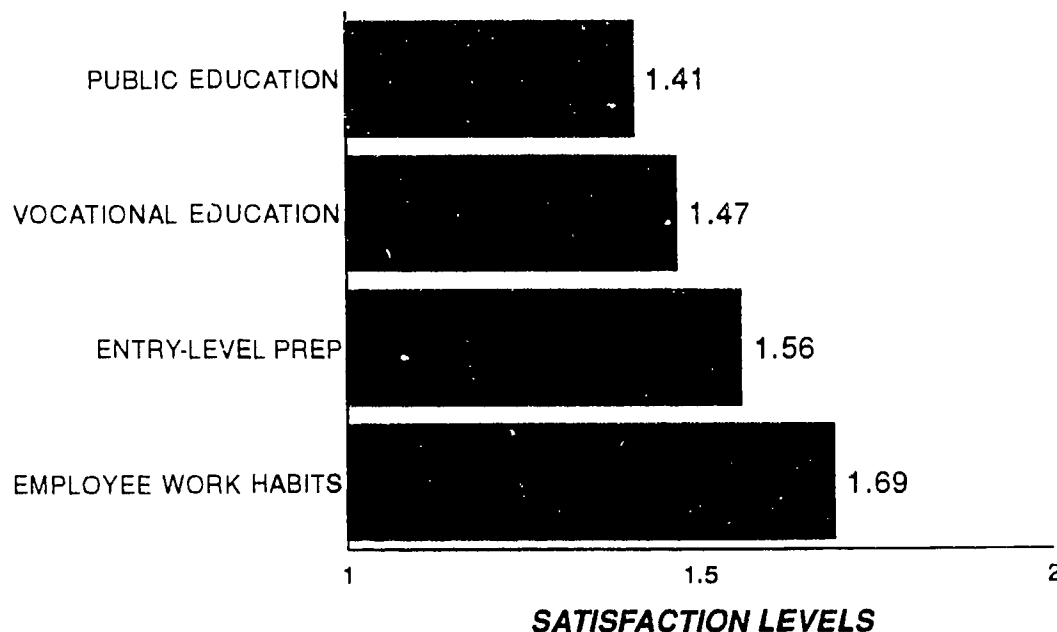
2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 16 COMMENTS: Responses indicated that employers were dissatisfied with both public (1.41) and vocational education (1.47). The areas of entry-level preparation (1.56), and employee work habits (1.69) reflected levels of employer satisfaction. The dissatisfaction with vocational education is not consistent with prior year survey results.

D. OVERALL OCCUPATIONAL PREPARATION

"An employee must have an interest in the job- not just 8 to 5- they must be able to do whatever it takes to get the job done!!!"

... A Florida Employer

There were 14 survey components in the work force preparation section of the business administration and management survey. These questions were separated into two general areas: basic and job-related or technical skills. Each of these included a series of questions reflecting various knowledge or preparation areas contained within the business administration and management curriculum. These two areas with their specific internal components are displayed graphically in Figures 17 and 18.

1. Basic Skills - The overall satisfaction level for basic skills preparation was 1.53, or satisfied. Figure 17 looks at seven elements grouped as basic skills and their respective employer responses.

FIGURE 17
EMPLOYER SATISFACTION LEVELS
WITH INTENDED PROGRAM OUTCOMES

BASIC SKILLS

Skill	Value
MATH COMPUTATION	1.71
WRITTEN COMMUNICATION	1.5
VERBAL COMMUNICATION	1.48
GROOMING HABITS	1.58
LEADERSHIP SKILLS	1.33
KEYBOARDING/TYPING	1.71
DECISION MAKING	1.43

SATISFACTION LEVELS
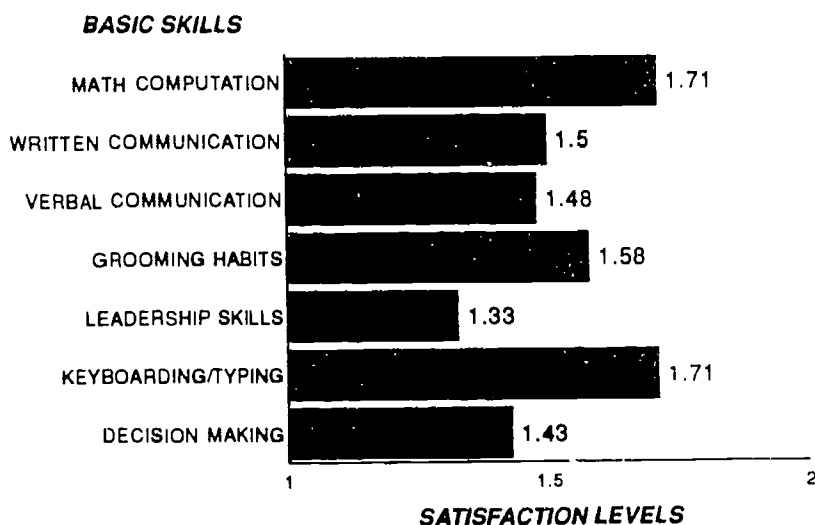
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 17 COMMENTS: Three of the basic skill areas reflected levels of employer satisfaction: math computation (1.71), keyboarding/typing skills (1.71) and grooming habits (1.58) Three of the remaining four skill areas reflected levels of employer dissatisfaction. Employers were most dissatisfied with employees' leadership skills (1.33) and their employees' ability to make decisions (1.43).

34

2. Job-related or Technical Skills

"More and more employees must be understanding of the business need for total quality management and team building."

... A Florida Employer

The overall score for job-related skills was 1.54 or satisfied. Figure 18 shows employer responses for seven specific job related skills.

FIGURE 18
EMPLOYER SATISFACTION LEVELS WITH INTENDED PROGRAM OUTCOMES

JOB-RELATED SKILLS

Skill	Level
MANAGEMENT ACTIVITIES	1.44
BUSINESS RECORDS	1.53
COMMUNICATIONS	1.58
HUMAN RELATIONS	1.39
INFORMATION PROCESSING	1.64
CONSUMER ECONOMICS	1.6
BOOKKEEPING/ACCOUNTING	1.57

SATISFACTION LEVELS
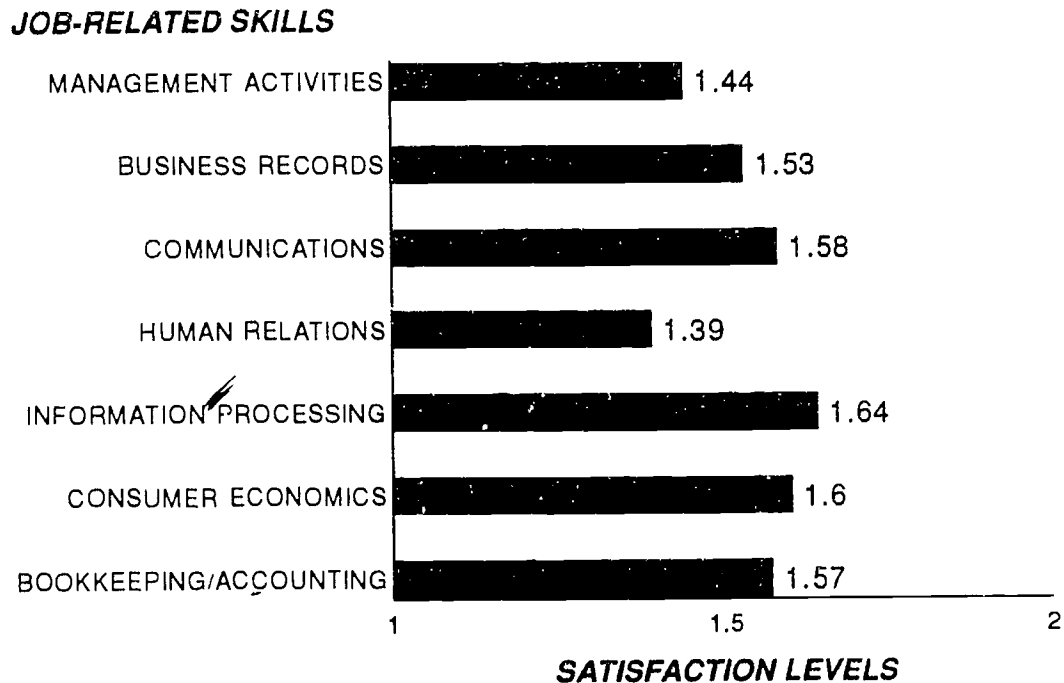
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 18 COMMENTS: Employee management activities (1.44) and their ability to perform human relations activities (1.39) were the only job related areas reflecting employer dissatisfaction. The employees' ability to process information (1.64) and their performance of consumer economic activities (1.60) reflected the highest levels of employer satisfaction.

35

SECTION VII. MEDICAL LABORATORY TECHNOLOGY

"The institutional program that prepared our lab tech did a very good job!!!

...A Florida Emplover

A. RESPONSES

Thirty-eight employers were identified as having hired a training-related completer within the program area of medical laboratory technology. Thirty-one of those employers responded to the survey request for a response rate of 82%.

B. HIRING NEEDS

This first inquiry requested that employers identify those health/medical field occupations in which they were experiencing difficulties in finding qualified applicants. Occupations were selected from thos : related program areas presented in the Vocational Education Program Course Standards Manual. There were twenty-four occupations listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as was appropriate. Figure 19 shows six areas where Florida medical laboratory technology employer's identified their highest need.

FIGURE 19
EMPLOYER HIRING NEEDS
MEDICAL LABORATORY TECHNOLOGY

AREAS OF NEED

NUMBER OF OCCURRENCES

MOST FREQUENT RESPONSES
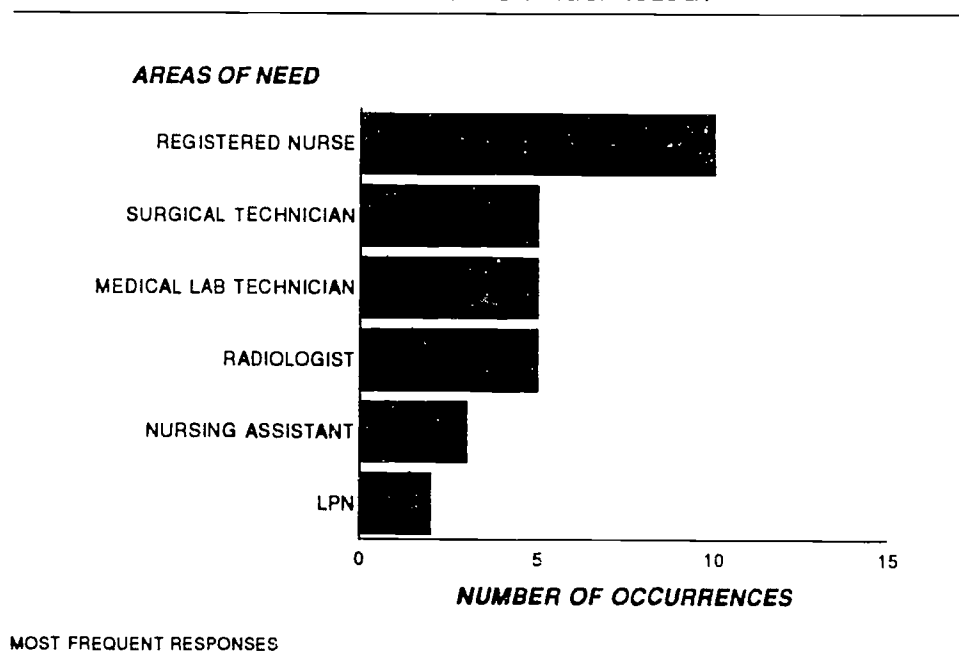
FIGURE 19 COMMENTS: Employers clearly had the most difficulty finding registered nurses. Other occupations reflecting a need for additional applicants were med lab technicians, surgical technicians, and radiologists. All other occupations reflected little or no response from employers.

36

41

C. GENERAL EDUCATION/PREPARATION QUESTIONS

"It would be a great benefit if employees' had desk top computer knowledge."

... A Florida Employer

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits. Figure 20 is a graphic presentation of those four areas and their calculated levels of satisfaction from the medical laboratory technology opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 20
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

SURVEY QUESTIONS

Survey Question	Satisfaction Level
PUBLIC EDUCATION	1.46
VOCATIONAL EDUCATION	1.54
ENTRY-LEVEL PREP	1.83
EMPLOYEE WORK HABITS	1.75

1   1.5   2

SATISFACTION LEVELS
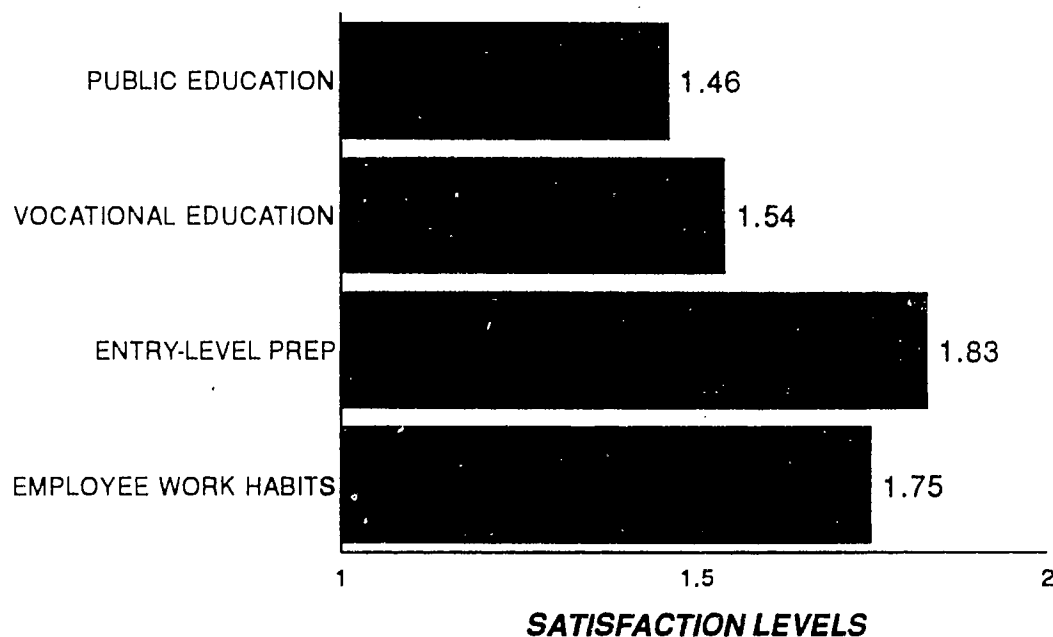
2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 20 COMMENTS: Responses indicated that employers were satisfied with vocational education and especially satisfied with entry-level preparation and employee work habits. Employers were dissatisfied with public education.

D. OVERALL OCCUPATIONAL PREPARATION

"Interning students need to abide with that hospitals policies and procedures."

... A Florida Employer

There were 21 questions within the work force preparation section of the medical laboratory technology survey. These questions were separated into two general areas: technical and basic skills. Each of these included a series of questions depicting various knowledge or preparation areas contained within the core engineering curriculum. These two areas with their specific internal components are displayed graphically in Figures 21, 22, and 23.

     1. Basic Skills - The overall satisfaction level for basic skills preparation was 1.79, or quite satisfied. Figure 21 looks at seven basic skills and their respective employer responses.

FIGURE 21
EMPLOYER SATISFACTION LEVELS
WITH INTENDED PROGRAM OUTCOMES

BASIC SKILLS

	Satisfaction Level
UNDERSTAND PHLEBOTOMY	1.93
WRITTEN COMMUNICATION	1.67
VERBAL COMMUNICATION	1.78
EMP ᗡYABILITY SKILLS	1.64
INT ᏒSONAL SKILLS	1.93
QUALITY ASSURANCE & SAFETY	1.81
LEGAL & ETHICAL RESPONSIBILITIES	1.77

1   1.5   2

SATISFACTION LEVELS
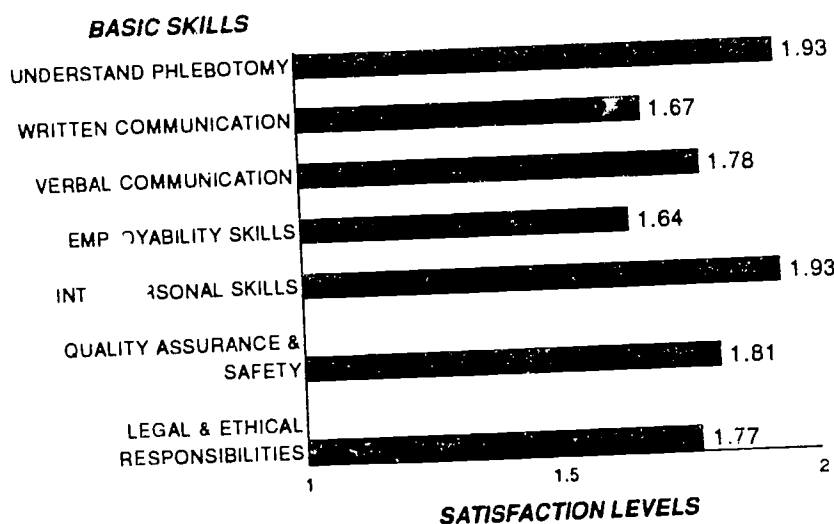
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 21 COMMENTS: Employers were satisfied with all basic skill areas. The two highest rated basic skills were the employees' understanding of phlebotomy (1.93) and their professional, communication, and interpersonal skills (1.93).

38

4ɔ

2. Technical Job Skills

"Employees need familiarity with up-to-date usable information and equipment."

... A Florida Employer

The overall score for technical skills or selected principles and procedures was 1.89 or very satisfied. This area consisted of 14 technical job skills, procedures or principles and are displayed in Figures 22 and 23. Figure 22 shows responses for seven specific skills and their respective employer responses. The overall score for the technical job skills exhibited within Figure 22 was 1.74 or satisfied.

FIGURE 22
EMPLOYER SATISFACTION LEVELS WITH
INTENDED PROGRAM OUTCOMES

TECHNICAL JOB SKILLS


```
COLLECTION PROCEDURES                    1.85
INFECTION CONTROL                        2
ANATOMIC STRUCTURES &
BODY SYSTEMS                        1.6
IMMUNE-DEFICIENCY
DISEASES, SUCH AS AIDS                    1.94
OPERATION/PRINCIPLES
OF LAB INSTRUMENTS                  1.71
COLLECTION REAGENTS &
INTERFERING SUBSTANCES              1.69
CORRELATE LAB PROCESS
WITH THEORY                    1.41
                  1            1.5            2
```

SATISFACTION LEVELS

2= VERY SATISFIED, 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED
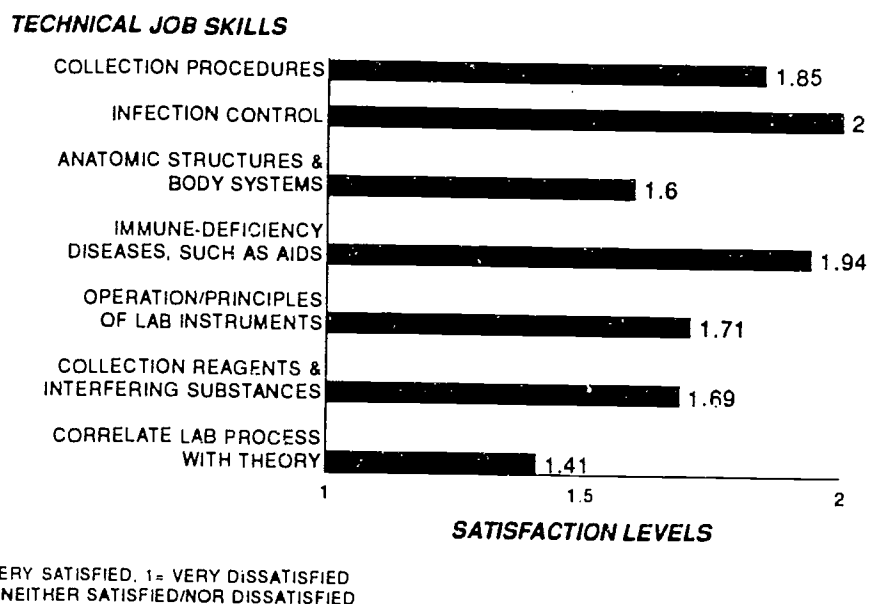
FIGURE 22 COMMENTS: Six of the seven elements in this inquiry area showed levels of employer satisfaction. Only the area of the employees' ability to correlate laboratory procedures with theoretical knowledge (1.41) reflected a level of dissatisfied employer response. The area of effective infection control (2.00) was rated the highest where there were no dissatisfied responses recorded. Additional areas rating particularly high were the employees' understanding of sexually transmitted diseases, such as AIDS (1.94), and their collection procedures and recognition of possible complications (1.85).

3. Specific Principles and Procedures

"Employees need more clinical practice in all areas!!!!"

... A Florida Employer

Figure 23 shows responses for seven specific principles and procedures associated with the medical laboratory technology occupational area. The overall score for these seven skills was 1.84 or very satisfied.

FIGURE 23
EMPLOYER SATISFACTION LEVELS WITH JOB-RELATED OR TECHNICAL SKILLS

PROCEDURES OR PRINCIPLES OF

REQUISITION, TRANSPORT & PROCESS SPECIMENS — 1.94
URINALYSIS PROCEDURES — 2
HEMATOLOGY — 1.85
MICROBIOLOGY — 1.82
CLINICAL CHEMISTRY — 1.69
IMMUNOHEMATOLOGY — 1.77
IMMUNO/SEROLOGY — 1.79

SATISFACTION LEVELS
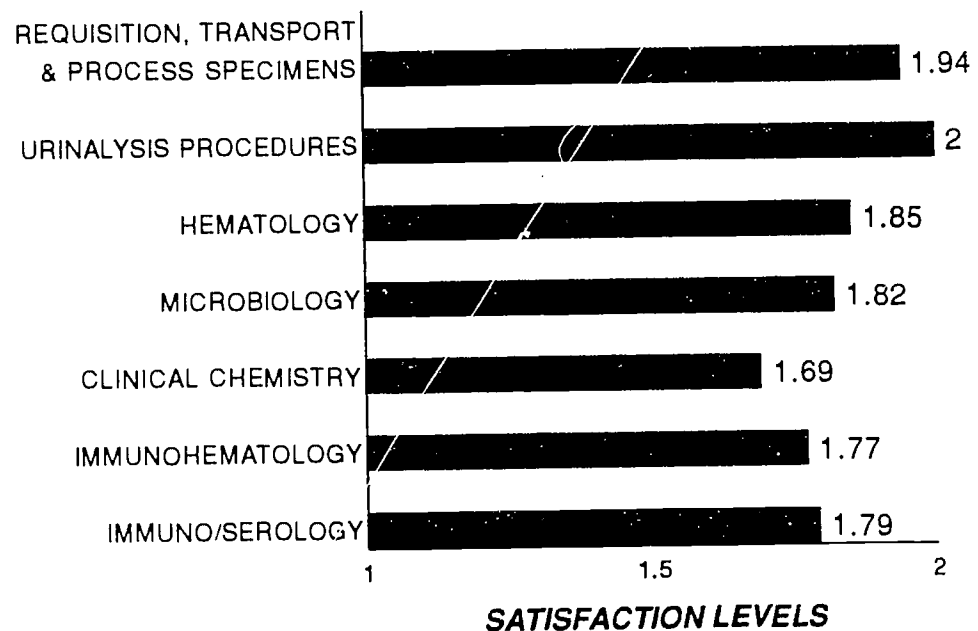
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 23 COMMENTS: All elements in this inquiry area showed considerably high levels of employer satisfaction. The knowledge of urinalysis procedures and principles (2.00) was rated the highest where no employers registered a dissatisfied response. Additional areas rating particularly high were employees' practice of accepted procedures of requisitioning, transporting, and processing specimens (1.94), and their demonstration of hematological (1.85) and microbiological (1.82) principles and procedures.

40

45

SECTION VIII. MEDICAL ASSISTING

"Medical assistants need compassion, patience, a desire to do the job for the satisfaction of helping people not just for the paycheck!"

... A Florida Employer

A. RESPONSES
Seventy-two employers were identified as having hired a training-related completer within the program area of medical assisting. Of these, 74% or 53 firms responded to the survey request.

B. HIRING NEEDS
This first inquiry area requested employers to identify those job categories in which they were experiencing difficulties in finding qualified applicants. There were 18 health field occupations plus an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as were appropriate. Figure 24 shows seven of those occupational areas where medical assisting employers identified their highest need.

FIGURE 24
EMPLOYER HIRING NEEDS
MEDICAL ASSISTING

AREAS OF NEED

NUMBER OF OCCURRENCES

MOST FREQUENT RESPONSES

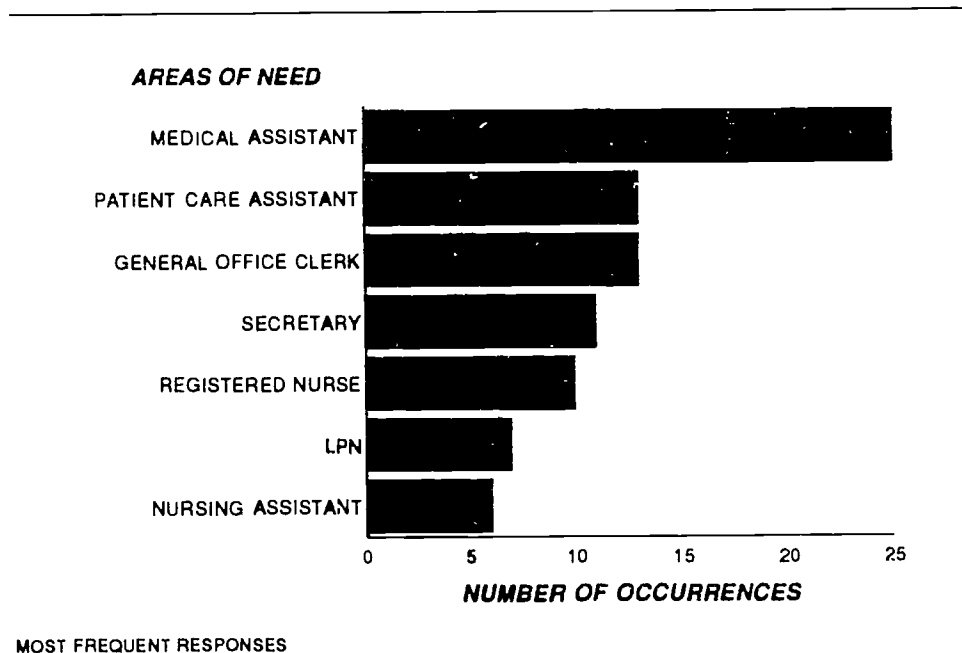**FIGURE 24 COMMENTS**: Employers responded that their most critical need was for additional qualified medical assistants. Five of the seven occupations cited were directly associated to health professionals. The other two were the office occupations of general office clerk and secretary. All other listed occupations reflected little or no difficulty in finding qualified applicants.

41

46

C. GENERAL EDUCATION/PREPARATION QUESTIONS

"There needs to be more attention to the health care code of ethics and to personal behavior."

... A Florida Employer

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits. Figure 25 is a graphic presentation of those four areas and their calculated levels of satisfaction from the medical assisting opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 25
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

SURVEY QUESTIONS

PUBLIC EDUCATION	1.2
VOCATIONAL EDUCATION	1.64
ENTRY-LEVEL PREP	1.63
EMPLOYEE WORK HABITS	1.73

1   1.5   2

SATISFACTION LEVELS
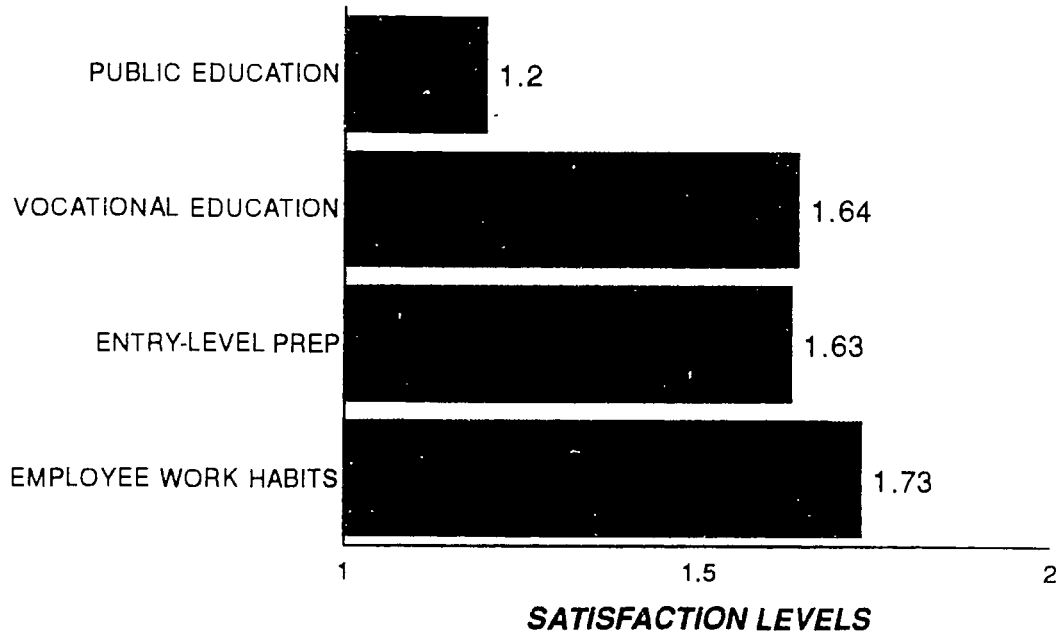
2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 25 COMMENTS: Responses indicated that employers were satisfied with vocational education, entry-level preparation, and especially satisfied with employee work habits. Medical Assisting employers were very dissatisfied concerning public education (1.20).

42

D. OVERALL OCCUPATIONAL PREPARATION

"Medical assistants need to be taught how to communicate with the patients and their fellow workers in an intelligent, TACTFUL, and professional manner."

... A Florida Employer

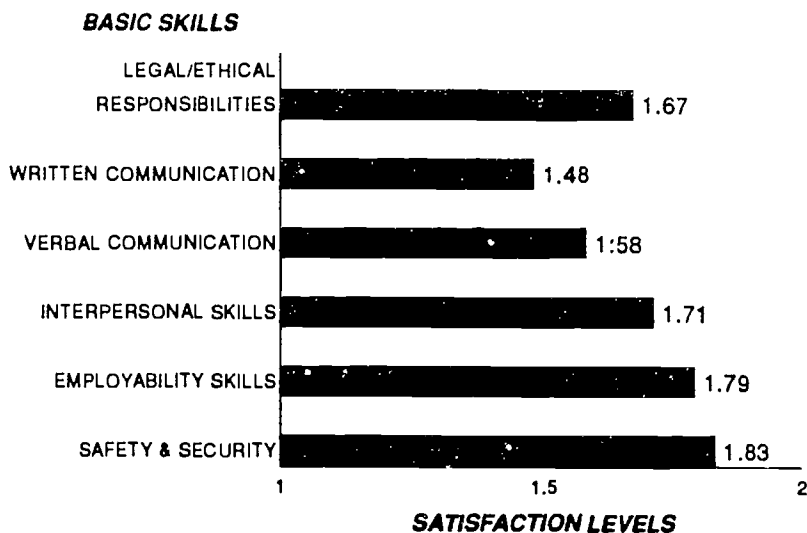There were 14 questions within the work force preparation section of the medical assisting survey. These questions were grouped into two general areas of job related or technical skills and basic skills. These areas included a series of questions depicting various knowledge or preparation areas contained within the medical assisting curriculum. These specific internal components are displayed graphically in Figures 26 and 27.

1. Basic Skill Areas - The overall satisfaction level for this grouping of skills preparation was 1.67, or satisfied. Figure 26 looks at six basic skills and their reflected employer responses.

FIGURE 26
EMPLOYER SATISFACTION LEVELS
WITH INTENDED PROGRAM OUTCOMES

BASIC SKILLS

Skill	Level
LEGAL/ETHICAL RESPONSIBILITIES	1.67
WRITTEN COMMUNICATION	1.48
VERBAL COMMUNICATION	1:58
INTERPERSONAL SKILLS	1.71
EMPLOYABILITY SKILLS	1.79
SAFETY & SECURITY	1.83

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 26 COMMENTS: Employers were most satisfied with the basic health areas of their employees' ability to recognize and practice safety and security procedures (1.83), their employability skills (1.76), and their ability to communicate and use interpersonal skills effectively (1.71). The only element within this area with a level of employer dissatisfaction was written communication skills (1.48).
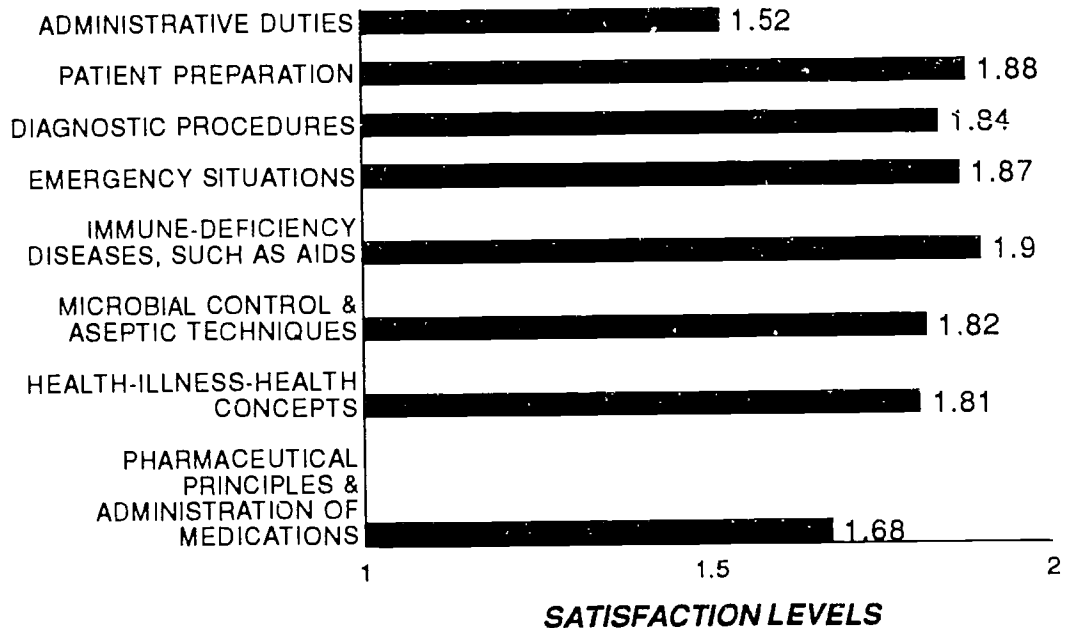
43

49

2. Job related Skills

"Very few applicants in over 4 years have demonstrated above average educational and job skills from the Vo Tech Medical Assisting program. I feel the "self-study" program for medical assistants has been detrimental to the program."

... A Florida Employer

The overall score for this area was 1.79 or quite satisfied. Figure 27 shows responses for eight specific areas associated with the duties of a medical assistant.

FIGURE 27
EMPLOYER SATISFACTION LEVELS WITH INTENDED PROGRAM OUTCOMES

JOB-RELATED SKILLS

ADMINISTRATIVE DUTIES	1.52
PATIENT PREPARATION	1.88
DIAGNOSTIC PROCEDURES	1.84
EMERGENCY SITUATIONS	1.87
IMMUNE-DEFICIENCY DISEASES, SUCH AS AIDS	1.9
MICROBIAL CONTROL & ASEPTIC TECHNIQUES	1.82
HEALTH-ILLNESS-HEALTH CONCEPTS	1.81
PHARMACEUTICAL PRINCIPLES & ADMINISTRATION OF MEDICATIONS	1.68

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 27 COMMENTS: All eight elements in this inquiry area showed levels of employer satisfaction. The highest rated areas were the employees' knowledge of sexually transmitted diseases such as AIDS (1.90), their ability to prepare patients for, assist with, and follow-up patients after examinations and treatment (1.88), and their ability to recognize and respond to emergency situations (1.87). The lowest ranking skill within this area was the employees' knowledge of pharmaceutical principles and the administration of medications (1.52).

44

SECTION IX. PATIENT CARE ASSISTANT

"We operate nursing homes and generally find that the majority of CNA's require re-training once they come to our facilities. In general, new LPN's lack management skills, leadership ability, and judgement skills!!"

... A   Florida   Employer

A. RESPONSES
There were 345 patient care assistant employers identified as having hired a training-related completer. Of those 74% or 257 firms responded to the survey request.

B. HIRING NEEDS
This first inquiry was that employers identify those industry-related occupations in which they were experiencing difficulties in finding qualified applicants. Occupations were selected from those related program areas presented in the Vocational Education Program Course Standards Manual. There were 24 occupations listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as was appropriate. Figure 28 shows 7 of those areas where Florida patient care assistant employers' identified their highest need.

FIGURE 28
EMPLOYER HIRING NEEDS
PATIENT CARE ASSISTANT

AREAS OF NEED

NUMBER OF OCCURRENCES
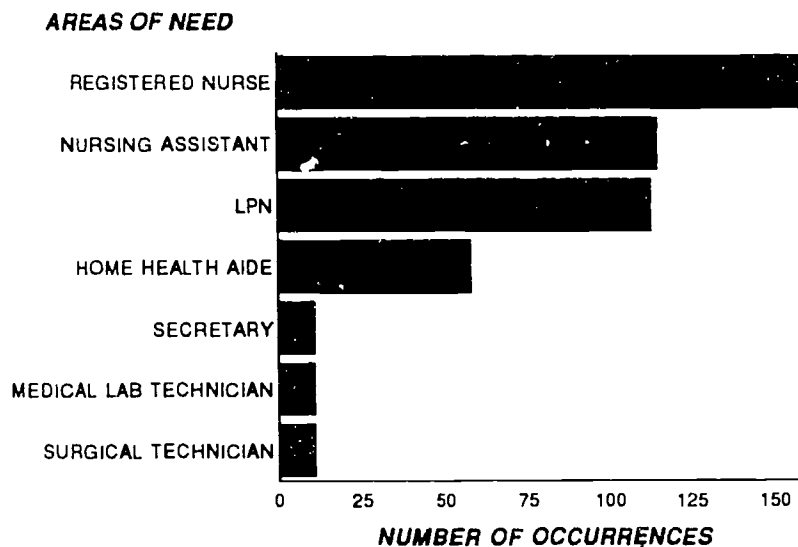
MOST FREQUENT RESPONSES

FIGURE 28 COMMENTS: Registered nurses, nursing assistants, licensed practical nurses, and home health aides were the occupations where employers expressed the most need for additional applicants.   All other occupations listed received little or no comment.

45

C. GENERAL EDUCATION/PREPARATION QUESTIONS
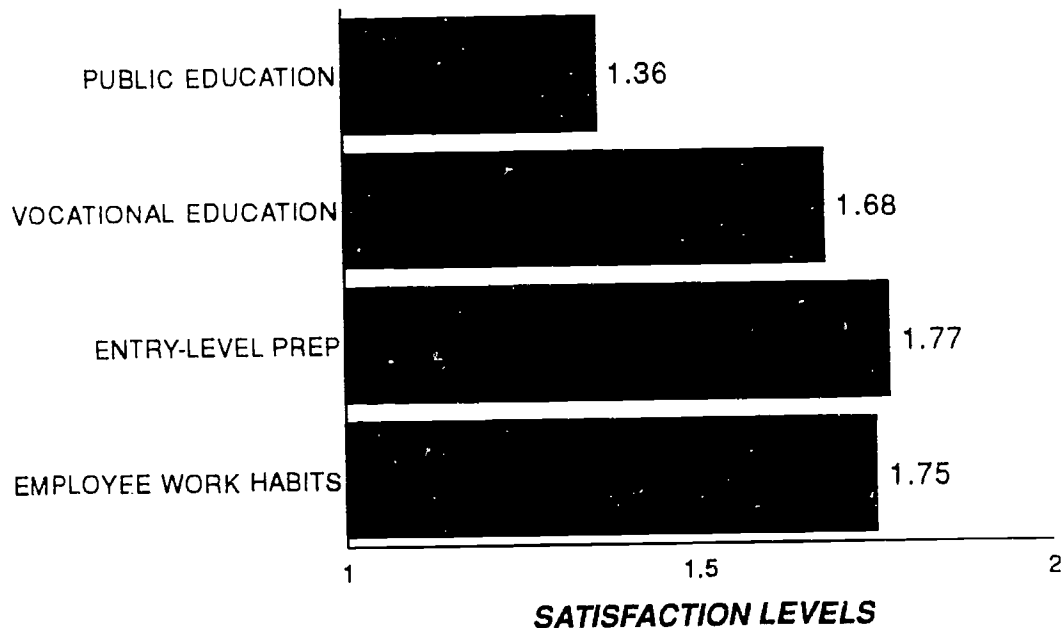
"Applicants need interviewing skills to include proper attire to wear on job interviews, to not bring family members to scheduled interviews, and additional communication skills."

... A Florida Employer

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and work habits of their employees. Figure 29 is a graphic presentation of those four areas and their levels of satisfaction from the patient care assistant opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 29
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

SURVEY QUESTIONS

Question	Satisfaction Level
PUBLIC EDUCATION	1.36
VOCATIONAL EDUCATION	1.68
ENTRY-LEVEL PREP	1.77
EMPLOYEE WORK HABITS	1.75

SATISFACTION LEVELS

2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 29 COMMENTS: Responses indicated that employers were satisfied with vocational education, employee work habits and especially satisfied with entry-level preparation. Patient care assistant employers were dissatisfied concerning public education. These responses are consistent with findings in other sections of the report.
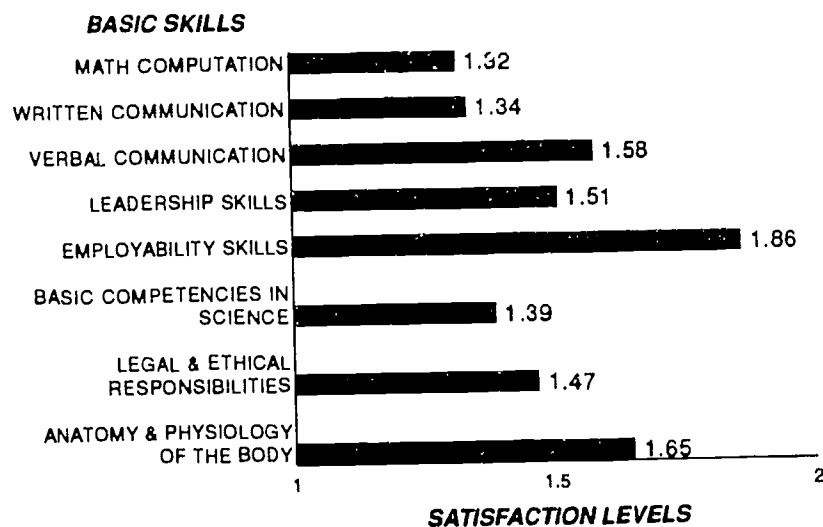
46

51

D. OVERALL OCCUPATIONAL PREPARATION

"New employees would benefit from a great deal more clinical experience. LPN's need at least 6 months - CNA's at least 3 months caring for 10-12 geriatric patients. Both groups need a better understanding of State and Federal regulations and quality assurance."

... A Florida Employer

There were 22 questions within the work force preparation section of the patient care assistant survey. These questions were grouped into two general areas of job-related or technical and basic skills. These included a series of questions reflecting various knowledge or preparation areas contained within the patient care assistant curriculum. These two areas with their specific internal components are displayed graphically in Figures 30, 31, and 32.

1. Basic Skill Areas - The overall satisfaction level for this preparation area was 1.52, or somewhat satisfied. Figure 30 looks at eight basic skills and their respective employer responses.

FIGURE 30
EMPLOYER SATISFACTION LEVELS WITH
INTENDED PROGRAM OUTCOMES

BASIC SKILLS

Skill	Value
MATH COMPUTATION	1.32
WRITTEN COMMUNICATION	1.34
VERBAL COMMUNICATION	1.58
LEADERSHIP SKILLS	1.51
EMPLOYABILITY SKILLS	1.86
BASIC COMPETENCIES IN SCIENCE	1.39
LEGAL & ETHICAL RESPONSIBILITIES	1.47
ANATOMY & PHYSIOLOGY OF THE BODY	1.65

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 30 COMMENTS: A wide range of satisfaction levels is exhibited in this grouping of basic preparation areas. Note the high level of satisfaction with employability skills (1.86) and the high levels of dissatisfaction with math skills (1.32), written communication skills (1.34) and the employee's basic competencies in science (1.39).

47

2. Job-related or Technical Skills

"Patient care technicians need experience in administering hemodialysis treatments. A vo-tech course is needed to teach and train dialysis care personnel.."

... A Florida Employer

The overall score for technical or job related skills was 1.71 or satisfied. This area consisted of 14 technical job skills or activities and are displayed in Figures 31 and 32. Figure 31 shows responses for seven specific skills and their respective employer responses. The overall score for the technical job skills exhibited within Figure 31 was 1.74 or quite satisfied.

FIGURE 31
EMPLOYER SATISFACTION LEVELS WITH
INTENDED PROGRAM OUTCOMES

JOB-RELATED SKILLS

EMERGENCY CARE	1.7
ASEPTIC TECHNIQUES	1.72
COMFORT & SAFETY	1.85
PERSONAL PATIENT CARE	1.93
NURSING PROCEDURES	1.69
NUTRITION	1.58
INFECTION CONTROL	1.68

SATISFACTION LEVELS
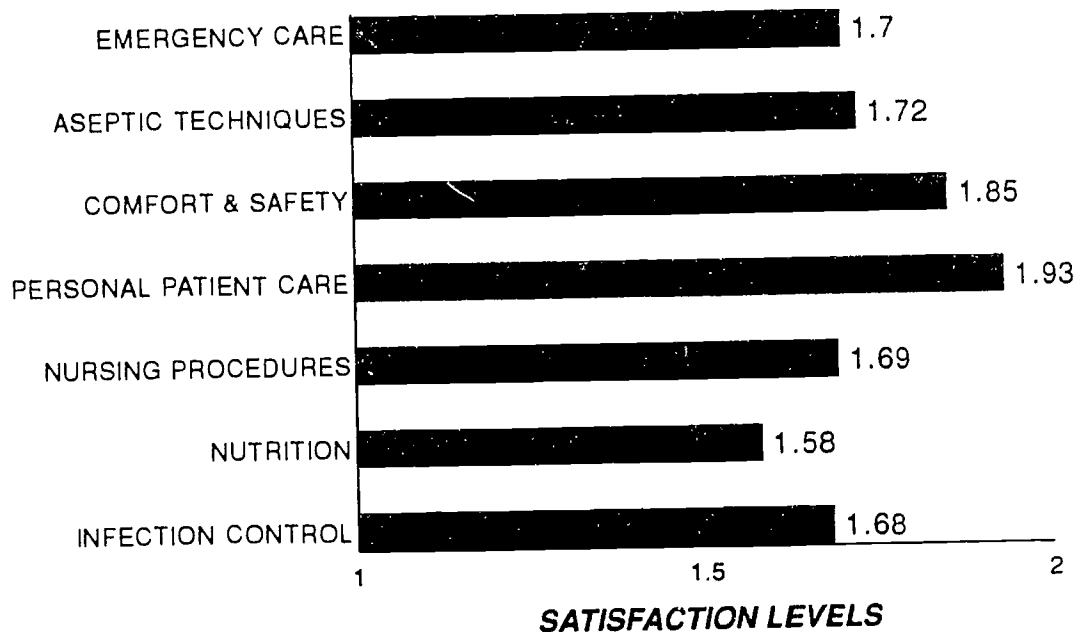
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 31 COMMENTS: All elements in this inquiry area showed comparatively high levels of employer satisfaction. The two highest rated skills: provision of personal patient care (1.93) and physical comfort and safety functions (1.85) are primary functions of a patient care assistant.

48

3. Additional Job related Skills

"Employees need a better understanding of the principles of infection control. They also need to understand their limitations and legal responsibilities and to communicate problems that are outside their responsibilities to nurses."

... A Florida Employer

Figure 32 shows responses for seven job-related skills or procedures associated with the patient care assistant occupational area. The overall score for these seven skills was 1.69 or satisfied.

FIGURE 32
EMPLOYER SATISFACTION LEVELS WITH
INTENDED PROGRAM OUTCOMES

JOB-RELATED SKILLS

2= VERY SATISFIED; 1= VERY DISSATISFIED
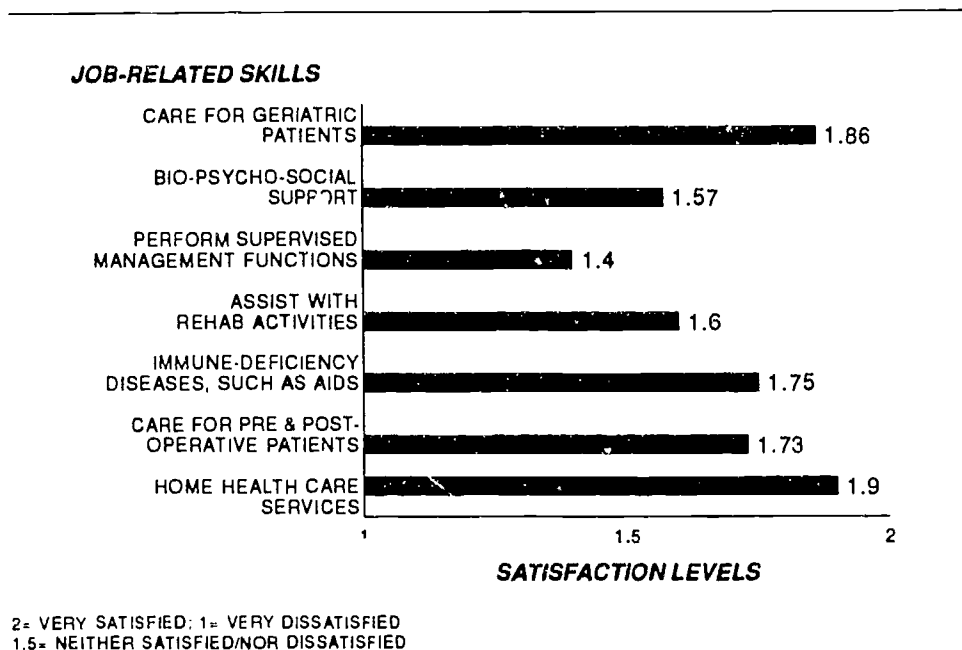1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 32 COMMENTS: Six of the seven elements in this inquiry area showed levels of employer satisfaction. The provision of home health care services (1.90) and care for geriatric patients (1.86) were rated the highest. Only the area of performing supervised management functions (1.40) registered a level of employer dissatisfaction.

49

SECTION X. PARAMEDIC

"Newly trained paramedics appear to be at a loss in "taking charge of the patient." This is a combination of assessment skills, therapeutic skills, and leadership skills!!"

... A Florida Employer

A. RESPONSES

There were 91 paramedic employers identified within the FETPIP data base as having hired a training related completer. Of those, 79% or 72 firms responded to the survey request.

B. HIRING NEEDS

The first inquiry requested that employers identify those industry-related occupations in which they were experiencing difficulty finding qualified applicants. There were twenty-four health occupations listed along with an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as were appropriate. Figure 33 shows those areas where Florida paramedic employer's identified their highest need.

FIGURE 33
EMPLOYER HIRING NEEDS
PARAMEDIC
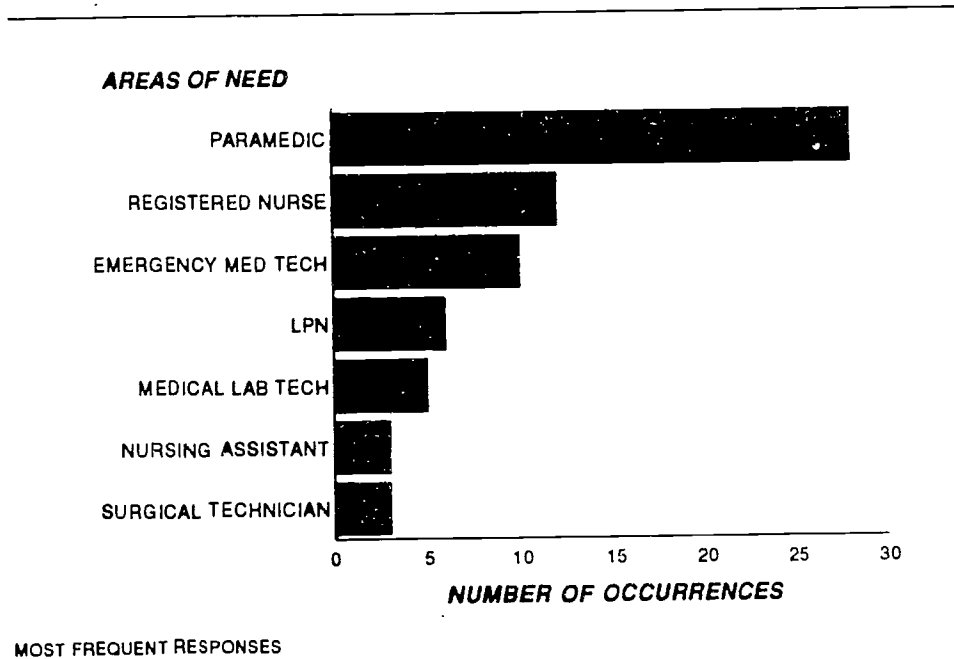

MOST FREQUENT RESPONSES

FIGURE 33 COMMENTS: By far, employers indicated that they were having the most difficulty finding qualified paramedics. All other comments were for various other health field specialists including nurses.

50

C. GENERAL EDUCATION/PREPARATION QUESTIONS

"In my opinion, the emergency medical services field would greatly benefit from earlier orientation of potential students. I have not seen any high school preparation in this area."

... A Florida Employer

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits. Figure 34 is a graphic presentation of those four areas and their calculated levels of satisfaction from the paramedic opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 34
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

SURVEY QUESTIONS

PUBLIC EDUCATION   1.3

VOCATIONAL EDUCATION   1.77

ENTRY-LEVEL PREP   1.81

EMPLOYEE WORK HABITS   1.85

1   1.5   2

SATISFACTION LEVELS
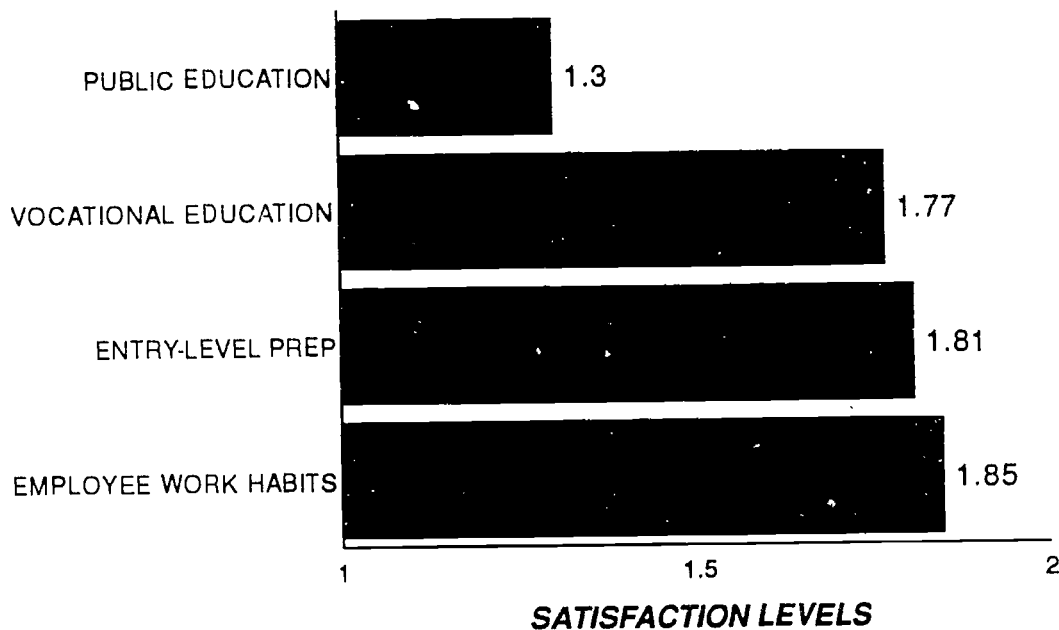
2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 34 COMMENTS: Responses indicated that employers were very satisfied with vocational education (1.77), entry-level preparation (1.81), and with employee work habits (1.85). Employers were dissatisfied with public education (1.31). These results are consistent with other findings within this report.

51

D. OVERALL OCCUPATIONAL PREPARATION

"In addition to the necessary technical skills, employees need interpersonal, team work, and conflict resolution skills."

... A Florida Employer

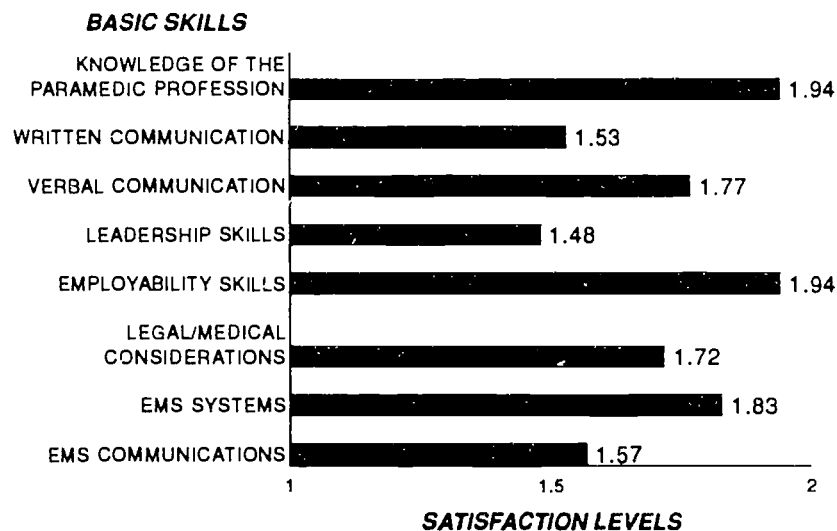There were 34 questions within the work force preparation section of the paramedic survey. These questions were grouped into three general areas of basic skills, job-related skills and the ability to assess and manage various emergencies or duties. Each grouping included a series of elements depicting various knowledge or preparation areas contained within the paramedic curriculum. These three areas with their specific internal components are displayed graphically in Figures 35, 36, 37, and 38.

     1. Basic Skills - The overall satisfaction level for basic skills preparation was 1.72, or satisfied. Figure 35 looks at eight basic skills and their respective employer responses.

FIGURE 35
EMPLOYER SATISFACTION LEVELS
WITH INTENDED PROGRAM OUTCOMES

BASIC SKILLS

Skill	Rating
KNOWLEDGE OF THE PARAMEDIC PROFESSION	1.94
WRITTEN COMMUNICATION	1.53
VERBAL COMMUNICATION	1.77
LEADERSHIP SKILLS	1.48
EMPLOYABILITY SKILLS	1.94
LEGAL/MEDICAL CONSIDERATIONS	1.72
EMS SYSTEMS	1.83
EMS COMMUNICATIONS	1.57

SATISFACTION LEVELS

2= VERY SATISFIED. 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 35 COMMENTS: Employers were satisfied with seven of the eight skill areas in this grouping. Note the very high ratings the employees' knowledge of the paramedic profession (1.94) and employability skills (1.94). Also, note the satisfied ratings for the employees' understanding of emergency medical system systems (1.83) and verbal communication skills (1.77). Only the area of leadership skills (1.48) received a dissatisfied employer response.

52

2. Job-related Skills

"There should be more concentration on the routine daily tasks associated with the EMS operations. More emphasis could be directed to HRS requirements, documentation, and quality assurance."

... A Florida Employer

The overall score for job-related or associated skills was 1.80 or very satisfied. Figure 36 shows responses for eight specific areas associated the duties of a paramedic.

FIGURE 3
EMPLOYER SATISFACTION LEVELS WITH
INTENDED PROGRAM OUTCOMES

JOB-RELATED SKILLS

	Satisfaction Level
RESCUE TECHNIQUES	1.73
USE MEDICAL TERMS	1.89
ADMINISTER MEDICATIONS & PHARMACOLOGY	1.95
MAJOR INCIDENT RESPONSE	1.61
PATIENT ASSESSMENT & INITIAL MANAGEMENT	1.84
IMMUNE-DEFICIENCY DISEASES, SUCH AS AIDS	1.83
MANAGE CAUSES OF STRESS	1.61
MANAGE AIRWAY AND VENTILATION	1.91

1   1.5   2

SATISFACTION LEVELS
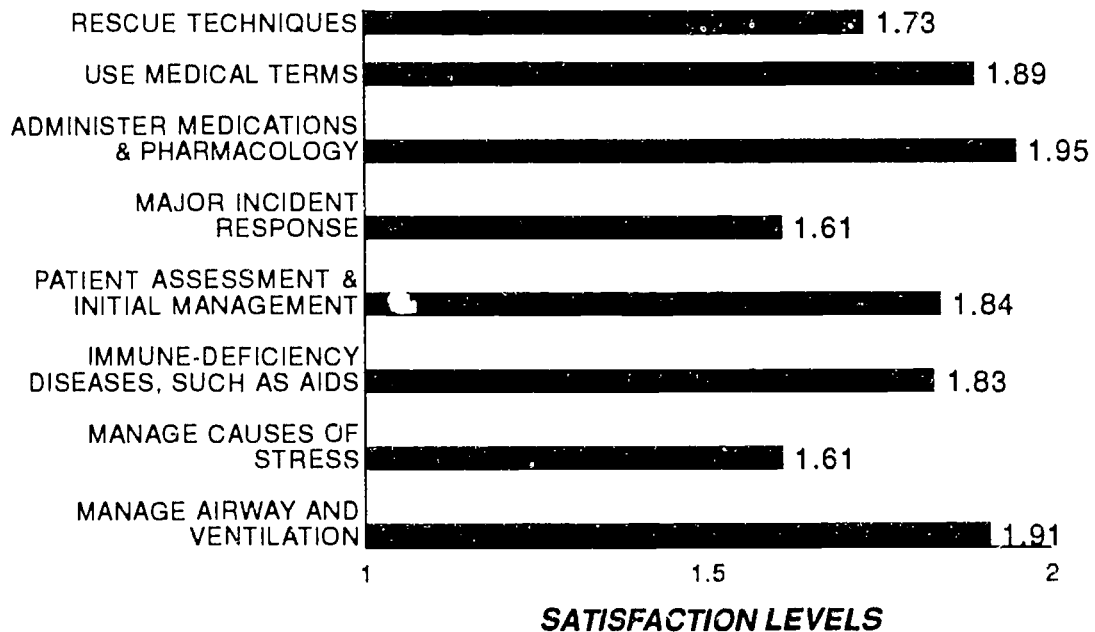
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 36 COMMENTS: All eight job-related skills within this inquiry reflected relatively high levels of employer satisfaction. The employees' knowledge of pharmacology and capability to administer medications (1.95), manage airways and ventilation (1.91), and their use of medical terms (1.89) were rated highest by employers.

58

3. Assessment and Management of Emergencies

"Our new employees could use more hands on skills in rescue techniques and in driving emergency vehicles."
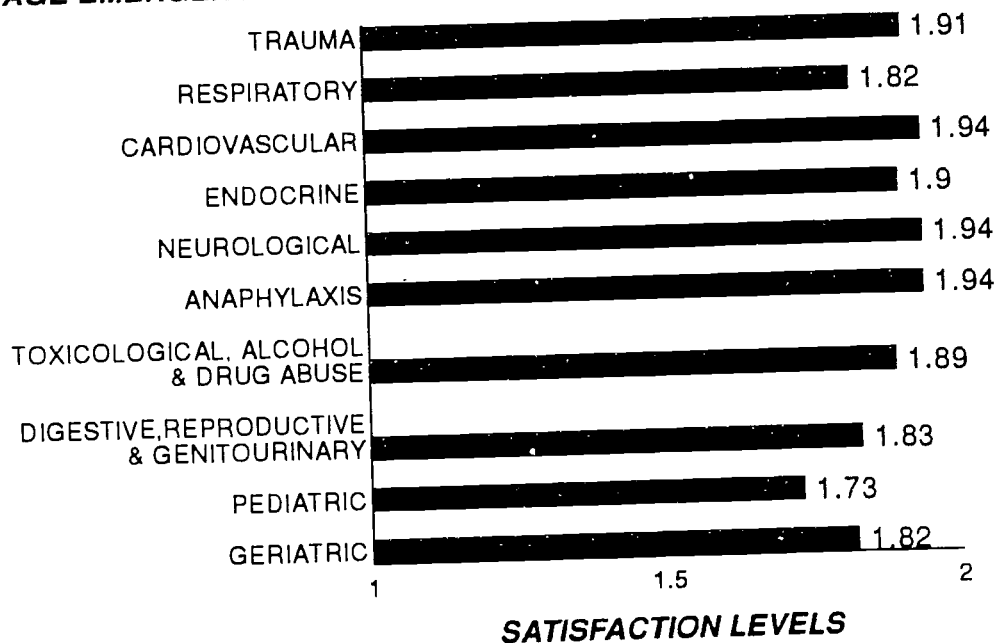
... A Florida Employer

The overall score for this area was 1.88 indicating a high degree of satisfaction with these skills. Figure 37 examines employer responses to this grouping of ten emergency assessment/management areas.

FIGURE 37
EMPLOYER SATISFACTION LEVELS FOR
JOB-RELATED OR TECHNICAL SKILLS

ASSESS/MANAGE EMERGENCIES

Category	Value
TRAUMA	1.91
RESPIRATORY	1.82
CARDIOVASCULAR	1.94
ENDOCRINE	1.9
NEUROLOGICAL	1.94
ANAPHYLAXIS	1.94
TOXICOLOGICAL, ALCOHOL & DRUG ABUSE	1.89
DIGESTIVE,REPRODUCTIVE & GENITOURINARY	1.83
PEDIATRIC	1.73
GERIATRIC	1.82

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 37 COMMENTS: All areas within this section reflected a very high level of employer satisfaction. The areas of the employees' capability to manage and assess cardiovascular (1.94), neurological (1.94), and anaphylaxis (1.94) emergencies scored the highest levels of employer satisfaction. Other areas where employers rated their employee's ability highly were the management of respiratory emergencies (1.82), trauma (1.91), endocrine emergencies (1.90). This inquiry area rated the highest of all district/ community college program areas.
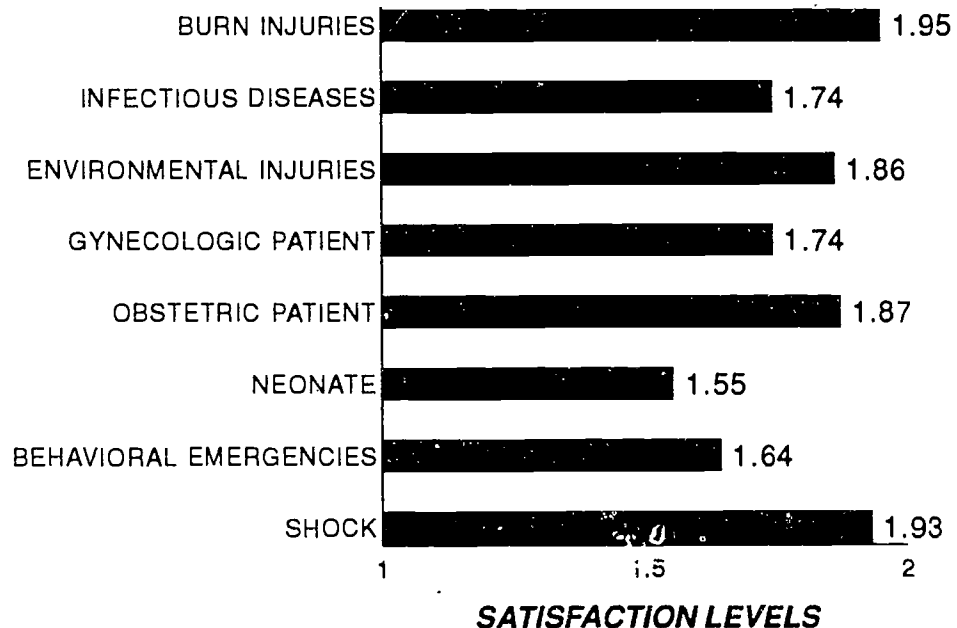
54

4. Additional Assessment/Management Areas

"Other areas employees could benefit from additional training would be pediatrics, venipuncture, emergency driving techniques, and human/public relation skills.

... A Florida Employer

The overall score for this area was 1.79 or very satisfied with these skills. Figure 38 examines employer responses to eight additional assessment/management skills.

FIGURE 38
EMPLOYER SATISFACTION LEVELS WITH
JOB-RELATED OR TECHNICAL SKILLS

ASSESSMENT AND MANAGEMENT OF

BURN INJURIES	1.95
INFECTIOUS DISEASES	1.74
ENVIRONMENTAL INJURIES	1.86
GYNECOLOGIC PATIENT	1.74
OBSTETRIC PATIENT	1.87
NEONATE	1.55
BEHAVIORAL EMERGENCIES	1.64
SHOCK	1.93

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 38 COMMENTS: Again, no area within this section reflected a level of employer dissatisfaction. The employees' ability to deal with burn injuries (1.95), shock (1.93), and environmental injuries (1.86) received the highest employer ratings within this inquiry area.

55

SECTION XI. ARCHITECTURE

"In architecture an employee needs a better understanding of problem solving. The individual does not necessarily need to know the answer but how to go about getting it on their own!!!"

... A Florida Employer

A. BACKGROUND/RESPONSES

Two survey types were utilized within each University discipline area. Half of the employers received a general survey (33), similar to one used in prior years activities with District / Community College program areas, and the other half (33) received a specific survey, designed from requirements foi architecture examination outlined in Florida Statutes 481 Pt. 1, Chapter 21B-14, Florida Board of Architecture and Interior Design .

There were 66 Architecture employers identified as having hired a training related graduate. Of those, 76% or 50 firms (23:General, 27:Specific) responded to the survey request.

B. HIRING NEEDS

This first inquiry requested that employers identify those job categories in which they were experiencing difficulties in finding qualified applicants. There were ten categories along with one for "no difficulty" listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as were appropriate. Figure 39 shows those occupational areas where architecture employers identified their highest need.

FIGURE 39
EMPLOYER HIRING NEEDS
ARCHITECTURE

AREAS OF NEED

NUMBER OF OCCURRENCES

MOST FREQUENT RESPONSES
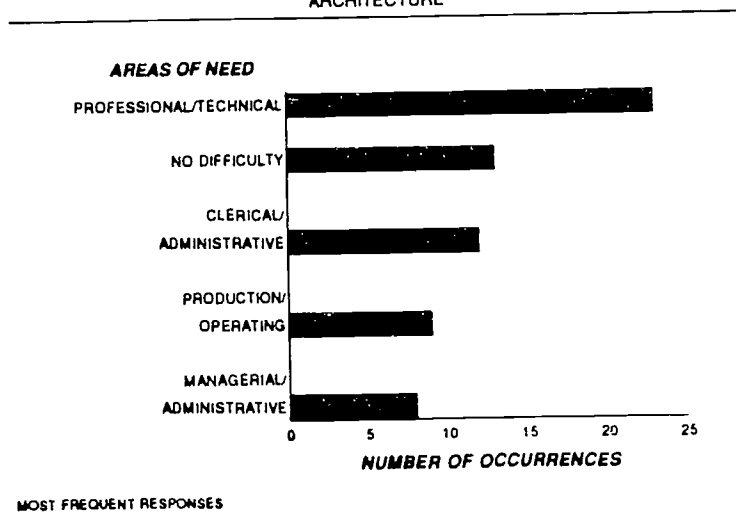
FIGURE 39 COMMENTS: Employers indicated that they were having the most difficulty finding qualified applicants within the professional/technical occupational area. The occupations most mentioned within this area were project architects and project managers. The next highest response category chosen was "No Difficulty". In the comment section for this inquiry the most frequently mentioned needs were for the architects to have: computerized assisted drawing (CADD) skills, sound marketing and technical skills, and business and accounting skills.

61

C. GENERAL EDUCATION/PREPARATION QUESTIONS

"An architects development still requires an "apprentice" period!!"

<div align="right">... A Florida Employer</div>

Every survey asked employers to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits. Figure 40 is a graphic presentation of those four areas and their calculated levels of satis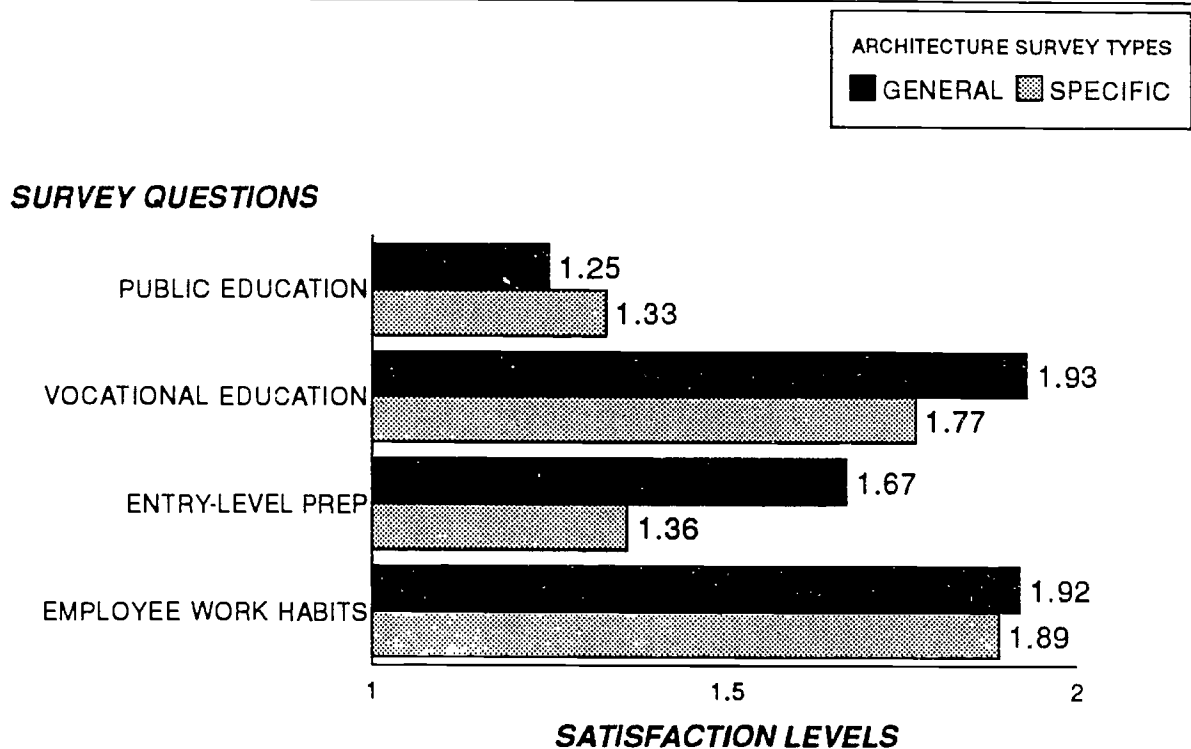faction for both the general and specific architecture opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 40
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

ARCHITECTURE SURVEY TYPES
■ GENERAL ▨ SPECIFIC

SURVEY QUESTIONS

PUBLIC EDUCATION 1.25 / 1.33

VOCATIONAL EDUCATION 1.93 / 1.77

ENTRY-LEVEL PREP 1.67 / 1.36

EMPLOYEE WORK HABITS 1.92 / 1.89

1   1.5   2

SATISFACTION LEVELS

2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 40 COMMENTS: Responses to both the general and the specific survey indicated that employers were satisfied with vocational education, and with employee work habits. Each survey type also reflected that employers were dissatisfied with public education. These results are consistent with other findings within this report. Note that there is a contradiction between general and specific survey responses concerning employee entry-level preparation. Specific survey employers were dissatisfied (1.36) with this area while general survey (1.67) responses reflected satisfaction with the entry-level preparation of their employees.

D. OVERALL OCCUPATIONAL PREPARATION

"Reading-Writing-Spelling-Grammar; Its hard to believe but we find Florida college graduates are weak in professional writing and technical writing and speaking. Also, I suspect you are producing too many graduates and suggest following-up on current grads before expanding capacity!!!"
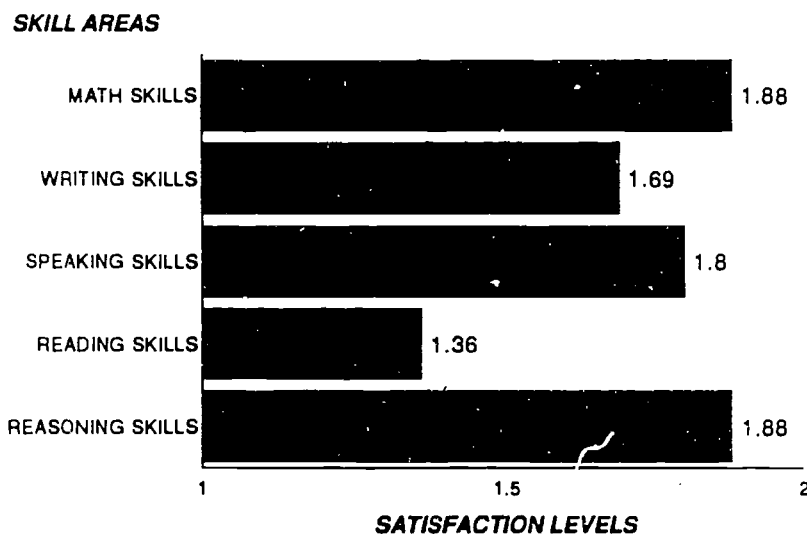
... A   Florida   Employer

Part C, Overall Occupational Preparation, consisted of 13 questions on the general and 17 questions on the specific architecture opinion survey. These questions were grouped into two areas: basic skills and job-related or technical skills. The general survey was structured similarly to prior year surveys and contained the same elements for each university discipline. The specific architecture survey items were extracted from the architecture examination required for licensure in Florida. These two areas with their specific internal components for both the general and specific architecture surveys are displayed graphically in Figures 41, 42, 43, 44, and 45.

1. **Basic Skills** - The overall satisfaction level for basic skills preparation was 1.65, or satisfied. Figure 41 looks at five basic skills from the general survey and their respective employer responses. Figure 42 looks at five basic skills from the specific architecture survey and the employer responses.

a. General Survey

FIGURE 41
BASIC SKILLS
GENERAL SURVEY - ARCHITECTURE

SKILL AREAS

Skill	Satisfaction Level
MATH SKILLS	1.88
WRITING SKILLS	1.69
SPEAKING SKILLS	1.8
READING SKILLS	1.36
REASONING SKILLS	1.88

SATISFACTION LEVELS

2= VERY SATISFIED 1= VERY DISSATISFIED
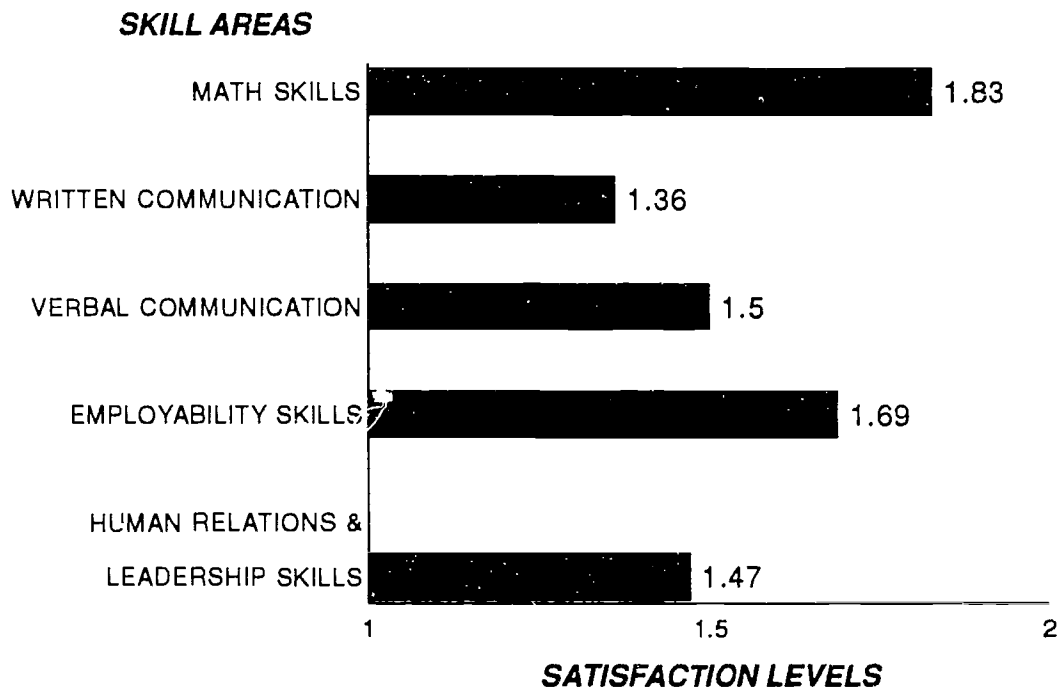1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURES 41 COMMENTS: Employers from the general survey were satisfied with four of the five basic skills listed. Employers were quite satisfied with their employees' math, speaking, and reasoning skills and less satisfied with writing skills. General survey employers were dissatisfied with their employees' reading skills.

58

b. Specific Survey

"Employees need time management skills, marketing techniques and the ability to "listen" to subcontractors ideas."

... A Florida Employer

FIGURE 42
BASIC SKILLS
SPECIFIC SURVEY - ARCHITECTURE

SKILL AREAS

Skill	Value
MATH SKILLS	1.83
WRITTEN COMMUNICATION	1.36
VERBAL COMMUNICATION	1.5
EMPLOYABILITY SKILLS	1.69
HUMAN RELATIONS & LEADERSHIP SKILLS	1.47

Axis: 1   1.5   2

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 42 COMMENTS: Specific survey employers were satisfied with two of the five basic skills listed. Employers were more satisfied with employee math skills than with their employability skills. Employers were dissatisfied with their employees' written communication skills and their human relations and leadership skills.

59

GENERAL & SPECIFIC SURVEY BASIC SKILL COMPARISONS: Three survey items were common to both surveys. Employers were quite satisfied with employee math skills on both surveys. General survey employers were quite satisfied with employee speaking skills while specific survey employers were moderately satisfied with their verbal communication skills. Note the different employer responses concerning employee writing skills where general survey respondents reflected moderate satisfaction while specific survey responses were the opposite-dissatisfied.
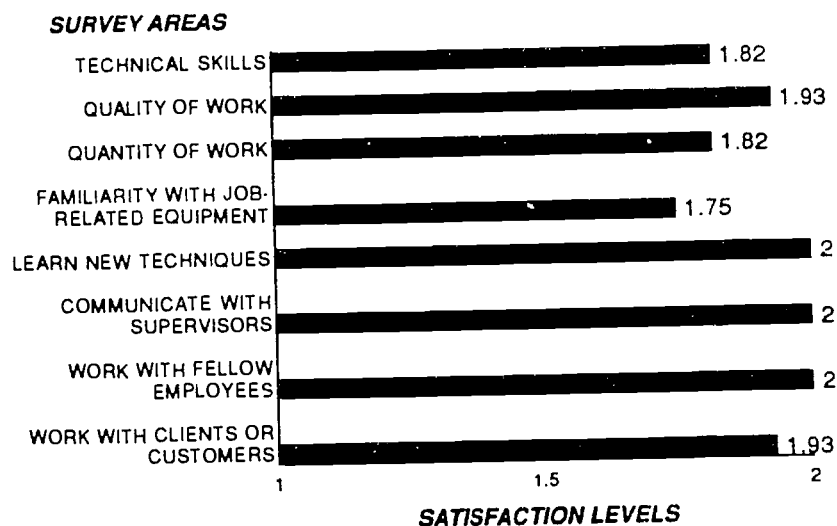
2. Job-related Skills

"Employees need more technical skills and less lip service!!!!"

...A Florida Employer

The overall score for job-related and associated skills was 1.75 or very satisfied. Figure 43 shows responses for the eight general survey job-related skills. Figures 44 and 45 show specific survey employer responses for eleven licensure exam job-related skills.

> **a. General Survey** - The overall score for general survey job-related skills was 1.91 or very satisfied.

FIGURE 43
JOB-RELATED OR TECHNICAL SKILLS
GENERAL SURVEY - ARCHITECTURE

SURVEY AREAS

Survey Area	Value
TECHNICAL SKILLS	1.82
QUALITY OF WORK	1.93
QUANTITY OF WORK	1.82
FAMILIARITY WITH JOB-RELATED EQUIPMENT	1.75
LEARN NEW TECHNIQUES	2
COMMUNICATE WITH SUPERVISORS	2
WORK WITH FELLOW EMPLOYEES	2
WORK WITH CLIENTS OR CUSTOMERS	1.93

SATISFACTION LEVELS

2= VERY SATISFIED. 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 43 COMMENTS: All eight job-related skills within this inquiry reflected very high levels of employer satisfaction. Three skill areas within this inquiry: 1) the employees' ability to learn techniques, 2) their ability to communicate with their supervisors, and 3) their ability to work with fellow employees did not receive any dissatisfied employer responses.

60

b. Specific Survey- The overall score for specific survey job-related skills was 1.51 or slightly satisfied.

"We need project managers and project architects with exceptional computer aided drafting skills."

... A Florida Employer

FIGURE 44
JOB-RELATED OR TECHNICAL SKILLS
SPECIFIC SURVEY - ARCHITECTURE

SURVEY AREAS

SATISFACTION LEVELS
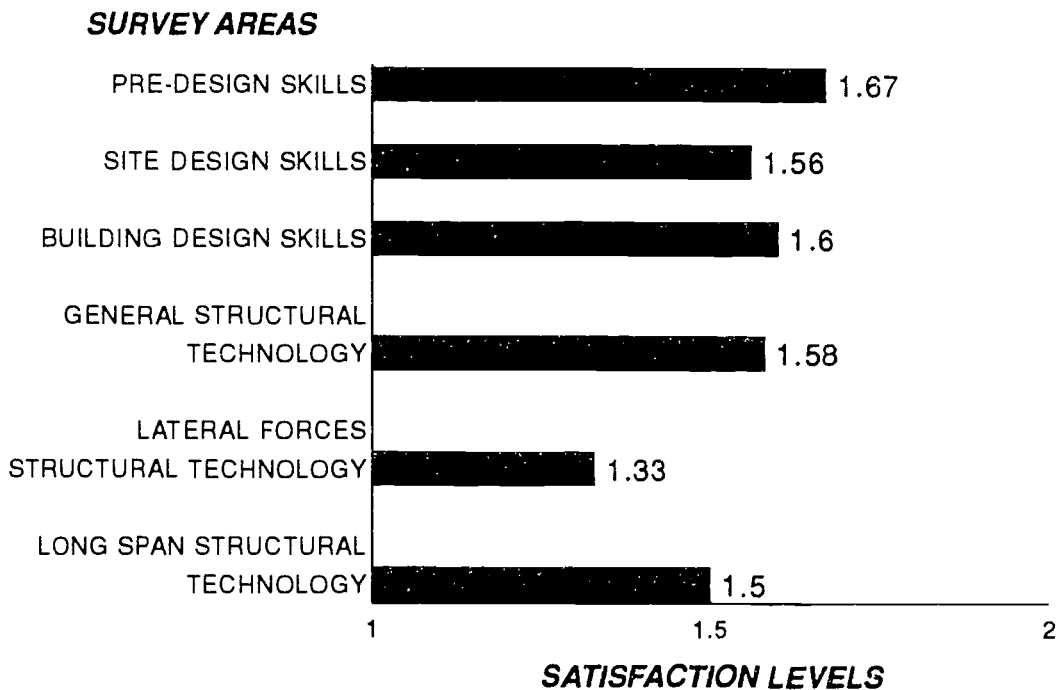
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 45
JOB-RELATED OR TECHNICAL SKILLS
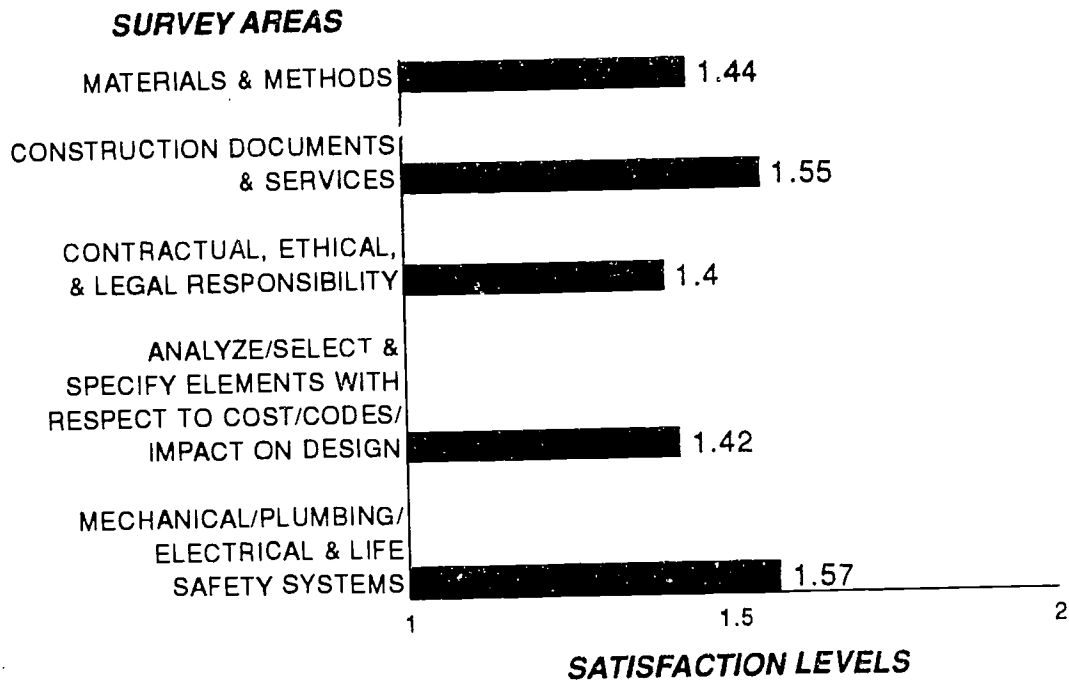### SPECIFIC SURVEY - ARCHITECTURE

SURVEY AREAS

MATERIALS & METHODS — 1.44

CONSTRUCTION DOCUMENTS & SERVICES — 1.55

CONTRACTUAL, ETHICAL, & LEGAL RESPONSIBILITY — 1.4

ANALYZE/SELECT & SPECIFY ELEMENTS WITH RESPECT TO COST/CODES/ IMPACT ON DESIGN — 1.42

MECHANICAL/PLUMBING/ ELECTRICAL & LIFE SAFETY SYSTEMS — 1.57

1   1.5   2

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 44 & 45 COMMENTS: Specific survey employers were satisfied with six of the eleven specific job-related or technical skills. They were particularly dissatisfied with their employees' knowledge of lateral forces structural technology (1.33) and their ability to identify, analyze, evaluate, and specify appropriate building materials, building systems, and hardware and their methods of installation (1.44). They were also dissatisfied with their understanding of contractual, ethical, and legal relationships and responsibilities (1.40) and of construction management procedures relative to control quality, time, and cost and with their ability to analyze, select, and specify various components with respect to cost, building codes, and their impact on architectural design (1.42).

OVERALL JOB-RELATED SKILL COMMENTS: Note the considerably lower employer satisfaction ratings between the general and specific survey employers. The specific survey employers were less satisfied with many specific architectural duties. This architecture program area is the only area to reflect differences between the general and specific surveys. In their responses, employers of the architectural graduates maybe saying that as general employees, they are adequate (general survey responses); but as architects, there are some areas in which they could be strengthened (specific survey responses).

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SECTION XII. LIBRARY SCIENCE

"The graduate and undergraduate programs are not placing enough emphasis on emerging technologies utilized in the school setting. The competencies expressed in this survey represent only a portion of the competencies required of an entry-level librarian or library media specialist."

... A Florida Employer

A. BACKGROUND/RESPONSES

Two survey types were utilized for each University degree area. Half of the employers (28) received a general survey, similar to one used in prior years activities with District/ Community College program areas. The other half (27) received a specific survey, designed from a Dictionary of Occupational Titles job description.

There were 55 Library Science employers identified as having hired a graduate in a related job. Of those, 80% or 44 (21:General,23:Specific) firms responded to the survey request.

B. HIRING NEEDS

This first inquiry requested that employers identify those job categories in which they were experiencing difficulties in finding qualified applicants. There were ten categories listed, along with one for "no difficulty" and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as were appropriate. Figure 46 shows the occupational areas where library science employers identified their highest need.

FIGURE 46
EMPLOYER HIRING NEEDS
LIBRARY SCIENCE

AREAS OF NEED

MOST FREQUENT RESPONSES
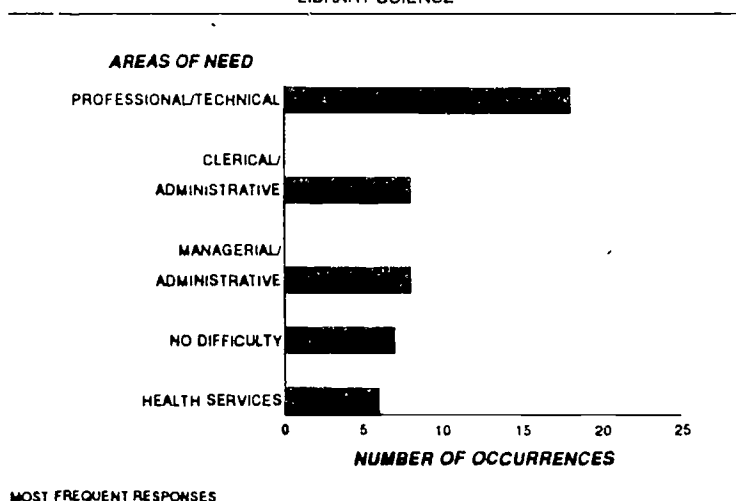
FIGURE 46 COMMENTS: By far, employers indicated that they were having the most difficulty finding qualified applicants within the professional/technical occupational area. The next highest response categories chosen were clerical and managerial administrative positions. The highest concentration of employers having hired library science program completers were city and county municipalities. This is why many respondents identified needs for health services workers and others not associated with library science. The most mentioned items within the additional comments section of hiring needs were their need for minority candidates and wastewater treatment operators.

C. GENERAL EDUCATION/PREPARATION QUESTIONS

"Although librarian is a profession as opposed to a vocation, library schools would do well to teach customer service skills- both patron and in-house. Also expose the student to realistic expectations as to what librarians do- which is everything!!!"
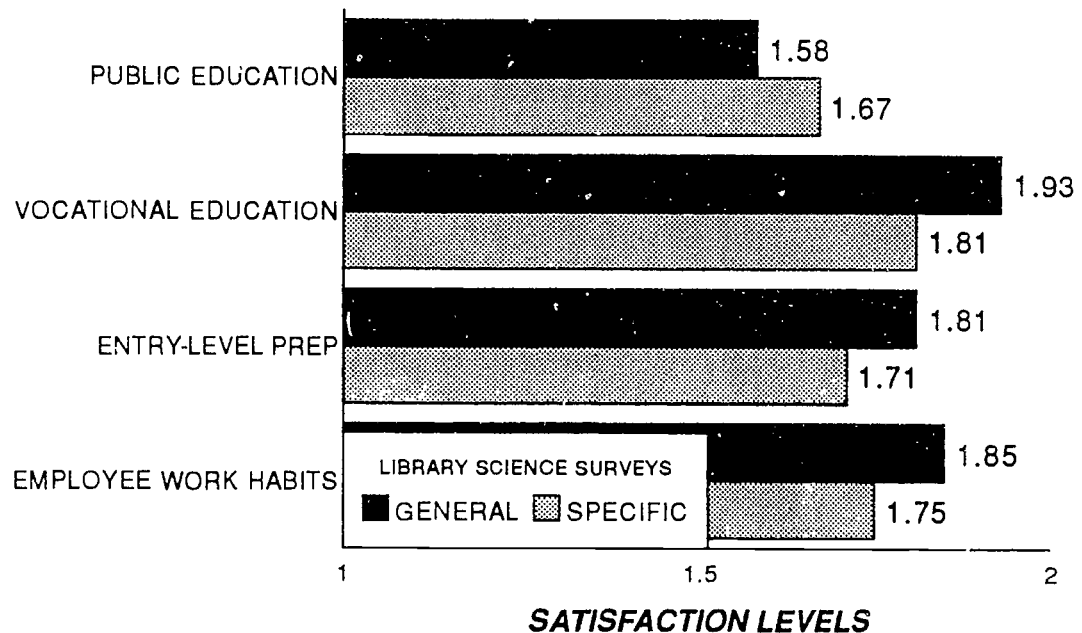
... A Florida Employer

Each survey asked employers to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits. Figure 47 is a graphic presentation of those four areas and their calculated levels of satisfaction for both the general and specific library science opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 47
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

SURVEY QUESTIONS

Survey Question	General	Specific
PUBLIC EDUCATION	1.58	1.67
VOCATIONAL EDUCATION	1.93	1.81
ENTRY-LEVEL PREP	1.81	1.71
EMPLOYEE WORK HABITS	1.85	1.75

LIBRARY SCIENCE SURVEYS
■ GENERAL ▨ SPECIFIC

1   1.5   2

SATISFACTION LEVELS

2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 47 COMMENTS: Responses to both the general and the specific survey indicated that employers were satisfied with vocational education, entry-level preparation, and with employee work habits. Please note that each survey type reflected that employers were satisfied with public education. This is the only employer group that reflected satisfaction with public education.

64

D. OVERALL OCCUPATIONAL PREPARATION

"The librarian must emerge from the traditional roles thought of for a librarian or media specialist. Management and utilization of technology such as television, the production of instructional media, computers, cd-rom, and laser discs currently can comprise 50% of the specialist's time. Well-trained and articulate professionals are a must in today's modern library."
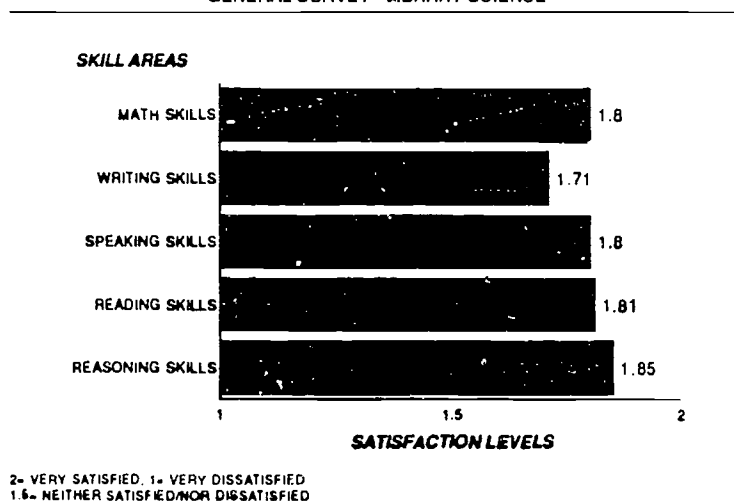
... A   Florida   Employer

Part C, Overall Occupational Preparation, consisted of 13 questions on the general and 17 questions on the specific library science opinion survey. These questions were grouped into two areas, basic skills and job-related or technical skills. The general survey was structured like prior year surveys and contained the same elements for each university discipline. The specific library science survey items were extracted from examples of job duties within a Dictionary of Occupational Titles job description. These two areas with their specific internal components for both the general and specific library science surveys are displayed graphically in Figures 48, 49, 50, 51, and 52.

1. **Basic Skills** - The overall satisfaction level for basic skills preparation was 1.83, or very satisfied. Figure 48 looks at five basic skills from the general survey and their respective employer responses. Figure 49 looks at four basic skills from the specific library science survey and the employer responses.

a. **General Survey**- The overall score for general survey basic skills was 1.79 or very satisfied.

FIGURE 48
BASIC SKILLS
GENERAL SURVEY - LIBRARY SCIENCE

SKILL AREAS

SKILL	VALUE
MATH SKILLS	1.8
WRITING SKILLS	1.71
SPEAKING SKILLS	1.8
READING SKILLS	1.81
REASONING SKILLS	1.85

SATISFACTION LEVELS

2- VERY SATISFIED, 1- VERY DISSATISFIED
1.5- NEITHER SATISFIED/NOR DISSATISFIED

FIGURES 48 COMMENTS: Employers from the general survey were satisfied with all five basic skills listed. Employers were very satisfied with their employees' math, speaking, and reasoning skills and somewhat less satisfied with writing skills. Contrary to results described elsewhere within this report and prior years findings library science employers were quite satisfied with their employees' writing and reading skills.

65

b. Specific Survey - The overall score for specific survey basic skills
was 1.87 or very satisfied.

FIGURE 49
BASIC SKILLS
SPECIFIC SURVEY - LIBRARY SCIENCE

SKILL AREAS
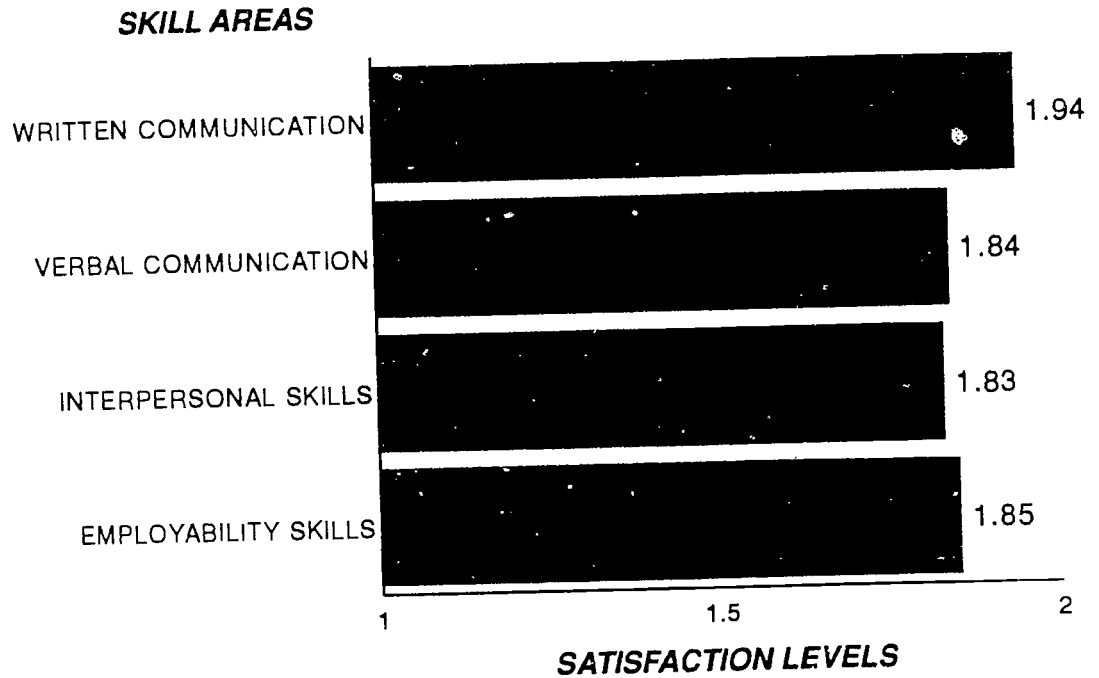
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 49 COMMENTS: Specific survey employers were very satisfied with all four basic
skills listed. Employers were most satisfied with their employees' written communication skills.

GENERAL & SPECIFIC SURVEY BASIC SKILL COMPARISONS: Two survey items
were on both surveys. General and specific survey employers were very satisfied with employee
speaking/verbal communication skills and satisfied their writing/written communication skills.
Overall library science employers were very satisfied with employee basic skills.
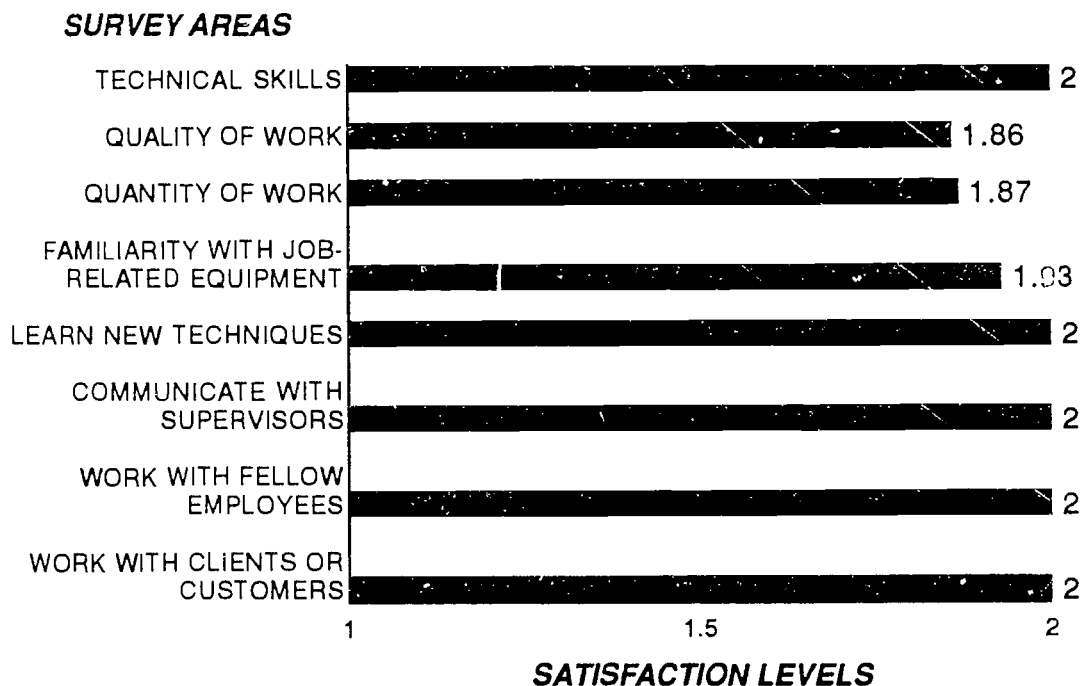
66

71

2. Job-related Skills

"As a small library, skills such as on-line data searching capabilities and a knowledge of low-cost or better yet "free" software to assist with the automation of our library would be great."

<div align="right">... A Florida Employer</div>

The overall score for job-related and associated skills was 1.95 or very satisfied. Figure 50 shows responses for the eight general survey job-related skills. Figures 51 and 52 show specific survey employer responses for thirteen job-related skills.

> **a. General Survey -** The overall score for general survey job-related skills was 1.96 or very satisfied.

FIGURE 50
JOB-RELATED OR TECHNICAL SKILLS
GENERAL SURVEY - LIBRARY SCIENCE

SURVEY AREAS

Survey Area	Score
TECHNICAL SKILLS	2
QUALITY OF WORK	1.86
QUANTITY OF WORK	1.87
FAMILIARITY WITH JOB-RELATED EQUIPMENT	1.93
LEARN NEW TECHNIQUES	2
COMMUNICATE WITH SUPERVISORS	2
WORK WITH FELLOW EMPLOYEES	2
WORK WITH CLIENTS OR CUSTOMERS	2

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 50 COMMENTS: All eight job related skills within this inquiry reflected very high levels of employer satisfaction. Five skill areas within this inquiry: 1) overall technical skills, 2) the employees' ability to learn techniques, 3) their ability to communicate with their supervisors, 4) their ability to work with fellow employees, and 5) their ability to work with clients or customers did not receive any dissatisfied employer responses.

<div align="center">67   72</div>

b. Specific Survey- The overall score for specific survey job-related skills was 1.95 or very satisfied.

FIGURE 51
JOB·RELATED OR TECHNICAL SKILLS
SPECIFIC SURVEY - LIBRARY SCIENCE
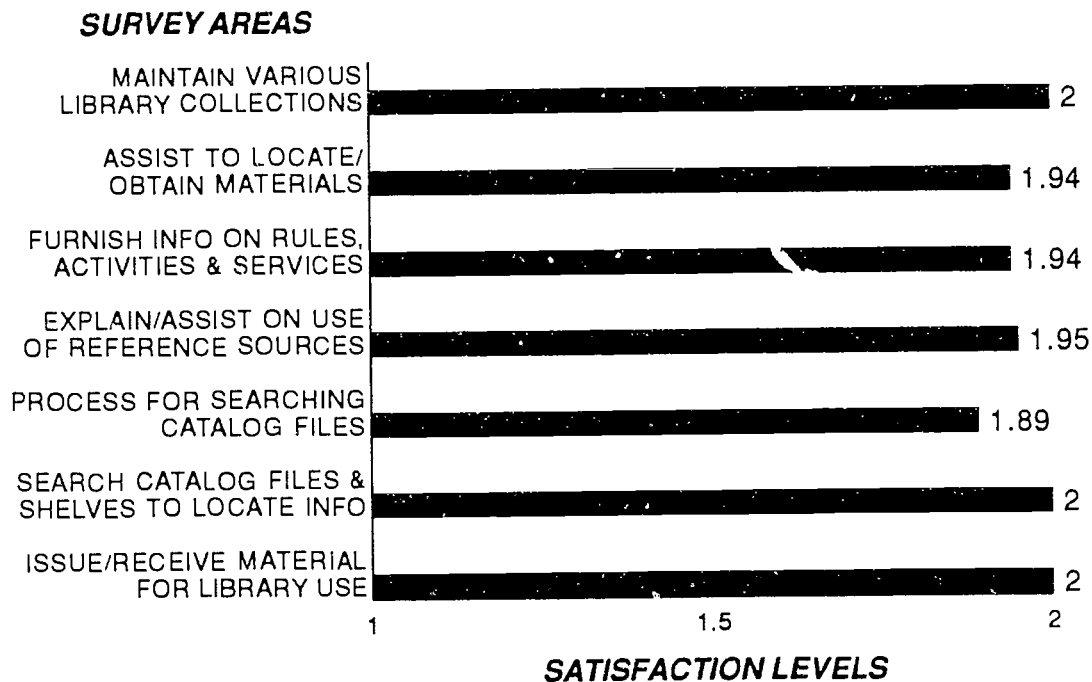
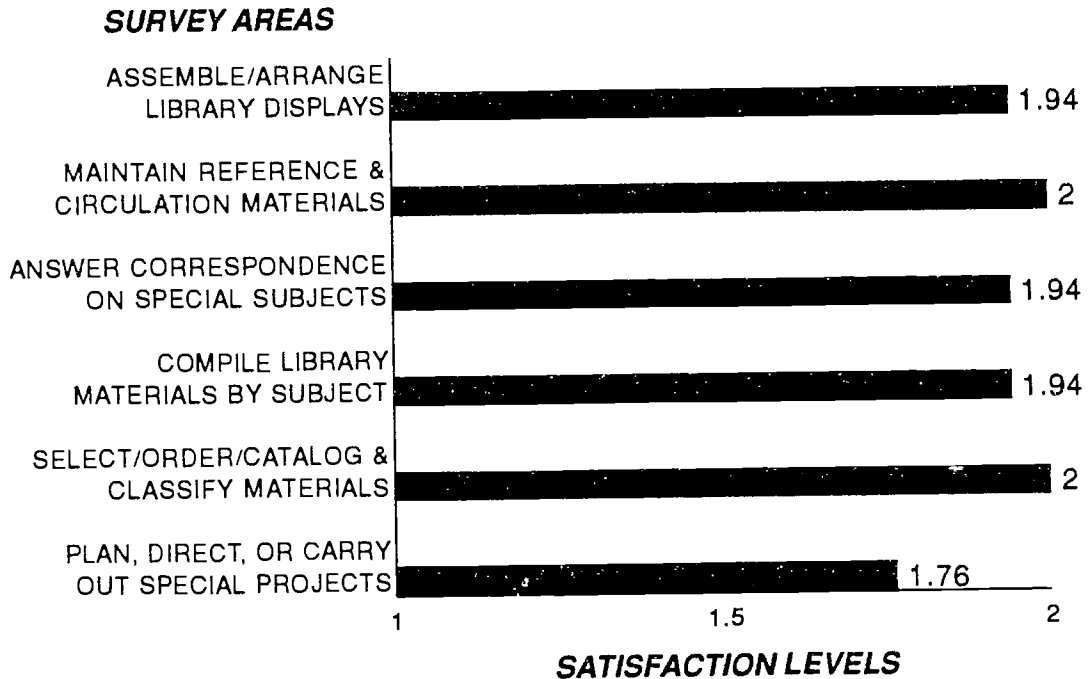**SURVEY AREAS**

2= VERY SATISFIED: 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

73

FIGURE 52
JOB-RELATED OR TECHNICAL SKILLS
SPECIFIC SURVEY - LIBRARY SCIENCE

SURVEY AREAS

Horizontal bar chart of SATISFACTION LEVELS (x-axis from 1 to 2):

- ASSEMBLE/ARRANGE LIBRARY DISPLAYS — 1.94
- MAINTAIN REFERENCE & CIRCULATION MATERIALS — 2
- ANSWER CORRESPONDENCE ON SPECIAL SUBJECTS — 1.94
- COMPILE LIBRARY MATERIALS BY SUBJECT — 1.94
- SELECT/ORDER/CATALOG & CLASSIFY MATERIALS — 2
- PLAN, DIRECT, OR CARRY OUT SPECIAL PROJECTS — 1.76

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 51 & 52 COMMENTS: Specific survey employers were very satisfied with all thirteen of the specific job-related or technical skills. Five of these skills: 1) the employees' ability to maintain library collections of books, serial publications, documents, audiovisuals, and other materials, 2) to search catalog files and shelves to locate information, 3) to issue and receive materials for circulation or for use in the library, 4) maintain reference and circulation materials, and 5) select, order, catalog, and classify materials did not receive any dissatisfied employer responses. The lowest level of satisfaction was directed at the ability to plan, direct, or carryout special projects.

OVERALL JOB-RELATED SKILL COMMENTS: Employers were very satisfied with all survey items on both the general and specific library science surveys.

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SECTION XIII. PHARMACY

"Many students have problems doing the day to day work. They sometimes have almost an elitist work ethic. Some students, on the other hand, are excellent."

... A Florida Employer

A. BACKGROUND/RESPONSES

Two survey types were utilized for each University discipline. Half of the employers (22) received a general survey, similar to one used in prior years activities with District/ Community College program areas. The other half (23) receive a specific survey, designed from requirements for licensure as a pharmacist in Florida.

There were 45 Pharmacy employers identified as having hired a training-related graduate. Of those, 69% or 31 (14:General,17:Specific) firms responded to the survey request.

B. HIRING NEEDS

This first inquiry requested that employers identify those job categories in which they were experiencing difficulties in finding qualified applicants. There were ten categories along with one for "no difficulty" listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as were appropriate. Figure 53 shows those occupational areas where pharmacy employers identified their highest need.

FIGURE 53
EMPLOYER HIRING NEEDS
PHARMACY

AREAS OF NEED

NUMBER OF OCCURRENCES
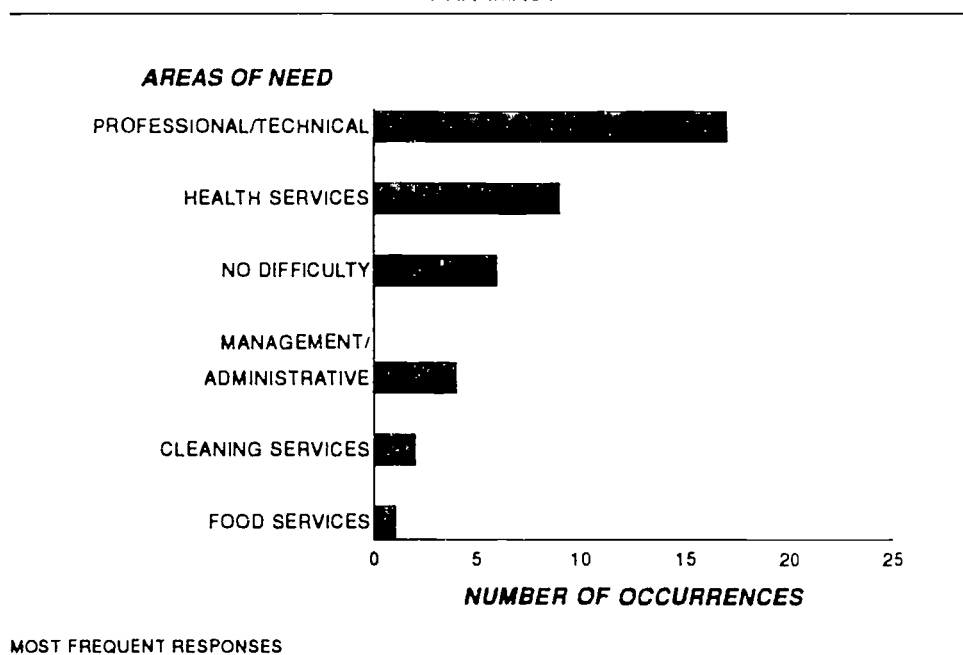
MOST FREQUENT RESPONSES

FIGURE 53 COMMENTS: By far, employers indicated that they were having the most difficulty finding qualified applicants within the professional/technical occupational area. The next highest response category chosen was health services. In the comment section for this inquiry the most mentioned needs were for physical, speech, and occupational therapists.

70

C. GENERAL EDUCATION/PREPARATION QUESTIONS

"Employees should be able to reason. think, and spell!!!"

... A Florida Employer

Each survey type asked employers to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits. Figure 54 is a graphic presentation of those four areas and their calculated levels of satisfaction for both the general and specific pharmacy opinion surveys. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 54
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS

SURVEY QUESTIONS

SATISFACTION LEVELS
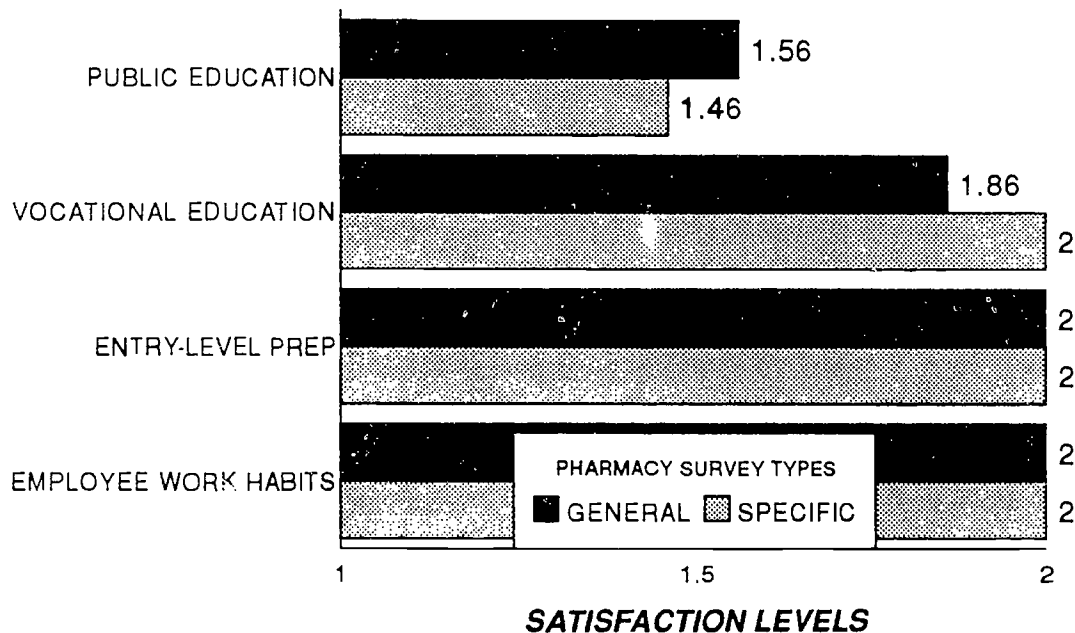
2= VERY SATISFIED: 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 54 COMMENTS: Responses to both the general and the specific survey indicated that employers were very satisfied with vocational education, entry-level preparation, and with employee work habits. Specific survey responses reflected dissatisfaction with public education. There were no dissatisfied responses for either survey type concerning their employees' entry-level preparation or work habits.

71

7⌣

D. OVERALL OCCUPATIONAL PREPARATION

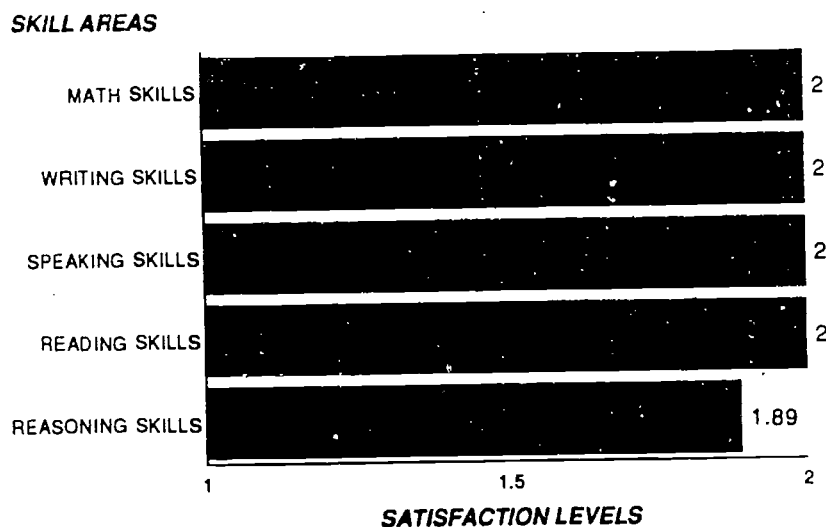**"New pharmacists need additional managerial skills in the area of budgeting for instance."**

... A Florida Employer

Part C, Overall Occupational Preparation consisted of 13 questions on the general and 12 questions on the specific pharmacy opinion survey. These questions were grouped into two areas: basic skills and job related or technical skills. The general survey was structured from prior year surveys and contained the same elements for each university degree area. The specific pharmacy survey items were extracted from the pharmacy licensure exam required for licensure in Florida. These areas with their specific internal components for the general and specific pharmacy surveys are displayed graphically in Figures 55, 56, 57, and 58.

1. Basic Skills - The overall satisfaction level for basic skills preparation was 1.93, or very satisfied. Figure 55 looks at five basic skills from the general survey and their respective employer responses. Figure 56 looks at four basic skills from the specific pharmacy survey and the employer responses.

a. General Survey he overall score for general survey basic skills was 1.98 or very sat ..ied.

FIGURE 55
BASIC SKILLS
GENERAL SURVEY - PHARMACY

SKILL AREAS

MATH SKILLS	2
WRITING SKILLS	2
SPEAKING SKILLS	2
READING SKILLS	2
REASONING SKILLS	1.89

1   1.5   2

SATISFACTION LEVELS

2= VERY SATISFIED, 1= VERY DISSATISFIED
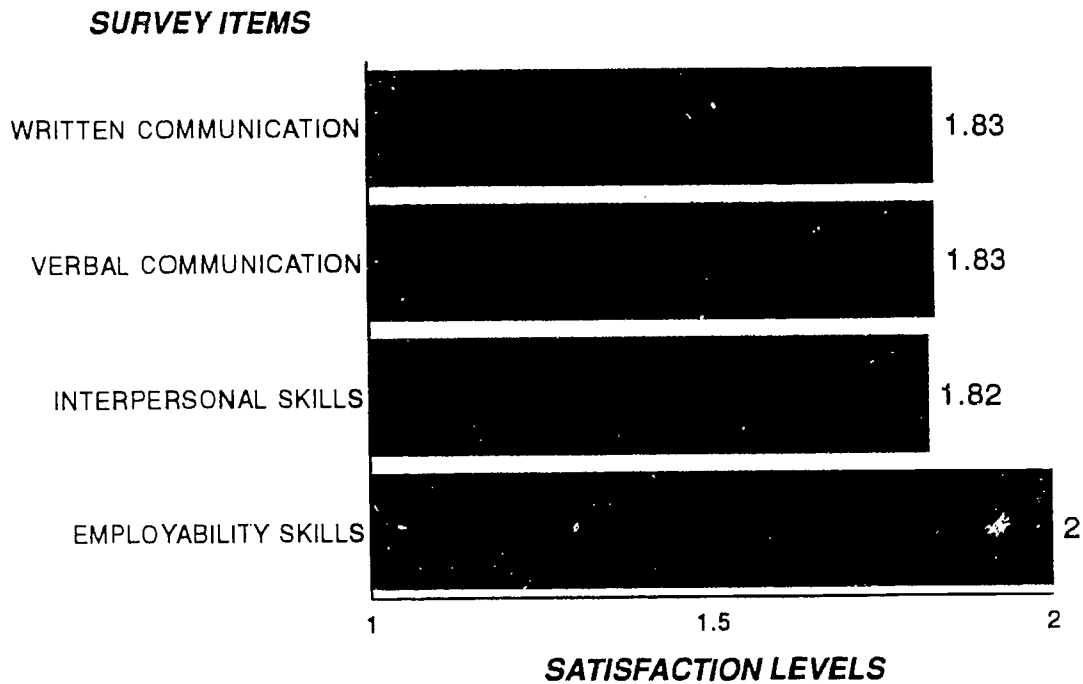1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURES 55 COMMENTS: Employers from the general survey were very satisfied with all five basic skills listed. Employers were very satisfied with their employees' math, speaking, writing, and reading skills and less satisfied with their reasoning skills. Pharmacy employers were very satisfied with their employees' writing and reading skills.

b. Specific Survey - The overall score for specific survey basic skills was 1.87 or quite satisfied.

FIGURE 56
BASIC SKILLS
SPECIFIC SURVEY - PHARMACY

SURVEY ITEMS

WRITTEN COMMUNICATION	1.83
VERBAL COMMUNICATION	1.83
INTERPERSONAL SKILLS	1.82
EMPLOYABILITY SKILLS	2

1   1.5   2

SATISFACTION LEVELS

2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 56 COMMENTS: Specific survey employers were quite satisfied with all of the basic skills listed. Employers were most satisfied with their employees' employability skills where no dissatisfied responses were received fr·m pharmacy specific survey employers.

GENERAL & SPECIFIC SURVEY BASIC SKILL COMPARISONS: Two survey items, writing and speaking skills, were on both surveys. Each survey type employer was very satisfied with employee verbal communication/speaking skills and their writing/written communication skills. Please note that there were no dissatisfied responses on the general survey concerning math, writing, speaking, and reading skills. On the specific pharmacy survey there were no dissatisfied responses concerning employees' employability skills.

73

2. Job-related Skills

The overall score for job-related and associated skills was 1.82 or very satisfied. Figure 57 shows responses for the eight general survey job-related skills. Figure 58 shows specific survey employer responses for eight job-related skills from the pharmacy licensure exam.

> a. General Survey - The overall score for general survey job-related skills was 1.96 or very satisfied.

FIGURE 57
JOB-RELATED OR TECHNICAL SKILLS
GENERAL SURVEY - PHARMACY

SURVEY AREAS

Survey Area	Value
TECHNICAL SKILLS	2
QUALITY OF WORK	2
QUANTITY OF WORK	2
FAMILIARITY WITH JOB-RELATED EQUIPMENT	1.89
LEARN NEW TECHNIQUES	1.91
COMMUNICATE WITH SUPERVISORS	1.9
WORK WITH FELLOW EMPLOYEES	2
WORK WITH CLIENTS OR CUSTOMERS	2

SATISFACTION LEVELS
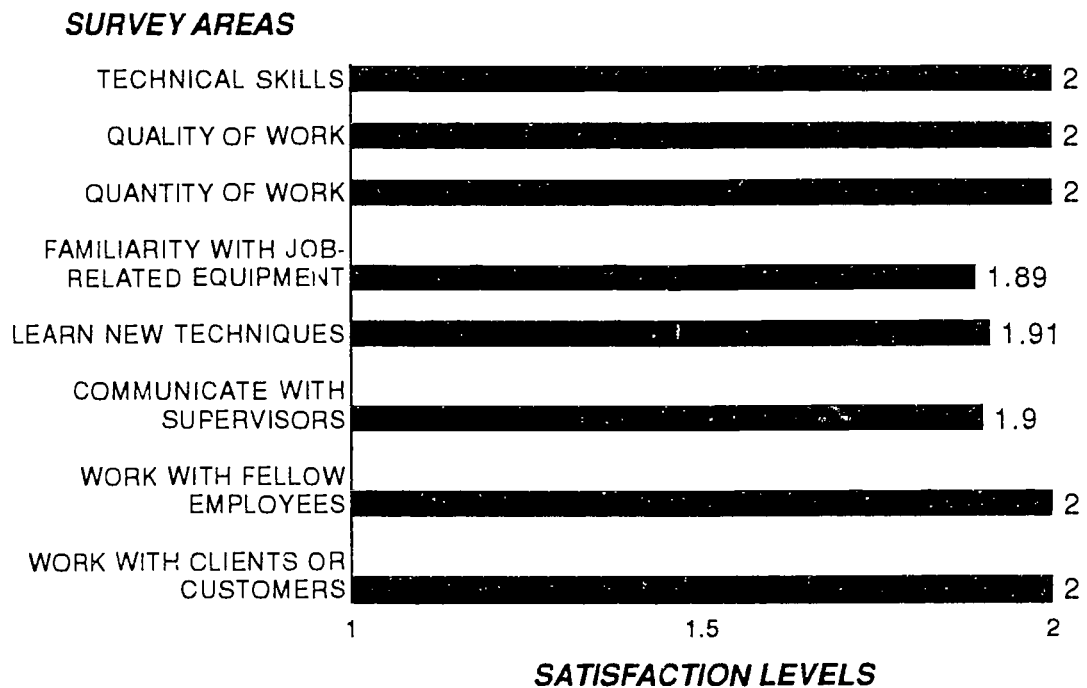
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 57 COMMENTS: All eight job related skills within this inquiry reflected very high levels of employer satisfaction. Five skills within this inquiry area: 1) the employees' quality of work, 2) their quantity of work, 3) their ability to work with fellow employees, 4) their ability to communicate with clients or customers, and 5) their overall technical skills, did not receive any dissatisfied employer responses.

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b. Specific Survey- The overall score for specific survey job-related skills was 1.92 or very satisfied.

FIGURE 58
JOB-RELATED OR TECHNICAL SKILLS
SPECIFIC SURVEY - PHARMACY

SURVEY AREAS

MONITOR DRUG THERAPY	1.83
INTERPRET & DISPENSE PRESCRIPTION ORDERS	2
ASSESS ORDERS & DRUGS USED TO DISPENSE THEM	2
COMPOUND & CALCULATE ELEMENTS FOR ORDERS	1.92
COUNSEL PATIENTS & HEALTH PROFESSIONALS	1.9
LAWS/REGS FOR A HEALTH CARE-PHARMACY FACILITY	1.92
LAWS FOR SAFE STORAGE RELATING TO FIRE & HEALTH-HAZARD CONTROL	1.8
IMMUNE-DEFICIENCY DISEASES, SUCH AS AIDS	2

1   1.5   2

SATISFACTION LEVELS
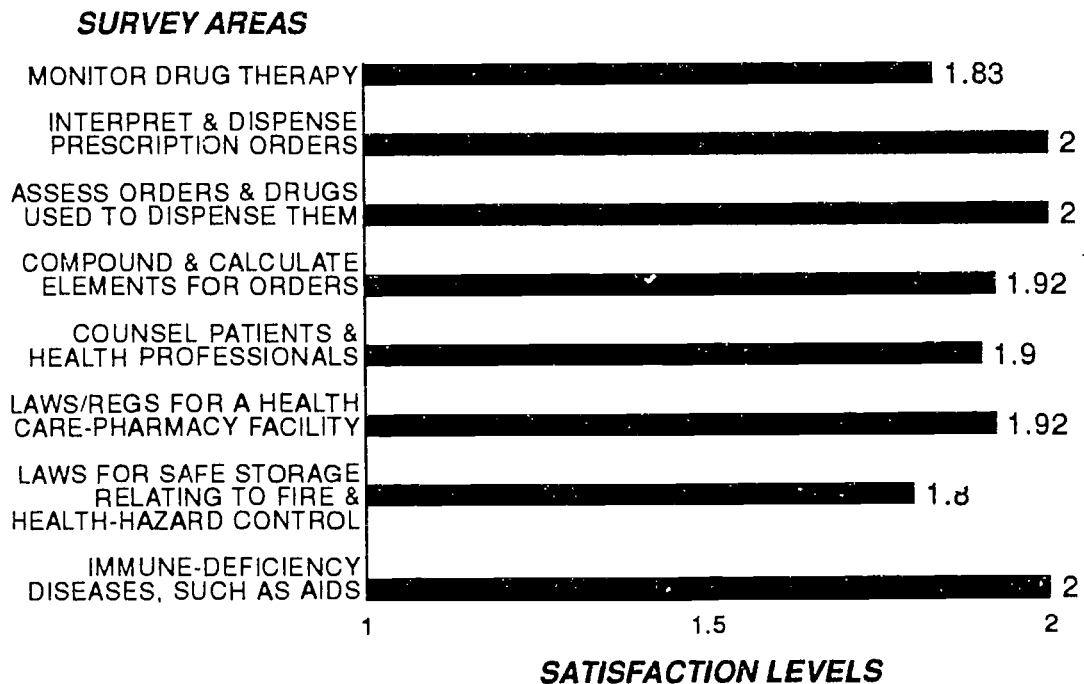
2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 58 COMMENTS: Specific survey employers were very satisfied with all eight of the job-related or technical skills. They were most satisfied with their employees' ability to interpret and dispense prescriptions and medication orders, their ability to assess prescription or medication orders and drugs used in dispensing them, and their knowledge of sexually transmitted diseases, such as AIDS. All three of these areas did not receive a dissatisfied employer response.

OVERALL JOB-RELATED SKILL COMMENTS: Note the consistently high employer satisfaction ratings for all job-related skills on both pharmacy survey types.

SECTION XIV: PROPOSED FUTURE ACTIVITIES

"All employees need the verbal communication and interpersonal skills to be able to interface with the culturally diverse fellow workers, clients, customers, or patients they come in contact with."

... A Florida Employer

A. SPECIFIC PROGRAM AREA SURVEYS

This is the third year where targeted program areas were selected to obtain employer opinions. Resp. from employers has continued to approach 70 to 75 percent for each program-specific survey. This type of employer feed back can be directly associated with specific curriculum areas within programs and is thus valuable as an analysis tool. Employer feedback allows Department staff to evaluate specific program competencies and adjust or enhance specific program curriculum. It is recommended that as in prior years, this approach be continued with input from affected parties as to specific programs for review. It is further recommended that the University-level follow-up utilize the knowledge area-specific survey approach for this effort.

B. GENERAL EMPLOYER OPINION SURVEY

It has been three years since a general survey to a select sample of all vocational program completers has been conducted. While responses to these surveys were generally lower than specific surveys, they have indicated a level of employer satisfaction with job-related or technical skills and a level of employer dissatisfaction with basic skills. In light of a possible shift in these type of feelings, particularly regarding basic skills, it is suggested that a general survey be conducted next year within an area determined through consultation with interested parties.

C. SPECIFIC INDUSTRY/OCCUPATIONAL ANALYSIS

Considerable attention is consistently being directed toward educational processes to better train students to succeed in the world of work. A part of this attention resulted from the Department of Labor Secretary's Commission on Achieving Necessary Skills or SCANS Commission. SCANS has researched and defined a series of educational foundations and workplace competencies that are considered necessary to be competitive and successful in the workplace. It is suggested that next year's activities include continuing a comparative evaluation of student and employers perceptions concerning SCANS foundation skills and workplace competencies.

1992-93 EMPLOYER OPINION SURVEY
APPENDICES

APPENDIX   A

AUTOMOTIVE TECHNOLOGY

1. The AUTOMOTIVE TECHNOLOGY SURVEY INSTRUMENT

2. A SUMMATION OF AUTOMOTIVE TECHNOLOGY EMPLOYER RESPONSES

INDUSTRIAL TECHNOLOGY EMPLOYER OPINION SURVEY

PART A.

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

1. Identify those occupations for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A.	Automotive Technician	M. Small Engine Mechanic
B.	Machine Repairer	N. Small Engine Specialist
C.	Automobile Mechanic	O. Fuel/Ignition/Starting System Specialist
D.	Shop Supervisor/Manager	P. Instrumentation Technician
E.	Service Manager	Q. Suspension Mechanic
F.	Automotive Engineer	R. Assembler
G.	Machinist	S. Drive Train Technician
H.	Heat/Cooling Technician	T. Systems Analyst
I.	Front-end/Brake Mechanic	U. Mechanic Assistant
J.	Carburetor/tune-up Mechanic	V. Safety Inspector
K.	Auto Body Repairer	W. Heavy Equipment Mechanic
L.	Diesel Mechanic	X. Machine Operator

2. Please identify any other job titles/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

A. Very satisfied	D. Dissatisfied
B. Satisfied	E. Very dissatisfied
C. Average	F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall system of public education?　　　　　　　　· A B C D E F

4. How do you feel about Florid 's overall system of vocational education?　　　　　　　A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation of your employees who attended vocational education programs?　　A B C D E F

6. How would you rate the work habits of your employees who attended vocational education programs?　　A B C D E F

84

(Please complete additional questions on the reverse side)

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees who had vocational training within the areas listed below. Please remember that these statements are with specific reference to the occupational area of AUTOMOTIVE TECHNICIAN, only.

7. Demonstrate an understanding of automotive mechanics. A B C D E F
8. Apply electrical & electronic skills in diagnosing/troubleshooting malfunctions of electrical/electronics components. A B C D E F
9. Demonstrate proficiency in servicing steering, suspension & wheel systems. A B C D E F
10. Demonstrate proficiency in servicing automotive brake systems. A B C D E F
11. Demonstrate proficiency in servicing cooling, air conditioning, & heating services. A B C D E F
12. Demonstrate proficiency in engine performance services. A B C D E F
13. Demonstrate proficiency in automatic transmission/trans-axle service. A B C D E F
14. Demonstrate proficiency in servicing manual drive trains & axles. A B C D E F
15. Demonstrate proficiency in engine repair service. A B C D E F
16. Demonstrate employability skills. A B C D E F
17. Demonstrate an understanding of entrepreneurship. A B C D E F
18. Verbal communication skills. A B C D E F
19. Written communication skills. A B C D E F
20. Math computation skills. A B C D E F

21. PLEASE SPECIFY ANY ADDITIONAL SKILLS OR AREAS OF KNOWLEDGE THAT YOU FEEL A VOCATIONAL GRADUATE YOU EMPLOY SHOULD HAVE.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail to:

FLORIDA DEPARTMENT OF EDUCATION
EDUCATION & TRAINING PLACEMENT
INFORMATION PROGRAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197

1993 EMPLOYER OPINION SURVEY RESULTS
AUTOMOTIVE TECHNOLOGY (64/47/73%)

PUBLIC EDUCATION	1.35
VOCATIONAL EDUCATION	1.58
ENTRY-LEVEL PREPARATION	1.70
WORK HABITS	1.69

Demonstrate an understanding of automotive mechanics.	1.75
Apply electrical & electronic skills in diagnosing/troubleshooting malfunctions of electrical/electronic components.	1.52
Demonstrate proficiency in servicing steering, suspension & wheel systems.	1.70
Demonstrate proficiency in servicing automotive brake systems.	1.85
Demonstrate proficiency in servicing cooling, air conditioning, & heating services.	1.67
Demonstrate proficiency in engine performance services.	1.46
Demonstrate proficiency in automatic transmission/trans-axle service.	1.45
Demonstrate proficiency in servicing manual drive trains & axles.	1.58
Demonstrate proficiency in engine repair service.	1.78
Demonstrate employability skills.	1.76
Demonstrate an understanding of entrepreneurship.	1.33
Verbal communication skills.	1.61
Written communication skills.	1.47
Math computation skills.	1.45

APPENDIX B

GASOLINE ENGINE MECHANICS

1. The GASOLINE ENGINE MECHANIC SURVEY INSTRUMENT

2. A SUMMATION OF GASOLINE ENGINE MECHANIC EMPLOYER RESPONSES

INDUSTRIAL TECHNOLOGY EMPLOYER OPINION SURVEY

PART A.

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

1. Identify those occupations for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A. Automotive Technician	M. Small Engine Mechanic
B. Machine Repairer	N. Small Engine Specialist
C. Automobile Mechanic	O. Fuel/Ignition/Starting System Specialist
D. Shop Supervisor/Manager	P. Instrumentation Technician
E. Service Manager	Q. Suspension Mechanic
F. Automotive Engineer	R. Assembler
G. Machinist	S. Drive Train Technician
H. Heat/Cooling Technician	T. Systems Analyst
I. Front-end/Brake Mechanic	U. Mechanic Assistant
J. Carburetor/tune-up Mechanic	V. Safety Inspector
K. Auto Body Repairer	W. Heavy Equipment Mechanic
L. Diesel Mechanic	X. Machine Operator

2. Please identify any other job titles/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

A. Very satisfied	D. Dissatisfied
B. Satisfied	E. Very dissatisfied
C. Average	F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall
system of public education?   A B C D E F

4. How do you feel about Florida's overall
system of vocational education?   A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation
of your employees who attended vocational education programs?   A B C D E F

6. How would you rate the work habits of your employees who
attended vocational education programs?   A B C D E F

(Please complete additional questions on the reverse side)

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees who had vocational training within the areas listed below. Please remember that these statements are with specific reference to the occupational area of **GASOLINE ENGINE MECHANIC**, only.

7.	Apply safety rules & procedures.	A B C D E F
8.	Identify & utilize appropriate laboratory tools & equipment.	A B C D E F
9.	Demonstrate proficiency in applying customer service skills.	A B C D E F
10.	Demonstrate proficiency in applying basic math skills.	A B C D E F
11.	Demonstrate proficiency in repairing & maintaining basic two-stroke cycle engines.	A B C D E F
12.	Demonstrate proficiency in repairing & maintaining basic four-stroke cycle engines.	A B C D E F
13.	Diagnose & repair ignition systems.	A B C D E F
14.	Service fuel systems.	A B C D E F
15.	Service, repair, & adjust engine controls.	A B C D E F
16.	Repair & service lubrication systems.	A B C D E F
17.	Service cooling & exhaust systems.	A B C D E F
18.	Diagnose, service, repair & adjust electrical systems.	A B C D E F
19.	Service & repair starting systems.	A B C D E F
20.	Demonstrate proficiency in repairing engine interior components.	A B C D E F
21.	Demonstrate proficiency in diagnosing & repairing power transfer systems.	A B C D E F
22.	Demonstrate proficiency in applying technical recording & reporting skills.	A B C D E F
23.	Demonstrate employability skills.	A B C D E F
24.	Demonstrate an understanding of entrepreneurship.	A B C D E F

25. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION
EDUCATION AND TRAINING PLACEMENT
INFORMATION PROGRAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197

1993 EMPLOYER OPINION SURVEY RESULTS
GASOLINE ENGINE MECHANICS (3/2/67%)

PUBLIC EDUCATION	1.00
VOCATIONAL EDUCATION	1.00
ENTRY-LEVEL PREPARATION	1.50
WORK HABITS	1.50

Apply safety rules & procedures.	2.00
Identify & utilize appropriate laboratory tools & equipment.	1.50
Demonstrate proficiency in applying customer service skills.	1.00
Demonstrate proficiency in applying basic math skills.	1.00
Demonstrate proficiency in repairing & maintaining	1.50
basic two-stroke cycle engines.	1.50
Demonstrate proficiency in repairing & maintaining	
basic four-stroke cycle engines.	1.50
Diagnose & repair ignition systems.	1.50
Service fuel systems.	1.50
Service, repair, & adjust engine controls.	1.50
Repair & service lubrication systems.	1.50
Service cooling & exhaust systems.	1.50
Diagnose, service, repair, & adjust electrical systems.	1.50
Service & repair starting systems.	1.50
Demonstrate proficiency in repairing interior engine components.	1.50
Demonstrate proficiency in diagnosing &	
repairing power transfer systems.	1.50
Demonstrate proficiency in applying technical recording &	
reporting skills.	1.00
Demonstrate employability skills.	1.00
Demonstrate and understanding of entrepreneurship.	1.00

APPENDIX C

MACHINING

1. The MACHINING SURVEY INSTRUMENT

2. A SUMMATION OF MACHINING EMPLOYER RESPONSES

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90/91

INDUSTRIAL TECHNOLOGY EMPLOYER OPINION SURVEY

SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
THE FLORIDA STATE TECHNICAL COMMITTEE FOR INDUSTRIAL EDUCATION

PART A.

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

1. Identify those occupations for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A. Machinist	M. Millwright
B. Machine Repairer	N. Maintenance Mechanic
C. Development Mechanic	O. Machine Repairer
D. Machine Shop Supervisor	P. Instrumentation Technician
E. Shop Manager	Q. Fluid-power Mechanic
F. Salvage Engineer	R. Assembler
G. Prototype Machinist	S. Industrial Engineering Technician
H. Mechanical Technician	T. Systems Analyst
I. Die or Tool Designer/Maker	U. Production Planner
J. Lay-out Worker	V. Safety Inspector
K. Set-up Operator	W. Compliance & Enforcement Inspector
L. Instrument Maker/Repairer	X. Machine Operator

2. Please identify any other job titles/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

A. Very satisfied	D. Dissatisfied
B. Satisfied	E. Very dissatisfied
C. Average	F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall system of public education? A B C D E F

4. How do you feel about Florida's overall system of vocational education? A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation of your employees who attended vocational education programs? A B C D E F

6. How would you rate the work habits of your employees who attended vocational education programs? A B C D E F

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(Please complete additional questions on the reverse side)

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees who had vocational training within the areas listed below. Please remember that these statements are with specific reference to the occupational area of **MACHINIST**, only.

7.	Demonstrate proficiency in maintaining immediate work area.	A B C D E F
8.	Perform mathematical calculations.	A B C D E F
9.	Demonstrate proficiency in blueprint reading & machine planning.	A B C D E F
10.	Perform measuring operations.	A B C D E F
11.	Perform maintenance on machines and tools.	A B C D E F
12.	Perform bench work skills.	A B C D E F
13.	Set up and operate power saws.	A B C D E F
14.	Set up and operate pedestal grinders.	A B C D E F
15.	Set up and operate drill presses.	A B C D E F
16.	Set up and operate lathes.	A B C D E F
17.	Set up and operate milling machines.	A B C D E F
18.	Set up and operate grinding machines.	A B C D E F
19.	Set up and operate tool machines and cutters.	A B C D E F
20.	Apply computerized numerical control operations skills.	A B C D E F
21.	Set up and operate EDM machines.	A B C D E F
22.	Set up and operate heat treat furnaces.	A B C D E F
23.	Written communication skills.	A B C D E F
24.	Verbal communication skills.	A B C D E F
25.	Demonstrate employability skills.	A B C D E F
26.	Demonstrate an understanding of entrepreneurship.	A B C D E F

27. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUC   ON
EDUCATION AND TRAINING PLACEMENT
INFORMATION PROGRAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197

1993 EMPLOYER OPINION SURVEY RESULTS
MACHINING (24/21/88%)

PUBLIC EDUCATION	1.45
VOCATIONAL EDUCATION	1.45
ENTRY-LEVEL PREPARATION	1.50
WORK HABITS	1.45

Demonstrate proficiency in maintaining immediate work area.	1.70
Perform mathematical calculations.	1.50
Demonstrate proficiency in blueprint reading & machine planning.	1.50
Perform measuring operations.	1.67
Perform maintenance on machines and tools.	1.33
Perform bench work skills.	1.44
Set up and operate power saws.	1.67
Set up and operate pedestal grinders.	1.75
Set up and operate drill presses.	1.89
Set up and operate lathes.	1.67
Set up and operate milling machines.	1.50
Set up and operate grinding machines.	1.38
Set up and operate tool machine & cutters.	1.44
Apply computerized numerical control operation skills.	1.50
Set up and operate EDM machines.	1.50
Set up and operate heat threat furnaces.	1.33
Written communication skills.	1.25
Verbal communication skills.	1.50
Demonstrate employability skills.	1.56
Demonstrate an understanding of entrepreneurship.	1.25

APPENDIX D

BUSINESS ADMINISTRATION & MANAGEMENT

1. The BUSINESS ADMINISTRATION & MANAGEMENT SURVEY INSTRUMENT

2. A SUMMATION OF BUSINESS ADMINISTRATION & MANAGEMENT
EMPLOYER RESPONSES

BUSINESS EMPLOYER OPINION SURVEY

SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
THE FLORIDA STATE TECHNICAL COMMITTEE FOR BUSINESS AND OFFICE EDUCATION

PART A.

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

1. Identify those occupations for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A. Accounting Clerk	I. Business Managers/Supervisors	Q. Data Entry Operator
B. Accountant	J. General Office Clerk	R. Peripheral Equipment Operator
C. Billing Clerk	K. Secretary	S. Business Programmers
D. Bookkeeper	L. Legal Secretary	T. Systems Analyst
E. Billing Machine Operator	M. Shipping/Receiving Clerk	U. Court Reporter
F. Time Keeping Clerk	N. Computer Operator	V. Receptionist
G. Bookkeeping/Payroll Clerk	O. Data Processing Clerk	W. Medical Secretary
H. Posting Clerk	P. Clerk Typist	X. Office Manager

2. Please identify any other job titles/occupations where applicants are needed or that you feel will be in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

A. Very satisfied	D. Dissatisfied
B. Satisfied	E. Very dissatisfied
C. Average	F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall system of public education?   A B C D E F

4. How do you feel about Florida's overall system of vocational education?   A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation of your employees who attended vocational education programs?   A B C D E F

6. How would you rate the work habits of your employees who attended vocational education programs?   A B C D E F

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(Please complete additional questions on reverse side)

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees who had vocational training within the areas listed below. Please remember that these statements are with specific reference to the business occupational area of **MID-LEVEL MANAGERS**, only.

7. Perform math computations.   A B C D E F
8. Perform keyboarding/typing activities.   A B C D E F
9. Identify, classify, & demonstrate management activities. A B C D E F
10. Perform business records activities.   A B C D E F
11. Perform communications activities.   A B C D E F
12. Perform human relations activities.   A B C D E F
13. Exhibit appropriate grooming habits.   A B C D E F
14. Perform information processing activities.   A B C D E F
15. Demonstrate leadership skills.   A B C D E F
16. Perform consumer economics activities.   A B C D E F
17. Perform decision making activities.   A B C D E F
18. Verbal communication skills.   A B C D E F
19. Written communication skills.   A B C D E F
20. Perform bookkeeping/accounting activities.   A B C D E F

21. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to.

1993 EMPLOYER OPINION SURVEY RESULTS
VOCATIONAL PROGRAM AREAS

BUSINESS ADMINISTRATION & MANAGEMENT (65/41/63%)

PUBLIC EDUCATION	1.41
VOCATIONAL EDUCATION	1.47
ENTRY-LEVEL PREPARATION	1.56
WORK HABITS	1.69
Perform math computations.	1.71
Perform keyboarding/typing activities.	1.71
Identify, classify, & demonstrate management activities.	1.44
Perform business records activities.	1.53
Perform ccmmunications activities.	1.58
Perform human relations activities.	1.39
Exhibit appropriate grooming habits.	1.58
Perform information processing activities.	1.64
Demonstrate leadership skills.	1.33
Perform consumer economics activities.	1.60
Perform decision making activities.	1.43
Verbal communication skills.	1.48
Written communication skills.	1.50
Perform bookkeeping/accounting activities.	1.57

APPENDIX E

MEDICAL LABORATORY TECHNOLOGY

1. The MEDICAL LABORATORY TECHNOLOGY SURVEY INSTRUMENT

2. A SUMMATION OF MEDICAL LABORATORY TECHNOLOGY EMPLOYER RESPONSES

PARAPROFESSIONAL HEALTH EMPLOYER OPINION SURVEY

SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
THE FLORIDA STATE TECHNICAL COMMITTEE FOR HEALTH OCCUPATIONS EDUCATION

PART A

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

1. Identify those occupations for which you currently have difficulty finding qualified applicants. (You may circle more than one)

A. Registered nurse	J. Office Manager
B. Licensed practical nurse	K. General office clerk
C. Nursing assistant	L. Medical lab tech
D. Emergency Medical Technician	M. Medical records clerk
E. Home health aide	N. Maintenance worker
F. Secretary	O. Anesthesiologist
G. Surgical tech	P. Patient care assistant
H. Paramedic	Q. Medical assistant
I. Clerk typist	R. Radiologist

2. Please identify any other job titles/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

A. Very satisfied	D. Dissatisfied
B. Satisfied	E. Very dissatisfied
C. Average	F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall system of public education?   A B C D E F

4. How do you feel about Florida's overall system of vocational education?   A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation of your employees who attended vocational education programs?   A B C D E F

6. How would you rate the work habits of your employees who attended vocational education programs?   A B C D E F

(Please complete additional questions on the reverse side)

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied
B. Satisfied
C. Average

D. Dissatisfied
E. Very dissatisfied
F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees who had vocational training within the areas listed below. Please remember that these statements are with specific reference to the occupational area of MEDICAL LABORATORY TECHNICIAN, only.

7. Discuss phlebotomy in relation to the health care setting.   A B C D E F
8. Demonstrate legal and ethical responsibilities.   A B C D E F
9. Identify the anatomic structure & function of body systems in relation to services performed by clinical laboratory personnel.   A B C D E F
10. Practice collection procedures & recognize possible complications.   A B C D E F
11. Recognize & identify collection reagents supplies, equipment, & interfering chemical substances.   A B C D E F
12. Practice effective infection control.   A B C D E F
13. Practice accepted procedures of requisitioning, transporting, & processing specimens.   A B C D E F
14. Demonstrate accepted professional, communication & interpersonal skills.   A B C D E F
15. Practice quality assurance & safety.   A B C D E F
16. Demonstrate knowledge of urinalysis principles & procedures.   A B C D E F
17. Demonstrate knowledge of hematological principles & procedures.   A B C D E F
18. Demonstrate knowledge of microbiological principles & procedures.   A B C D E F
19. Demonstrate knowledge of clinical chemistry principles & procedures.   A B C D E F
20. Demonstrate knowledge of immunohematological principles & procedures.   A B C D E F
21. Demonstrate knowledge of immuno/serological principles & procedures.   A B C D E F
22. Demonstrate knowledge of operation & principles of lab instruments.   A B C D E F
23. Correlate clinical laboratory procedures with theoretical knowledge.   A B C D E F
24. Written communication skills.   A B C D E F
25. Verbal communication skills.   A B C D E F
26. Demonstrate employability skills.   A B C D E F
27. Demonstrate knowledge of sexually transmitted diseases, including AIDS.   A B C D E F

28. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION
EDUCATION AND TRAINING PLACEMENT
INFORMATION PROGRAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197

1993 EMPLOYER OPINION SURVEY RESULTS
MEDICAL LABORATORY TECHNOLOGY (38/31/82%)

PUBLIC EDUCATION	1.46
VOCATIONAL EDUCATION	1.54
ENTRY-LEVEL PREPARATION	1.83
WORK HABITS	1.75

Discuss phlebotomy in relation to the health care setting.	1.93
Demonstrate legal & ethical responsibilities.	1.77
Identify the anatomic structure & function of body systems in relation to services performed by clinical laboratory personnel.	1.60
Practice collection procedures & recognize possible complications.	1.85
Recognize & identify collection reagents supplies, equipment, & interfering chemical substances.	1.69
Practice effective infection control.	2.00
Practice accepted procedures of requisitioning, transporting, & processing specimens.	1.94
Demonstrate accepted professional, communication, & interpersonal skills.	1.93
Practice quality assurance & safety.	1.81
Demonstrate knowledge of urinalysis principles & procedures.	2.00
Demonstrate knowledge of hematological principles & procedures.	1.85
Demonstrate knowledge of microbiological principles & procedures.	1.82
Demonstrate knowledge of clinical chemistry principles & procedures.	1.69
Demonstrate knowledge of immunohematological principles & procedures.	1.77
Demonstrate knowledge of immuno/serological principles & procedures.	1.79
Demonstrate knowledge of operation & principles of lab instruments.	1.71
Correlate clinical laboratory procedures with theoretical knowledge.	1.41
Written communication skills.	1.67
Verbal communication skills.	1.78
Demonstrate employability skills.	1.64
Demonstrate knowledge of sexually transmitted diseases, including AIDS.	1.94

APPENDIX F

MEDICAL ASSISTING

1. The MEDICAL ASSISTING SURVEY INSTRUMENT

2. A SUMMATION OF MEDICAL ASSISTING EMPLOYER RESPONSES

PARAPROFESSIONAL HEALTH EMPLOYER OPINION SURVEY

SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
THE FLORIDA STATE TECHNICAL COMMITTEE FOR HEALTH OCCUPATIONS EDUCATION

PART A

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

1. Identify those occupations for which you currently have difficulty finding qualified applicants. (You may circle more than one)

A. Registered nurse	J. Office Manager
B. Licensed practical nurse	K. General office clerk
C. Nursing assistant	L. Medical lab tech
D. Emergency Medical Technician	M. Medical records clerk
E. Home health aide	N. Maintenance worker
F. Secretary	O. Anesthesiologist
G. Surgical tech	P. Patient care assistant
H. Paramedic	Q. Medical assistant
I. Clerk typist	R. Radiologist

2. Please identify any other job titles/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

A. Very satisfied	D. Dissatisfied
B. Satisfied	E. Very dissatisfied
C. Average	F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall
system of public education?   A B C D E F

4. How do you feel about Florida's overall
system of vocational education?   A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation
of your employees who attended vocational education programs?   A B C D E F

6. How would you rate the work habits of your employees who
attended vocational education programs?   A B C D E F

(Please complete additional questions on the reverse side)

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees who had vocational training within the areas listed below. Please remember that these statements are with specific reference to the occupational area of MEDICAL ASSISTANT, only.

7. Demonstrate the ability to communicate & use interpersonal skills effectively.   A B C D E F
8. Demonstrate legal and ethical responsibilities.   A B C D E F
9. Demonstrate an understanding of & apply health-illness-health concepts.   A B C D E F
10. Perform administrative duties.   A B C D E F
11. Demonstrate knowledge of pharmaceutical principles & administer medications.   A B C D E F
12. Prepare patients for, assist with, & follow-up patients after examinations & treatment.   A B C D E F
13. Perform basic office diagnostic procedures.   A B C D E F
14. Demonstrate knowledge of the fundamentals of microbial control & the use of aseptic techniques.   A B C D E F
15. Recognize & respond to emergency situations.   A B C D E F
16. Recognize & practice safety & security procedures.   A B C D E F
17. Written communication skills.   A B C D E F
18. Verbal communication skills.   A B C D E F
19. Demonstrate employability skills.   A B C D E F
20. Demonstrate knowledge of sexually transmitted diseases, including AIDS.   A B C D E F

21. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION
EDUCATION AND TRAINING PLACEMENT
INFORMATION PROGRAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197

1993 EMPLOYER OPINION SURVEY RESULTS
MEDICAL ASSISTING (72/53/74%)

PUBLIC EDUCATION	1.20
VOCATIONAL EDUCATION	1.64
ENTRY-LEVEL PREPARATION	1.63
WORK HABITS	1.73

Demonstrate the ability to communicate& use interpersonal skills effectively.	1.71
Demonstrate legal & ethical responsibilities.	1.67
Demonstrate an understanding of & apply health-illness-health concepts.	1.81
Perform administrative duties.	1.52
Demonstrate knowledge of pharmaceutical principles & administer medications.	1.68
Prepare patients for, assist with, & follow-up patients after exams & treatment.	1.88
Perform basic office diagnostic procedures.	1.84
Demonstrate knowledge of the fundamentals of microbial control & the use of aseptic techniques.	1.82
Recognize & respond to emergency situations.	1.87
Recognize and practice safety & security procedures.	1.83
Written communication skills.	1.48
Verbal communication skills.	1.58
Demonstrate employability skills.	1.79
Demonstrate knowledge of sexually transmitted diseases, including AIDS.	1.90

APPENDIX G

PATIENT CARE ASSISTANT

1. The PATIENT CARE ASSISTANT SURVEY INSTRUMENT

2. A SUMMATION OF PATIENT CARE ASSITANT EMPLOYER RESPONSES

PARAPROFESSIONAL HEALTH EMPLOYER OPINION SURVEY

SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
THE FLORIDA STATE TECHNICAL COMMITTEE FOR HEALTH OCCUPATIONS EDUCATION

PART A

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

1. Identify those occupations for which you currently have difficulty finding qualified applicants. (You may circle more than one)

A. Registered nurse
B. Licensed practical nurse
C. Nursing assistant
D. Emergency Medical Technician
E. Home health aide
F. Secretary
G. Surgical tech
H. Paramedic
I. Clerk typist

J. Office Manager
K. General office clerk
L. Medical lab tech
M. Medical records clerk
N. Maintenance worker
O. Anesthesiologist
P. Patient care assistant
Q. Medical assistant
R. Radiologist

2. Please identify any other job titles/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

A. Very satisfied
B. Satisfied
C. Average

D. Dissatisfied
E. Very dissatisfied
F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall
   system of public education?   A B C D E F

4. How do you feel about Florida's overall
   system of vocational education?   A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation
   of your employees who attended vocational education programs?   A B C D E F

6. How would you rate the work habits of your employees who
   attended vocational education programs?   A B C D E F

(Please complete additional questions on the reverse side)

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees who had vocational training within the areas listed below. Please remember that these statements are with specific reference to the occupational area of PATIENT CARE ASSISTANT, only.

7. Demonstrate employability skills.   A B C D E F
8. Apply human relations and leadership skills.   A B C D E F
9. Verbal communication skills.   A B C D E F
10. Written communication skills.   A B C D E F
11. Apply mathematics skills.   A B C D E F
12. Demonstrate basic competencies in science.   A B C D E F
13. Demonstrate legal and ethical responsibilities.   A B C D E F
14. Provide emergency care.   A B C D E F
15 Perform aseptic techniques.   A B C D E F
16. Exhibit understanding of the anatomy & physiology of the body.   A B C D E F
17. Perform physical comfort and safety functions.   A B C D E F
18. Provide personal patient care.   A B C D E F
19. Perform nursing procedures.   A B C D E F
20. Apply principles of nutrition.   A B C D E F
21. Provide care for geriatric patients.   A B C D E F
22. Apply the principles of infection control.   A B C D E F
23. Provide bio-psycho-social support.   A B C D E F
24. Perform supervised management functions.   A B C D E F
25. Assist with rehabilitative activities.   A B C D E F
26. Demonstrate knowledge of immune deficiency diseases,
    including AIDS.   A B C D E F
27. Provide care for pre & post-operative patients.   A B C D E F
28. Perform home health care services.   A B C D E F

27. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION
EDUCATION AND TRAINING PLACEMENT
INFORMATION PROGRAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197

1993 EMPLOYER OPINION SURVEY RESULTS
PATIENT CARE ASSISTANT (345/257/75%)

PUBLIC EDUCATION	1.36
VOCATIONAL EDUCATION	1.68
ENTRY-LEVEL PREPARATION	1.77
WORK HABITS	1.75
Demonstrate employability skills.	1.86
Apply human relations & leadership skills.	1.51
Verbal communication skills.	1.58
Written communication skills.	1.34
Apply mathematics skills.	1.32
Demonstrate basic competencies in science.	1.39
Demonstrate legal & ethical responsibilities.	1.47
Provide emergency care.	1.70
Perform aseptic techniques.	1.72
Exhibit understanding if the anatomy & physiology of the body.	1.65
Perform physical comfort & safety functions.	1.85
Provide personal patient care.	1.93
Perform nursing procedures.	1.69
Apply principles of nutrition.	1.58
Provide care for geriatric patients.	1.86
Apply the principles of infection control.	1.68
Provide bio-psycho-social support.	1.57
Perform supervised management functions.	1.40
Assist with rehabilitative activities.	1.60
Demonstrate knowledge of immune-deficiency diseases, including AIDS.	1.75
Provide care for pre & post-operative patients.	1.73
Perform home health care services.	1.90

APPENDIX H

PARAMEDIC

1. The PARAMEDIC SURVEY INSTRUMENT

2. A SUMMATION OF PARAMEDIC EMPLOYER RESPONSES

PARAPROFESSIONAL HEALTH EMPLOYER OPINION SURVEY

SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
THE FLORIDA STATE TECHNICAL COMMITTEE FOR HEALTH OCCUPATIONS EDUCATION

PART A

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

1. Identify those occupations for which you currently have difficulty finding qualified applicants. (You may circle more than one)

A. Registered nurse
B. Licensed practical nurse
C. Nursing assistant
D. Emergency Medical Technician
E. Home health aide
F. Secretary
G. Surgical tech
H. Paramedic
I. Clerk typist

J. Office Manager
K. General office clerk
L. Medical lab tech
M. Medical records clerk
N. Maintenance worker
O. Anesthesiologist
P. Patient care assistant
Q. Medical assistant
R. Radiologist

2. Please identify any other job titles/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

A. Very satisfied
B. Satisfied
C. Average

D. Dissatisfied
E. Very dissatisfied
F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall
   system of public education?   A B C D E F

4. How do you feel about Florida's overall
   system of vocational education?   A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation
   of your employees who attended vocational education programs?   A B C D E F

6. How would you rate the work habits of your employees who
   attended vocational education programs?   A B C D E F

(Please complete additional questions on the reverse side)

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees who had vocational training within the areas listed below. Please remember that these statements are with specific reference to the occupational area of PARAMEDIC, only.

7. Demonstrate knowledge of the paramedic profession.   A B C D E F
8. Describe EMS systems.   A B C D E F
9. Describe medical/legal considerations.   A B C D E F
10. Describe & demonstrate EMS communications systems.   A B C D E F
11. Demonstrate rescue techniques and extrication.   A B C D E F
12. Describe major incident response.   A B C D E F
13. Describe and manage causes of stress.   A B C D E F
14. Use medical terms.   A B C D E F
15. Demonstrate general patient assessment and initial management.   A B C D E F
16. Manage airway and ventilation.   A B C D E F
17. Assess and manage shock.   A B C D E F
18. Demonstrate knowledge of pharmacology & administer medications.   A B C D E F
19. Assess and manage trauma emergencies.   A B C D E F
20. Assess and manage burn injuries.   A B C D E F
21. Assess and manage respiratory emergencies.   A B C D E F
22. Assess and manage cardiovascular emergencies.   A B C D E F
23. Assess and manage endocrine emergencies.   A B C D E F
24. Assess and manage neurological emergencies.   A B C D E F
25. Assess and manage digestive, genitourinary, & reproductive emergencies.   A B C D E F
26. Assess and manage anaphylaxis emergencies.   A B C D E F
27. Assess and manage toxicological, alcohol, & drug abuse emergencies.   A B C D E F
28. Assess and manage infectious diseases.   A B C D E F
29. Assess and manage environmental injuries.   A B C D E F
30. Assess and manage geriatric emergencies.   A B C D E F
31. Assess and manage pediatric emergencies.   A B C D E F
32. Assess and manage the gynecologic patient.   A B C D E F
33. Assess and manage the obstetric patient.   A B C D E F
34. Assess and manage the neonate.   A B C D E F
35. Assess and manage behavioral emergencies.   A B C D E F
36. Demonstrate knowledge of immune-deficiency diseases, including AIDS.   A B C D E F
37. Written communication skills.   A B C D E F
38. Verbal communication skills.   A B C D E F
39. Demonstrate employability skills.   A B C D E F
40. Demonstrate leadership and administrative skills.   A B C D E F

41. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

1993 EMPLOYER OPINION SURVEY RESULTS
PARAMEDICS (91/71/78%)

PUBLIC EDUCATION	1.30
VOCATIONAL EDUCATION	1.77
ENTRY-LEVEL PREPARATION	1.81
WORK HABITS	1.85
Demonstrate knowledge of paramedic profession.	1.94
Describe EMS systems.	1.83
Describe legal/medical considerations.	1.72
Describe & demonstrate EMS communications systems.	1.57
Demonstrate rescue techniques & extrication.	1.73
Describe major incident response.	1.61
Describe & manage causes of stress.	1.61
Use medical terms.	1.89
Demonstrate patient assessment & initial management.	1.84
Manage airway & ventilation.	1.91
Assess & manage shock.	1.93
Demonstrate knowledge of pharmacology & administer meds.	1.95
Assess & manage trauma emergencies.	1.91
Assess & manage burn injuries.	1.95
Assess & manage respiratory emergencies.	1.93
Assess & manage cardiovascular emergencies.	1.94
Assess & manage endocrine emergencies.	1.90
Assess & manage neurological emergencies.	1.94
Assess & manage digestive, genitourinary & reproductive emergencies.	1.83
Assess & manage anaphylaxis emergencies.	1.94
Assess & manage toxicological, alcohol, & drug abuse emergencies.	1.89
Assess & manage infectious diseases.	1.74
Assess & manage environmental injuries.	1.86
Assess & manage geriatric emergencies.	1.82
Assess & manage pediatric emergencies.	1.73
Assess & manage the gynecologic patient.	1.74
Assess & manage the obstetric patient.	1.87
Assess & manage the neonate.	1.55
Assess & manage behavioral emergencies.	1.64
Demonstrate knowledge of immune-deficiency diseases, including AIDS.	1.83
Written communication skills.	1.53
Verbal communication skills.	1.77
Demonstrate employability skills.	1.94
Demonstrate leadership & administrative skills.	1.48

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APPENDIX I

ARCHITECTURE

1. The **GENERAL** ARCHITECTURE SURVEY INSTRUMENT

2. A SUMMATION OF **GENERAL** ARCHITECTURE SURVEY EMPLOYER
RESPONSES

3. The **SPECIFIC** ARCHITECTURE SURVEY INSTRUMENT

4. A SUMMATION OF **SPECIFIC** ARCHITECTURE SURVEY EMPLOYER
RESPONSES

EMPLOYER OPINION SURVEY
SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
FLORIDA STATE UNIVERSITY SYSTEM

PART A.

Directions: *Read each statement carefully and circle the letter of the answer that best applies to you.*

HIRING NEEDS

1. Identify those occupational areas for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A. Managerial/Administrative
B. Clerical/Administrative
C. Production/Operating
D. Professional/Technical
E. Maintenance/material handling
F. Food Services

G. Personnel Services
H. Protective Services
I. Cleaning Services
J. Health Services
K. No Difficulty

2. Please identify any job areas/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: *For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)*

A. **Very satisfied**
B. **Satisfied**
C. **Average**

D. **Dissatisfied**
E. **Very dissatisfied**
F. **I don't know**

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall
   system of public education?   A B C D E F

4. How do you feel about Florida's overall
   system of university or higher level education? A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation
   of those who attended university education programs? A B C D E F

6. How would you rate the work habits of those who
   attended university education programs?   A B C D E F

(Please complete additional questions on the reverse side)

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Directions: *For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)*

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction within the areas listed below with specific reference to the occupational area of entry-level, **ARCHITECT**, only.

7.	Technical job skills.	A B C D E F
8.	Math skills.	A B C D E F
9.	Reading skills.	A B C D E F
10.	Writing skills.	A B C D E F
11.	Speaking skills.	A B C D E F
12.	Reasoning (logical thinking) skills.	A B C D E F
13.	Quality of work.	A B C D E F
14.	Quantity of work.	A B C D E F
15.	Familiarity with job-related equipment.	A B C D E F
16.	Ability to learn new techniques on the job.	A B C D E F
17.	Ability to communicate with supervisors.	A B C D E F
18.	Ability to work with fellow employees.	A B C D E F
19.	Ability to work with clients or customers.	A B C D E F

20. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

GENERAL SURVEY - ARCHITECTURE

Total Employer Surveys 33
Employer Responses 23
Response Rate 70%

PUBLIC EDUCATION	1.25
VOCATIONAL EDUCATION	1.93
ENTRY-LEVEL PREPARATION	1.67
WORK HABITS	1.92
TECHNICAL JOB SKILLS	1.82
MATH SKILLS	1.88
READING SKILLS	1.36
WRITING SKILLS	1.69
SPEAKING SKILLS	1.80
REASONING (LOGICAL THINKING) SKILLS	1.88
QUALITY OF WORK	1.93
QUANTITY OF WORK	1.82
FAMILIARITY WITH JOB-RELATED EQUIPMENT	1.75
ABILITY TO LEARN NEW TECHNIQUES ON THE JOB	2.00
ABILITY TO COMMUNICATE v 'ITH SUPERVISORS	2.00
ABILITY TO WORK WITH FELLOW EMPLOYEES	2.00
ABILITY TO WORK WITH CLIENTS OR CUSTOMERS	1.93

EMPLOYER OPINION SURVEY
SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
FLORIDA STATE UNIVERSITY SYSTEM

PART A.

Directions: *Read each statement carefully and circle the letter of the answer that best applies to you.*

HIRING NEEDS

1. Identify those occupational areas for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A. Managerial/Administrative
B. Clerical/Administrative
C. Production/Operating
D. Professional/Technical
E. Maintenance/material handling
F. Food Services

G. Personnel Services
H. Protective Services
I. Cleaning Services
J. Health Services
K. No Difficulty

2. Please identify any job areas/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: *For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)*

A. **Very satisfied**
B. **Satisfied**
C. **Average**

D. **Dissatisfied**
E. **Very dissatisfied**
F. **I don't know**

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall
   system of public education?   A B C D E F

4. How do you feel about Florida's overall
   system of university or higher level education?   A.B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation
   of those who attended university education programs?   A B C D E F

6. How would you rate the work habits of those who
   attended university education programs?   A B C D E F

(Please complete additional questions on the reverse side)

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied D. Dissatisfied
B. Satisfied E. Very dissatisfied
C. Average F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees within the areas listed below. Please remember that these statements are with specific reference to the occupational area of **ARCHITECT**, only.

7. Demonstrate employability skills. A B C D E F
8. Apply human relations and leadership skills. A B C D E F
9. Verbal communication skills. A B C D E F
10. Written communication skills. A B C D E F
11. Apply mathematics skills. A B C D E F
12. Pre-design skills: Applying the principles of land use planning. A B C D E F
13. Site design skills: Analyzing & resolving various aspects of sites & the incorporation of the principles of land use planning & utilization. A B C D E F
14. Building design skills: Synthesizing programmatic & environmental requirements into a coherent & aesthetic concept through the process of schematic design & design development. A B C D E F
15. General structural technology: Interpreting & applying basic principles, terminology, & standards of the physical sciences relating to the general structure systems of building. A B C D E F
16. Lateral forces structural technology. A B C D E F
17. Long span structural technology. A B C D E F
18. Mechanical, plumbing, electrical, & life safety systems: Interpreting & applying the basic principles, terminology, & standards of the physical sciences relating to human comfort & safety. A B C D E F
19. Materials & methods: Identifying, analyzing, evaluating, & specifying appropriate building materials, building systems, & hardware and their methods of installation. A B C D E F
20. Construction documents & services: Analyzing, evaluating, coordinating, & preparing the instruments for translation of design concepts, building materials & systems, for construction & related construction administration of building projects. A B C D E F
21. Demonstration of an understanding of contractual, ethical, & legal relationships & responsibilities & of construction management procedures relative to control quality, cost, & time. A B C D E F
22. Analyze, select, & specify various components with respect to cost, building codes, & their impact on architectural design. A B C D E F

23. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

ARCHITECTURE - SPECIFIC SURVEY

Total Employer Surveys 33
Employer Responses 27
Response Rate 82%

PUBLIC EDUCATION	1.33
VOCATIONAL EDUCATION	1.77
ENTRY-LEVEL PREPARATION	1.30
WORK HABITS	1.89

Demonstrate employability skills.	1.69
Apply human relations & leadership skills.	1.47
Verbal communication skills.	1.50
Written communication skills.	1.36
Apply mathematics skills.	1.83

Pre-design skills: Applying the principles of land use planning.	1.67
Site design skills: Analyzing & resolving various aspects of sites & the incorporation of the principles of land use planning & utilization.	1.56
Building design skills: Synthesizing programmatic & environmental requirements into a coherent & aesthetic concept through the process of schematic design & design development.	1.60
General structural technology: Interpreting & applying basic principles, terminology, & standards of the physical sciences relating to the general structure systems of building.	1.58
Lateral forces structural technology.	1.33
Long span structural technology.	1.50
Mechanical, plumbing, electrical, & life safety systems: Interpreting & applying the basic principles, terminology, & standards of the physical sciences relating to human comfort & safety.	1.57
Materials & methods: Identifying, analyzing, evaluating, & specifying appropriate building materials, systems, & hardware and their methods of installation.	1.44
Construction documents & services: Analyzing, evaluating, coordinating, & preparing the instruments for translation of design concepts, building materials & systems, for construction & related construction administration of building projects.	1.55
Demonstration of an understanding of contractual, ethical, & legal relationships & responsibilities & of construction management procedures relative to control quality,costs, & time.	1.40
Analyze, select, & specify various components with respect to cost, building codes, & their impact on architectural design.	1.42

APPENDIX J

LIBRARY SCIENCE

1. The **GENERAL** LIBRARY SCIENCE SURVEY INSTRUMENT

2. A SUMMATION OF **GENERAL** LIBRARY SCIENCE EMPLOYER RESPONSES

3. The **SPECIFIC** LIBRARY SCIENCE SURVEY INSTRUMENT

4. A SUMMATION OF **SPECIFIC** LIBRARY SCIENCE EMPLOYER RESPONSES

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EMPLOYER OPINION SURVEY
SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
FLORIDA STATE UNIVERSITY SYSTEM

PART A.

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

1. Identify those occupational areas for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A. Managerial/Administrative
B. Clerical/Administrative
C. Production/Operating
D. Professional/Technical
E. Maintenance/material handling
F. Food Services

G. Personnel Services
H. Protective Services
I. Cleaning Services
J. Health Services
K. No Difficulty

2. Please identify any job areas/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

A. Very satisfied
B. Satisfied
C. Average

D. Dissatisfied
E. Very dissatisfied
F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall system of public education?   A B C D E F

4. How do you feel about Florida's overall system of university or higher level education?   A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation of those who attended university education programs?   A B C D E F

6. How would you rate the work habits of those who attended university education programs?   A B C D E F

(Please complete additional questions on the reverse side)

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Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction within the areas listed below with specific reference to the occupational area of entry-level, **LIBRARIAN OR LIBRARY MEDIA SPECIALIST**, only.

7. Technical job skills.   A B C D E F
8. Math skills.   A B C D E F
9. Reading skills.   A B C D E F
10. Writing skills.   A B C D E F
11. Speaking skills.   A B C D E F
12. Reasoning (logical thinking) skills.   A B C D E F
13. Quality of work.   A B C D E F
14. Quantity of work.   A B C D E F
15. Familiarity with job-related equipment.   A B C D E F
16. Ability to learn new techniques on the job.   A B C D E F
17. Ability to communicate with supervisors.   A B C D E F
18. Ability to work with fellow employees.   A B C D E F
19. Ability to work with clients or customers.   A B C D E F

20. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION
EDUCATION AND TRAINING PLACEMENT
INFORMATION PROGRAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197

GENERAL SURVEY - LIBRARY SCIENCE

Total Employer Surveys 28
Employer Responses 21
Response Rate 75%

PUBLIC EDUCATION	1.58
VOCATIONAL EDUCATION	1.93
ENTRY-LEVEL PREPARATION	1.81
WORK HABITS	1.85
TECHNICAL JOB SKILLS	2.00
MATH SKILLS	1.80
READING SKILLS	1.81
WRITING SKILLS	1.71
SPEAKING SKILLS	1.80
REASONING (LOGICAL THINKING) SKILLS	1.85
QUALITY OF WORK	1.86
QUANTITY OF WORK	1.87
FAMILIARITY WITH JOB-RELATED EQUIPMENT	1.93
ABILITY TO LEARN NEW TECHNIQUES ON THE JOB	2.00
ABILITY TO COMMUNICATE WITH SUPERVISORS	2.00
ABILITY TO WORK WITH FELLOW EMPLOYEES	2.00
ABILITY TO WORK WITH CLIENTS OR CUSTOMERS	2.00

EMPLOYER OPINION SURVEY
SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
FLORIDA STATE UNIVERSITY SYSTEM

PART A.

Directions: *Read each statement carefully and circle the letter of the answer that best applies to you.*

HIRING NEEDS

1. Identify those occupational areas for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A. Managerial/Administrative   G. Personnel Services
B. Clerical/Administrative   H. Protective Services
C. Production/Operating   I. Cleaning Services
D. Professional/Technical   J. Health Services
E. Maintenance/material handling   K. No Difficulty
F. Food Services

2. Please identify any job areas/occupations where applicants are needed or that you feel will be needed in the future.

_____/_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: *For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)*

A. **Very satisfied**   D. **Dissatisfied**
B. **Satisfied**   E. **Very dissatisfied**
C. **Average**   F. **I don't know**

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall
   system of public education?   A B C D E F

4. How do you feel about Florida's overall
   system of university or higher level education?   A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation
   of those who attended university education programs? A B C D E F

6. How would you rate the work habits of those who
   attended university education programs?   A B C D E F

(Please complete additional questions on the reverse side)

Diretions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees within the areas listed below. Please remember that these statements are with specific reference to the occupational area of **LIBRARIAN OR LIBRARY MEDIA SPECIALIST,** only.

7. Maintain library collections of books, serial publications, documents, audiovisual, & other materials.   A B C D E F
8. Assist groups & individuals in locating & obtaining materials.   A B C D E F
9. Furnish information in library activities, facilities, rules, & services. A B C D E F
10. Explain & assist in the use of reference sources to locate information.   A B C D E F
11. Describe or demonstrate procedures for searching catalog files.   A B C D E F
12. Search catalog files & shelves to locate information.   A B C D E F
13. Issue & receive materials for circulation or for use in library.   A B C D E F
14. Assemble & arrange displays of books & other library materials.   A B C D E F
15. Maintain reference & circulation materials.   A B C D E F
16. Answer correspondence on special reference subjects.   A B C D E F
17. Compile a list if library materials according to subjects or interests. A B C D E F
18. Select, order, catalog, and classify materials.   A B C D E F
19. Plan & direct or carry out special projects involving library promotion & outreach activities.   A B C D E F
20. Demonstrate interpersonal skills.   A B C D E F
21. Written communication skills.   A B C D E F
22. Verbal communication skills.   A B C D E F
23. Demonstrate employability skills.   A B C D E F

24. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION
EDUCATION AND TRAINING PLACEMENT
INFORMATION PROGRAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197

LIBRARY SCIENCE - SPECIFIC SURVEY

Total Employer Surveys 27
Employer Responses 23
Response Rate 85%

PUBLIC EDUCATION	1.67
VOCATIONAL EDUCATION	1.81
ENTRY-LEVEL PREPARATION	1.71
WORK HABITS	1.75

Maintain library collections of books, serial publications, documents, audiovisuals, & other materials.	2.00
Assist groups & individuals in locating & obtaining materials.	1.94
Furnish information in library activities, facilities, rules, & services.	1.94
Explain & assist in the use of reference sources to locate information.	1.95
Describe or demonstrate procedures for searching catalog files.	1.89
Search catalog files & shelves to locate information.	2.00
Issue & receive materials for circulation or for use in the library.	2.00
Assemble & arrange displays of books & other library materials.	1.94
Maintain reference & circulation materials.	2.00
Answer correspondence on special reference subjects.	1.94
Compile a list of library materials according to subjects or interests.	1.94
Select, order, catalog, & classify materials.	2.00
Plan & direct or carry out special projects involving library promotion & outreach activities.	1.76
Demonstrate interpersonal skills.	1.83
Written communication skills.	1.94
Verbal communication skills.	1.84
Demonstrate employability skills.	1.85

APPENDIX K

PHARMACY

1. The **GENERAL** PHARMACY SURVEY INSTRUMENT

2. A SUMMATION OF **GENERAL** PHARMACY EMPLOYER RESPONSES

3. The **SPECIFIC** PHARMACY SURVEY INSTRUMENT

4. A SUMMATION OF **SPECIFIC** PHARMACY EMPLOYER RESPONSES

EMPLOYER OPINION SURVEY
SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
FLORIDA STATE UNIVERSITY SYSTEM

PART A.

Directions: *Read each statement carefully and circle the letter of the answer that best applies to you.*

HIRING NEEDS

1. Identify those occupational areas for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A. Managerial/Administrative	G. Personnel Services
B. Clerical/Administrative	H. Protective Services
C. Production/Operating	I. Cleaning Services
D. Professional/Technical	J. Health Services
E. Maintenance/material handling	K. No Difficulty
F. Food Services	

2. Please identify any job areas/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: *For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)*

A. Very satisfied	**D. Dissatisfied**
B. Satisfied	**E. Very dissatisfied**
C. Average	**F. I don't know**

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall
   system of public education?   A B C D E F

4. How do you feel about Florida's overall
   system of university or higher level education?   A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation
   of those who attended university education programs?   A B C D E F

6. How would you rate the work habits of those who
   attended university education programs?   A B C D E F

(Please complete additional questions on the reverse side)

Directions: For each of the statements bel... circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction within the areas listed below with specific reference to the occupational area of entry-level, **PHARMACIST**, only.

7.	Technical job skills.	A	B	C	D	E	F
8.	Math skills.	A	B	C	D	E	F
9.	Reading skills.	A	B	C	D	E	F
10.	Writing skills.	A	B	C	D	E	F
11.	Speaking skills.	A	B	C	D	E	F
12.	Reasoning (logical thinking) skills.	A	B	C	D	E	F
13.	Quality of work.	A	B	C	D	E	F
14.	Quantity of work.	A	B	C	D	E	F
15.	Familiarity with job-related equipment.	A	B	C	D	E	F
16.	Ability to learn new techniques on the job.	A	B	C	D	E	F
17.	Ability to communicate with supervisors.	A	B	C	D	E	F
18.	Ability to work w...h ...ow employees.	A	B	C	D	E	F
19.	Ability to work witn clients or customers.	A	B	C	D	E	F

20. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

GENERAL SURVEY - PHARMACY

Total Employer Surveys 22
Employer Responses   14
Response Rate   64%

PUBLIC EDUCATION	1.56
VOCATIONAL EDUCATION	1.86
ENTRY-LEVEL PREPARATION	2.00
WORK HABITS	2.00
TECHNICAL JOB SKILLS	2.00
MATH SKILLS	2.00
READING SKILLS	2.00
WRITING SKILLS	2.00
SPEAKING SKILLS	2.00
REASONING (LOGICAL THINKING) SKILLS	1.89
QUALITY OF WORK	2.00
QUANTITY OF WORK	2.00
FAMILIARITY WITH JOB-RELATED EQUIPMENT	1.89
ABILITY TO LEARN NEW TECHNIQUES ON THE JOB	1.91
ABILITY TO COMMUNICATE WITH SUPERVISORS	1.90
ABILITY TO WORK WITH FELLOW EMPLOYEES	2.00
ABILITY TO WORK WITH CLIENTS OR CUSTOMERS	2.00

EMPLOYER OPINION SURVEY
SPONSORED BY
THE FLORIDA DEPARTMENT OF EDUCATION AND
FLORIDA STATE UNIVERSITY SYSTEM

PART A.

Directions: *Read each statement carefully and circle the letter of the answer that best applies to you.*

HIRING NEEDS

1. Identify those occupational areas for which you currently have difficulty finding qualified applicants. (You may circle more than one.)

A. Managerial/Administrative
B. Clerical/Administrative
C. Production/Operating
D. Professional/Technical
E. Maintenance/material handling
F. Food Services

G. Personnel Services
H. Protective Services
I. Cleaning Services
J. Health Services
K. No Difficulty

2. Please identify any job areas/occupations where applicants are needed or that you feel will be needed in the future.

_____

_____

PART B.

Florida's public education system comprises elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: *For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)*

A. Very satisfied
B. Satisfied
C. Average

D. Dissatisfied
E. Very dissatisfied
F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall system of public education?　　　　　　　　A B C D E F

4. How do you feel about Florida's overall system of university or higher level education?　　　A B C D E F

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation of those who attended university education programs?　　A B C D E F

6. How would you rate the work habits of those who attended university education programs?　　A B C D E F

(Please complete additional questions on the reverse side)

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Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied   D. Dissatisfied
B. Satisfied   E. Very dissatisfied
C. Average   F. I don't know

PART C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of employees within the areas listed below. Please remember that these statements are with specific reference to the occupational area of **PHARMACIST**, only.

7. Interpret & dispense prescriptions/medication orders.   A B C D E F

8. Assess prescriptions/medication orders & drugs used in dispensing them.   A B C D E F

9. Compound & calculate necessary elements involved in the extemporaneous preparation of prescriptions/medication orders.   A B C D E F

10. Monitor drug therapy.   A B C D E F

11. Counsel patients & health professionals.   A B C D E F

12. Demonstrate an understanding of the laws & regulations, both state & federal, pertaining to institutional pharmacy & health care facilities.   A B C D E F

13. Demonstrate an understanding of the laws & regulations, state & federal, pertaining to the safe & controlled storage of alcohol & other related substances & relating to fire & health-hazard control.   A B C D E F

14. Demonstrate interpersonal skills.   A B C D E F

15. Written communication skills.   A B C D E F

16. Verbal communication skills.   A B C D E F

17. Demonstrate employability skills.   A B C D E F

18. Demonstrate knowledge of sexually transmitted diseases, including AIDS.   A B C D E F

19. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

_____

_____

Please place the completed questionnaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION
EDUCATION AND TRAINING PLACEMENT
INFORMATION PROGRAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197

PHARMACY - SPECIFIC SURVEY

Total Employer Surveys 23
Employer Responses   17
Response Rate   74%

PUBLIC EDUCATION	1.46
VOCATIONAL EDUCATION	2.00
ENTRY-LEVEL PREPARATION	2.00
WORK HABITS	2.00

Interpret & dispense prescription/medication orders.	2.00
Assess prescription/medication orders & drugs used in dispensing them.	2.00
Compound & calculate necessary elements involved in the extemporaneous preparation of prescription/medication orders.	1.92
Monitor drug therapy.	1.83
Counsel patients & health professionals.	1.90
Demonstrate an understanding of the laws & regulations, both state & federal, pertaining to institutional pharmacy & health care facilities.	1.92
Demonstrate an understanding of the laws & regulations, both state & federal, pertaining to the safe & controlled storage of alcohol & other related substances relating to fire & health-hazard control.	1.80
Demonstrate interpersonal skills.	1.82
Written communication skills.	1.83
Verbal communication skills.	1.83
Demonstrate employability skills.	2.00
Demonstrate knowledge of sexually transmitted diseases, including AIDS.	2.00

APPENDIX L

EMPLOYER / STUDENT COMPARISONS

1. The EMPLOYER SURVEY INSTRUMENT

2. The STUDENT SURVEY INSTRUMENT

3. A SUMMATION OF STUDENT / EMPLOYER RESPONSES

5 = EXTREMELY CRITICAL   2 = SOMEWHAT CRITICAL
4 = HIGHLY CRITICAL   1 = NOT CRITICAL
3 = MODERATELY CRITICAL

COMPETENCIES

Resources

(C1)	ALLOCATES TIME	5 4 3 2 1 0
(C2)	ALLOCATES MONEY	5 4 3 2 1 0
(C3)	ALLOCATES MATERIAL & FACILITY RESOURCES	5 4 3 2 1 0
(C4)	ALLOCATES HUMAN RESOURCES	5 4 3 2 1 0

Information

(C5)	ACQUIRES & EVALUATES INFORMATION	5 4 3 2 1 0
(C6)	ORGANIZES & MAINTAINS INFORMATION	5 4 3 2 1 0
(C7)	INTERPRETS & COMMUNICATES INFORMATION	5 4 3 2 1 0
(C8)	USES COMPUTERS TO PROCESS INFORMATION	5 4 3 2 1 0

Interpersonal

(C9)	PARTICIPATES AS A MEMBER OF A TEAM	5 4 3 2 1 0
(C10)	TEACHES OTHERS	5 4 3 2 1 0
(C11)	SERVES CLIENTS/CUSTOMERS	5 4 3 2 1 0
(C12)	EXERCISES LEADERSHIP	5 4 3 2 1 0
(C13)	NEGOTIATES TO ARRIVE AT A DECISION	5 4 3 2 1 0
(C14)	WORKS WITH CULTURAL DIVERSITY	5 4 3 2 1 0

Systems

(C15)	UNDERSTANDS SYSTEMS	5 4 3 2 1 0
(C16)	MONITORS & CORRECTS PERFORMANCE	5 4 3 2 1 0
(C17)	IMPROVES & DESIGNS SYSTEMS	5 4 3 2 1 0

Technology

(C18)	SELECTS TECHNOLOGY	5 4 3 2 1 0
(C19)	APPLIES TECHNOLOGY TO TASK	5 4 3 2 1 0
(C20)	MAINTAINS & TROUBLESHOOTS TECHNOLOGY	5 4 3 2 1 0

FOUNDATION SKILLS

Basic Skills

(F1)	READING	5 4 3 2 1 0
(F2)	WRITING	5 4 3 2 1 0
(F3)	ARITHMETIC	5 4 3 2 1 0
(F4)	MATHEMATICS	5 4 3 2 1 0
(F5)	LISTENING	5 4 3 2 1 0
(F6)	SPEAKING	5 4 3 2 1 0

Thinking Skills

(F7)	CREATIVE THINKING	5 4 3 2 1 0
(F8)	DECISION MAKING	5 4 3 2 1 0
(F9)	PROBLEM SOLVING	5 4 3 2 1 0
(F10)	SEEING THINGS IN THE MIND'S EYE	5 4 3 2 1 0
(F11)	KNOWING HOW TO LEARN	5 4 3 2 1 0
(F12)	REASONING	5 4 3 2 1 0

Personal Qualities

(F13)	RESPONSIBILITY	5 4 3 2 1 0
(F14)	SELF-ESTEEM	5 4 3 2 1 0
(F15)	SOCIAL	5 4 3 2 1 0
(F16)	SELF-MANAGEMENT	5 4 3 2 1 0
(F17)	INTEGRITY/HONESTY	5 4 3 2 1 0

STUDENT/EMPLOYEE SURVEY

1. ARE YOU CURRENTLY EMPLOYED?   YES_____   NO_____
   IF YES,   FULL-TIME_____   PART-TIME_____
              WHAT IS YOUR JOB TITLE(S) _____

2. HAVE YOU EVER BEEN EMPLOYED?   YES_____   NO_____
   IF YES,   HOW LONG HAVE YOU BEEN WORKING? YEARS(S) _____

3. WHAT ARE YOUR PLANS UPON SCHOOL COMPLETION?
   EMPLOYMENT   _____   WHAT TYPE? _____
   EDUCATION   _____   WHAT PROGRAM? _____

INSTRUCTIONS: FOR EACH OF THE FOLLOWING COMPETENCIES & FOUNDATIONS, PLEASE
RATE TWO QUESTIONS FOR EACH ITEM USING A SCALE OF 0 TO 5:

   1. HOW IMPORTANT IS EACH SKILL TO YOUR FUTURE EMPLOYMENT? AND
   2. WHAT DO YOU FEEL IS YOUR CURRENT SKILL LEVEL FOR EACH ITEM?

                    RESPONSE SCALE
          5 = VERY IMPORTANT OR HIGHLY SKILLED
          3 = AVERAGE IMPORTANCE OR SKILLS
          0 = NOT IMPORTANT OR UNSKILLED

	IMPORTANCE OF SKILL TO JOB	CURRENT SKILL LEVEL
COMPETENCIES		
Resources		
(C1) ALLOCATES TIME	0 1 2 3 4 5	0 1 2 3 4 5
(C2) ALLOCATES MONEY	0 1 2 3 4 5	0 1 2 3 4 5
(C3) ALLOCATES MATERIAL/FACILITY RESOURCES	0 1 2 3 4 5	0 1 2 3 4 5
(C4) ALLOCATES HUMAN RESOURCES	0 1 2 3 4 5	0 1 2 3 4 5
Information		
(C5) ACQUIRES & EVALUATES INFORMATION	0 1 2 3 4 5	0 1 2 3 4 5
(C6) ORGANIZES & MAINTAINS INFORMATION	0 1 2 3 4 5	0 1 2 3 4 5
(C7) INTERPRETS & COMMUNICATES INFORMATION	0 1 2 3 4 5	0 1 2 3 4 5
(C8) USES COMPUTERS TO PROCESS INFORMATION	0 1 2 3 4 5	0 1 2 3 4 5
Interpersonal		
(C9) PARTICIPATES AS A MEMBER OF A TEAM	0 1 2 3 4 5	0 1 2 3 4 5
(C10) TEACHES OTHERS	0 1 2 3 4 5	0 1 2 3 4 5
(C11) SERVES CLIENTS/CUSTOMERS	0 1 2 3 4 5	0 1 2 3 4 5
(C12) EXERCISES LEADERSHIP	0 1 2 3 4 5	0 1 2 3 4 5
(C13) NEGOTIATES TO ARRIVE AT A DECISION	0 1 2 3 4 5	0 1 2 3 4 5
(C14) WORKS WITH CULTURAL DIVERSITY	0 1 2 3 4 5	0 1 2 3 4 5
Systems		
(C15) UNDERSTANDS SYSTEMS	0 1 2 3 4 5	0 1 2 3 4 5
(C16) MONITORS & CORRECTS PERFORMANCE	0 1 2 3 4 5	0 1 2 3 4 5
(C17) IMPROVES & DESIGNS SYSTEMS	0 1 2 3 4 5	0 1 2 3 4 5
Technology		
(C18) SELECTS TECHNOLOGY	0 1 2 3 4 5	0 1 2 3 4 5
(C19) APPLIES TECHNOLOGY TO TASK	0 1 2 3 4 5	0 1 2 3 4 5
(C20) MAINTAINS & TROUBLESHOOTS TECHNOLOGY	0 1 2 3 4 5	0 1 2 3 4 5
FOUNDATION SKILLS		
Basic Skills		
(F1) READING	0 1 2 3 4 5	0 1 2 3 4 5
(F2) WRITING	0 1 2 3 4 5	0 1 2 3 4 5
(F3) ARITHMETIC	0 1 2 3 4 5	0 1 2 3 4 5
(F4) MATHEMATICS	0 1 2 3 4 5	0 1 2 3 4 5
(F5) LISTENING	0 1 2 3 4 5	0 1 2 3 4 5
(F6) SPEAKING	0 1 2 3 4 5	0 1 2 3 4 5
Thinking Skills		
(F7) CREATIVE THINKING	0 1 2 3 4 5	0 1 2 3 4 5
(F8) DECISION MAKING	0 1 2 3 4 5	0 1 2 3 4 5
(F9) PROBLEM SOLVING	0 1 2 3 4 5	0 1 2 3 4 5
(F10) SEEING THINGS IN THE MIND'S EYE	0 1 2 3 4 5	0 1 2 3 4 5
(F11) KNOWING HOW TO LEARN	0 1 2 3 4 5	0 1 2 3 4 5
(F12) REASONING	0 1 2 3 4 5	0 1 2 3 4 5
Personal Qualities		
(F13) RESPONSIBILITY	0 1 2 3 4 5	0 1 2 3 4 5
(F14) SELF-ESTEEM	0 1 2 3 4 5	0 1 2 3 4 5
(F15) SOCIAL	0 1 2 3 4 5	0 1 2 3 4 5
(F16) SELF-MANAGEMENT	0 1 2 3 4 5	0 1 2 3 4 5
(F17) INTEGRITY/HONESTY	0 1 2 3 4 5	0 1 2 3 4 5

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	IMPORTANCE TO STUDENTS	CRITICALITY TO EMPLOYER	STUDENT SKILLS RATING
COMPETENCIES (3.35)	4.25	3.52	3.54
Resources (3.01)	4.23	3.11	3.54
(C1) ALLOCATES TIME (4.19)	4.49	4.21	3.59
(C2) ALLOCATES MONEY (2.21)	3.99	2.71	3.27
(C3) ALLOCATES MATERIAL/FACILITY RESOURCES (2.82)	4.15	2.43	3.66
(C4) ALLOCATES HUMAN RESOURCES (2.82)	4.28	3.07	3.64
Information (3.55)	4.48	3.86	3.71
(C5) ACQUIRES & EVALUATES INFORMATION (3.59)	4.49	3.93	3.84
(C6) ORGANIZES & MAINTAINS INFORMATION (3.61)	4.59	3.86	3.76
(C7) INTERPRETS & COMMUNICATES INFORMATION (4.00)	4.71	4.29	3.89
(C8) USES COMPUTERS TO PROCESS INFORMATION (3.00)	4.11	3.36	3.36
Interpersonal (3.80)	4.32	3.89	3.86
(C9) PARTICIPATES AS A MEMBER OF A TEAM (4.24)	4.36	4.29	4.08
(C10) TEACHES OTHERS (3.67)	4.13	3.57	3.75
(C11) SERVES CLIENTS/CUSTOMERS (4.15)	4.50	4.50	3.97
(C12) EXERCISES LEADERSHIP (3.63)	4.26	3.21	3.64
(C13) NEGOTIATES TO ARRIVE AT A DECISION (3.39)	4.32	3.14	3.95
(C14) WORKS WITH CULTURAL DIVERSITY (3.72)	4.33	4.29	3.79
Systems (3.41)	4.27	3.62	3.48
(C15) UNDERSTANDS SYSTEMS (3.77)	4.48	3.71	3.79
(C16) MONITORS & CORRECTS PERFORMANCE (3.35)	4.40	3.79	3.64
(C17) IMPROVES & DESIGNS SYSTEMS (3.11)	3.93	3.21	3.01
Technology (2.98)	3.97	3.13	3.11
(C18) SELECTS TECHNOLOGY (2.89)	3.91	2.86	2.96
(C19) APPLIES TECHNOLOGY TO TASK (3.35)	4.17	3.43	3.39
(C20) MAINTAINS & TROUBLESHOOTS TECHNOLOGY (2.70)	3.83	2.86	2.99
FOUNDATION SKILLS (4.02)	4.65	4.48	4.23
Basic Skills (3.92)	4.68	4.55	4.31
(F1) READING (4.32)	4.76	4.79	4.49
(F2) WRITING (3.87)	4.64	4.36	4.31
(F3) ARITHMETIC (3.61)	4.53	4.71	4.26
(F4) MATHEMATICS (2.75)	4.56	4.36	4.19
(F5) LISTENING (4.61)	4.89	4.79	4.43
(F6) SPEAKING (4.33)	4.72	4.50	4.20
Thinking Skills (3.79)	4.56	4.14	4.10
(F7) CREATIVE THINKING (3.40)	4.41	4.00	3.99
(F8) DECISION MAKING (4.01)	4.67	4.00	4.06
(F9) PROBLEM SOLVING (4.20)	4.64	4.21	4.10
(F10) SEEING THROUGH THE MIND'S EYE (3.26)	4.42	3.50	3.91
(F11) KNOWING HOW TO LEARN (4.01)	4.60	4.50	4.31
(F12) REASONING (3.87)	4.64	4.57	4.25
Personal Qualities (4.34)	4.72	4.75	4.28
(F13) RESPONSIBILITY (4.71)	4.78	4.79	4.41
(F14) SELF-ESTEEM (4.11)	4.69	4.64	4.06
(F15) SOCIAL (4.17)	4.57	4.57	4.17
(F16) SELF-MANAGEMENT (4.12)	4.72	4.71	4.19
(F17) INTEGRITY/HONESTY (4.61)	4.85	4.93	4.60
COMPETENCIES & FOUNDATION SKILLS TOTALS (3.69)	4.45	4.00	3.89

APPENDIX M

EMPLOYER HIRING PRACTICES

1. The HIRING PRACTICES SURVEY INSTRUMENT

FLORIDA EDUCATION & TRAINING PLACEMENT INFORMATION PROGRAM (FETPIP)
EMPLOYER HIRING PRACTICES

FIRM NAME: _____   INDUSTRY TYPE:_____

ADDRESS: _____   # OF TOTAL EMPLOYEES_____
_____   # OF VOCATIONAL EMPLOYEES_____
_____

1. In what job areas or occupations does your firm experience job openings most frequently?
    (circle as many as necessary)
    A. Managerial/administrative   G. Personal services
    B. Clerical/administrative   H. Protective services
    C. Production/operating   I. Cleaning services
    D. Professional/technical   J. Health services
    E. Maintenance/material handling   K. No difficulty
    F. Food services

Please identify specific job titles related to these categories.
    TYPE/JOB TITLE   number of openings/frequencies

_____   _____

_____   _____

_____   _____

2. What primary source is used when seeking new employees? (check as many as needed)
        a. Employment agencies ____   e. School placement officers____
        b. Advertisements   ____   f. Job Service of Florida____
        c. Personal contacts   ____   g. Other ____
        d. Unsolicited, walk-ins ____

3. Does your firm use a standard hiring procedure?   YES _____   NO _____
        Please describe:

4. Does your firm use a standard job application?   YES _____   NO _____
        If yes, could we obtain a copy for review?

5. How are applications/applicants reviewed or screened?
        What are wanted application/applicant ingredients?

6. Are any entry/application test(s) administered?
                a. verbal ____   c. math ____
                b. written ____   d. other____
        Are there desired testing levels?

7. Are there additional screening criteria or minimum standards an applicant may experience or need?
        a. High school/college/vocational credentials   ____
        b. Test score results   ____
        c. Work experience   ____
        d. References   ____

8. Do your hiring practices include verifying educational or training attainment?
        a. Never ____   c. Often ____
        b. Seldom____   d. Always____

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